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Rough Country TS13000S Installation Instructions

13,000-Lb Pro Series Winch with Synthetic Rope

Part number: TS13000S

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Scan for fitment, price and install help



Thank you for choosing Rough Country for all your vehicle needs.

Before beginning installation, read all instructions and be sure you have all parts needed for installation.

After installation, be sure to check all fasteners for proper torque and check for adequate clearance between all components. It's also recommended to periodically check all hardware for tightness.

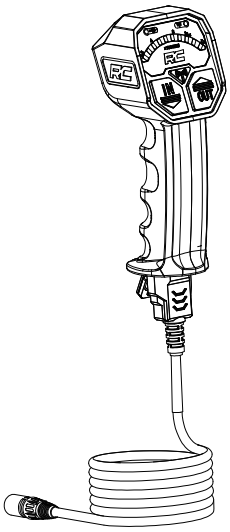
For all questions and concerns about this product, please call 1-800-222-7023. We will be happy to assist you.

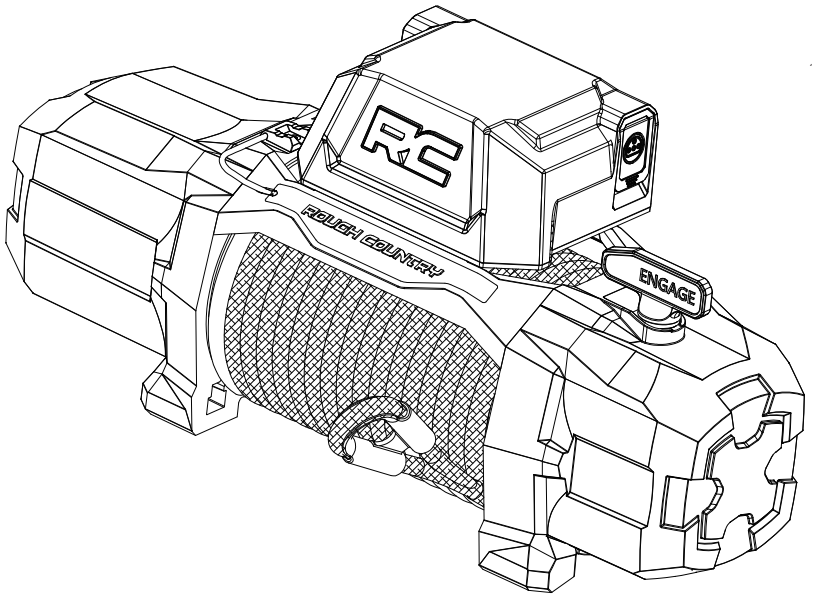


13K TORQUE WINCH WITH SYNTHETIC ROPE

Installation, Operation, and Safety Instructions

FEATURES | INDEX





FEATURES:

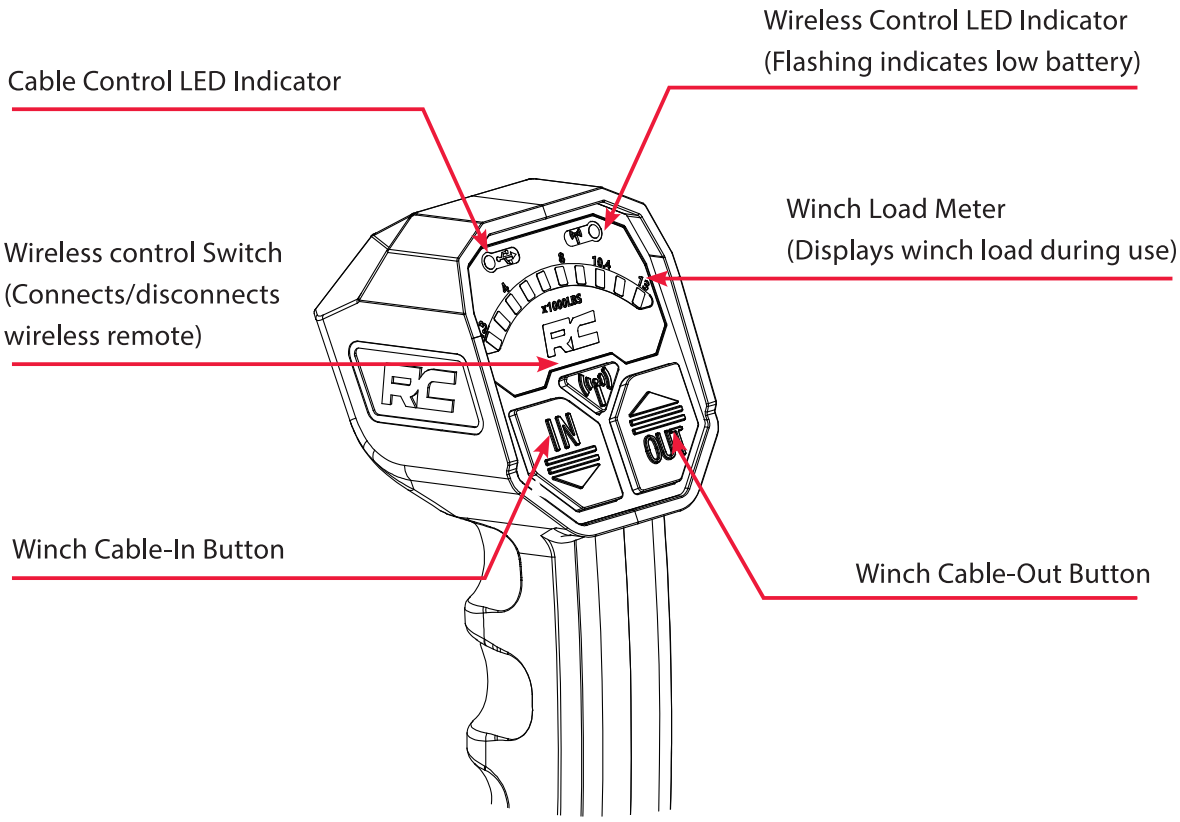
- Load-Indication System
- LED logo on Control Box
- Electronic Torque Limiter
- 3-stage planetary gear system
- 193.2:1 Gear ratio
- 7hp motor
- Colored LED Line pull indicators
- Rechargeable remote control (use *wired or wireless*)
- Scratch and abrasion resistant synthetic rope
- IP67 waterproof rating
- Includes hawse fairlead
- Includes clevis hook and snubber
- Remote with integrated magnet
- Mounting hardware included

INDEX:

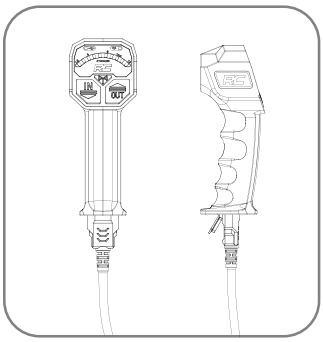
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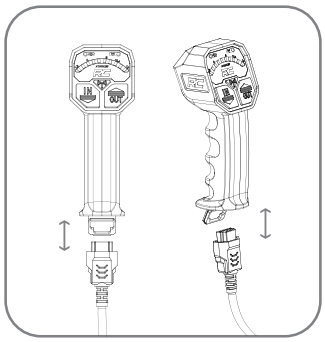
WINCH REMOTE CONTROLLER FEATURES



Battery Specification:
Model:18500, 3.7V 1400mA.



Cable Control



Wireless Control

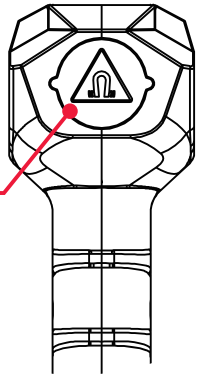
Cable Control: Remote cable must be properly connected to winch control box and remote. (Remote charges when connected)

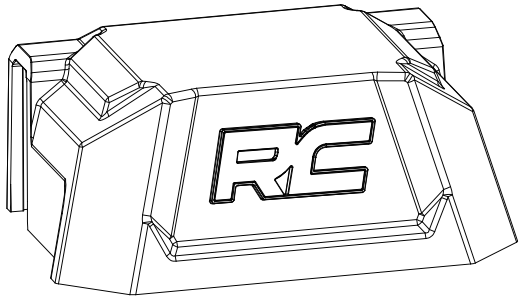
Wireless Control: Remote cable must be linked to winch for wireless control. To link remote to winch, disconnect cables from remote and winch, then press and hold wireless button for 3 seconds. (Wireless LED indicator will appear) To disconnect, press and hold wireless button for 3 seconds and remote will be disconnected.
Note: *LED indicator flashes when remote battery is low.*

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WINCH REMOTE AND CONTROL BOX FEATURES

Magnetic: Strong neodymium magnets enables remote to secure to any ferromagnetic material





RC logo on control box shows winch power and displays winch load during use.

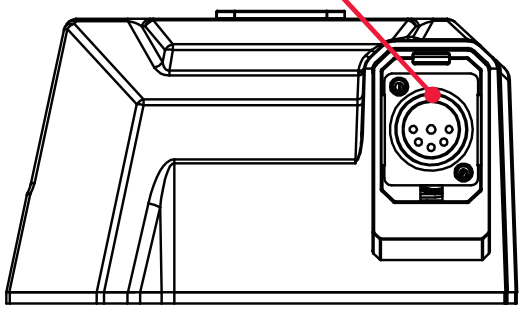
⚠ WARNING ⚠

NEVER operate with less than **10 WRAPS** of cable around the drum. The terminal end prevents cable from unraveling, it is **NOT** a load bearing attachment point. Improper installation and/or spooling will cause rope to release from terminal.

- Always re-spool winch with load of no less than 500lbs before each use.
- Inspect rope before each use.
- Avoid contact with sharp or rough objects that may damage, cut or weaken the rope.
- Never use rope over a rough surfaces without protection between object and rope.
- Never shock-load winch rope.
- Never bend rope around unprotected, sharp corners.
- Always use an aluminum hawse fairlead with synthetic rope.
- Never hook rope back into itself while winching.
- Aways wash rope after use.

Rough Country is not responsible for product if misused, improperly installed, abused, or product is modified in anyway.

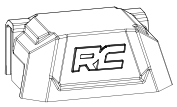
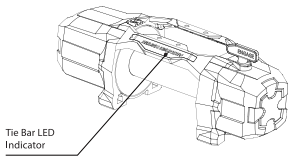
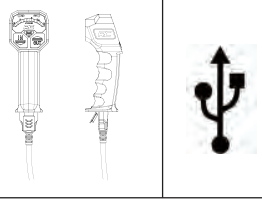
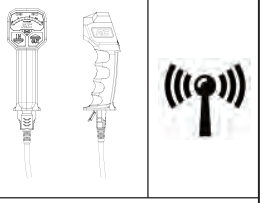
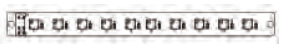
Remote Cable Port



Connect remote cable to the control box port by aligning the 5 pins with holes on control box port. Once pins are aligned, push plug firmly until fully locked into socket.

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WINCH LOAD-INDICATION SYSTEM

	LED LOGO (Indicator on Control Box)	Tie Bar LED Indicator	Remote Control LED Indicator	Remote Controller Indicator
				
PCB				
Power ON	**Red light**	**/**	**/**	**/**
Remote Connection (wireless & cable)	**White light**	**White light (10 LEDs)**	**White light (10 LEDs)**	**/**
10% Load	**Green light**	**Green light (1 LEDs)**	**Green light (1 LEDs)**	**/**
20% Load	**Green light**	**Green light (2 LEDs)**	**Green light (2 LEDs)**	**/**
30% Load	**Green light**	**Green light (3 LEDs)**	**Green light (3 LEDs)**	**/**
40% Load	**Yellow light**	**Yellow light (4 LEDs)**	**Yellow light (4 LEDs)**	**/**
50% Load	**Yellow light**	**Yellow light (5 LEDs)**	**Yellow light (5 LEDs)**	**/**
60% Load	**Yellow light**	**Yellow light (6 LEDs)**	**Yellow light (6 LEDs)**	**/**
70% Load	**Red light**	**Red light (7 LEDs)**	**Red light (7 LEDs)**	**/**
80% Load	**Red light**	**Red light (8 LEDs slowly flash)**	**Red light (8 LEDs slowly flash)**	**/**
90% Load	**Red light**	**Red light (9 LEDs quickly flash)**	**Red light (9 LEDs quickly flash)**	**/**
100% Load	**Red light**	**Red light (10 LEDs rapidly flash)**	**Red light (10 LEDs rapidly flash)**	**/**
Overload		**Winch stops / Powers off**		

IMPORTANT : The load-indicator lights display the amount of load on your winch during continuous winching with heavy loads. Always check motor temperature frequently. If motor runs too hot to touch, allow winch to cool before continuing recovery. It is recommended to re-access your recovery and consider the use of a snatch block, when recovery exceeds full load and/or when red overload LEDs are flashing.

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SAFETY PRECAUTIONS

Improper equipment operation may cause damage to equipment. Observe all safety precautions for personal safety and the safety of others. Failure to comply may cause serious personal injury or death.

Read the following carefully before operating your winch. Keep these instructions for future reference.

DRESS PROPERLY.

Loose clothing and/or jewelry is not recommended while winching, as they can be caught in moving parts.

Wear leather gloves when handling winch cable. Do not handle cable with bare hands.

Non-skid footwear is recommended.

KEEP A SAFE DISTANCE.

Ensure that all persons stand clear of winch cable and load during winch operation. If a cable pulls loose or breaks under load, it can backlash and cause serious injury or death.

DO NOT STEP OVER THE CABLE.

Everyone should be kept away from the work area.

Keep proper footing and balance at all times.

DO NOT ABUSE THE CABLES.

Keep cables away from heat, oil and sharp edges.

DO NOT OVERWORK THE WINCH.

If motor becomes hot to touch, stop and allow winch to cool.

DO NOT maintain power to the winch if the motor stalls.

DO NOT exceed maximum line pull ratings shown in tables (pg 13). Shock-loads must be avoided.

CHECK FOR DAMAGED PARTS.

Before using, you should check your winch carefully. Any damaged parts should be properly repaired or replaced by an authorized service center.

WINCH REPAIRS

If winch needs repairing, use only identical replacement parts. Improper parts may cause further damage or personal injury.

RE-SPOOLING CABLE.

Leather gloves must be worn while re-spooling winch. To re-spool correctly, it is necessary to keep a slight load on the cable. (See page 8 for operational procedures)

DO NOT allow the cable to slide through your hand.

DO NOT approach the winch to closely.

Turn winch off and repeat the procedure until all but approximately 3-feet of cable is spooled.

Turn off remote control. With clutch disengaged, finish spooling cable by rotating the drum by hand.

If winch is not accessible by hand, spool winch using remote power. Be sure to keep hands clear from cable.

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WINCH OPERATING PROCEDURES

Read the following carefully before operating your winch. Keep these instructions for future reference. Rough Country Winches are intended for recreational, self-recovery usage only.

The uneven spooling of cable, while pulling a load, is not a problem unless there is a cable pile-up on one end of the drum. If this happens, reverse the winch to relieve the load and move anchor closer to the center of the vehicle. After recovery, pull the cable back out and re-spool for future use.

Store the remote control inside your vehicle to prevent damaged and always inspect cables before connecting. When ready to begin spooling, plug remote control cable into control box plug with clutch disengaged, never engage clutch while winch is turning.

Never connect the hook back to the cable, this may cause damage to cable.

Observe your winch during use, while standing at a safe distance. Stop the winching process every 3-feet to ensure the cable is not piling up in one corner. Jamming the cable can cause damage to the winch.

DO NOT attach tow hook to winch mounting plate, they must be attached to the vehicle's frame.

The use of a snatch block will aid in recovery operations by increasing the winch's capacity and winching speeds. This also allows direct line-pull to the center of the fairlead. When using a snatch block during stationary winching, the winch hook should be attached to the vehicle's chassis.

Ensure D-rings with adequate load ratings are used in conjunction with approved tree trunk protection to provide safe anchoring points.

9. When extending winch cable, ensure at least 10 wraps of cable remain on drum at all times. Failure to do so could result in the cable parting from the drum under load, which may cause serious injury or damage to property.
10. All winches are provided with red cable markings to identify that 10 cable wraps remain on the winch drum.
11. Since the greatest pulling power is achieved on the inner most layer of your winch, pull off as much line as you can for heavy pulls (must leave 10 wraps minimum on the drum). If this is not practical, use a snatch block and double line arrangement.
12. Draping a heavy blanket or similar object over the extended winch cable is recommended, as it will dampen any backlash, should a failure occur.
13. Neat, tight spooling avoids cable binding, which is caused when a load is applied and the cable is pinched between the others. If this happens, repeatedly power the winch in and out until cable is free. Do not attempt to unbind cable under a load by hand.
14. To prevent vehicle rollback, apply blocks behind wheels, if vehicles are on an incline.
15. Never move vehicle to pull a load.
16. Be sure vehicle battery is in good condition. Avoid contact with battery acids or other contaminants and always wear eye protection when working around a battery.
17. Always leave vehicle running while winching to prevent damage to battery.

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WINCH OPERATING PROCEDURES

18. Always ensure cable is properly installed and in good condition.
19. Do not use cable if frayed or showing signs of wear.
20. Do not replace cable with a cable of lesser strength.
21. Cable life is dependent on use and proper care.
22. Cable must be wound onto the drum under a load of at least 500lbs or the outer wraps will draw into the inner wraps and severely damage the cable during winching. Winding the cable on the drum under a load of 500lbs or more will add tension to the line and stretch the new cable to create a tight cable wrap around the drum. Failure to follow these steps may result in cable damage and reduce cable life.
23. Do not attempt to exceed the pulling limits of this winch.
24. Do not drive your vehicle to assist the winch in any way. Vehicle movement in combination with winch operation may overload the cable, the winch itself or cause damaging shock-loads.
25. Shock-loads when winching are dangerous! A shock-load occurs when a sudden force is applied to the cable. A vehicle rolling back with slack on the cable may cause a damaging shock-load.
27. This winch is for vehicles and non-industrial applications ONLY.
28. Do not use winch in hoisting applications.
29. Do not use winch to lift, support or otherwise transport personnel.

The best way to get acquainted with operating your winch, is to make a few test runs before actually using it in the field.
Remember you can 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 jolting or shifting payloads.

STANDARD OPERATING PROCEDURES

1. Ensure the vehicle is secure by applying the parking brake or chocking the wheels.
2. Pull winch cable to the desired length and connect to an anchor point. The winch clutch allows for rapid uncoiling of the cable to connect to load or anchor point. The shift handle, located on the gear housing of the winch, operates the clutch as follows:
   a. To disengage the clutch, move the clutch handle so that the "DISENGAGE" text is facing forward. Cable can now be free-spooled from the drum.
   b. To engage the clutch, move the clutch handle into the "ENGAGE" position. The winch is now ready for winch recovery.
3. A magnet is integrated on the reverse side of the remote, which allows it to be secured to a vehicle and prevents remote from falling onto the ground.
4. It is recommended to operate winch from the driver side of the vehicle to ensure safe operation.
5. To commence winching operation, start vehicle engine, ensure vehicle is in neutral, and maintain engine at idle speed.
6. Operate the remote control using the IN or OUT buttons until the vehicle has been retrieved. Regularly check the winch to ensure cable is winding onto the drum evenly.

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WINCH INSTALLATION

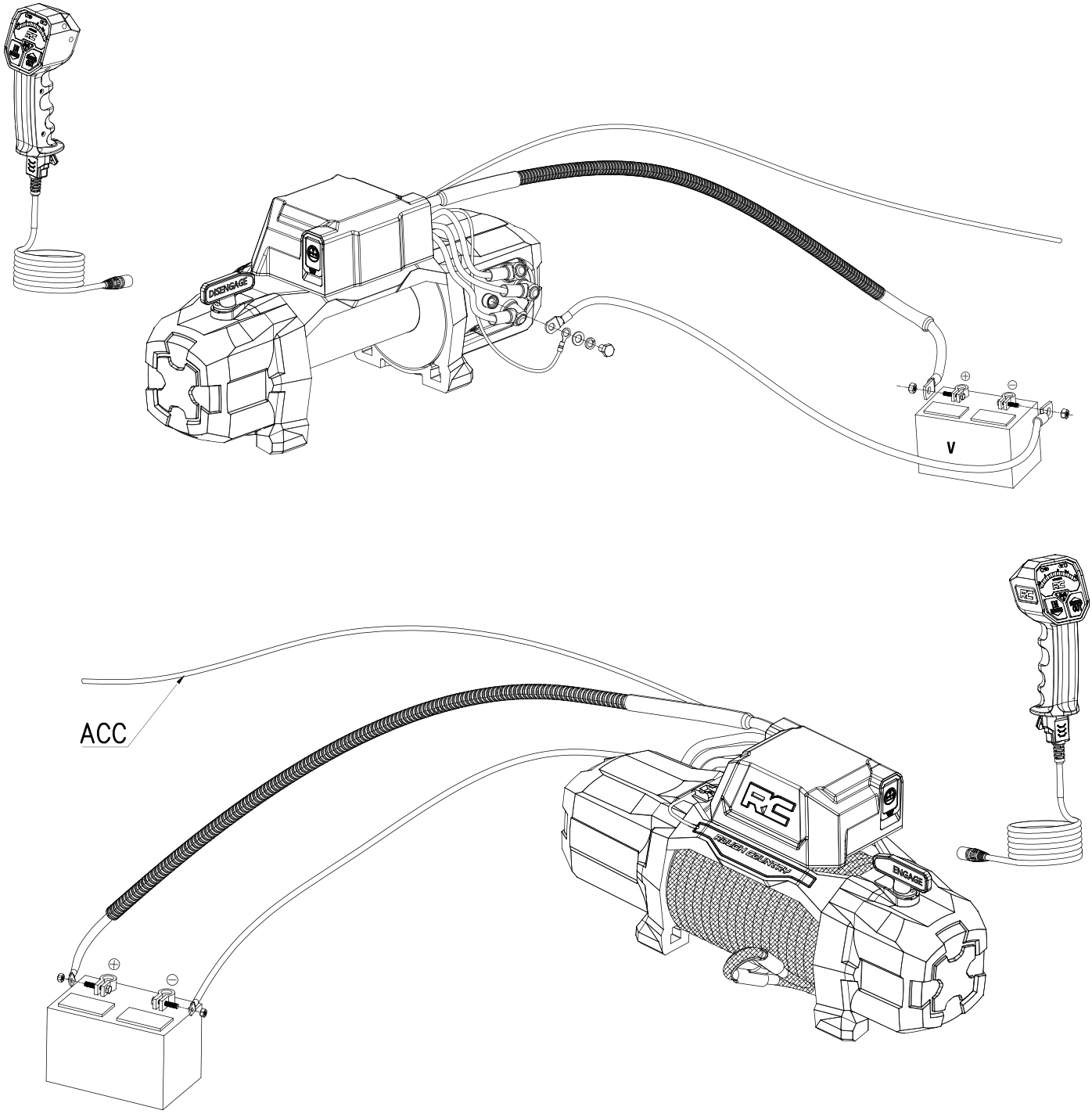
The fitment of winch plates and/or winch bumper systems may affect the triggering of SRS airbags. Check that the mounting system has been tested and approved for winch fitment on the airbag equipped vehicle before installation. Failure to comply may cause serious injury or death.

The winch is to be mounted onto a suitable steel mounting frame, using the 4-point mounting system. It is important that the winch be mounted on a flat surface so that the motor, drum and gear housing are properly aligned.
The winch should be secured to the mounting plate with M10 x 32mm bolts and lock washers provided. The winch plate must be at least 6mm thick. Thicker plates may require longer bolts (not included). Ensure winch mounting bolts protrude past the top surface of the nut.
The fairlead is to be mounted in a position to guide the rope onto the drum evenly.

NOTE: Gear box and motor assembly cannot be clocked differently. Attempting to do so can cause damage to the winch and will void its warranty.
DO NOT FORCE CLUTCH HANDLE!
If clutch handle will not turn, rotate the drum by hand to align gears and free the handle from pressure.
Inspect the rope before first use. Any defects must be noted before initial use.
Improper use, inadequate fairlead and bumper clearance, abuse, neglect, or abrasions is not covered by warranty.

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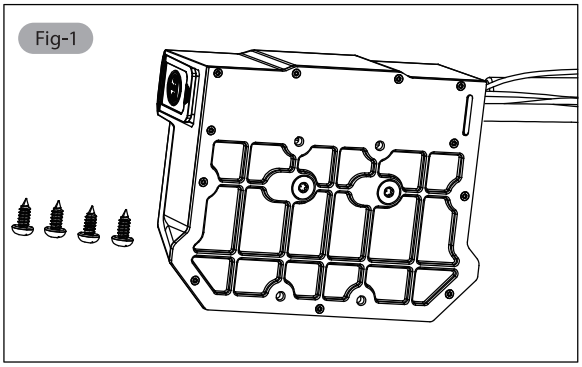
ELECTRICAL DIAGRAM

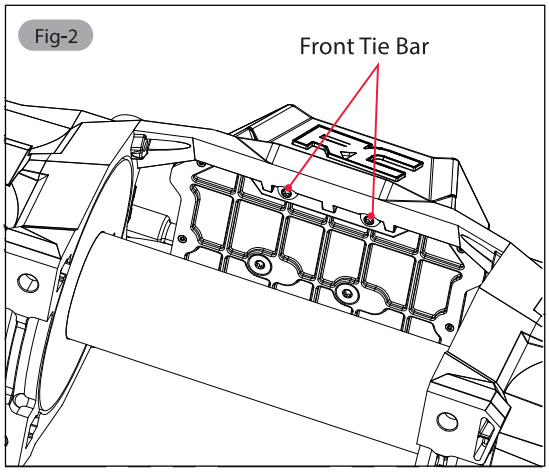


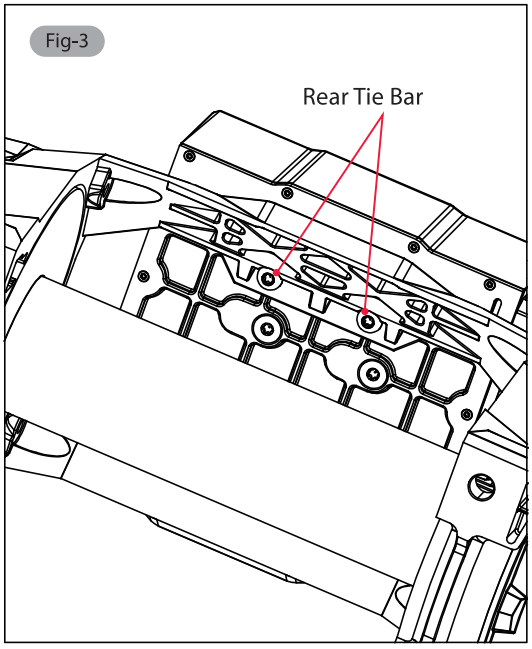
WARNING: Do not alter, change or amend winch wiring/connections.
Doing so can cause property damage or bodily injury and voids warranty.

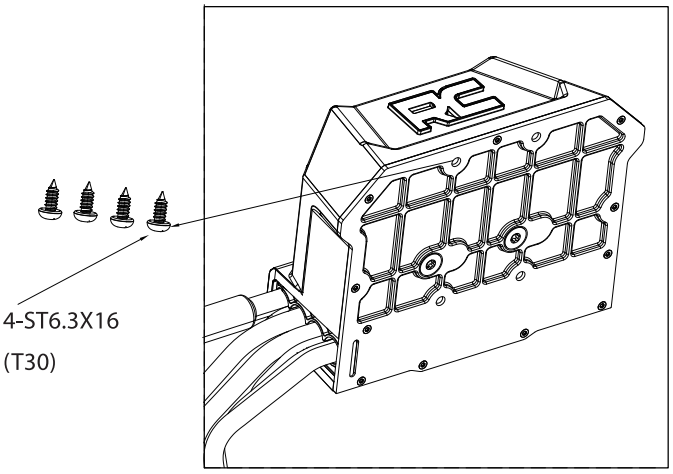
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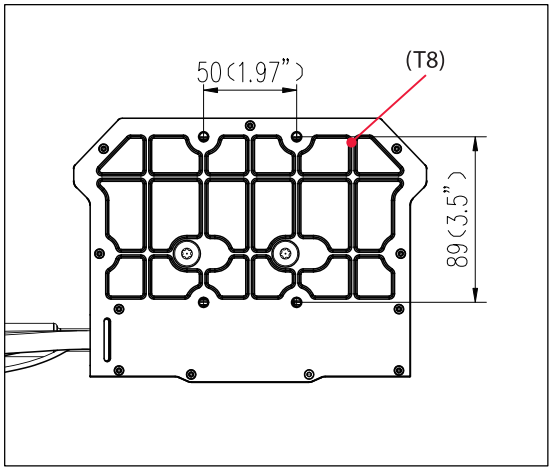
CONTROL BOX INSTALLATION











The Control Box is attached to the tie bars using four bolts shown in figures 2 and 3. Remove bolts to detach the control box from the winch.

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FUSE REPLACEMENT

Fig-1

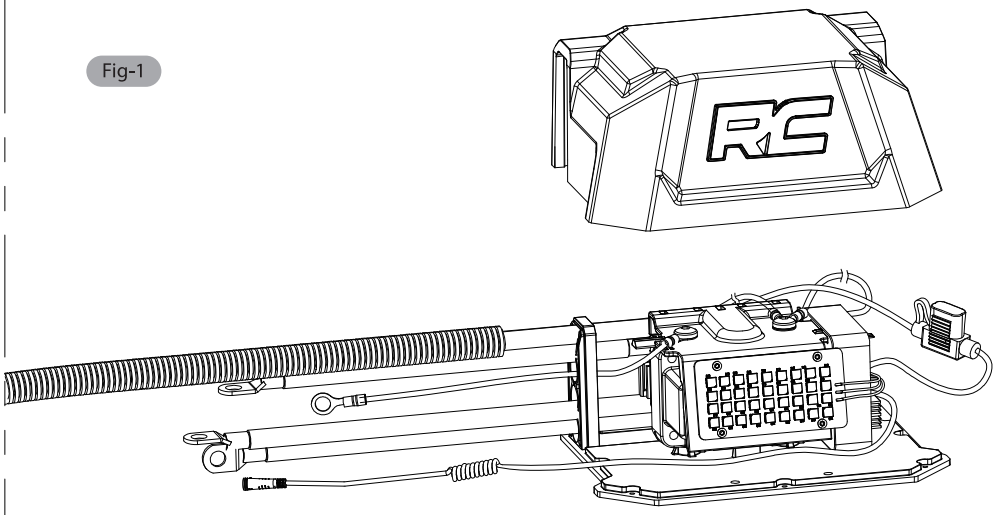
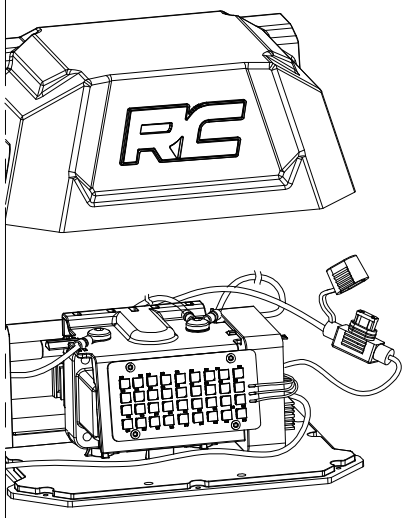


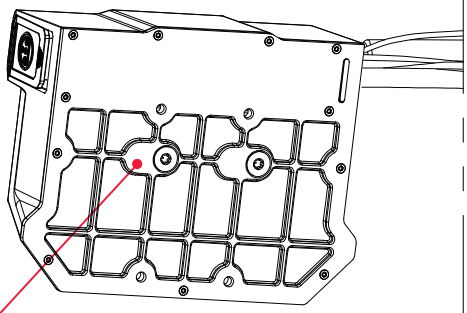
Fig-2





Fuse Specification :
32V 5A

Fig-3



Do not over tighten bolts at the bottom of control box, as shown in figure 3. This may cause damage to the cable and other internal components.

1. Power off the winch, open the control box cover, and locate the fuse shown in figure 1.
   Note: Replace with fuse of the same capacity current ONLY, do not replace with higher current fuse.
   Note: Do not touch the spring antenna on the circuit.
2. If the fault is not resolved, please check other areas of the curcuit system.

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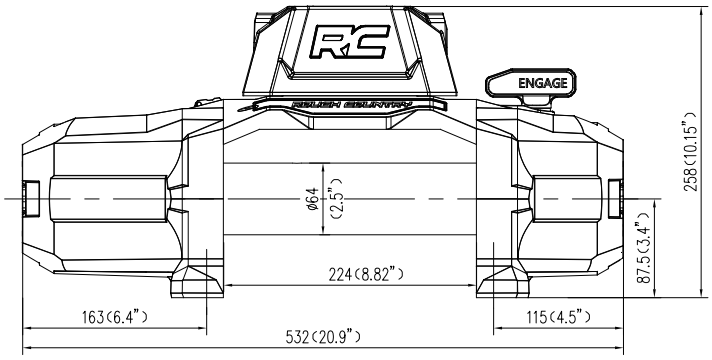
WINCH SPECIFICATIONS

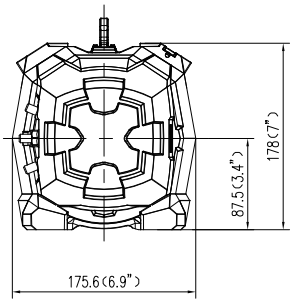
TS13000S SPECIFICATIONS	
Single Rated Line Pull	13,000 lb (5897 kgs)
Motor	7HP Series Wound
Controller	Wireless / Wired Remote (12' Cable)
Gear System	3-Stage Planetary
Gear Reduction Ratio	193.2:1
Clutch	Sliding Ring Gear
Braking	Automatic In-The-Drum
Drum Size	Dia. 2.5" (63.5mm) x Length 9.6" (224mm)
Synthetic Rope (COMP Series)	1/2" x 92'(12.5mmx28m)
Fairlead (COMP Series)	Aluminum Hawse Fairlead
Remote Control	Included
Battery	Recommended 650 CCA
Battery Leads	25m^2 72" L (1.83m)
Net Weight	65lbs
Overall Dimensions (L x W x H)	20.9" x 6.9" x 10.15" (532x176x258mm)
Mounting Bolt Pattern	10" x 4.5" (254 x 114.3mm)

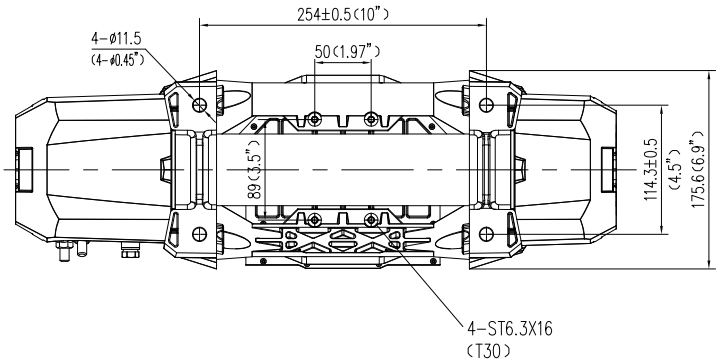
TS13000S Line Speed & Amp Draw - First Layer										
Line	lbs.		No	2000	4000	6000	8000	10000	12000	13000
Pull	kgs		Load	907	1814	2721	3628	4536	5443	5897
Line	fpm	12V	31.30	15.74	13.12	9.84	8.53	6.89	5.74	5.25
Speed	mpm	12V	9.54	4.8	4	3	2.6	2.1	1.75	1.6
Motor	amps	12V	70	122	174	226	280	332	384	405

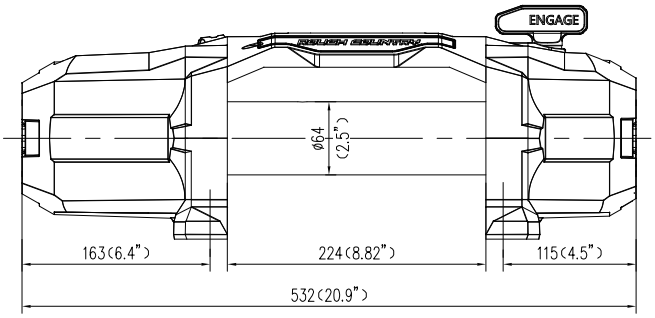
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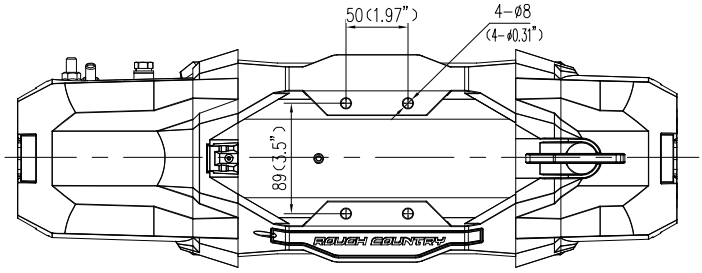
WINCH MEASUREMENTS











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TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE	SUGGESTED REMEDY
Motor does not turn on	Safety switch is off	Turn safety switch to ON position
	Switch assembly not connected properly	Insert switch assembly firmly to the connector
	Loose battery cable	Tighten nuts on cable connectors
	Solenoid malfunctioning	Tap solenoid to free contact, apply 12 volts to coil terminal directly. The solenoid will make an audible clicking sound when activating.
	Defective switch assembly	Replace switch assembly
	Defective motor	Check for voltage at armature port with switch pressed. If voltage is present, replace motor.
	Water has entered motor	Check for voltage at armature port with switch pressed. If voltage is present, replace motor.
Motor runs hot	Long period of operation	Let winch cool down periodically.
Motor runs slow or weak in power	Low battery	Recharge battery by running vehicle
	Insufficient current or voltage	Clean, tighten or replace the connector.
Motor runs but cable drum does not turn	Clutch not engaged	Turn clutch to IN position, if that does not work, ask a qualified technician to check and repair.
Motor runs in one direction only	Defective or stuck solenoid	Tap solenoid to free contacts. Repair or replace solenoid.

By purchasing any item sold by Rough Country, LLC, the buyer expressly warrants that he/she is in compliance with all applicable, State, and Local laws and regulations regarding the purchase, ownership, and use of the item. It shall be the buyers responsibility to comply with all Federal, State and Local laws governing the sales of any items listed, illustrated or sold. The buyer expressly agrees to indemnify and hold harmless Rough Country, LLC for all claims resulting directly or indirectly from the purchase, ownership, or use of the items.

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