**KARTT PROFESSIONAL Limited Warranty**

The Kartt range of products are known for their quality and reliability. We are committed to ensuring our customers can use our products confidently.

It is essential that each of our products is used in accordance with its limitations. Please familiarise yourself fully with the operating instructions and guidelines and ensure you wear appropriate safety equipment for your protection.

Kartt shall not be responsible or liable for any indirect or consequential damages
12 month Warranty

- The Kartt range of Pundmann winches is supplied with a 12 month limited warranty
- The warranty applies to the original buyer of the equipment
- It is subject to the products having been correctly installed by an approved installer
- The winch must be used in line with the operating guidelines, with a reliable power supply and not have been subject to inappropriate applications.

This warranty excludes:

- Cosmetic defects such as paint, decals, etc.,
- Worn parts including steel/synthetic ropes
- Any Accessory part including roller fairleads, hooks, mounting plates, transmitter, isolator switches
- Failures due to acts of God and other force majeure events beyond the manufacturer's control
- Problems caused by parts that are not original part
- Alteration or modification(s) made by any party other than the manufacturer.
- Any electrical cables & wireless remote systems
- Any third party equipment
- Batteries

Terms of Warranty

Kartt will offer to repair or replace any parts which Kartt find to be defective.
Kartt will repair or replace with a similar item, of a similar age and do not offer a new for old warranty
The warranty does not cover shipping costs or labour costs incurred by the warranted party.

# INSTALLATION & OPERATIONAL GUIDE

KARTT

## 42.3kN & 51kN

**(9,500 lbs & 11,500 lbs)**


2, Adams Close
Woburn Road Industrial Estate
Kempston, Bedford, MK42 7JE

Email:- **sales@kartt.co.uk**
Web:- **www.kartt.com**

# PERFORMANCE SPECIFICATIONS

| | 51kN (11,500 lb) | 11,500 lb Synth | 11,500 lb (24V) | 11,500 (24V) Synth |
|---|---|---|---|---|
| **Rated Line Pull** | 5216 kg | 5216 kg | 5216 kg | 5216 kg |
| **Motor** | Sealed 6.0 HP Series Wound | Sealed 6.0 HP Series Wound | Sealed 6.0 HP Series Wound | Sealed 6.0 HP Series Wound |
| **Gearing** | 3-Stage Planetary | 3-Stage Planetary | 3-Stage Planetary | 3-Stage Planetary |
| **Gear Ratio** | 218: 1 | 218: 1 | 218: 1 | 218: 1 |
| **Solenoid** | Weather Sealed Solenoid and Circuit Breaker Protected | Weather Sealed Solenoid and Circuit Breaker Protected | Weather Sealed Solenoid and Circuit Breaker Protected | Weather Sealed Solenoid and Circuit Breaker Protected |
| **Clutch** | Pull and Turn, Ergo | Pull and Turn, Ergo | Pull and Turn, Ergo | Pull and Turn, Ergo |
| **Brake** | Mechanical, Automatic Load Holding | Mechanical, Automatic Load Holding | Mechanical, Automatic Load Holding | Mechanical, Automatic Load Holding |
| **Rope** | Wire 9.5mm x 26m | 9.5 mm x 24.4m | Wire 9.5mm x 26m | 9.5 mm x 24.4m |
| **Hook** | Heavy Duty Clevis Pinned Latched | Heavy Duty Clevis Pinned Latched | Heavy Duty Clevis Pinned Latched | Heavy Duty Clevis Pinned Latched |
| **Fairlead** | Heavy-Duty, Stainless Steel 4-Way Roller | CNC'd Billet Aluminium Hawse | Heavy-Duty, Stainless Steel 4-Way Roller | CNC'd Billet Aluminium Hawse |
| **Remote** | 12' Rubber Sealed Hand-held | 12' Rubber Sealed Hand-held | 12' Rubber Sealed Hand-held | 12' Rubber Sealed Hand-held |
| **Dimensions** | 529mm L x 160mm W x 234.5mm H | 529mm L x 160mm W x 234.5mm H | 529mm L x 160mm W x 234.5mm H | 529mm L x 160mm W x 234.5mm H |
| **Drum Diameter** | 64mm | 64mm | 64mm | 64mm |
| **Drum Length** | 228.6mm | 228.6mm | 228.6mm | 228.6mm |
| **Installed Weight** | 42 kg | 28.6 kg | 42 kg | 28.6 kg |
| **Shipping Weight** | 44 kg | 30.4 kg | 44 kg | 30.4 kg |
| **Warranty** | Limited 3 Year Warranty | Limited 3 Year Warranty | Limited 3 Year Warranty | Limited 3 Year Warranty |
| **Line Pull 0 kg** | 80 Amps Motor Draw/5.7 MPM Line Speed | 80 Amps Motor Draw/5.7 MPM Line Speed | 80 Amps Motor Draw/5.7 MPM Line Speed | 80 Amps Motor Draw/5.7 MPM Line Speed |
| **Line Pull 5,126 kg** | 410 Amps Motor Draw/2 FPM (0.6 M/M) Line Speed | 410 Amps Motor Draw/2 FPM (0.6 M/M) Line Speed | 410 Amps Motor Draw/2 FPM (0.6 M/M) Line Speed | 410 Amps Motor Draw/2 FPM (0.6 M/M) Line Speed |
| **Lead Wires** | 6' (1.8m) x 4 gauge (25mm ) | 6' (1.8m) x 4 gauge (25mm ) | 6' (1.8m) x 4 gauge (25mm ) | 6' (1.8m) x 4 gauge (25mm ) |
| **# Rope Layers Pull Capacity** | | | | |
| **1** | 5216 | 5216 | 5216 | 5216 |
| **2** | 4137 | 4137 | 4137 | 4137 |
| **3** | 3427 | 3427 | 3427 | 3427 |
| **4** | 2926 | 2926 | 2926 | 2926 |



# SAFETY PRECAUTIONS

The responsibility for safe installation and operation of this winch ultimately rests with you, the operator. Please read and understand all of the safety precautions and operating instructions before installing and operating the winch. Careless winch operation can result in serious injury and/or property damage. Never obscure or remove the warning or instruction labels which are there for your safety and the safety of any other users.

**⚠DANGER** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**⚠WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**⚠CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. This notation is also used to alert against unsafe practices.

Note: Indicates additional information in the installation and operation procedures of your winch.

THE FOLLOWING SYMBOLS ARE USED ON THE PRODUCT AND IN THE OWNER'S MANUAL


Refer to Owners manual


Always use handsaver strap for safety


Maintain a safe distance from the winch,Rope and Load


Under no circumstances utilize a Winch to lift and/or move People or Animals

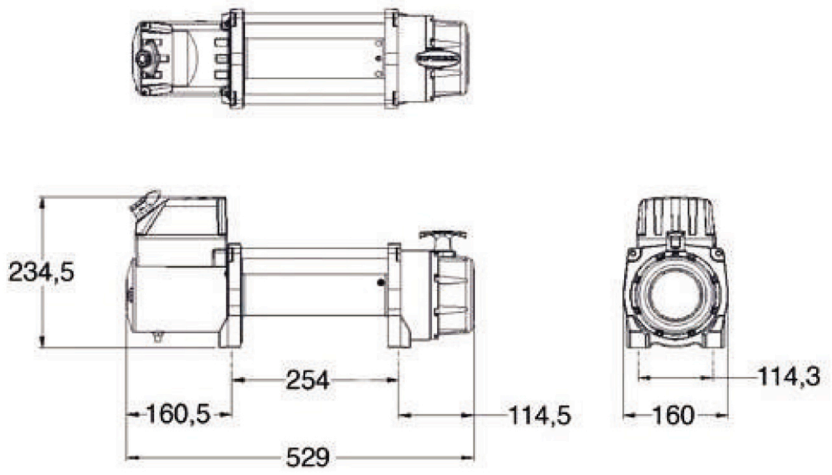

Under no circumstances apply the use of a Winch to secure a load

Correct installation of your winch is a requirement for proper operation.

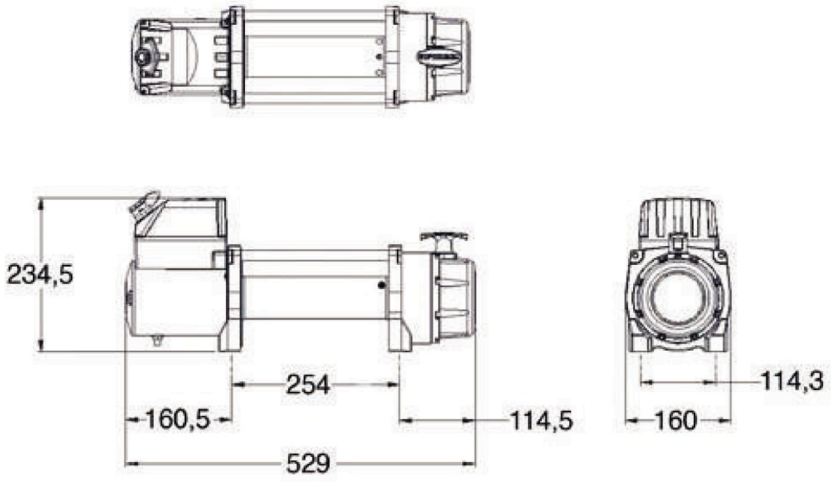
Please Note: This winch is equipped with a permanent magnet motor and is designed primarily for intermittent applications. This winch is not designed to be used in industrial or lifting / hoisting applications and NEVER should be used for moving people. Improper use could damage your winch and void your warranty.

The freespool clutch is operated by a pull and turn knob which disengages the gear box. Pull up and turn clockwise through 90 degrees. The wire / synthetic rope can then be pulled out using a hand-saver strap or bar.

# DIMENSIONS




42.3kN (9500 lb)




51 kN (11500 lb)

k. DO NOT use the vehicle to assist the winch in moving a load. Overloading could easily occur and cause damage to the winch and / or rope.
l. DO NOT approach the winch, the rope or the pulley block when operating the winch. Beware of the “Danger Zone”, those areas around the winch, fairlead, rope, hook and pulley block (where used) and motor.
m. Do not straddle or step over the rope when it is under load and / or in use. Operate the winch at a safe distance using the handheld controller and wanderlead or a remote control device.
n. Before operating the winch ensure that the vehicle transmission is in neutral and the handbrake lever is applied. Chock the wheels. Ensure that the vehicle engine is running during winch operation ensuring that the battery is at full power. Never use the winch in a situation where there is insufficient voltage / power.
o. DO NOT disconnect the freespooling clutch when the rope is under load.
p. After bringing the load to its safe position and securing it in place, release the tension from the rope and the winch. Do not use the winch to keep the load in position.
q. Inspect the winch, rope, hook and other accessories frequently. Replace damaged, kinked or frayed ropes immediately as their loadbearing capacity will have been compromised. Use heavy leather gloves when handling wire rope and even then do not allow the wire rope to slide through your hands. Replacement wire rope should be respooled under a load of around 100lbs / 50kg.
r. Having disconnected the clutch, always use the hand saver when freespooling the rope. Do not put your finger through the hook in order to pull the rope.
s. Do not operate the winch when under the influence of medication, alcohol or drugs. Keep alert when operating the winch. If something appears or sounds to be wrong, cease operation, turn off the winch and check it carefully.
t. If the movement of the load that is being winched appears to be restricted, do not try to use the power of the winch to overcome the blockage. Cease operation and check carefully what might be restricting the movement. Without putting yourself at risk clear the restriction and then start again.
u. Always use Personal Protective Equipment when operating the winch, including eye protection, heavy leather gloves, steel toe-capped boots or shoes with anti-slip soles and appropriate work wear (long trousers and long sleeved jacket). Ensure the long hair is tucked away and avoid wearing jewellery (rings and necklaces) that might get caught when operating the winch.
v. DO NOT machine or weld any part of the winch or its components.
w. Even if the winch is not in use for long periods of time, ensure that it remains in working order so that it is ready when it is needed. If possible, use a winch cover to protect against road salts and dirt. Periodically check the operation of the winch

AFTER READING AND UNDERSTANDING THIS MANUAL, LEARN TO USE YOUR WINCH. After installing the winch, practice using it so that you will be familiar with it when the need arises.

## OPERATION OF THE HANDHELD CONTROLLER

The handheld control switch (sometimes called the pendant) activates a solenoid which sends power to the winch motor. To connect the handheld controller, remove the cover on the plug holder and insert the plug end of the remote switch. The plug on the handheld control cord is keyed and will fit into the socket only one way.

The switch trigger returns to the "Off" position when released. To change direction, move the toggle in the other direction.

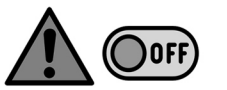
**⚠CAUTION** The switch assembly must be kept free of dirt and moisture to ensure safe operation.

**⚠WARNING** The wire rope may break before the winch stalls. For heavy loads use a pulley block to reduce the load on the wire rope.

**⚠CAUTION** If the winch motor stalls, do not continue to apply power to the winch.

**⚠CAUTION** To prevent unauthorised use of the winch, remove the handheld controller / pendant and store it in a clean dry area such as the vehicle glove box.

## IMPORTANT INSTRUCTIONS FOR WIRED/WIRELESS REMOTE




Switch off when not in use

Non-Rechargable Batteries Inside


1. For safety & to conserve battery life, switch off the unit when not in use
2. Apply freespool brake before using. Press Mode Button to turn On/Off
3. Unplug the cable from the handset BEFORE using wirelessly as this is required to ensure it works wirelessly.
   Wireless mode operates within a 10m – 20m range
   SCAN FOR VIDEO or visit bit.ly/winchremote
4. Press Mode Button to turn on Wireless – turn off at the end of each use to conserve battery

NOTE – Keep a spare battery and screw driver to hand (23A Alkaline High Voltage Battery 12V)
To change battery:- requires a P2 Phillips screw driver. Remove 3 screws, take care taking casing apart.
Modulation: ASK Digital Data/ Frequency 434 MHZ. Operating temp range -40 ~ 185 °F / -40 ~ 85°C

## MAINTENANCE

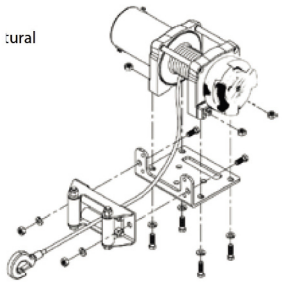
• Before every use of the winch, check the tightness of the mounting bolts and the electrical connections. Remove all dirt or corrosion where found and always keep the winch clean. Use a winch cover where possible.

• DO NOT ATTEMPT to disassemble the gearbox. Repairs should be carried out by the manufacturer or authorised repair centre.

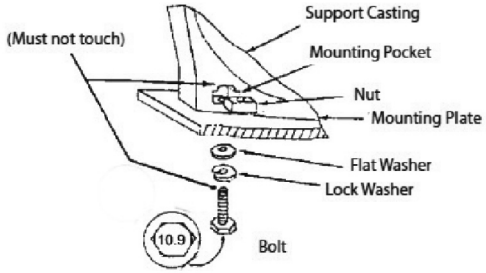
• The gearbox has been lubricated in the factory, at point of manufacture, using high temperature lithium grease. No internal lubrication is required.



the winch in the proper direction can cause the winch brake (if equipped) to operate improperly and / or cause the winch to fail.Position the winch over the holes in the mounting kit or structural support.
Secure the winch to the mounting kit or structural support using the bolts, lock washers and square nuts supplied with the winch.




Secure the roller fairlead or hawse to the mounting plate or structural support using the hardware supplied.Be sure that all hardware securing the winch and the mounting plate has been properly tightened.
No part of the vehicle (skid plates, wiring, auxiliary lights, tyres etc) should impede the operation of your Pundmann winch.
When mounting, check all vehicle and winch parts for free operation. Be sure that the winch mounting location does not significantly reduce ground clearance.
Do not weld or machine any part of the winch. Welding or machining may weaken the structural integrity of the winch and will void your warranty. Be sure that this structural support is at least 6.3mm thick (35kN to 51kN)
Mounting bolt threads must fully engage the nut but the bolt must not contact the opposite side of the nut pocket in the casting.




KARTT recommends that all the winch's electrical systems can be readily and quickly isolated from their electrical supply in the event of an emergency. The winch's electrical systems should always be isolated when the winch is not in use. Install a mounting kit or prepare a flat, secure mounting location for the winch to

KARTT

WORKHORSE

PROFESSIONAL WINCHES

KARTT

For more information please contact...

**sales@kartt.co.uk**

# www.kartt.com

a. This winch must NEVER be used for moving people or for moving loads above people. Items should not be lifted vertically. KARTT does not warrant this winch to be suitable for such uses. This winch is designed for movement of loads on the ground only.

b. DO NOT OVERLOAD. Be sure that any item to be moved falls within the maximum line pull rating of the winch. The use of a pulley block is recommended to double line the wire rope and reduce the load on the winch, on the rope (steel or synthetic), on the motor and on the battery. Where used, the pulley block should be rated to a minimum of twice the winch's line pull rating. SEE FIGURE 1.

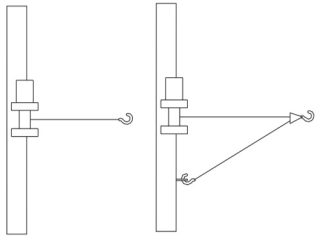


Figure 1

c. Use the winch intermittently and never more than for one minute. Do not use in a constant duty application. If the winch motor becomes very hot to the touch, stop the winching application and allow the winch motor to cool down for several minutes.

d. DO NOT operate the winch with less than 5 turns of the rope around the drum as the end of the wire rope might not withstand the full applied load.

e. Avoid continuous pulls from extreme angles as this might cause the wire rope to gather on one end of the drum and damage the wire rope. SEE FIGURE 2

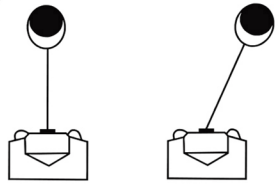



Figure 2

f. Note that the stated Maximum Pulling Force is the maximum load pull on the first layer of rope. Never operate the winch beyond its Maximum Pulling Force.

g. Never hook the wire rope back on itself as this can damage the rope. Use a nylon sling when using an anchor point such as a tree. SEE FIGURE 3.

h. Always check the winch mounting before use, to ensure that bolts are not loose and everything is secure.

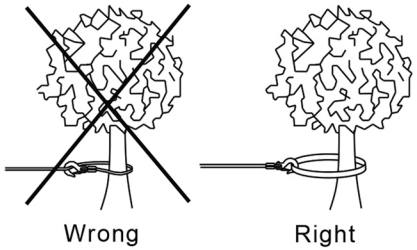



Figure 3

i. Always inspect the wire rope when extended and before use. Prevent kinks in the rope as this will reduce the capacity and weaken it. Ensure that the rope is wound back on to the drum under tension of around 100lbs / 50kg and avoid uneven layering.

j. When you have attached the hook to the load, it is important to place a wire dampener / blanket / heavy coat over the wire, near the hook end, so that in the event of a hook / rope / attachment point failure, the energy of the rope is directed towards the ground and will help to prevent serious injury or damage. SEE FIGURE 4.

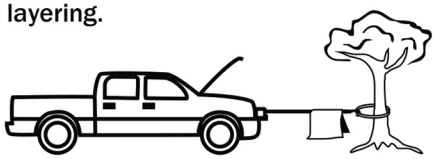


Figure 4



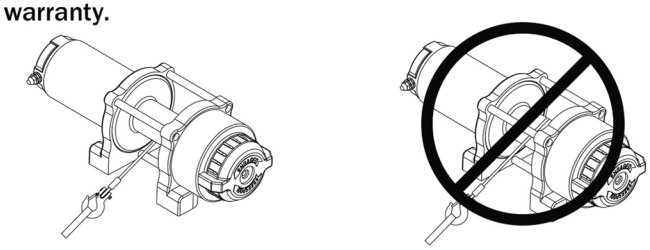
# PERFORMANCE SPECIFICATIONS

| | 42.3kN (9,500 lb) | 9,500 lb Synth | 9,500 lb (24V) | 9,500 (24V) Synth |
|---|---|---|---|---|
| **Rated Line Pull** | 4309 kg | 4309 kg | 4309 kg | 4309 kg |
| **Motor** | Sealed 5.2 HP Series Wound | Sealed 5.2 HP Series Wound | Sealed 5.2 HP Series Wound | Sealed 5.2 HP Series Wound |
| **Gearing** | 3-Stage Planetary | 3-Stage Planetary | 3-Stage Planetary | 3-Stage Planetary |
| **Gear Ratio** | 218: 1 | 218: 1 | 218: 1 | 218: 1 |
| **Solenoid** | Weather Sealed Solenoid and Circuit Breaker Protected | Weather Sealed Solenoid and Circuit Breaker Protected | Weather Sealed Solenoid and Circuit Breaker Protected | Weather Sealed Solenoid and Circuit Breaker Protected |
| **Clutch** | Pull and Turn, Ergo | Pull and Turn, Ergo | Pull and Turn, Ergo | Pull and Turn, Ergo |
| **Brake** | Mechanical, Automatic Load Holding | Mechanical, Automatic Load Holding | Mechanical, Automatic Load Holding | Mechanical, Automatic Load Holding |
| **Rope** | Wire 8.3mm x 29m | 9.5 mm x 24.4m | Wire 8.3mm x 29m | 9.5 mm x 24.4m |
| **Hook** | Heavy Duty Clevis Pinned Latched | Heavy Duty Clevis Pinned Latched | Heavy Duty Clevis Pinned Latched | Heavy Duty Clevis Pinned Latched |
| **Fairlead** | Heavy-Duty, Stainless Steel 4-Way Roller | Anodized Aluminum Hawse | Heavy-Duty, Stainless Steel 4-Way Roller | Anodized Aluminum Hawse |
| **Remote** | 12' Rubber Sealed Hand-held | 12' Rubber Sealed Hand-held | 12' Rubber Sealed Hand-held | 12' Rubber Sealed Hand-held |
| **Dimensions** | 529mm L x 160mm W x 234.5mm H | 529mm L x 160mm W x 234.5mm H | 529mm L x 160mm W x 234.5mm H | 529mm L x 160mm W x 234.5mm H |
| **Drum Diameter** | 63.5mm | 63.5mm | 63.5mm | 63.5mm |
| **Drum Length** | 228.6mm | 228.6mm | 228.6mm | 228.6mm |
| **Installed Weight** | 41 kg | 26.7 kg | 41 kg | 26.7 kg |
| **Shipping Weight** | 42 kg | 28.6 kg | 42 kg | 28.6 kg |
| **Warranty** | Limited 3 Year Warranty | Limited 3 Year Warranty | Limited 3 Year Warranty | Limited 3 Year Warranty |
| **Line Pull 0 kg** | 80 Amps Motor Draw/5.7 MPM Line Speed | 80 Amps Motor Draw/5.7 MPM Line Speed | 80 Amps Motor Draw/5.7 MPM Line Speed | 80 Amps Motor Draw/5.7 MPM Line Speed |
| **Line Pull 4,309 kg** | 340 Amps Motor Draw/4 FPM (1.2 M/M) Line Speed | 340 Amps Motor Draw/4 FPM (1.2 M/M) Line Speed | 340 Amps Motor Draw/4 FPM (1.2 M/M) Line Speed | 340 Amps Motor Draw/4 FPM (1.2 M/M) Line Speed |
| **Lead Wires** | 6' (1.8m) x 4 gauge (25mm ) | 6' (1.8m) x 4 gauge (25mm ) | 6' (1.8m) x 4 gauge (25mm ) | 6' (1.8m) x 4 gauge (25mm ) |
| **# Rope Layers Pull Capacity** | | | | |
| **1** | 4309 | 4309 | 4309 | 4309 |
| **2** | 3497 | 3497 | 3497 | 3497 |
| **3** | 2943 | 2943 | 2943 | 2943 |
| **4** | 2540 | 2540 | 2540 | 2540 |

## INSTALLATION

Correct installation of your winch is required to ensure proper operation.
1. Mount the winch on to the vehicle, trailer or other fixed installation by using the hardware provided.

**⚠CAUTION** This winch must be mounted with the rope in the under wound direction ( Fig. 5 ) Improper mounting could damage your winch and void your warranty.



Underwind



Overwind

Fig. 5

Note: Your winch is designed to ROPE IN and ROPE OUT in one direction. Do not attempt to reverse the operation of your winch.
WARNING Before you start your winch installation, disconnect your vehicle earth and positive leads from the battery.
MINIMUM ELECTRICAL REQUIREMENTS.
35kN to 51kN winches A 60amp alternator and battery with 440 cold-cranking amperes capacity are the minimum recommended power sources. Be sure to select the battery or power supply that is appropriate for this winch. If the winch is in heavy use, an auxiliary battery and heavy duty alternator are recommended.
Under some circumstances, it may be appropriate to install additional circuit protection devices (circuit breakers). If in doubt seek appropriate advice.
Install a mounting kit or prepare a flat, secure mounting location for the winch to make sure that the motor, drum and gearbox are aligned correctly. Your winch is a very powerful machine. To protect yourself and property be sure that the structural support is strong enough to support and withstand the high rated pulling capacity of the winch. If you choose not to use a mounting kit you will need to drill holes in the structural support. Be sure that this structural support is at least 6.3mm thick (35kN to 51kN).
If not using the hardware supplied with the mounting kit, always use hardware which equals or exceeds the strength grade of the supplied hardware. Do not substitute any strength grade bolts weaker than SAE Grade 8 (ISO 10.9). Under no circumstances should the end of the mounting bolts touch the inside surface of the casting mount pockets.
As you position the winch, make sure that the rope winds in the proper rotation of the drum. Your winch is intended to operate in one direction only. Failure to operate



## TROUBLESHOOTING

| SYMPTOM | POSSIBLE CAUSE | SOLUTION |
|---|---|---|
| Motor will not operate or runs in one direction only | -Switch inoperative<br>-Broken wires or bad connection<br>-Defective motor | -Replace switch<br>-Replace wires, connect correctly and tighten the bolts/nuts<br>-Replace or repair motor |
| Motor runs but drum does not turn | -Clutch not engaged | -Engage clutch |
| Motor runs but with insufficient power or line speed | -Weak battery<br>-Defective motor | -Recharge or replace battery<br>-Keep terminals clean, tighten or replace connective device<br>-Repair or replace motor |
| Motor overheating | -Winch running for a long time<br>-Defective motor | -Stop the operation and allow the motor to cool down<br>-Repair or replace the motor |

make sure that the motor, drum and gearbox are aligned correctly. Your winch is a very powerful machine. To protect yourself and property be sure that the structural support is strong enough to support and withstand the maximum pulling capacity of the winch.

2. Electrical connections.
Automotive batteries contain gasses which are explosive. Wear eye protection during installation and remove all metal jewellery. Do not lean over the battery whilst making connections. Disconnect the negative and positive leads from the vehicle battery. Route the long red and black colour coded wires to the battery. To ensure insulation abrasion and/or cutting, apply several layers of electrical tape where wiring may come in to contact with sharp parts on the vehicle. Attach the red colour coded wire to the positive battery terminal and reattach the terminal to the battery. If your vehicle is equipped with side pole terminals, it may be necessary to obtain auxiliary side terminal bolts from your local auto parts dealer to make these connections. Connect the black colour coded wire to the negative battery terminal, then connect the terminal to the battery.


Having made the connection to the battery, now check the direction of rotation of the drum. Pull and turn the clutch knob clockwise through 90 degrees so that the drum can be turning freely. Pull out some cable from the drum and then turn the clutch knob through 90 degrees anticlockwise to re-engage. Pull out some cable from the drum and then turn the clutch knob (freespooling handle) to the “IN” position. Press the “Cable Out” button on the handheld controller. If more cable is releasing from the drum then the electrical connections are correct. If not, then turn off the power to the winch and check all connections.



## OPERATION

• Pull and turn the clutch knob through 90 degrees clockwise so that the drum can turn freely by hand.

• USING THE HANDSAVER STRAP OR BAR and at all times wearing heavy duty gloves, pull the hook and cable towards the load and attach securely. NOTE, check that there are at least 5 turns of the cable left on the drum before operation.

• Rotate the clutch knob through 90 degrees anticlockwise to the “ENGAGED” position. CAUTION:- the clutch must be fully engaged before winching. Never try to operate the clutch knob whilst the drum is turning. DO not try to readjust the clutch knob (freespooling handle) as it has been factory set and permanently locked in place with a thread locking compound.

• Press the “CABLE IN” button on the handheld controller and the cable will pull the load towards the winch, the cable itself will respool on to the drum. Constantly monitor the cable as it is respooling on to the drum to ensure that it is spooling evenly across the drum and not leaving gaps between turns. Press the “CABLE OUT” button to reverse direction but wait until the motor stops before doing this.

• When the load has reached its optimum position, secure the load and then (only then) remove the hook and respool the rest of the cable. Under no circumstances should you use the winch to secure the load.

FOR RIGGING AND PULLEY BLOCK GUIDANCE, PLEASE REFER TO THE USER GUIDE THAT IS PROVIDED WITH THE PACKAGE.