



Your safety, and the safety of others, is very important. To help you make informed decisions about safety, we have provided installation and operating instructions and other information on labels and in this guide. This information alerts you to potential hazards that could hurt you or others. It is not possible to warn you about all potential hazards associated with this product, you must use your own good judgement.

CARELESS INSTALLATION AND OPERATION CAN RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE. READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND OPERATING INSTRUCTIONS BEFORE INSTALLING AND OPERATING THIS PRODUCT.

This guide identifies potential hazards and has important safety messages that help you and others avoid personal injury or death. WARNING and CAUTION are signal words that identify the level of hazard. These signal words mean:

WARNING signals a hazard that *could* cause serious injury or death, if you do not follow recommendations.

CAUTION signals a hazard that *may* cause minor to moderate injury, if you do not follow recommendations. This guide uses **NOTICE** to call attention to important mechanical information, and **Note**: to emphasize general information worthy of special attention.



GENERAL SAFETY PRECAUTIONS



WARNING!

MOVING PART HAZARDS

To prevent serious injury and property damage:



- Do not operate or install winch without reading and understanding these instructions and the Basic Guide to Winching Techniques.



- Keep hands clear of wire rope, hook and fairlead opening during operation and when spooling.



- Use supplied hook strap for spooling wire rope.



- Stand clear of wire rope and load during operation.

- Keep others away.



- Inspect winch installation and wire rope condition before operating winch.

- Do not use as a hoist.

- Do not use to move persons.



- Do not exceed winch's rated capacity.

- Never touch wire rope or hook while in tension.



- Be certain the anchor you select will withstand load.

- Never wrap wire rope back onto itself. Use a choker chain or tree trunk protector on the anchor.



- Prior to initiating winching operation be sure any element which can interfere with safe winching is removed.

- Do not disengage clutch if winch is under load or wire rope is in tension.



WARNING!

- Take your time. Sloppy rigging causes accidents.

- The wire rope must always spool onto the drum as indicated by the drum rotation label on the winch.



BATTERY HAZARDS

- Batteries contain gasses which are flammable.

- Wear eye protection.

- Remove all metal jewelry.

- Do not lean over battery while making connections.

- Failure to take proper precaution may result in fire or serious injury.

CAUTION!

TO AVOID INJURY AND PROPERTY DAMAGE:



- Do not use winch to secure a load during transport.



- Do not submerge in water.



- Do not use to tow other vehicles.



- Wear heavy leather gloves when handling the wire rope.



- Never winch with less than 5 wraps of wire rope around the drum.



- Caution should be used if the vehicle is tied down during a winching operation. This may lead to damage to the frame.



- Before winching, inspect remote control lead for damage.

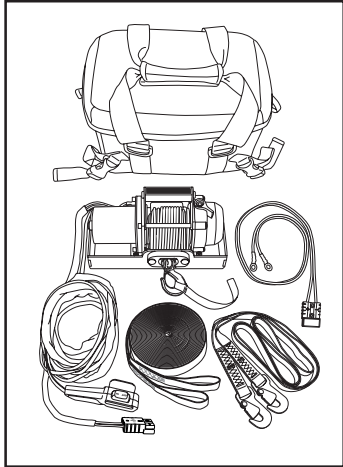


Figure 1. WARN SnoWinch kit

Specifications

Part number: PN 70170

Rated line pull: 1500 lbs. (680 kgs.) single-line

Motor: 12V DC, .4 hp (.3kW) permanent magnet

Control: Remote Control 10'

Geartrain: 3-Stage Planetary

Gear ratio: 103:1

Lubrication: Grease EP

Clutch (freespooling): Cam activated

Brake: Mechanical brake standard

Drum diameter/Length: 1.5"/3.0" (3,8cm/7,6cm)

Complete Kit Weight: 15.0 lbs. (6.8 kgs)

Rope: Synthetic, 40', 5/32" diameter (12.2m, 4mm diam.)

Fairlead: Synthetic Hawse

Recommended Battery: 12 Amp/hour minimum for winching

Battery leads: 10 gauge

Duty Cycle: Intermittent

Performance Data

Line Pull lbs (kgs)	Line Speed ft/min (m/min)	Motor Current Amps
0	15 (4.6)	6
500 (227)	11 (3.3)	27
1000 (455)	7 (2.1)	44
1500 (680)	5 (1.5)	65

Above performance specs are based on first layer of drum

Pulling power lbs (kgs)	Rope layer 1st is closest to drum
1500 (680)	1st
1320 (599)	2nd
1162 (527)	3rd
1020 (463)	4th

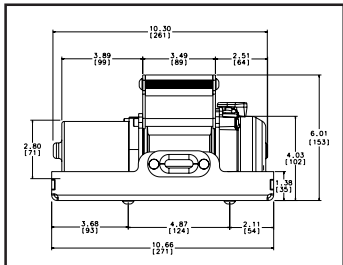


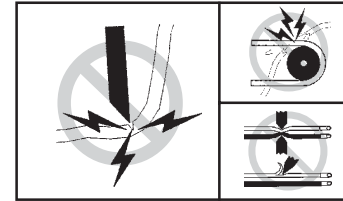
Figure 2. Winch dimensions

Step One: Safety First!

WARNING!

TO PREVENT SERIOUS INJURY OR DEATH FROM ELECTRICAL FIRE:

- Do not route electrical cables across sharp edges.
- Do not route electrical cables through or near moving parts.
- Do not route electrical cables through or near any high heat parts.
- Avoid pinch and wear/abrasion points when installing all electrical cables.



Make sure you thoroughly read and understand all safety warnings in this guide and “**The Basic Guide to Winching Techniques**”.

Make sure you thoroughly inspect the winch, winch rope, and all straps that will be used for winching. If there is any damage, or excessive wear, replace the damaged component prior to use.

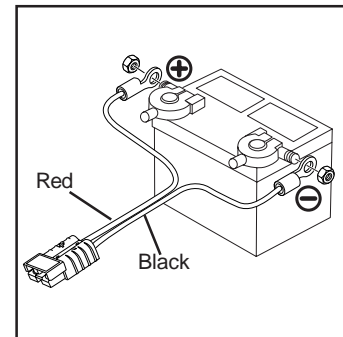
Always use caution when working with electricity and remember to verify that no exposed electrical connections exist before energizing your winch circuit.

Step Two: Install Power Lead

The power lead must be installed so the winch can be connected quickly when needed.

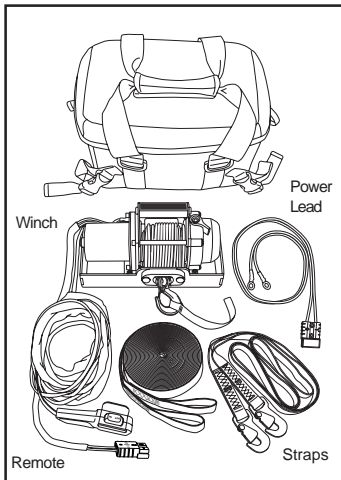
It is recommended that the electrical plug should be located as close to the center of the vehicle as possible. This will allow the winch to be fastened to the front or rear of the vehicle.

Verify that the winch electrical wires will be able to reach the power plug when the winch is secured to the front or rear of the vehicle.



Power Lead

Fasten the power lead to the vehicle with electrical ties. Be sure to leave enough slack in the wire so that the plug can be maneuvered to connect the winch electrical wires.



Kit Components

Step Three: System Overview

This system is designed as a vehicle recovery system only. As with all winches, it is very important to thoroughly inspect all parts of the system prior to winching. If any part is damaged, it must be disposed of and immediately replaced.

This system is designed to be securely stored inside its bag when not in use. Make sure that there are no items stored in the bag with the winch that could damage the winch, winch rope, electrical components, or straps.

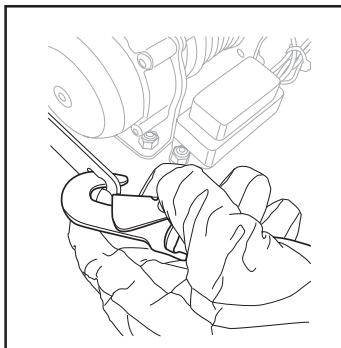
There are two different length straps in this system. The 9' RED strap must be used to attach the winch to the vehicle. The 25' BLACK strap must be used as a tree trunk protector or to wrap around another vehicle or anchor point. Wrap this strap around the anchor point so that the winch hook can be hooked through both ends of the strap. Neither of these straps should ever be used in a "Choker" manner such that it loops back onto its self.

The winch electrical system is very basic. Simply plug the winch power cord into the power lead on the vehicle and the system is ready. The cord should be routed over the vehicle to make sure that it does not get caught under the vehicle during winching.

This winch is equipped with a light weight synthetic rope. Make sure that this rope does not come in contact with any sharp edges, chemicals, or hot surfaces. Never tie knots in rope.

The hawse fairlead used in this system is made of a synthetic material that is designed to work with the synthetic rope. This fairlead can be permanently damaged if the winch hook is pulled up to the fairlead under the full power of the winch, and the winch is stalled.

⚠ WARNING
Never use these straps in a "Choker" manner to extend the length of a pull.

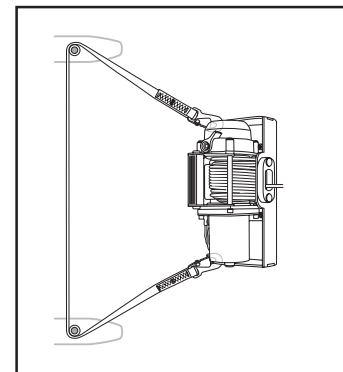


Shackles and Strap Attached to Winch

⚠ WARNING
Impact and Moving Part Entanglement Hazard
Failure to observe these instructions could lead to severe injury or death

- Always know the Working Load Limit (WLL) of your rope.
- Never exceed the WLL of 1500lbs (680kg) or shock load this rope.
- Never use this rope on a winch with a rated line pull greater than 1500 lbs (680kg).
- Always determine suitability of rope for a specific application.
- Never use a rope if Worn, Damaged, Abused, Overloaded or Improperly Maintained.
- Never stand within the recoil (snapback) area.
- Never use rope over a rough surface without Chafe Protection.

⚠ WARNING
Inspect winch rope and straps before operating winch.



Winch Attached to Vehicle

Step Four: Recovery System Setup and Use

Always take time to assess your situation and plan your pull. Review the "Basic Guide to Winching Techniques" before you get stuck. Remove the winch from its bag and place it on the ground in front or behind the vehicle with the fairlead facing away from vehicle.

Secure the winch to the vehicle with the RED strap. Attach one end of the RED strap to one side of the mounting plate. Route the strap securely around the vehicle and back to the other side of the mounting plate.

Make sure that the strap will not come in contact with any sharp or hot edges or objects. If this happens, the straps could be damaged and result in system failure.

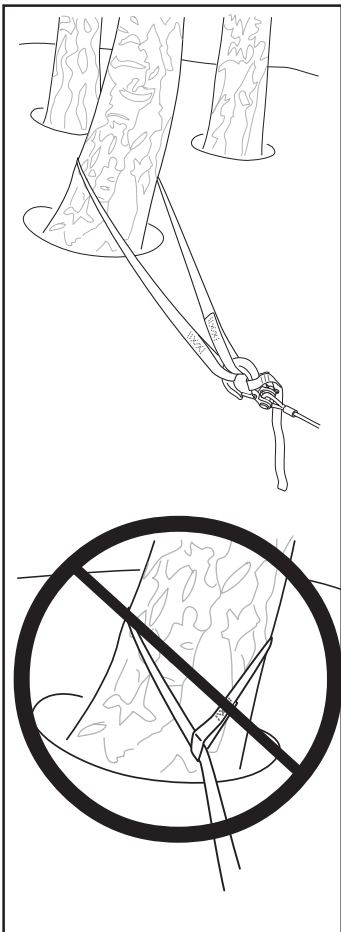
Do not wrap the RED strap around an object multiple times. This could prevent the strap from sliding around the vehicle attachment point. Sliding of the strap on the vehicle will help align the winch with the anchor point and distribute the load on both ends of the strap.

Move the winch clutch lever to the Freespool position so the rope can be pulled out manually. Always use the supplied hook strap to hold the hook when spooling the rope in or out. Leave at least five wraps of rope on the drum. Move the clutch lever back to the Engaged position and then pull on the rope to make sure the clutch is engaged.

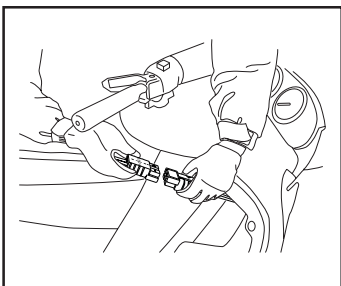
Wrap the BLACK strap around the anchor point so that the winch hook can be hooked through both ends of the strap. This strap can be wrapped around the anchor point multiple times if needed to reduce length.

Attach the winch hook to both ends of BLACK strap.

Lay something over the rope to absorb energy should the rope or strap fail. Tree limbs or a heavy jacket placed midway between the winch and anchor point may be used for this purpose.



Black Strap as Tree Trunk Protector



Attach power cord to vehicle power lead

Attach the winch Power Cord to the vehicle power lead. The cord should be routed over the vehicle to make sure that it does not get caught under the vehicle during winching.

Check to make sure that all connections are secure and that no components are damaged. Power the winch in briefly and then back out to make sure that it is functioning properly.

The system is now ready to winch.

Step Five: Bag Storage and Use

Always take time to properly secure the winch inside the bag. Using the internal adjustment strap, cinch strap around winch to prevent damage to the winch, bag, or kit contents

Always secure the bag to a flat surface, by using the 4 tie down adjustment straps. The bag should never be mounted vertically, or suspended by these straps. Doing so may result in damage to the bag, or kit contents. Never position the bag near sharp items that may abrade or tear the bag.

There are 4 plastic D-ring tie down points located on the outside of the bag. These D-rings are to provide additional tie down security. If the bag is allowed to shift, or bounce when riding, use ratchet straps or bungee chords to secure bag to the vehicle rack.

⚠ CAUTION

KNOW YOUR WINCH:

- Take time to fully understand your winch and the winching operation by reviewing the *Basic Guide to Winching Techniques* included with your winch.

Storage

This product should be stored in a dry place. After use, be sure the bag is opened to allow the inside and contents to dry thoroughly.

Service

Should you encounter a problem during installation or operation of your winch, please follow these steps toward resolving the problem:

- Refer to your operator's guide and installation instructions. It has illustrations and detailed information on the installation and safe and proper operation of your winch. It also includes a replacement parts list and assembly diagrams. If you are unable to resolve the problem, then go to step 2.
- Contact your dealer where you purchased your winch. If, after discussing the problem with their parts and service staff, you are still unable to resolve the problem then go to step 3.
- Call an Authorized WARN Service center from the list provided on the back of the warranty sheet included with the product. When calling, please have the following information available: winch model number and purchase date, make, model and year of ATV.
- If you are unable to resolve the problem to your satisfaction, please call Warn Industries Customer Service at: 1-800-543-9276. When calling, please have the following information available: winch model number and purchase date, make, model and year of ATV. You may also contact Warn Industries by visiting our website: www.warn.com.

Warranty

Please refer to the warranty sheet enclosed with your winch for details.

Replacement Part Numbers

Ordering information: Parts may be obtained through your local dealer or distributor.

Part Number	Description
PN 70757	Straps, nylon, 25' and 9'
PN 70758	Rope, Synthetic, 5/32" x 40'
PN 70759	Hawse Kit, Synthetic
PN 70760	Bag, 7x7x11"
PN 70751	Lead, Battery

The above list represents the most commonly requested replacement parts. A full listing of replacement and service parts are available. Check with your WARN authorized dealer or on the web: www.warn.com