

User's Manual and Safety Warnings PWTR SERIES

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PROWINCH LLC COMPANY WITH QUALITY MANAGEMENT SYSTEM

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For purposes of enforcing the Warranty of the product purchased, Prowinch[®] LLC, will only be liable for any damage when it is possible to prove that the user has followed each and every one of the warnings contained in the User Manual and Safety Warnings.

1. It is the sole responsibility of the Client / User to verify that the acquired equipment, products and accessories comply with the characteristics, capacities, elements, components, accessories and other conditions for the use that the Client / user intends to give it.

2. It is also the sole responsibility of the Client / User to ensure that the equipment and products purchased are operated and maintained in safety conditions and by personnel duly trained in the use thereof, also implementing all the security measures necessary for prevent accidents or damages to people or property and observing the indications and warnings of the corresponding manuals of use.

3. The possible support in the selection of the equipment, the capacities and characteristics required by the clients that Prowinch provides is delivered free of charge and provided based on the information of use and requirements indicated by the Client itself, information that Prowinch does not It may not correspond to verify. In this way, it is in any case the sole and exclusive responsibility of the Client -or who will use the equipment and products acquired- to ensure that they comply with the capabilities, characteristics, up-to-date maintenance and everything necessary for a correct and safe operation in relation to the intended use.

4. For personnel lifting Prowinch recommends the use of winches with 4 brakes. The use of winches of 3 or less brakes or safety features lower than the maximum available, for personnel lifting, is the sole responsibility of the customer.

5. In order to guarantee the safety of the users of the equipment, especially those of Personnel, it is necessary to carry out the inspections and maintenance of the equipment according to the recommended frequency in relation to its work cycle, as it is described by the ASME B30 standards. It is mandatory to keep record and evidence the written and photographic reports of: Maintenance, Start-up, Load Tests, Training, Certifications, Inspections and Reports of failures and accidents.

6. The aforementioned reports must be sent by email to registros@prowinch.com within the first 7 calendar days that said event has occurred.

7. Compliance with the timely implementation of the mandatory activities described in points 6 and 7, plus all the activities mentioned in the corresponding rules applied, are the sole responsibility of the user. Failure to comply with the foregoing, releases Prowinch from any type of Liability and Warranty to the team, customer, staff and / or user or any other liability that could be attributed to Prowinch.

The information contained in this manual may contain technical errors or inaccuracies, Prowinch® LLC, is not responsible for errors typing, omission or incorrect information.

This manual is subject to change without prior notice. Download the latest version available at www.prowinch.com

Always check www.prowinch.com for latest information regarding this product.

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RECOVERY WINCHES SERIES PWTR

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MODELS







Prominch.



15.000.



General Safety Precautions



Thank you for purchasing a Prowinch[®] winch. This manual describes the operation and maintenance of the winch. All information in this publication is based on the newest production information is available at print time.

2. GENERAL SAFETY PRECAUTIONS

Prowinch[®]'s winches are designed for delivering a safe and trustable service if they are operated according to this manual.

This manual contains important information to help you properly install, operate and maintain your winch for maximum performance, economy and safety.

Please study its contents thoroughly before putting your winch into operation. By practicing correct operating procedures and by carrying out the recommended preventive maintenance suggestions, you will experience long, dependable and safe service. After you have completely familiarized yourself with the contents of this manual, we recommend that you carefully file it for future reference.

Applications for PWTR Prowinch® winches

Choose the Prowinch[®] winch that is right for you: PWTR series offers you top of the line models from 9500 lb up to 17000 lbs, featuring standard and optional accesories for recovery applications. We offer you lightweight, durable and affordable winches. Specially design for recovery applications, our winches are equiped of a durable wound motor for long life and extra pulling power, featuring a tough 3 stage planetary gear box delivering power and reliability. The body and frame of your winch are corrosion resistant stainless steel to provide a long life.

Mandatory use of:



General Safety Precautions





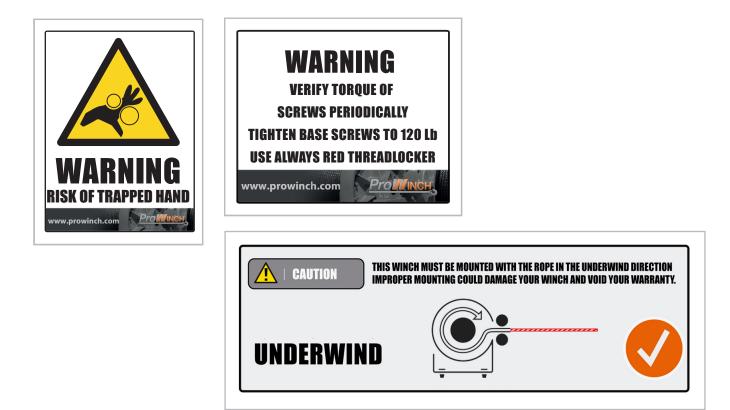
WARNING: This symbol indicates a dangerous situation which if not avoid, may cause minor or moderate wounds. It is also used for indicating unsafe practices.



DANGER: This symbol indicates a dangerous situations which if not avoided, may cause severe injuries or death.

DANGER

All operators and other users who are near the wire rope, must wear the safety protection for this equipment. This includes gloves and eyes protection.





2.1. GENERAL SAFETY

1. Take time to fully read the instructions from this User's Manual, in order to understand your winch and its operations.

2. Do not exceed winch or winch wire rope rated capacity. Double line using a snatch block to reduce winch load.

3. Do not use winch or winch wire rope for towing. Shock loads can damage, overload and break wire rope.

4. Do not use a winch to secure a load.

5. Do not operate this winch when under the influence of drugs, alcohol or medication.

6. Always wear heavy leather gloves when handling winch wire rope.

7. Always remove jewelry and wear eye protection.

8. Always be aware of possible hot surfaces at winch motor, drum or wire rope during or after winch use.

9. Inspect equipment regularly, replace damaged or worn parts, and keep appropriate records of maintenance.

10. Use only PROWINCH[®]'s recommended parts for replacement. Any modifications or repairs without the approval from PROWINCH[®] will void the warranty.



DANGER Failure to observe these instructions could lead to serious injury or death.



2.2 INSTALLATION SAFETY

1. Choose a mounting location that is sufficiently strong to withstand the maximum pulling capacity of your winch.

2. Use class 8.8 metric (grade 5) or better hardware.

3. Do not weld mounting bolts.

4. Use factory approved mounting hardware, components, and accessories.

5. Do not use bolts that are too long.

6. Confirm required bolt length to ensure proper thread engagement.

7. Complete the winch installation and hook attachment before installing the wiring.

8. Always keep hands clear of winch wire rope, hook loop, hook and fairlead opening during installation, operation, and when spooling in or out.

9. Always position fairlead with warning readily visible on top.

10. Prestrech wire rope and respool under load before use. Tightly wound wire rope reduces chances of binding, which can damage the wire rope. 11. Insulate and protect all exposed wiring and electrical terminals.

12. Do not route electrical cables across sharp edges, near parts that get hot and/or through or near moving parts.

13. Always place the supplied terminal boots on wires and terminals as directed by the installation instructions.

14. Do not lean over battery while making connections.

15. Do not route electrical cables over battery terminals.

16. Do not short battery terminals with metal objects.

17. Battery Recommendations A fully charged conventional automotive battery with a minimum rating of 650 cold cranking amps is recommended to obtain peak performance from your winch. Make sure all electrical connections are clean and tight.

18. Consult this User's Manual for proper wiring details.



2.3. SAFETY OPERATION

1. Inspect winch wire rope, hook, and slings before operating winch. Frayed, kinked or damaged winch wire rope must be replaced immediately. Damaged components must be replaced before operation. Protect parts from damage.

2. Remove any element or obstacle that may interfere with safe operation of the winch.

3. Always be certain the anchor you select will withstand the load and the strap will not slip.

4. Always use supplied hook strap whenever spooling winch wire rope in or out, during installation and during operation.

5. Always require operators and bystanders to be aware of vehicle and or load.

6. Be aware of stability of vehicle and load during winching, keep others away. Alert all bystanders of an unstable condition.

7. Always unspool as much winch wire rope as possible when rigging. Double line or pick distant anchor point.

8. Take time to use appropriate rigging techniques for a winch pull.

9. Do not touch winch wire rope or hook while someone else is at the control switch or during winching operation.

10. Do not engage or disengage clutch if winch is under load, winch wire rope is in tension or drum is moving.

11. Do not touch winch wire rope or hook while under tension or under load.

12. Stand clear of winch wire rope and load and keep others away while winching.

13. Do not use vehicle to pull load on winch wire rope. Combined load or shock load can damage, overload and break wire rope.

14. Do not wrap winch wire rope back onto itself. Use a choker chain or tree trunk protector on the anchor.

15. Do not operate winch with less than 5 wraps of winch wire rope or 10 wraps of synthetic rope around the drum. Wire rope could come loose from the drum, as the wire rope attachment to the drum is not designed to hold a load.

16. Do not use winch as a hoist or to suspend a load.

17. Always be certain anchor will withstand load, use appropriate rigging and take time to rig correctly.

18. Do not use winch to lift or move persons.

19. Do not use excessive effort to freespool winch wire rope.

20. Always use proper lifting technique or get lifting assistance while handling and installing.

21. Always wind the winch wire rope on bottom (mountside) of drum.

22. Do not wind wire rope over top of drum. Always spool the winch wire rope onto the drum in the direction specified by the drum rotation labels on the winch and/or in this manual.

General Safety Precautions



23. Do not leave remote control where it can be activated during free spooling, rigging, or when the winch is not being used.

24. Do not leave the winch remote control plugged in when installing, freespooling, rigging, servicing or when the winch is not being used.

25. Do not operate any equipment on which the safety placards or decals are missing or illegible.

26. Report any malfunction or irregular operation of the equipment.

27. Do not operate an equipment that has been modified without previous PROWINCH® approval.

28. Winch damper helps to prevent wire rope recoil in the event of a wire rope failure. Do not approach or move the damper once tension is applied. Do not allow it to get pulled into the fairlead.



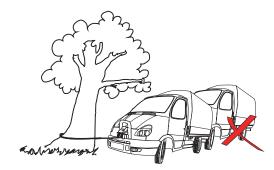
WARNING

An improper operation of the equipment can create a potentially hazardous situation which, if not avoided, could result in minor or moderate injuries. To avoid a potentially hazardous situation, always take time to fully understand your winch and winching operation by reviewing this manual.

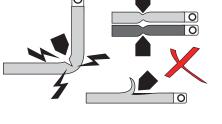




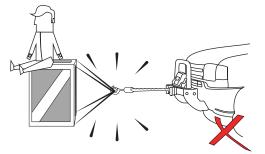
General Safety Precautions



1. Do not exceed winch or winch rope rated capacity.



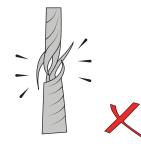
2. Do not route electrical cables across sharp edges, near parts that get hot and/ or through or near moving parts.



4. Do not use the equipment to lift or move people.



5. During winching operation always be aware of stability of vehicle and load during winching, keep others away. Alert all bystanders of an unstable condition.



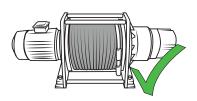
3. Always inspect winch rope, hook, and slings before operating winch. Frayed, kinked or damaged winch rope must be replaced immediately.



6. Do not submerge winch in water. Always store the remote control in a protected, clean, dry area.



7. Perform preventive checks as part of a regular maintenance schedule to keep your winch operating properly.



8. Always verify installation before operating.



9. Do not leave loads unattended, wire rope could come loose from the drum, as the wire rope attachment to the drum is not designed to hold a load.

General Environmental Precautions

2.4. GENERAL ENVIRONMENTAL PRECAUTIONS



DANGER

The following environmental conditions can cause malfunction of the winch.

The following environmental conditions may cause mal functions in the equipment.

When operated outdoor, a shelter should be used for extreme weather conditions: below -10° C or above 40° C



If used near chemicals, corrosive gas or explosives may cause an explosion.

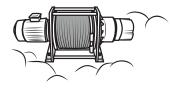
Exposure to salt or acids may cause malfunctioning.

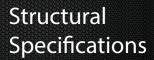


Exposure to sand may cause malfunctioning.



Avoid exposure to rain or extreme humidity. It may cause rusting of the equipment.





3. STRUCTURAL SPECIFICATIONS

With the Prowinch[®] winch, you will never be stuck again, by using lightweight strong internal components make this design extremely durable yet affordable. To begin, you should familiarize yourself with your Prowinch[®] winch and its components:

Motor: The winch motor is powered by the vehicle's battery. The motor provides power to the gear mechanism, which turns the winch drum and winds the wire rope IWRC (Synthetic Rope for s models).

Winch Drum: The drum is an steel reinforced cylinder, driven by the motor and gear train. You can easily change the wire rope or adjust its direction using the remote control.

Gear Train: The reduction gear, with three stage planetary, converts the winch motor power into a large pulling force, making the winch a lighter and more compact equipment.

Braking System: The brake is automatically applied to the winch drum when the winch motor is stopped and there is load on the wire rope, preventing the winch from paying out the line, a safe and reliable system.

Clutch: Using the freespool lever, the operator can manually

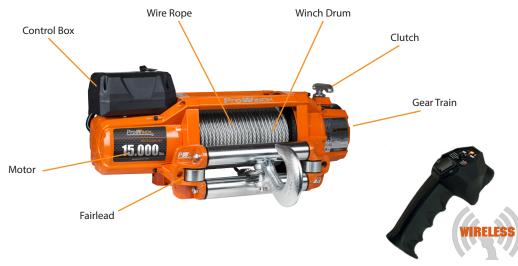
disengage the spooling drum from the gear box, enabling the drum to rotate freely. Never engage or disengage the clutch if winch is under load, wire rope is in tension or moving.

Fairlead: The fairlead acts to guide the wire rope onto the spooling drum, minimizing damage to the wire rope while it goes through the winch mount or bumper. There are two types: 4- Way Roller and Aluminum Hawse for S models.

Wire Rope: The steel wire rope is installed on the drum. Wire rope's diameter and lenght are determined by the winch's load capacity and design. The wire rope is looped at the end to accept the hook's clevis pin. You can easily change the wire rope or adjust its direction. There are two types of ropes according to the model of your winch, IWRC and Synthetic Wire Rope.

Remote Control: The remote control allows the operator to control the winch direction from a safe distance.

Control Box: Using electrical power from the vehicle's battery, the control box solenoids switch power to the motor, enabling the operator to change the direction of the winch drum rotation.



Installation

4. INSTALLATION

4.1 INSTALLATING THE CONTROL BOX (recommended before installing winch to vehicle).

The control box can be mounted in various ways depending on the application.

The control box can be mounted in two positions:

a) For models PWTR9500 and PWTR13000 Control box is Preinstalled from factory.

b) For models PWTR15000 and PWTR17000 Over de Winch Motor.

1) Install the two black motor mount brackets on the bottom of the control box by removing the four nuts on the bottom of the box, then placing the brackets over the bolts and then secure brackets by re-installing the nut.

Note: The end of the brackets point outward. (Fig. 2) Be careful when installing brackets in order not to push the bolts up into the control box. To help prevent this, install brackets with the control box on its side instead of laying it flat.

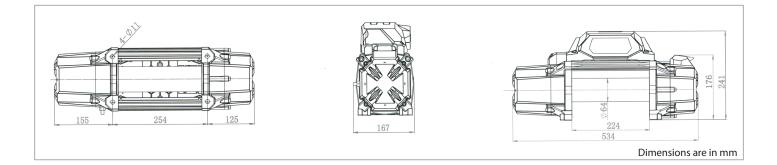
2) Install the control box by lining it up with the two holes on the motor side upright, then cecure with the included hardware.



Fig. 2



It's very important that the winch be mounted on a flat surface so that the three sections (motor, rope drum and gear housing) are properly aligned.





4.2 MOUNTING THE WINCH (please refer to Fig. 3).

1) Install a suitable mounting bumper, or mounting plate in the required position. The winch must be mounted with the direction of pull perpendicular to the mounting bolt fixings. The steel plate should be at least 6mm thick.

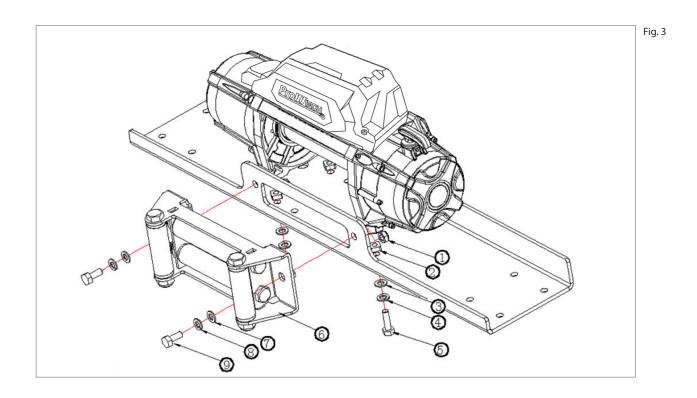
2) Attach fairlead (4-Way Roller type for wire rope or Aluminium Hawse for Synthetic Rope) to mounting plate using two nuts (9) and bolts (1) with flat (7) and spring washers (8).

3) Insert the four square nuts (2) into the pockets at the base of the winch frame.

4) Thread the four high tensile bolts (5) with flat (3) and spring(4) washers up through the mounting plate and into the square nuts in the winch. Tighten the mounting bolts to a torque setting of 60 Nm.

5) The supplied bolts are the correct length for installation on a 6-7mm plate. Other thicknesses may require bolts of a different length. Use at least 8.8 grade high tensile bolts, the thread length should be sufficiently long to fully engage the square nut but must not bottom out on the top of the pocket in the winch frame.

6) Feed the end of the wire rope through the roller fairlead (6) and attach the clevis hook or with a synthetic rope with fixed hook, feed the drum end of the synthetic rope through the hawse from the front and attach to the drum using the allen head cap screw finger tight only, ready for spooling onto the drum.



Installation

4.3 ELECTRICAL INSTALLATION (please refer to Fig. 4)

1) Verify that your battery is in good condition and can provide a minimum of 650 CCA.

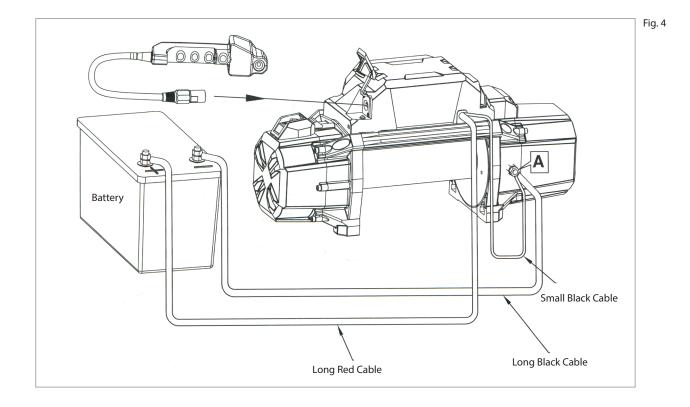
2) Install the supplied battery leads (long red lead from control box = Positive / separate long black lead = Negative) directly to the battery location, ensure that the cable is protected throughout its run from heat and abrasion against sharp components.

3) Connect the negative battery lead to the winch motor ground terminal (never use a chassis earth).

4) Connect the remaining cables from the control box to the motor observing the colour coded boots on the cable and corresponding colour coded collars on the motor terminals.

5) Ensure that the small ground wire from the control box (this is the ground supply to the contactor) is connected to the main battery fed ground terminal on the underside of the motor (do not attempt to use a chassis ground).

6) When you are satisfied that all other connections are correctly installed connect the battery leads to the battery (via an isolator switch and overload cut out if being used).



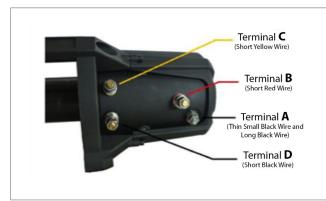
NOTES

- If you need to extend leads, use 40mm² (AWG 1) flexible welding cables.

- Always fit a battery isolator switch to the positive supply line to allow for emergency stop and to prevent unintentional starting and to protect the winch if vehicle is jump started.

- All ground connections must be fed from the battery, never attempt to use a chassis ground.

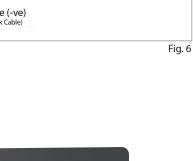
- Check all connections are secure and protect from corrosion with dielectric grease.



Terminal A' (Thin Small Black Wire) White Sleeve Terminal D' (Short Black Cable) Black Jacket Terminal A Negative (-ve) (Long Black Cable)

Fig. 5





Terminal C'

(Short Black Wire) Yellow Jacket

Terminal **B**'

(Short Black Wire)

Red Jacket

Positive (+ve) (Long Black Cable)

Installation

4.4 INSTALLING THE REMOTE CONTROL

- The remote control is a combined wired / wireless unit in-one with a removable lead.

- Once the winch has been set-up then the remote hand control can be operated either in WIRED OR WIRELESS mode.

- It is recommended that for the initial set-up (prior to applying any load) you use the winch in WIRED mode.

- Take care when inserting the wireless remote plug into the control box socket, you must line up the socket end with the groove in the socket (Fig. 7).

- To use the remote hand controller in the WIRELESS mode remove the control cable from the control box, unplug the remote hand controller from the control cable and press the MODE button on the remote hand controller until the green light marked WIRELESS is illuminated.

- Make sure winch remote indicator light is in correct mode before using.

- Use the thumb switch to operate the winch "IN" or "OUT".



Fig. 7



ATTENTION

Do not leave the remote plugged into the winch when not in use. Leaving the remote plugged in, may result in a dangerous condition and/or battery drain.

4.5 SPOOLING THE WIRE ROPE

1) Lay out the rope in front of the vehicle ensuring there are no twists or kinks.

2) With the winch clutch is disengaged, feed the drum terminal through the front of the roller / hawse fairlead and connect to the drum using the button head allen screw provided, this should be finger tight only so that the ring terminal can rotate if necessary.

3) Attach the hook end to a suitable anchor point and position the vehicle so there is at least 3 m of slack on the rope. Apply the vehicle hand brake.

4) Holding the rope with gloved hands and at least 5 m back from the winch apply as much pressure as you can by leaning your body weight against the rope and walking towards the winch whilst using the wired remote to wind in. Ensure that each wrap lays tightly next to the other until the rope tensions against the anchor point. There should be at least 6 wraps around the drum.

5) The rope must be wound onto the drum from the bottom of the drum. Using the wired remote and whilst gently applying the vehicle foot brake to maintain tension, use the winch to pull the vehicle towards the anchor point.

During the operation, regularly stop the winch, apply the handbrake to maintain tension and check the rope is spooling on evenly to the winch. If you have an assistant, they should remain in the vehicle to operate the brake, whilst you maintain control of the winch from outside the vehicle and using the wired remote.

6) When the rope is all but approx. 3m spooled in, using the hand save to hold the hook, reverse the winch slightly to allow the hook to be released.

7) Maintaining tension on the rope, pulse the remote to take in the remaining rope and then anchor the hook onto a suitable mounting point on the vehicle.

Notes

- It is important to understand that it is the first 6-8 tight wraps around the drum and NOT the drum terminal fixing point that allow the wire or synthetic rope to grip onto the drum.

 The drum terminal crimped onto the wire rope and its fixing onto the drum are not load bearing, it is just designed to allow the wire rope to be wound on under sufficient load for it to wrap tightly onto the drum.

- When wire rope is new it is greasy and springy and can easily unwind on the drum if tension is ever released.

- If the outer wraps of a wire rope do 'unwind' then you must pull the whole rope out and re-spool under tension. Failure to observe this will result in failure of the drum fixing.



ATTENTION

We recommend the use of an assistant when spooling the rope. Spooling operation should be undertaken on a large open, flat and level area.



5. OPERATING INSTRUCTIONS

- Ensure vehicle is secure by applying parking brake or chocking wheels.

- Power out (for short distance) or freespool the wire rope out and connect to a suitable anchor point.
- Re-check all wire rope rigging before start operation.

1) Plug in the winch hand controller and switch on the battery isolator if fitted. Feed the hand controller around the front of the vehicle and through the driver's window.

2) To begin winching, start the vehicle engine and with the transmission in neutral operate the winch whilst guiding the path of the winch with the vehicle steering until free. You must ensure that the wire rope winds evenly onto the drum. Acute angle winching can result in rope bunching on the drum which could break out the winch cross bars.

3) When the operation has been completed, the rope should be pulled out and re-spooled neatly under tension for next use.

Notes

- Your winch is not designed to be used continuously but instead to provide the high load short duration pulls required to recover an off road vehicle from difficulty.

- Never allow the winch motor to stall.

- Whenever you work your winch it will generate heat in the motor, high loading and/or long or repeated operation can cause the motor to overheat. Always monitor motor temperature; if the motor becomes too hot to comfortably hold your bare hand on stop operation immediately and allow to cool before further use.

- Do not exceed the maximum rated load of your winch.

- We recommend the use of a snatch block and double line technique for any loads exceeding 50% of winch rating. Always anchor hook back to suitable chassis fixing not the winch mounting plate.

- Keep the vehicle engine running while winching to maintain battery charge.

- A minimum of 6 tight wraps on the drum must be maintained to prevent failure of drum fixing. Do not pull wire rope out past the red marking.

- Do not disengage the clutch will under load.

- Do not re-engage clutch while winch is running.

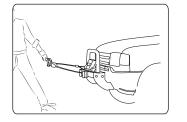
- Never drive your vehicle to assist the winch in any way.



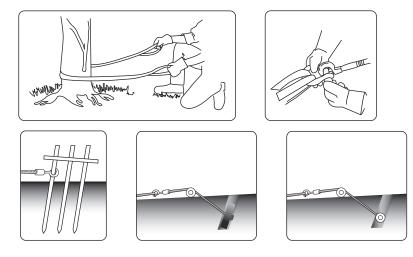
ATTENTION Always keep hands clear of winch rope, hook loop, hook and fairlead opening during installation, operation, and when spooling in or out.

5.1 WINCH OPERATION

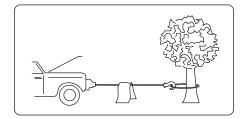
- Pull the rope to the anchor point.



- Couple hook to anchor point. If unable to find anchor point, make one using accessory.



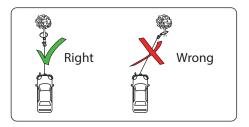
- Put blanket or specialized accessory (see Accessories Chapter) over wire rope.



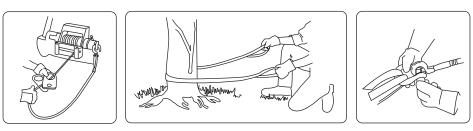
Operating Instructions



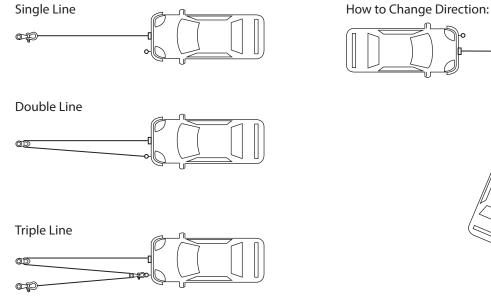
- Operate winch and pull. Check winch regularly to ensure that wire rope is wrapping evenly onto drum. If necessary unroll cable again and roll evenly. Repeat until vehicle is recovered. Avoid pulling in sharp angles.

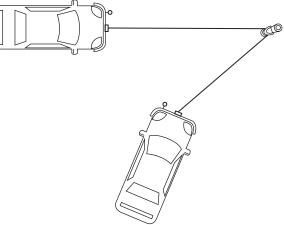


5.2 HOW TO USE PULLEY



Increasing pulling force:





6. MAINTENANCE INSTRUCTIONS

- The winch should be operated at least once a month.

- Replace remote control batteries every 12 months or when exhausted.

- Keep protective cover in place when not in use.

- Lubricate all moving parts with grease and with normal use do not need greasing for the life of the winch.

- Clean your winch after use, use only low pressure water and a brush to rinse off any dirt.

- Once dry you should use a light spray oil to coat the winch and wire rope before installing the winch cover.

- Winch should not be immersed in dirty water.

Check	Before first operation	After each use	Every 90 days
Read this user's manual, in order to understand your winch and its operation	х		
Check fasteners and make sure they are tight and to proper torque. Replace damaged fasteners.	х	x	х
Verify wiring to all components is correct and be certain that all connections are tight.	х		x
Verify there is no exposeed/ bare wiring or terminals. Cover expo- sures with terminal boot, head shrink tubing or elecytrical tape.	х		x
Inspect the wire rope for damage Replace it inmmediately if damaged	x	x	x
Keep winch, rope and switch control free from contaminants, Use a clean rag or towel to remove any dirt and debris.		x	

6.1 SYNTHETIC ROPE'S MAINTAINANCE

- Do not allow rope to contact sharp or abrasive objects.

- Do not expose to strong detergents, fuels, oils or anti-freeze solutions.
- After use; pull out rope, wash, dry and carefully re-spool onto drum.



7. LOCATION AND TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	SUGGESTED SOLUTION
Motor does not run	Circuit breaker off battery or CB cable loose	Energize circuit breaker. Attach cable and tighten nuts/bolts.
	Solenoid not working	Give a touch to solenoid and connect 12/24v directly. Coil makes a "Tac" sound when it starts. If it doesn't, replace solenoid.
Motor too hot	Operating period of time too long	Rest winch until cool
Motor works too slow or lacks power	Insufficient battery charge, current, or voltage	Charge battery. Clean, tighten and/or replace battery or other connections.
Motor starts but drum does not rotate	Clutch is not engaged	Engage clutch
Motor works in only one direction	Solenoid is broken	Replace solenoid

7.1 SERVICE FACTOR

SERVICE / SERVICIO	LOAD / CARGA	TIME / TIEMPO	MAINTENANCE (Months) / MANTENIMIENTO (Meses)		
Normal	<65%	<25%	6~12		
Heavy / Pesado	>65%	>25%	3~6		
Severe / Severo	Abnormal Conditions / E Environmental Geo Ambientales, Geog	1~3			
	<100%	<duty cycle="" limit<br="">>Límite Ciclo de Trabajo</duty>			

Signaling

8. SIGNALING



Pull: With forearm in vertical position and forefinger pointing up, move hand in small horizontal circles.



Pull slowly: With forearm in vertical position and forefinger pointing up, move hand in small horizontal circles while other hand stays horizontal motionless.



Unwind: With arm extended downward and forefinger pointing down, move hand in small horizontal circles.



Use main winch: Give fist touch on head, then use regular signals.



Emergency stop: Both arms outstretched, palm down and move again and again horizontally.



Stop all: Grab hands in front of body.

Technical Parameters

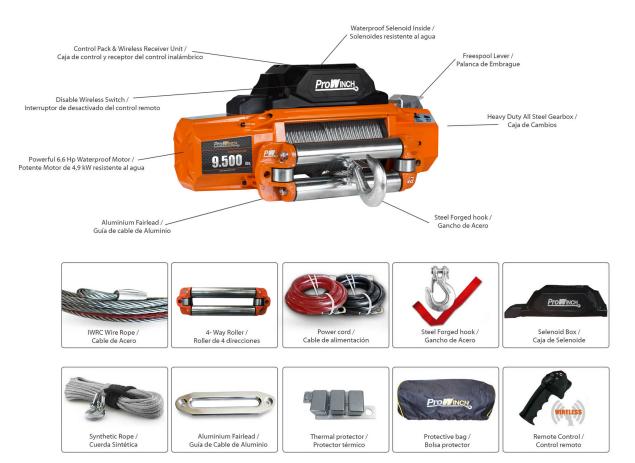


	13 13		15.000. (20.9)		
500.	13		15.000.		
		PWTR9500i / PWTR9500is	PWTR13000i / PWTR13000is	PWTR15000i / PWTR15000is	PWTR17000i / PWTR170
Rated Line Pull	(lb)	9.500	13.000	15.000	17.000
Capacidad de Carga	(kg)	4.309	5.897	6.804	7.711
Motor Power (Series Wound)	(Hp)	6,0	6,6	6,5	6,6
Potencia Motor (Series Wound)	(kW)	4,5	4,9	4,8	4,9
Voltage	0.0	12)//24)/	121/241	13)//24//	101/
Voltaje	(V)	12V/24V	12V/24V	12V/24V	12V
Recommended Battery			650 (Mi-imm	a for winching)	
Batería Recomendada	(CCA)		650 (IVIINIMUN	n for winching)	
Battery Leads	(in)		0.9	x 72	
Cables de Batería	(AWG)		4 x 1,	.83 m	
Waterproof			10.00	Datia	
Grado de Protección			IP 00	Rating	
Gear Ratio		218:1	265:1	432:1	432:1
Relación del Reductor		210.1	203.1	-52.1	-52.1
Gear Train		3 Stage	Planetary	4 Stage P	Planetary
Tren de Engranaje		Planetario	de 3 Etapas	Planetario	de 4 Etapas
Clutch			Sliding R	ing Gear	
Embrague			Anillo de Engra	anaje Corredizo	
Remote Control	(ft)		1	2	
Control Remoto	(m)		3	,7	
Brake			Automatic C		
Freno				era del Tambor	
Drum Size	(in)	Ø 2.5 x 10	Ø 2.5 x 10	Ø 3.45 x 10	Ø 3.45 x 10
Dimensión del Tambor	(mm)	Ø 63 x 254	Ø 63 x 254	Ø 88 x 254	Ø 88 x 254
WRC Wire Rope	(in x ft)	Ø 3/8" x 85	Ø 3/8" x 85	Ø 1/2" x 85	Ø 1/2" x 85
Cable IWRC	(mm x m)	Ø 9,5 x 26	Ø 9,5 x 26	Ø 12,7 x 26	Ø 12,7 x 26
Total Weight	(lb)	92	92	150	150
Peso Total	(kg)	42	42	68	68
Mounting Pattern	(in)			(4.5	
Patrón de Montaje	(mm)			< 114	
Overall Dimension	(in)	L21.1 x W6.5 x H9.6	L22.3 x W5.4 x H9.4	L22.3 x W7.5 x H10.7	L22.3 x W7.5 x H10.7
Dimensiones Totales	(mm)	L536 x AN166 x AL244	L566 x AN137 x AL239	L566 x AN190 x AL267	L566 x AN190 x AL267

Warranty: 3 Year / Certification valid for 1 year / 10 Year Parts and Service Availability Garantía: 3 Años / Certificación valida por 1 año / 10 Años disponibilidad de piezas y servicio

PERFORMANCE / DESEMPEÑO

Model / Modelo PWTR950012v/24v			PWTR13000S12v			PWTR1500012v			PWTR17000S12v								
Layers of Wire Rope / Capas de Cable		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Rated Line Pull per Layer	(lb)	9.500	7.700	6.500	5.700	13.000	9.530	7.929	6.770	15.000	12.060	10.082	8.662	17.000	15.225	13.246	11.524
Capacidad de Carga por Capa	(kg)	4,309	3,493	2,948	2,585	5,897	4,323	3,597	3,071	6,804	5,470	4,573	3,929	7,711	6,906	6,008	5,227
Cumulative Wire Rope Capacity	(ft)	16,2	39	68,2	95	18	37	64	91,8	19,68	45,92	75,44	85,28	19,68	45,92	75,44	85,28
Capacidad de Carga Acumulada	(m)	4,94	11,9	20,8	29	5,29	11,3	19,5	27,9	6	14	23	26	6	14	23	26
Line Speed	(ft/min)	6,4	7	8,5	10,6	5,58	7,22	8,86	11,48	2,95	4,26	4,92	5,9	2,95	4,26	4,92	5,9
Velocidad	(m/min)	2	2,1	2,6	3,2	1,7	2,2	2,7	3,5	1,2	1,6	2,5	3,2	0,9	1,3	1,5	1,8



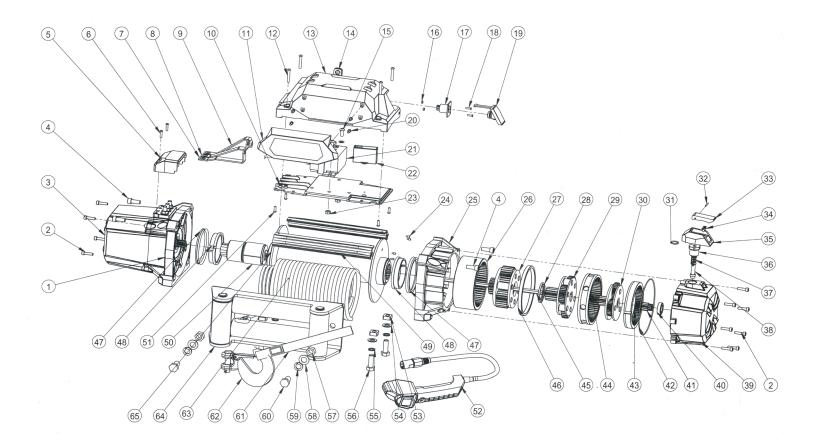
INCLUDES / INCLUYE

Model / Modelo	IWRC Wire Rope / Cable de Acero	Synthetic Rope / Cuerda Sintética	4-Way Roller / Roller de 4 direcciones	Aluminium Fairlead / Guía de cable de aluminio	Power cord / Cable de alimentación	Steel Forged hook / Gancho de Acero	Selenoid Box / Caja de Selenoide	Remote control / Control remoto	Thermal protector / Protector térmico	Protective bag / Bolsa protector
PWTR9500i		x		x	x	x	x	x		
PWTR9500s	х		х		х	х	х	х		
PWTR13000i		x		х	х	x	x	x	x	
PWTR13000s	х		х		х	х	х	х	х	х
PWTR15000i		x		x	x	x	x	x		
PWTR15000s	x		х		х	х	х	х		х
PWTR17000i		x		x	х	x	x	x		
PWTR17000s	x		х		x	x	x	x		х

Parts Diagram

Pro WINCH

9.1 PARTS DIAGRAM PWTR9500 / PWTR13000



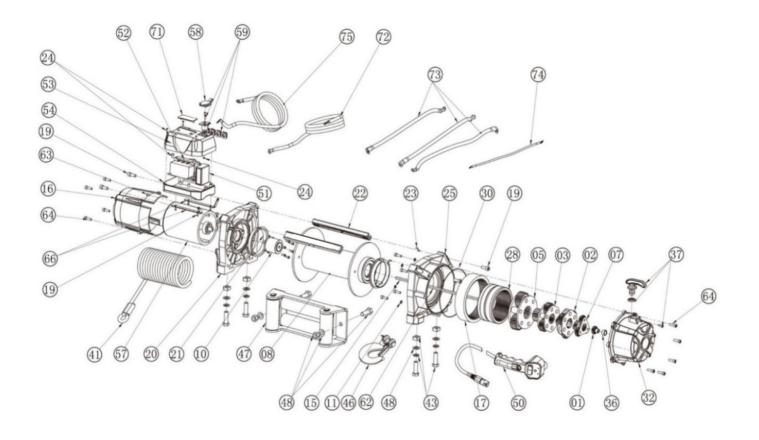
Parts List

N٥	Description	Qty	N٥	Description	Qty
1	Motor Base	1	36	Clutch Knob Housing	1
2	Hexagon Socket Head Cap Screw	11	37	Clutch Knob Spring	1
3	Motor	1	38	Clutch Knob Pin	1
4	Hexagon Socket Head Cap Screw	4	39	Gearbox	1
5	Box For Wiring	1	40	Bearning	1
6	Cross Recessed Rountersunk Red Screw	2	41	Allen Center Wheel	1
7	Plate 1 For Wiring	1	42	O- Ring	1
8	Plate 2 For Wiring	1	43	Inner Gear	1
9	Plate 3 For Wiring	11	44	Cultive Gear	1
10	Control Box Botton Plate	1	45	Driveshaft	1
11	Control Box Front Plate	4	46	Washer	1
12	Cross Recessed Countersunk Head Screw	1	47	Seal	1
13	Control Box	1	48	Sliding Bearning	2
14	Sheath	2	49	Tie Bar	2
15	Cross Recessed Countersunk Head Screw	2	50	Brake Assembly	2
16	Hexagon Socket Head Cap Screw	1	51	Cross Recessed Countersunk Head Screw	1
17	Socket	2	52	Remote Switch	4
18	Sunk Screw	1	53	Nut	2
19	Water Proof Cover	4	54	Washer	1
20	Hexagon Socket Head Cap Screw	1	55	Spring Washer	4
21	Solenoid	1	56	Hexagon Socket Head Cap Screw	4
22	Receiver	2	57	Nut	4
23	Nut	4	58	Washer	4
24	Pins For Tie Bar	1	59	Spring Washer	2
25	Gearbox Base	1	60	Hexagon Socket Head Cap Screw	2
26	Inner Gear	1	61	Hand Saver Strap	2
27	Stange- 3 Of Planetary Wheel	1	62	Hook	2
28	Washer	1	63	Rope Assembly	1
29	Stange- 2 Of Planetary Wheel	1	64	Fairlead	1
30	Stange- 1 Of Planetary Wheel	1	65	Drum	1
31	O-Ring	1			1
32	Dtraight Pin	1			
33	Clutch	1			
34	Cross Recessed Countersunk Head Screw	2			
35	Clutch Knob	1			

Parts Diagram

Pro WINC

9.3 PARTS DIAGRAM PWTR15000 / PWTR17000



Parts List

No.	Description	No.	Description
01	Sun Gear	43	Winch Mounting Hardware Set
02	Gear Carrier, Input	46	Clevis Hook
03	Gear Carrier, Intermediate	47	Roller Fairlead
05	Gear Carrier, Output	48	Roller Fairlead Mounting Hardware
07	Gear Carrier	49	Control Box Assy W/O Transmitter
08	Drum	50	Remote Control W/ Transmitter
10	Break Assy	52	Solenoid Assy
11	Washer	53	Control Box Cover
15	Circlip	54	Control Box Base
16	Motor Cover	55	Complete Gear Assy
17	Ring Gear	57	Complete Motor Assy
19	Tie Rod Screw	58	Socket Cover
20	Motor Base	59	Socket Connector Assy
21	Axle Sleeve	62	Drive Shaft
22	Tie Bar	63	Bolt M5 X 8
23	Pin M4 X 8	64	Haxagon Head Bolt M6 X 20
24	Control Box Mounting Brackets And Hardware	66	Motor Gear
25	Gear Box Base	68	Decal Set
28	Clutch Gear	71	Aluminum Winchmax Badge
30	Rubber Seal	72	Cable Battery (+)
32	Gear Box Cover	73	Cable Battery (-)
36	Oil Bearing	74	Ground Cable
37	Clutch Handle Assy	75	Cable Motor
41	Wire Rope With Fix Bolt		

Warranty



10. ACCESSORIES



Gloves: Avoid injuries. Wire rope wears with use and wire threads can poke out.



D-Shackles: Safely engages hook with pulleys and rigging straps.



Pulley: Increases pulling force of winch.



Rigging strap: Anchor point for winch line. Non-elastic nylon webbing rigging strap can be wrapped to a tree, trunk or a solid object. A D-Shackle can be used to attach winch hook.



Wire Rope Dampener: Reduces risk of injury due to recoil in event of a winch line or recovery strap failure (whip effect). Shape of blanket with pockets can be filled with weights like sand or stones. Once loaded should be folded around wire rope before pulling.



Tow Strap/Tow Sling: Polyester strap with a hoop on each end to tow vehicle.



Tow Hook: Installed on vehicle chassis providing an anchor point to tow vehicle.

11. WARRANTY

LIMITED WARRANTY COVERAGE

PROWINCH products are warranted to the original purchaser for a period of three (3) years after the date of purchase only to be free from defects in material and workmanship when subjected to normal, proper and intended use. Within this period, PROWINCH will only repair or replace free of charge any part on a product, after examination, is determined by PROWINCH to be defective in material or workmanship and was not caused or substantially contributed to by other factors or circumstances beyond PROWINCH control, including (but not limited to) defective installation, maintenance or repair, product modification or alteration, any neglect misuse or excessive use, mishandling, product exposure to extreme or unsuitable conditions, normal wear and tear or failure to follow manufacturer's instructions. This warranty does not apply to damage that PROWINCH determines to be from repairs made or attempted by anyone other than PROWINCH authorized personnel.

Return of the product with a copy of proof of purchase to PROWINCH, freight prepaid and insured, are required for this warranty to be effective. If more than one year has elapsed from purchase date, proof of periodic and regular maintenance by an authorized service must also be provided for this warranty to be effective. PROWINCH does not cover freight or labor charges associated with the inspection and testing of products which are found by PROWINCH not to be a valid warranty claim.

DISCLAIMER

In no event shall PROWINCH be liable for any labor, removal and installation expenses, loss of time, manufacturing costs, transportation, materials, loss of profits, incidental, special, consequential or punitive damages, or for any costs, attorney fees, expenses, losses or delays, direct or indirect, alleged to be as a consequence of any damage to, failure of, or defect in any product including, but not limited to, any claims for loss of profits. PROWINCH disclaims any implied warranties, including without limitation, any implied warranty of merchantability or fitness for a particular use or purpose.

Acceptance of the exclusive repair and replacement remedies described herein is a condition of the contract for the purchase of every PROWINCH product. If you do not agree to this condition, you should not purchase the product.





