



# **ELECTRIC WINCH**

## **Manual and Safety Instruction**

**MODELS:**  
**A9500 and A9500S**  
**A12000 and A12000S**  
**X9500 and X12500**

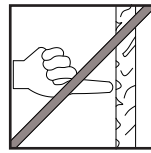
**\*PLEASE READ CAREFULLY BEFORE OPERATING THE WINCH**

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**WARNINGS, CAUTIONS,  
NOTICES AND DANGERS**



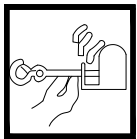
**NEVER TOUCH  
THE ROPE OR HOOK**



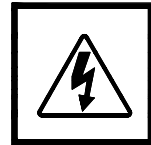
**PLEASE READ CAREFULLY**



**NEVER TOUCH  
THE ROPE OR HOOK**



**MOVING PARTS HAZARD**



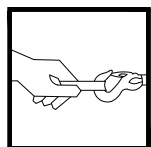
**ELECTRICAL HAZARD**



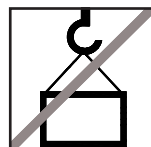
**MOVING PARTS HAZARD**



**NEVER HOOK THE ROPE  
BACK ONTO ITSELF**



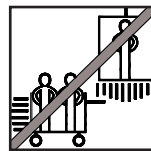
**KEEP HANDS CLEAR OF  
ROLE AND HOOK**



**NEVER USE WINCH TO  
SUSPEND A LOAD**



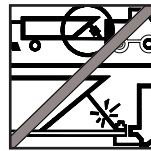
**EXPLOSION HAZARD**



**NEVER USE WINCH TO LIFT  
OR MOVE PERSONS**



**FIRE HAZARD**



**NEVER USE WINCH TO  
TOW OTHER VEHICLES  
OR OBJECTS**

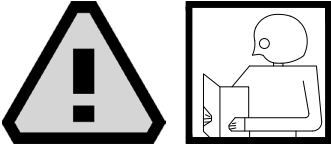


**WEAR PROTECTIVE  
CLOTHING/GEAR**

## WHAT'S INCLUDED:

Winch Assembly with Wire or Synthetic Rope  
Solenoid Control Box with Electrical Leads  
Wired and Wireless Remotes  
Clevis Hook with Pin and Pull Strap  
Fairlead  
Bolt Installation Kit  
Solenoid Control Box Brackets  
Instruction Manual

## Warnings and Cautions



### 1. As you read these instructions, you will see **WARNINGS**, **CAUTIONS**, **NOTICES** and **NOTES**.

Each message has a specific purpose. **WARNINGS** are safety messages that indicate a potentially hazardous situation, which, if not avoided, could result in serious injury or death. **CAUTIONS** are safety messages that indicate a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. A **CAUTION** may also be used to alert against unsafe practice. **CAUTIONS** and **WARNINGS** identify the hazard, indicate how to avoid the hazard, and advise of the probable consequence of not avoiding the hazard. **NOTICES** are messages to avoid property damage. **NOTES** are additional information to help you complete a procedure. **PLEASE WORK SAFELY!**



### 1.2 MOVING PARTS ENTANGLEMENT HAZARD

#### Dress properly

- Do not wear loose clothing or jewelry. They can be caught in moving parts.
- Non-skid footwear is recommended.
- Protective hair covering to contain long hair.

Failure to observe these instructions could lead to severe injury or death.

To avoid injury to hands or fingers:

- **Always** keep hands clear of rope, hook loop, hook and fairlead opening during installation, operation and when spooling in or out.
- **Always** use extreme caution when handling hook and rope during spooling operations.
- **Always** use supplied hook strap whenever spooling rope in or out, during installation, and during operation.
- **Always** keep vehicle in sight during winching operation.
- **Always** wear heavy leather gloves when handling rope.

## **WARNING**



### 1.3 CHEMICAL AND FIRE HAZARD

Failure to observe these instructions could lead to severe injury or death.

- **Always** remove jewelry and wear eye protection.
- **Never** lean over battery while making connections.
- **Always** verify area is clear of fuel lines, fuel tank, brake lines, electrical wires, etc. when drilling.
- **Never** route electrical cables:
  - Across any sharp edges.
  - Through or near moving parts.
  - Near parts that become hot.
- **Always** insulate and protect all exposed wiring and electrical terminals.
- **Always** install terminal boots as directed in installation instructions.

### 1.4 Vehicle batteries contain gases that are inflammable and can explode violently.

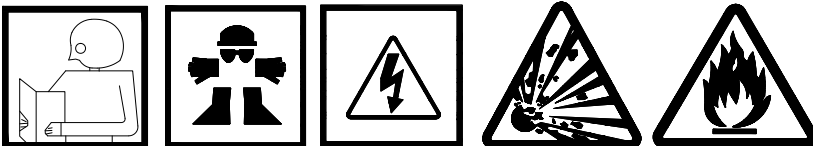
## **WARNING**



### 1.5 Battery

- Be sure that battery is in good condition. Avoid contact with battery acid or other contaminants.
- **Always** wear eye protection when working around a battery.
- **Always** follow wiring diagrams
- Have the engine running when using the winch, to avoid flattening the battery.

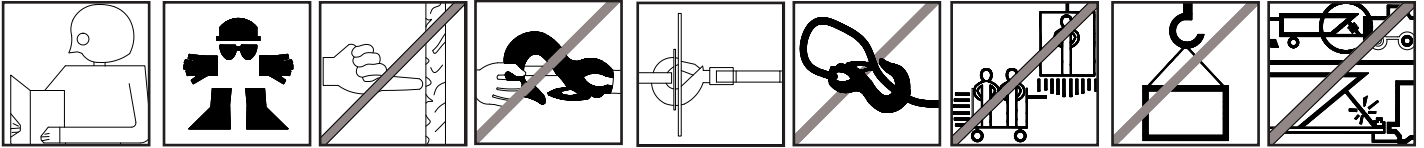
## **WARNING**



### 1.6 Improper wiring can result in electrical shock or explosion.

- **Always** insulate and protect all exposed wiring and electrical terminals.
- **Always** place supplied terminal boots on wires and terminals as directed by installation instructions.
- **Never** connect DC Powered winches to AC current.
- **Never** operate a DC winch in an explosive environment.
- **Never** route electrical cables across sharp edges; near parts that get hot, nor through or around moving parts.
- **Always** verify area is clear of fuel lines, fuel tank, brake lines, electrical wires, etc., when drilling.
- **Always** consult operator's manual for proper wiring details.

## DANGER



### 1.7 Improper use or overloading of the winch can result in a release of load or rope failure.

Before winching a load, be sure the clutch is fully in the engaged position.

- **Always** properly seat load in throat of hook.
- **Always** use a shackle or strap when attaching the hook to an anchor point.
- **Always** use a hook with a latch and insure hook latch is closed and not supporting load.
- **Always** keep hands clear of rope, hook loop, hook and fairlead opening during installation, operation and when spooling in or out.
- **Always** use supplied hook strap whenever spooling rope in or out during installation and operation.
- **Never** touch rope or hook while in tension or under load.
- **Never** hook the rope back onto itself.
- **Never** use winch to lift or move persons.
- **Never** use winch as a hoist or to suspend a load.

## WARNING

### 1.8 Moving Parts Entanglement Hazard

- Keep the duration of your pulls as short as possible.
- Do not step over a cable, or near a cable under load.
- **Never** engage or disengage clutch if winch is under load, rope is in tension or drum is moving.
- **Always** keep hands clear of rope, hook loop, hook and fairlead opening during installation, operation and when spooling in or out.
- **Always** keep wired remote control lead clear of the drum, rope and rigging. Inspect for cracks, pinches, frayed wires or loose connections. Replace remote control if damaged. **Use only manufacturer's identical replacements with the exact specifications.**
- **Always** pass wired remote control through a window to avoid pinching lead in door, when using remote inside a vehicle.
- **Never** leave remote control where it can be activated during free spooling, rigging, or when the winch is not being used.
- If the motor becomes uncomfortably hot to the touch, stop and let it cool for a few minutes. Do not pull more than one minute at or near the rated load. Do not maintain power to the winch if the motor stalls.
- Check motor often, never winching out of max pull and specific time, it will make the motor hot and damage it.

### 1.9 General Safety



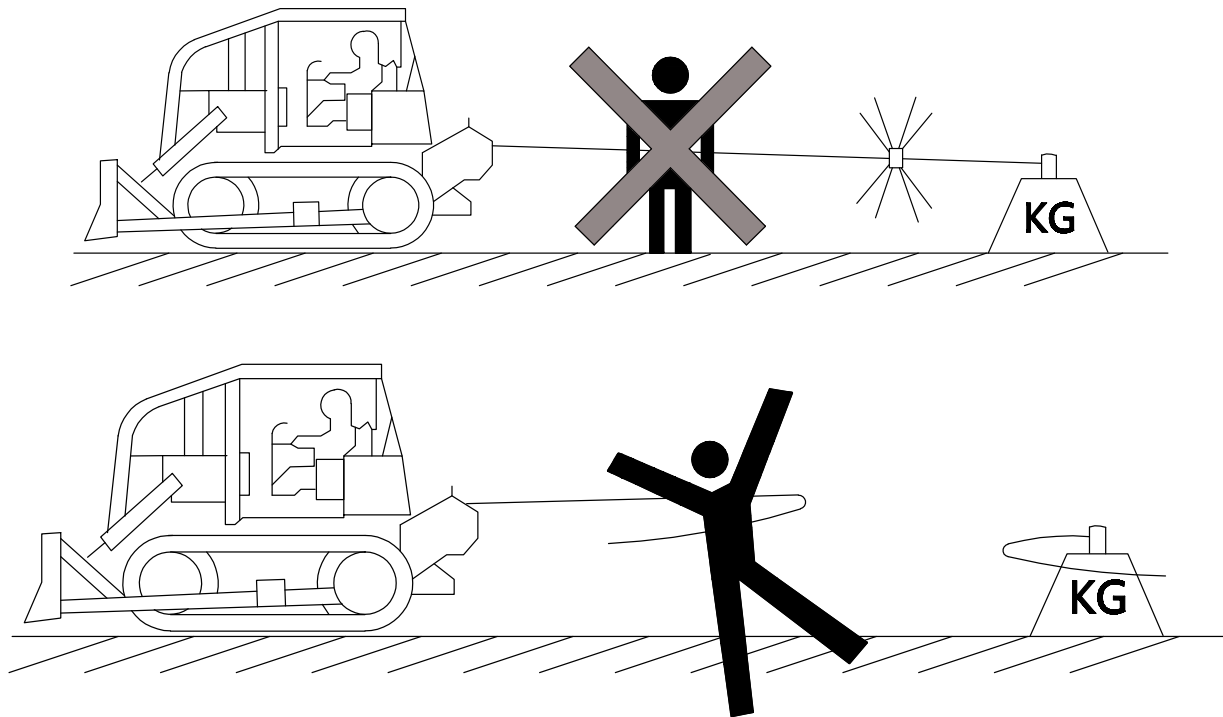
- **Always** know your winch. Take time to fully read the Installation Guide and the Basic Guide to Winching Techniques in order to understand your winch and its operation.
- Electric winches are for intermittent usage and should not be used in constant duty applications.
- Modification, alteration, or deviation to the winch should only be made by qualified Winch Company. (Altering or modifying the winch (i.e. machining or welding) in any way, will void the warranty.)
- **Never** operate this winch if you are under 16 years of age.
- **Never** operate this winch when under the influence of drugs, alcohol or medication.
- **Never** exceed winch/rope capacity listed on product data sheet. Double line using a snatch block to reduce winch load. **3**

- **Always** be aware of stability of vehicle and load during winching, keep others away. Alert all bystanders of an unstable condition.
- Keep a safe distance, proper footing and balance all the time.

## **WARNING**

### 1.10 Installation Safety

- **Always** inspect rope, hook, and slings before operating winch. Frayed, kinked or damaged rope must be replaced immediately. Damaged components must be replaced before operation. If a cable pulls loose or breaks under load it can lash back and cause serious personal injury or death.



(Figure 1-10)

- **Always** pre-stretch wire rope and re-spool under load before use. Tightly wound wire rope reduces chances of “binding”, which can damage the rope.
- **Always** spool the rope onto the drum in the direction specified by the winch warning label on the winch and/or documentation. This is required for the automatic brake (if so equipped) to function properly.
- **Always** choose a mounting location that is sufficiently strong to withstand the maximum pulling capacity of your winch.
- **Always** use factory approved mounting hardware, components, and accessories.
- **Always** use grade 5 (grade 8.8 metric) or better mounting hardware.
- **Never** weld mounting bolts.
- **Always** be careful when using longer bolts than those supplied from factory. Bolts that are too long can damage the base and/or prevent the winch from being mounted securely.
- **Always** mount the winch and attach the hook to the rope’s end loop before connecting the electrical wiring.
- **Always** position fairlead with WARNING label on top.
- **Never** obscure warning and instruction labels.
- **Never** leave remote control plugged into winch when free spooling, rigging, or when the winch is not being used.
- **Never** hook rope back onto itself, it causes damage to the rope.
- **Always** use a choker chain, choker rope, or tree trunk protector on the anchor.

- **Always** be certain that the anchor you select will withstand the load and the strap or chain will not slip.
- **Always** select an anchor point as far away as possible. This will provide the winch with its greatest pulling power.
- **Never** operate a winch with less than 5 turns of wire rope around the drum and operate a winch with less than 8 turns of synthetic rope around the winch drum. The rope could come loose from the drum.
- **Never** expose the rope to heat sources or chemicals.
- **Never** pull the rope around non-rotating sheaves or rollers.
- **Never** allow rope to tangle or jam while winching. Rope could break before winch stalls.
- **Never** knot or tie the rope to secure a load or repair a broken rope.
- **Never** use a hook whose throat opening has increased, or whose tip is bent or twisted.
- **Never** use to raise, suspend, lower or secure horizontally hinged doors or ramps
- **Always** store the remote control in a protected, clean, dry area.
- **Always** double line or pick distant anchor point when rigging. This maximizes pulling power and avoids overloading the winch.
- Place a recovery blanket on wire rope if possible before operating winch, it will make vehicle and operator safe if wire rope is damaged.

## CAUTION

### 1.11 Avoid Winch and Equipment Damage

- **Always** avoid side pulls which can pile up rope at one end of the drum. This can damage rope or winch.
- Do not operate the winch at extreme angles. Do not exceed the specified angles for a roller fairlead. For a hawse fairlead, the angle should be as close to straight as possible.
- **Never** use winch to tow other vehicles or objects. Shock loads can momentarily exceed capacity of rope and winch.
- **Always** avoid “powering out” for extended distances. This causes excess heat and wear on the winch motor and brake.
- **Always** use care to not damage the vehicle frame when anchoring to a vehicle during a winching operation.
- **Never** “jog” rope under load. Shock loads can momentarily exceed capacity of rope and winch.
- **Never** use winch to secure a load during transport.
- **Never** submerge winch in water.
- **Always** store the remote control in a protected, clean, dry area.

## NOTICE

### 1.12 General Tips for Safe Operation

1. To prevent battery drain and maximize power and speed of the winch, the vehicle engine should be kept running during operation. If the winch is used for a considerable time with the engine off, the battery may drain and be too weak to restart the engine.
2. Inspect the winch installation, check bolts to ensure that all bolts are tightened before each operation.
3. Any winch that appears to be damaged in any way, is found to be worn, or operates abnormally SHALL BE REMOVED FROM SERVICE UNTIL REPAIRED. It is recommended that the necessary repairs be made by a manufacturer’s authorized repair facility.
4. The wire rope may break before the motor stalls, for heavy loads at or near rated capacity, use a pulley block/snake block to reduce the load on the wire rope.
5. Do not move the vehicle to pull a load (Towing) on the winch cable, this could result in cable breakage.

## NOTICE

### 2. Electric Winch Installation

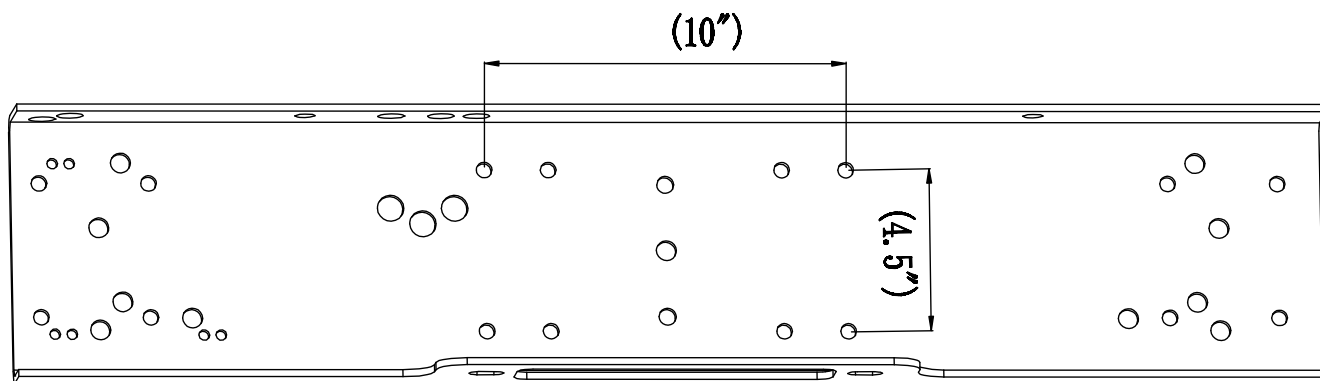
#### 2.1 Unpack Your Winch

Unpack your new winch and ensure that all the parts are included by referring to parts list provided in this manual.

If you find any parts missing or broken, please contact the store where you purchased from as soon as possible.

## 2.2 Mount Your Winch

Choose a suitable location to mount the winch that is strong enough to withstand the loads (A mounting plate is required for winch installation). Check that your mounting plate or bumper has suitable screw holes; if not drill four mounting holes according to the bolt pattern mentioned in the winch specifications (Figure 1-3).



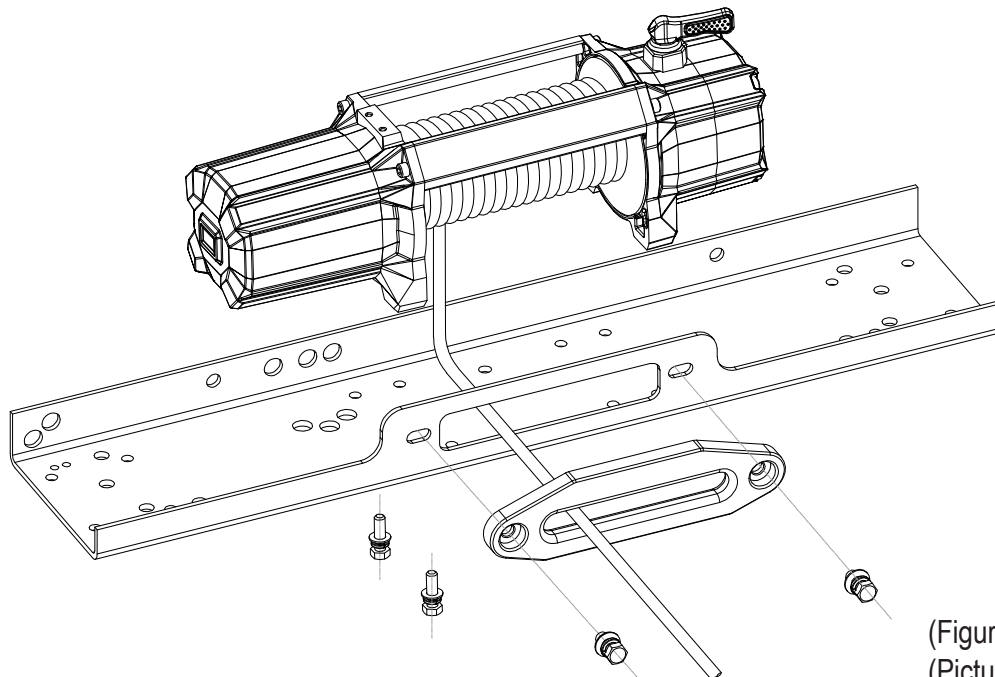
(Figure 2-2)  
(Pictures above for reference only)

## 2.3 Attach Your Winch

Install your winch on the mounting plate or bumper, using supplied fasteners and tighten.

## 2.4 Install Your Winch Fairlead

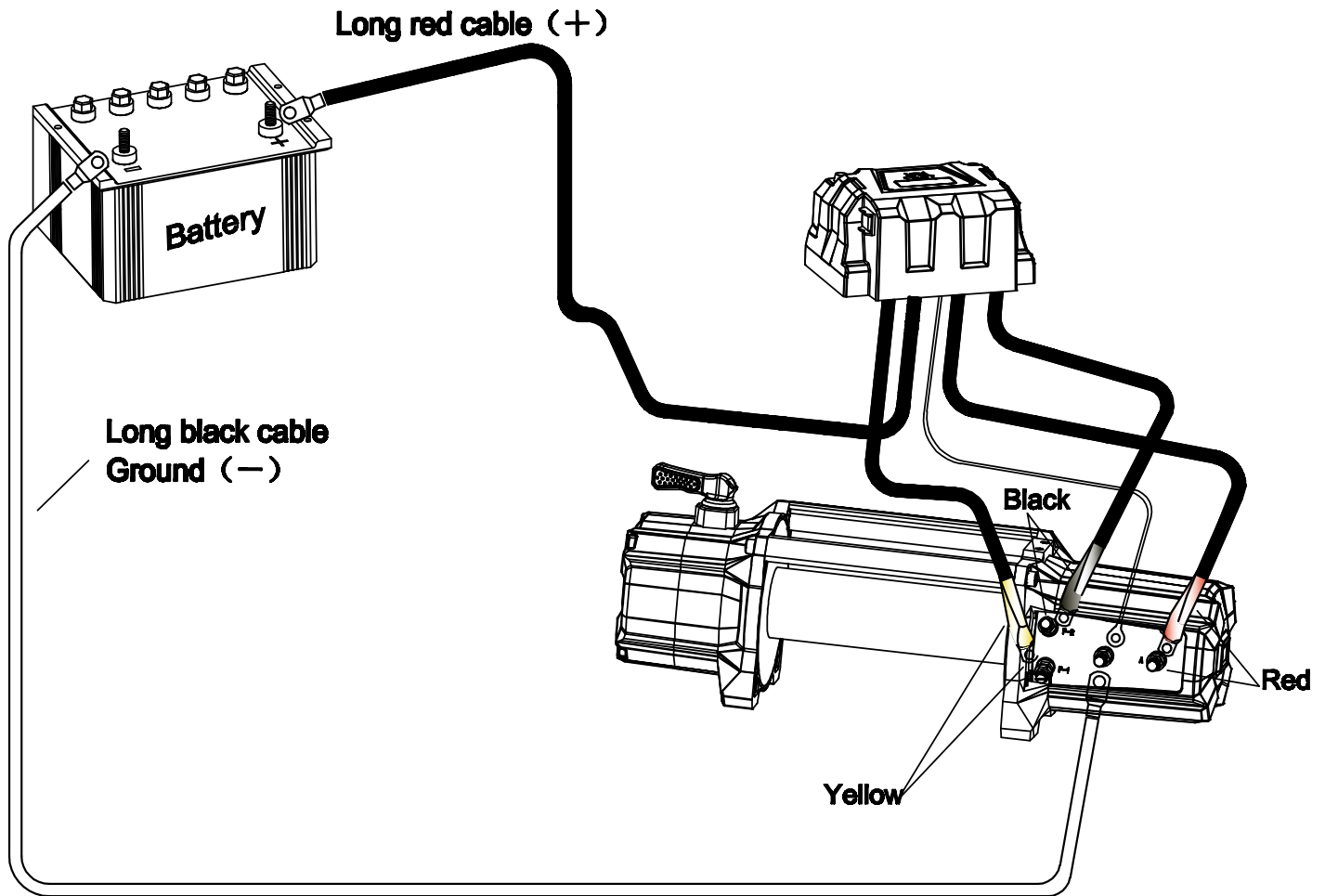
Fix the fairlead on the mounting plate or bumper. If you use any other mounting platforms, drill two holes for the fairlead installation. Position the holes such that the fairlead opening hole stretches from the circumference of the drum to the end of the maximum permissible layers on the drum in the direction of the cable. Note the winch direction after installation, the rope runs through the bottom of the drum.



(Figure 2-4)  
(Pictures above for reference only)



## 2.5 Install Control Box



(Figure 2-5)  
(Pictures above for reference only)

- Short red cable connects to the red terminal (A) of the motor.
- Short black cable with yellow jacket connects to the yellow terminal (F-1) of the motor.
- Short black cable with black jacket connects to the black terminal (F-2) of the motor.
- Thin black cable connects to bottom terminal of the motor.
- Long black cable connects to bottom terminal of the motor.

## 2.6 Connect Electric Cables

- Long Red cable connects to the Positive (+) of battery.
- Long Black cable connects to the Negative (-) of battery.

## 2.7 Test Your Winch

After proper installation and connection, place the clutch in the “Disengaged” position, pull out the winch rope for about 2 meters, then turn the clutch to the “Engaged” position, and handle the remote control to see if the winch works. If the winch doesn’t work, please check if all the things are in proper condition, such as, if the cable connection is correct and tight or the vehicle battery is sufficient. If the winch still does not work after thorough check, please contact the supplier.

## 2.8 Practice Using

After winch has been installed, take some time and practice using it so you will be familiar with all operation. Periodically check winch installation to ensure that all bolts are tight.

## 3. Electric Winch Operation

**NOTE:** For optimal winch performance, it is recommended that you use a fully charged 12V battery w/at least 650 CCA. Further it is advised to keep the engine running during the winch operation, so that the battery is being charged continuously.

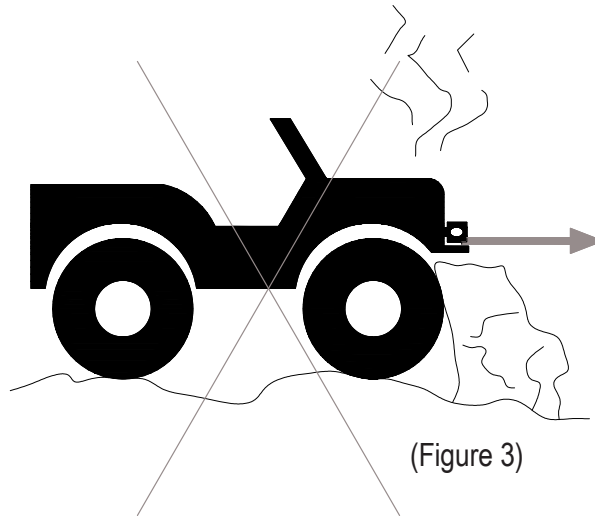
All winches are equipped with a clutch lever that engages/disengages the clutch. Clutch when engaged, winch can pull rope in; Clutch when disengaged, winch can pull rope out.

**CAUTION:** When using your Winch, always have at least 5 turns of wire rope or at least 8 turns of synthetic rope on the drum before winching. Ensure the clutch is fully engaged or fully disengaged to avoid any injuries and damages.

**CAUTION:** All Winches are for intermittent use only. Wait until the motor has cooled down before resuming operation.

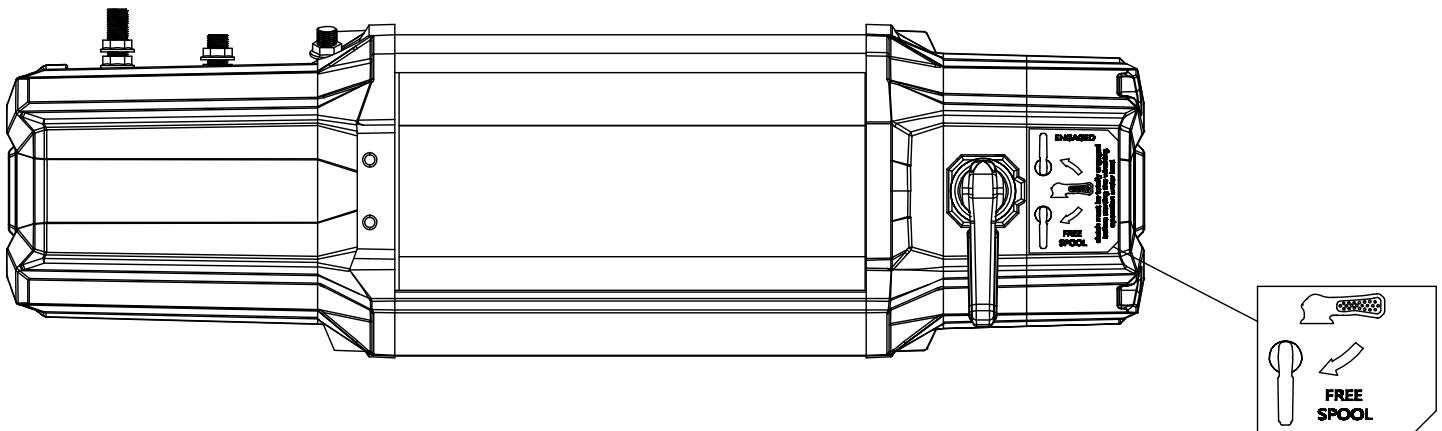
Potential causes of motor damage:

1. Long-duration pulls.
2. Low battery.
3. Overloading winch pulling capacity.



### 3.1 Step 1: Disengage Clutch

Disengage your winch by sliding the clutch to **FREE-SPOOL** position (Figure 3-1). The quickest and easiest way to pull the rope out from the drum is to free-spool it with the clutch in the disengaged position.

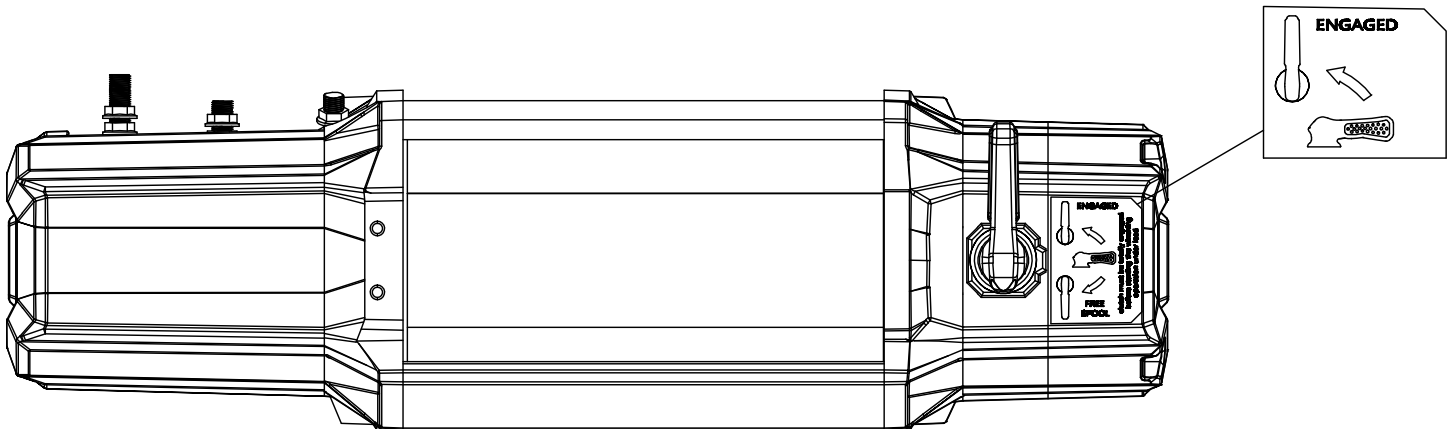


### 3.2 Step 2: Pull Rope to Anchor Point

Pull out enough rope to reach your anchor point. Be sure to keep a certain amount of tension in the wire. It can become twisted and overwrap when slackened, leading to rope damage. To prevent losing the end, hold the winch hook in the hook strap while you work.

### 3.3 Step 3: Engage Clutch

Engage your winch by sliding the clutch to **ENGAGED** position (Figure 3-3).



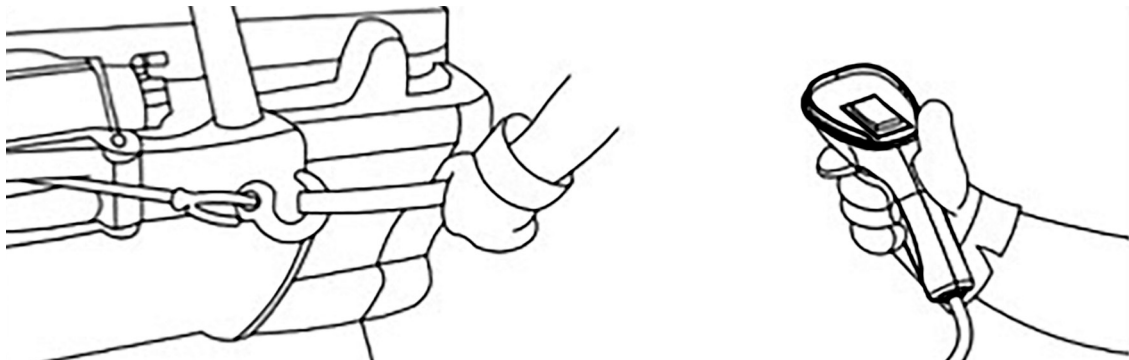
## NOTICE

(Figure 3-3)

If necessary, pull the rope out slightly until the clutch is seated correctly.

### 3.4 Step 4: Winching

Connect handle remote control to control box, keep distance from winch and rope for safety, press button on handle remote control to IN for winching, if you are using the wireless remote, please press IN button to winch. Slowly take up the rope slack until taut.



(Figure 3-4)

## NOTICE

Always disconnect the wired remote control when not in use.

### 3.5 Step 5: For Vehicle Recovery

Continue pulling until the vehicle is on stable ground. If you are able to drive the vehicle, the winching operation is complete. Once recovery of the vehicle is complete, be sure to secure the vehicle's brakes and put the Transmission in "park". Release tension in the rope.

Disconnect rope from the anchor, and then rewind rope keeping some tension on the rope and controlling the winch at all times during the respooling. The person handling the rope should walk the rope in and not let it slide through the hand, and control the winch at all times.

### 3.6 Step 6: Disconnect Remote Control

Disconnect the remote control cord and store in a clean and dry place. Winching operations are now complete. Replace protective cover on winch remote socket.

## WARNING

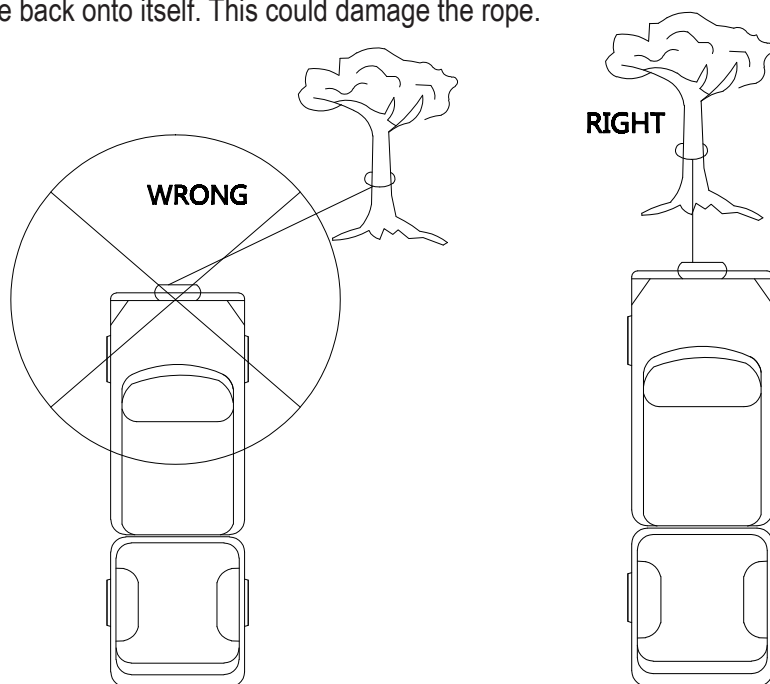
- **Always** be aware of stability of vehicle and load during winching, keep others away. Alert all bystanders of an unstable condition.
- **Always** keep a safe distance, proper footing and balance all the time.
- **Always** disconnect the cable to the vehicle battery after winching.

## NOTICE

All above connections is only for winch and winch parts. Any damage or injury caused by any other winch part is out of warranty.

#### Attention:

1. Be sure cables are not drawn taut across any surface which could possibly damage them.
2. Connect battery and screw the nut on the all terminals to avoid any loose connections.
3. Operate the wire remote controller after installation to make winch work in both directions.
4. Never hook the rope back onto itself. This could damage the rope.



5. **Never** allow rope to tangle or jam while winching. Rope could break before winch stalls.
6. **Never** exceed winch or rope capacity listed on product data sheet. Double line using a snatch block to reduce winch load.
7. Do not reverse the operation immediately. Relay can be easily damaged in this way.
8. Avoid continuous pulls from extreme angles. This can cause the wire rope to bunch at one end of the drum resulting in damage to the wire rope or winch. Do not exceed the specified angles for a roller fairlead. For a hawse fairlead, the angle should be as close to straight as possible.

### 3.7 Winch Accessories You May Need During Winching

In order to be prepared for all recovery scenarios it is recommended to be equipped with a full recovery kit.

These kits can include but are not limited to:

1. Farm Jack
2. Receiver Shackle
3. Shackle
4. Tree Saver
5. Snatch Block
6. Gloves



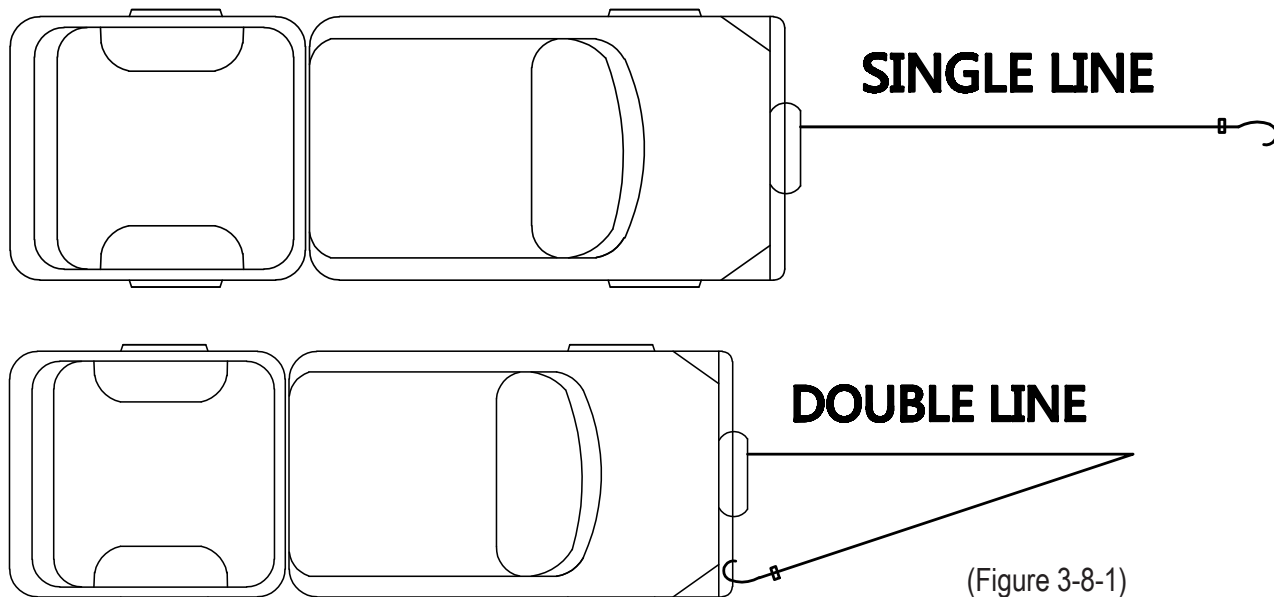
(Figure 3-7)

### 3.8 Some Tips for Better Winching

1. The use of a snatch block

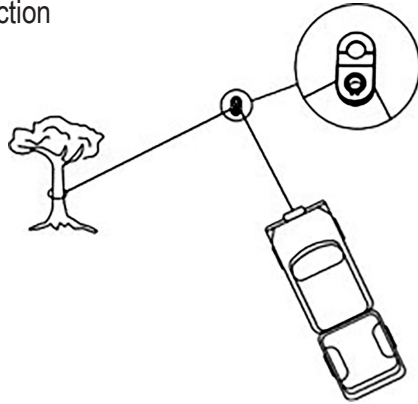
(1) Double Line

The use of a snatch block will aid recovery operations by providing a doubling of the winch capacity and a halving of the winching speed, and the means to maintain a direct line pull to the center of the rollers. When double loading during stationary winching, the winch hook should be attached to the chassis of the vehicle.



(Figure 3-8-1)

## (2) Change the Pulling Direction



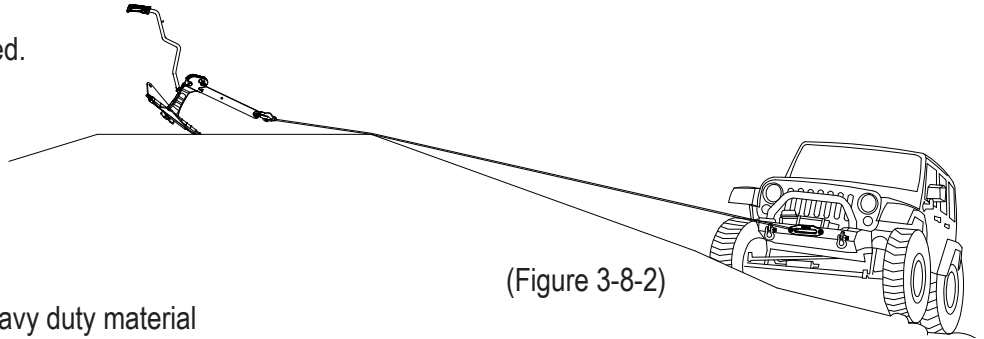
(Figure 3-8-2)

## (3) Increasing pulling power & duration

For loads over 1/2 rated capacity, use a pulley block to double line the rope. This will reduce the load on the winch and up to 50% of the strain on the rope. Attach to the frame or other load bearing part.

## 2. Using a Ground Anchor

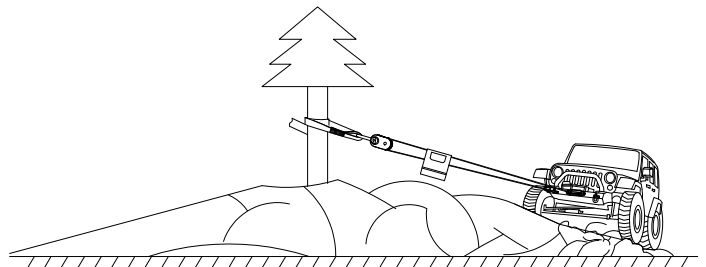
1. Pull out winch rope and affix to the anchor point.
2. The anchor point should be something such as a large rock or tree that is strong enough to support the load while winching.
3. Using a tree saver is recommended.
4. Always use a strap, never hook winch rope back on itself.



(Figure 3-8-2)

## 3. Using a recovery blanket or other heavy duty material

When pulling, put a damper, blanket or other heavy duty material over the rope near the hook end; if the rope fails for any reason, there will be a barrier to keep the rope from whipping and causing injury. (Figure 3-4)



(Figure 3-8-3)

## 4. Electric Winch Maintenance & Storage

### 4.1 General Inspection

1. The gear box has been lubricated and is sealed at the factory. No further internal lubrication is required for the life of the winch. Winch should not be soaked in water for a long time).
2. Do not attempt to disassemble the gear box. Repairs should be done by an authorized repair center.
3. Lubricate the cable periodically using light penetrating oil. Replace with a new cable as soon as possible if a kink, fray, fractures or crease is found.
4. Periodically check the tightness of the mounting bolts and electrical connections. Remove all dirt or corrosion and always keep clean. (Check battery cables and electrical connections at 90 day intervals to be certain they are clean and tight at all connection points.)
5. Check monthly the action of the clutch, making sure it is fully engaging and disengaging. If clutch is not fully engaging,

inspect clutch shifter assembly parts, check for damage or excessive wear and replace as necessary. Corrosion on electrical connections will reduce performance or may cause a short. Clean all connections especially in the remote control switch and receptacle. In salty environments use a silicone sealer to protect from corrosion. To minimize corrosion of the internal motor components that may occur due to condensation, power the winch in or out periodically. Energizing the motor will generate heat, which will help dissipate any moisture buildup in the motor. This should be performed at periodic intervals (such as with each oil change to your vehicle).

## 5. Wireless Remote Instructions

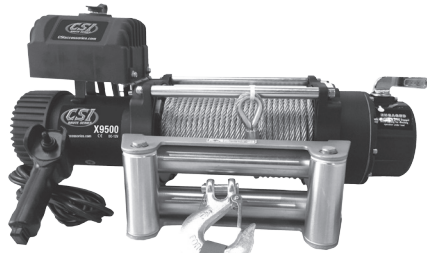
1. Please read all safety and caution instructions before operating the wireless remote or winch.
2. When not in use power off wireless remote to avoid accidental activation.
3. First the remote must be turned on. Press and hold the ON/OFF button until a red LED light flashes slowly.
4. To let out winch cable press and hold the OUT button (red LED will flash quickly) until desired cable length is met.
5. To winch in cable press and hold the IN button (red LED will flash quickly) until desired cable pull is met.
6. Once finished press and hold the ON/OFF button until red LED light is off.

## 6. Troubleshooting Guide

SYMPTOM	POSSIBLE CAUSE	SUGGESTED REMEDY
Motor does not turn on	<ul style="list-style-type: none"> <li>• Defective switch assembly</li> <li>• Switch assembly not connected properly               <ul style="list-style-type: none"> <li>• Loose battery cable</li> <li>• Weak battery</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Replace switch assembly</li> <li>• Insert switch assembly firmly to the connector</li> <li>• Tighten nuts on cable connectors</li> <li>• Change Battery</li> </ul>
Motor runs too hot	<ul style="list-style-type: none"> <li>• Long period of operation</li> </ul>	<ul style="list-style-type: none"> <li>• Let winch cool down periodically</li> </ul>
	<ul style="list-style-type: none"> <li>• Insufficient battery</li> </ul>	<ul style="list-style-type: none"> <li>• Check battery terminal voltage under load. If 10V or less, replace or parallel another battery to it.</li> </ul>
Motor runs slowly	<ul style="list-style-type: none"> <li>• Battery runs down</li> <li>• Insufficient current or voltage</li> </ul>	<ul style="list-style-type: none"> <li>• Recharge battery by running vehicle's engine</li> <li>• Clean, tighten or replace the connector</li> </ul>
	<ul style="list-style-type: none"> <li>• Bad connection</li> </ul>	<ul style="list-style-type: none"> <li>• Check battery cable for corrosion. Clean and grease.</li> </ul>
Motor runs but cable drum does not turn	<ul style="list-style-type: none"> <li>• Clutch not engaged</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure lever is completely in "Engaged" position</li> </ul>
Winch runs in one direction only	<ul style="list-style-type: none"> <li>• Defective or stuck solenoid</li> </ul>	<ul style="list-style-type: none"> <li>• Tap solenoid to free contacts. Repair or replace solenoid.</li> </ul>
	<ul style="list-style-type: none"> <li>• Defective switch assembly</li> </ul>	<ul style="list-style-type: none"> <li>• Replace switch assembly</li> </ul>
Motor water damage	<ul style="list-style-type: none"> <li>• Submerged in water or water from high pressure car wash</li> </ul>	<ul style="list-style-type: none"> <li>• Allow to drain and dry thoroughly, then run motor without a load in short bursts to dry windings.</li> </ul>
Will not hold load	<ul style="list-style-type: none"> <li>• Excessive load</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce load or double line</li> </ul>
	<ul style="list-style-type: none"> <li>• Worn or damaged brake</li> </ul>	<ul style="list-style-type: none"> <li>• Repair or replace brake</li> </ul>

## 6. Specifications X Series

X9500



X9500

CSI BRUTE SERIES

Rated Line Pull Motor	9500LBs Single Line Series Wound 6.0hp/4.4kw 12V DC
Gear Train	3 Stage Planetary
Gear Ratio	216:1
Clutch	Sliding Ring Gear Clockable
Braking Action	Automatic in the Drum
Battery	Recommended 650 CCA Minimum for Winching
Fairlead	4-Way Roller
Wire Rope	5/16" x 92'
Drum Size	2.5" x 9"
Dimensions	23" x 6.6" x 8.4"
Mounting Bolt Pattern	10" x 4.5"
N.W.	39kgs (86LBs)

### LINE SPEED & MOTOR CURRENT (FIRST LAYER)

Line Pull:	Lbs	0	2000	4000	8000	9500
	Kgs	0	907	1814	3629	4310
Line Speed:	FPM	35.4	17.1	13	8.01	7.2
	MPM	10.8	5.2	3.98	2.44	2.2
Motor Current:	Amps	80	140	200	310	350

### LINE PULL & CABLE CAP

Layer of Cable		1	2	3	4
Rated Line Pull Per Layer	Lbs	9500	8000	7200	6000
	Kgs	4310	3629	3266	2994
Cable Capacity Per Layer:	Ft	19.6	43	72	92
	M	6	13.2	22	28

X12500



X12500

CSI BRUTE SERIES

Rated Line Pull Motor	12500LBs Single Line Series Wound 6.5hp/4.8kw 12V DC
Gear Train	3 Stage Planetary
Gear Ratio	273:1
Clutch	Sliding Ring Gear Clockable
Braking Action	Automatic in the Drum
Battery	Recommended 650 CCA Minimum for Winching
Fairlead	Aluminum Hawse
Synthetic Rope	.374" x 85'
Drum Size	2.5" x 9"
Dimensions	23" x 6.6" x 8.7"
Mounting Bolt Pattern	10" x 4.5"
N.W.	44kgs (97LBs)

### LINE SPEED & MOTOR CURRENT (FIRST LAYER)

Line Pull:	Lbs	0	4000	6000	10000	12500
	Kgs	0	1814	2722	4536	5670
Line Speed:	FPM	25.5	15	11.5	6.9	6
	MPM	7.8	4.6	3.5	2	1.8
Motor Current:	Amps	80	150	180	290	350

### LINE PULL & CABLE CAP

Layer of Cable		1	2	3	4
Rated Line Pull Per Layer	Lbs	12500	10000	8600	7500
	Kgs	5670	4536	3629	2994
Cable Capacity Per Layer:	Ft	17.6	37	63	85
	M	5.4	11.4	19.4	26



IP68 rated to keep out dirt, water and to ensure reliability.



## 6. Specifications A Series



A9500 and A9500S

Rated Line Pull Motor	9500LBs Single Line Series Wound 5.5hp/4.1kw 12V DC
Gear Train	3 Stage Planetary
Gear Ratio	218:1
Clutch	Sliding Ring Gear
Braking Action	Automatic in the Drum
Battery	Recommended 650 CCA Minimum for Winching
A9500 Fairlead	4-Way Roller
A9500S Fairlead	Hawse
A9500 Wire Rope	5/16" x 92'
A9500S Synthetic Rope	3/8" x 85.3'
Drum Size	2.48" x 8.9"
Dimensions	21.5" x 6.3" x 7.6"
Mounting Bolt Pattern	10" x 4.5"
N.W.	36kgs (79.2 LBs)

### LINE SPEED & MOTOR CURRENT (FIRST LAYER)

Line Pull:	Lbs	0	2000	4000	6000	8000	9500
	Kgs	0	907	1814	2722	3629	4310
Line Speed:	FPM	26.5	16	11.9	9.79	9.2	7.2
	MPM	7.8	4.88	3.63	2.98	2.5	2.2
Motor Current:	Amps	80	130	190	240	280	350

### LINE PULL & CABLE CAP

Layer of Cable		1	2	3	4
Rated Line Pull Per Layer	Lbs	9500	8000	7200	6600
	Kgs	4310	3629	3266	2994
Cable Capacity Per Layer:	Ft	19.6	43	72	92
	M	6	13.2	22	28



A12000 and A12000S

Rated Line Pull Motor	12000LBs Single Line Series Wound 6.0hp/4.4kw 12V DC
Gear Train	3 Stage Planetary
Gear Ratio	265:1
Clutch	Sliding Ring Gear
Braking Action	Automatic in the Drum
Battery	Recommended 650 CCA Minimum for Winching
A12000 Fairlead	4-Way Roller
A12000S Fairlead	Hawse
A12000 Wire Rope	3/8" x 82'
A12000S Synthetic Rope	7/16" x 78.7'
Drum Size	2.48" x 8.9"
Dimensions	21.5" x 6.3" x 7.6"
Mounting Bolt Pattern	10" x 4.5"
N.W.	36kgs (79.2 LBs)

### LINE SPEED & MOTOR CURRENT (FIRST LAYER)

Line Pull:	Lbs	0	4000	6000	10000	12000
	Kgs	0	1814	2722	4536	5443
Line Speed:	FPM	22	12.5	9.8	6.9	5.6
	MPM	6.8	3.8	3	2.1	1.7
Motor Current:	Amps	80	170	210	310	360

### LINE PULL & CABLE CAP

Layer of Cable		1	2	3	4
Rated Line Pull Per Layer	Lbs	12000	9900	8300	7000
	Kgs	5443	4490	3765	3175
Cable Capacity Per Layer:	Ft	17.6	37	63	82
	M	6	13	22	25



IP68 rated to keep out dirt, water and to ensure reliability.