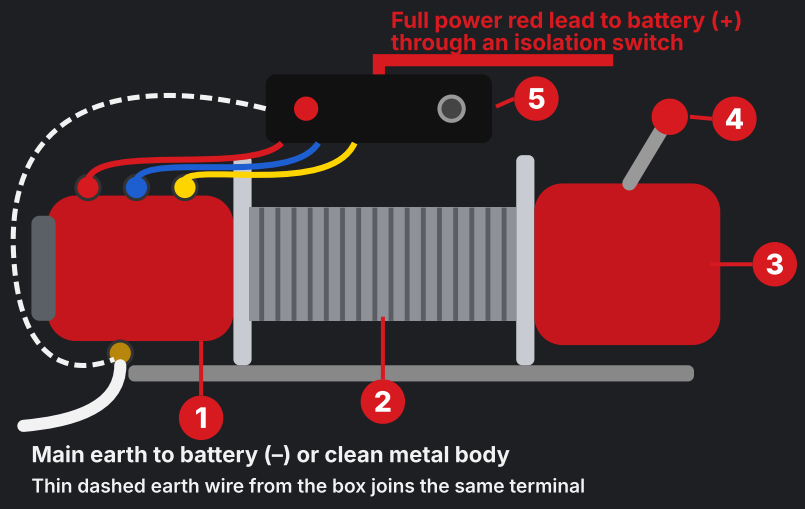
OX WINCHES

ELECTRIC WINCH

13500

Fitting & Operating Guide

Rated pull 13,500 lb · 6,124 kg



Read this guide before you fit or use your winch.
Keep it somewhere safe.

oxwinch.com · support@pumaspeed.co.uk · 01924 201120

Start here

This guide is built around pictures. Follow the numbered steps, look at the drawings, and do them **in order**.

WHAT THE SIGNS MEAN



NEVER
Do not do this.



TAKE CARE
This can hurt you or break the winch.



YOU MUST
Always do this.

WHAT IS IN THIS GUIDE

Safety first	**3**
Safety rules	**4**
Know your winch · What is in the box	**5**
Step 1 Mount the winch	**6**
Step 2 Wiring — where the leads go	**7**
Step 2 Wiring — match the colours	**8**
Step 3 Check the rope · First test	**9**
Using your winch	**10**
Anchors · Double line pull · Shock loads	**11**
Rope: how much pull you really have · Rope care	**12**
Looking after your winch · Fault finding	**13**
Specifications	**14**
Fitting checklist	**15**
Warranty and contact	**16**

Need help?
Email **support@pumaspeed.co.uk** or call **01924 201120**. Send us a photo of the problem and your order number.

Safety first

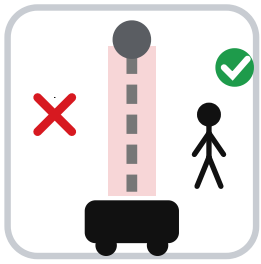
A rope under load can snap and whip back. It can kill. Stay well back: at least 1.5 times the length of rope you have pulled out.



Wear strong **leather gloves** every time you touch the rope.



Wear **eye protection** when you work near the battery.



Stand **to the side**. Never in line with the rope.



Never use the winch to **lift** anything or anyone.



Never **step over** the rope.



Keep **hands, hair, clothes and jewellery** away from the drum.



Never use **frayed, kinked or damaged** rope.



Never **drive** to help the winch pull.



Never hook the rope **back onto itself**. Use a strap or chain.

Never pull more than **13,500 lb (6,124 kg)** on one rope.

You get less on the upper rope layers — see page 12.

Safety rules — read them all

Before you start

- Wear close-fitting clothes and non-slip boots. No loose clothes or jewellery.
- Check the whole winch every time. Replace damaged parts. Use only **identical OX parts**.
- Keep everyone else away from the work area. Keep your footing and balance.
- The winch clutch must be **OUT** when you are not using it, and **fully IN** when you pull.

While you pull

- Stop if the motor is too hot to touch. Let it cool for a few minutes.
- If the motor stalls, **take your finger off the button**. Never keep the power on.
- Do not go over the rated pull. Shock loads count as extra load.
- Watch the rope. Stop about every metre and check it winds on evenly. Jammed rope can break the winch.
- Do not unplug or move the clutch while the motor is running.

Where this winch can be used

- Vehicle or boat mounted. Not industrial use.
- **Not a hoist.** Never lift, hold up or carry people.
- Do not fit the tow hook to the winch mounting plate. Tow hooks go on the vehicle chassis.

Airbags

- A winch or a bumper can change how the airbags fire. Check that your mounting kit is tested and approved for your vehicle.

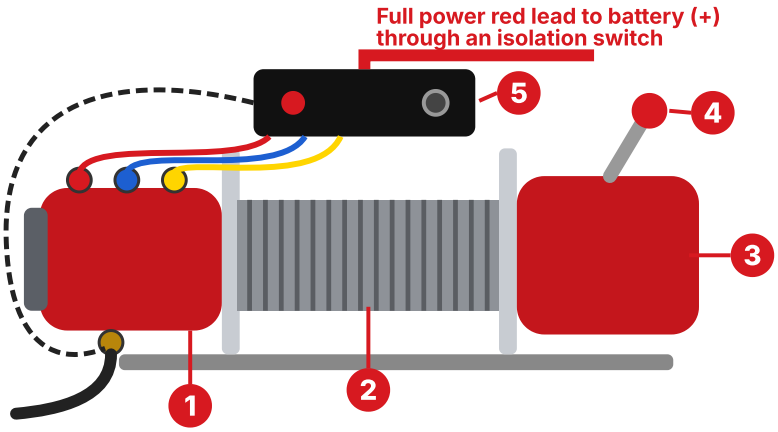
Battery

- Battery must be in good condition and fully charged.
- Keep battery acid off your skin. Wear eye protection.
- Keep the engine running while you winch so the battery does not go flat.

Remote control

- Do not leave the remote plugged in when you are not using the winch.
- Keep the remote inside the vehicle where it cannot be damaged. Check it before you plug it in.

Know your winch



1. Motor
2. Drum and rope
3. Gearbox
4. Clutch lever (IN / OUT)
5. V2 control box

WHAT IS IN THE BOX — TICK EACH ONE

	Winch (motor, drum, gearbox)	**1**	☐
	Rope, fitted to the drum Steel 9.5 mm × 24 m, or synthetic 10 mm × 23 m	**1**	☐
	Hook	**1**	☐
	Roller fairlead and its bolts	**1 set**	☐
	V2 control box, leads already fitted Yellow, blue, short red, thin black earth wire and long red (+)	**1**	☐
	Heavy-duty battery leads Red (+) is fitted to the V2 box. Black earth (–) goes from the winch to battery (–) or clean bare metal body	**1 pair**	☐
	Wired remote control switch Plugs into the V2 box	**1**	☐
	Wireless remote controls Paired to the receiver inside the V2 box	**2**	☐
	M10 mounting bolts and spring washers Cut to length for a 6 mm plate. Do not swap them	**4**	☐

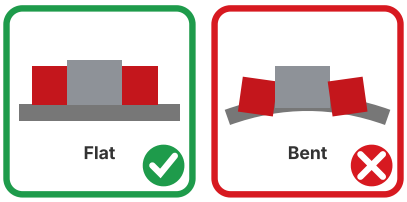
Optional extras (not in the box)

Battery isolation switch and a 1 m power cable. Order from oxwinch.com or the Titan Power Products website.

Step 1 — Mount the winch

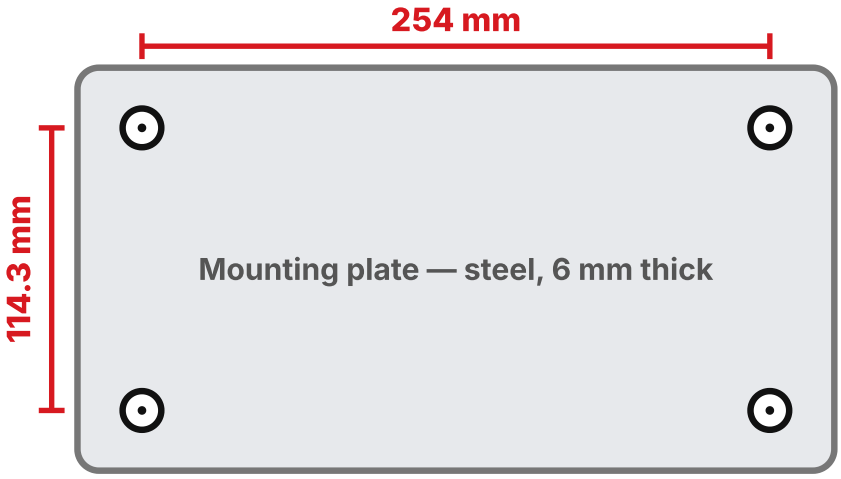
1. **Use a strong steel mount.** Fit the winch to a steel mounting plate, winch cradle or winch bumper. Kits made for your vehicle come with their own fitting instructions.

2. **Make sure the surface is flat.** The motor, drum and gearbox must line up. A bent or twisted mount puts the winch under strain.



3. **The winch has 4 feet.** You can fit it flat or on its side.

4. **Making your own plate?** Use steel **6 mm** thick and drill the holes to the pattern below. Use the bolts supplied: they are cut to fit a 6 mm plate. A badly made mount can void your warranty.



Bolts
Use only the M10 bolts and spring washers supplied (class 8.8). Tighten to **49 Nm**. **Never use longer bolts.** They push into the winch body and break the mounting points.

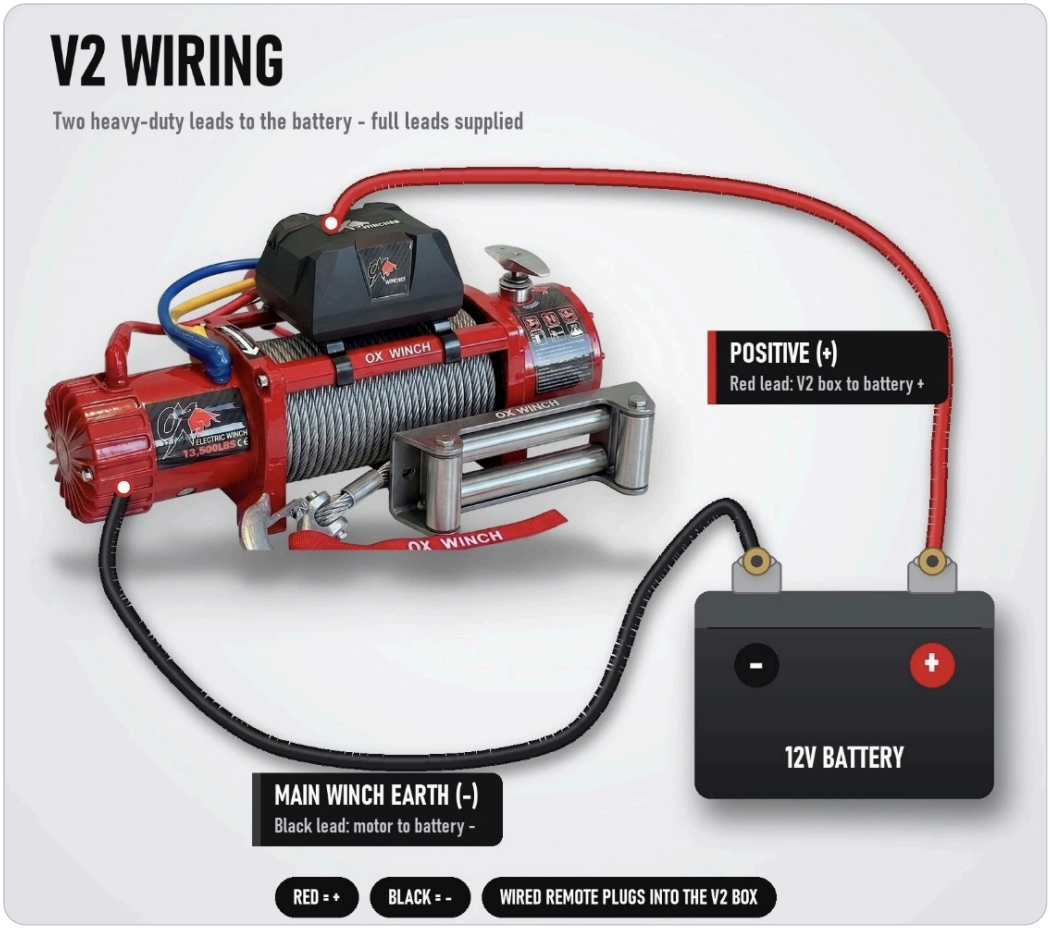
Airbags
Check your mount is tested and approved for vehicles with airbags.

Tow hook
Tow hooks go on the vehicle chassis. **Never** on the winch plate.

Fairlead: fit the roller fairlead so the rope goes onto the drum evenly.

Step 2 — Wiring: where the leads go

Connect the battery **last**. Keep the isolation switch **OFF** until every other lead is fitted. A winch can pull over 400 amps.



1. **Earth (–).** Black lead from the winch earth terminal (underside) to the battery negative (–), or to a clean, bare metal point on the vehicle body. No paint or rust.

2. **Positive (+).** Red lead from the V2 control box to the battery positive (+), through your isolation switch.

3. **Remote.** The wired remote plugs into the V2 control box.

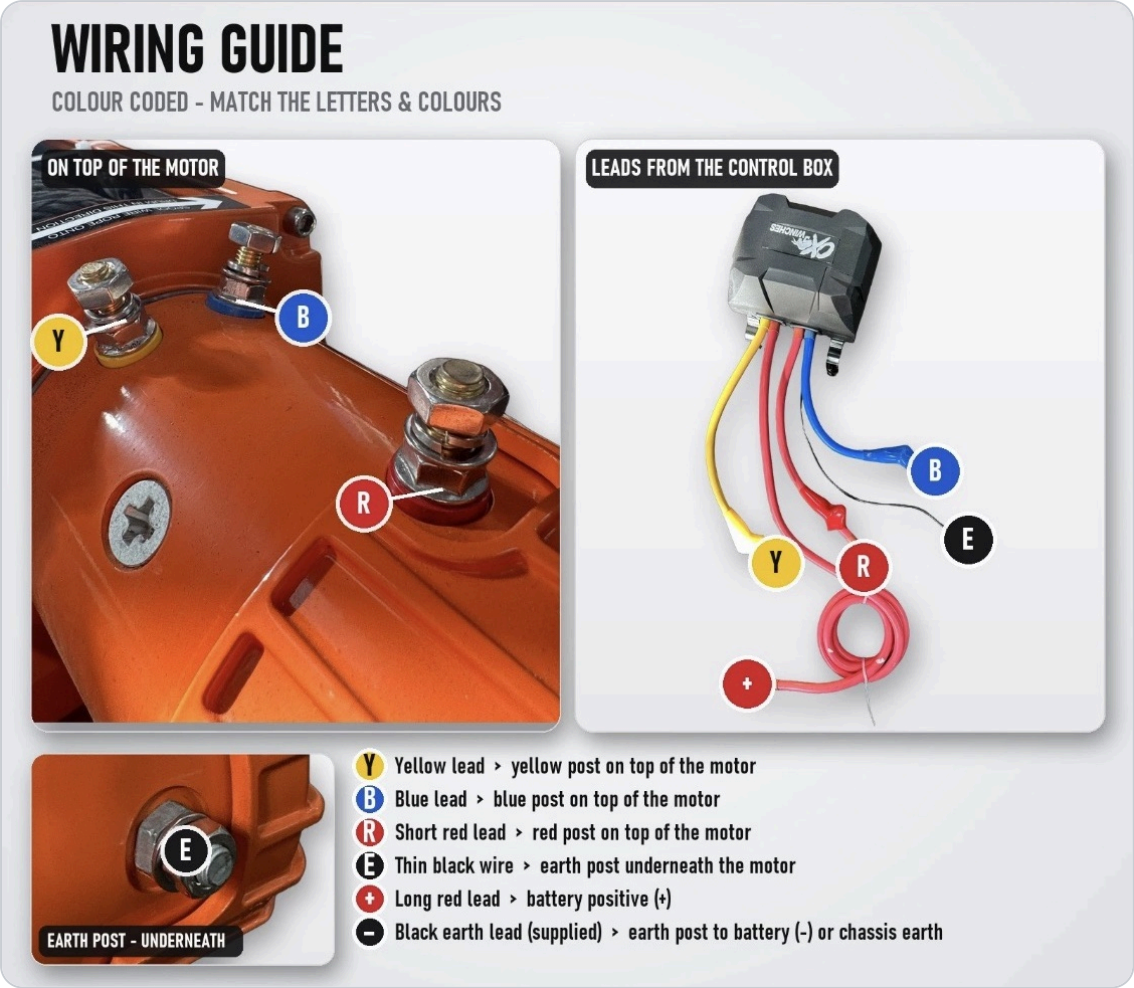
Battery isolation switch

Fit a battery isolation switch between the battery positive (+) and the winch red power lead. Use a switch and cable rated for the winch full current (up to 420 A on 12 V). We sell an optional 1 m power cable for this on oxwinch.com and the Titan Power Products website. Switch it OFF when you are not using the winch.

12 V or 24 V

Check the label on your winch. Use a battery system of the same voltage.

Step 2 — Wiring: match the colours



	Lead	Goes to
Y	**Yellow** lead	Yellow post on top of the motor
B	**Blue** lead	Blue post on top of the motor
R	**Short red** lead	Red post on top of the motor
E	**Thin black** wire	Earth post underneath the motor
+	**Long red** lead	Battery positive (+), through the isolation switch
–	**Black earth** lead (supplied)	Underside earth terminal to battery negative (–), or a clean bare metal body point

Check twice
Every letter and colour matches. Every nut is tight. No bare metal touching the winch body.

Keep it clean
Keep cables away from sharp edges, heat and moving parts. In wet or salty places, seal connections with silicone sealer.

Step 3 — Check the rope · First test

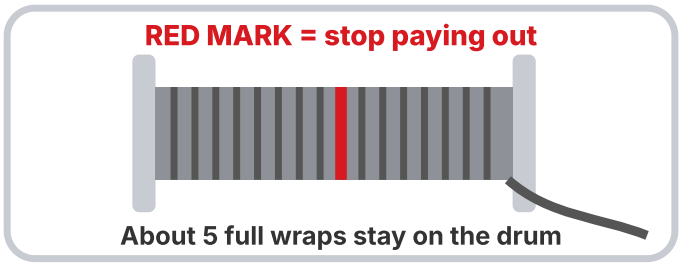
1

Check the rope. No kinks. No broken strands. It must be fixed properly to the drum. Never use frayed rope.



2

Clutch OUT. Pull the rope off the drum by hand until you see the **red mark**. About 5 wraps stay on the drum.



3

Wind it back under load. The first time you use the winch, wind the rope in with a load of **at least 230 kg (500 lb)**. This tightens the rope on the drum. Do it as a practice run, not in a recovery. If you skip this, the outer wraps can pull into the inner wraps and damage the rope.

4

No-load test. Clutch IN. Plug in the remote. Press **IN**, then **OUT**, in short bursts. The motor must run both ways.



WINDING THE ROPE IN: HOLD IT, WIND IT, STOP

1

Wear leather gloves. Keep a **slight load** on the rope. Hold the rope with one hand and the remote with the other.

2

Start as far back and in the centre as you can. Walk forward as the winch pulls in. Do not let the rope slop through your hand. Do not get too close to the winch.

3

Stop. Repeat until all the rope is in except about **1 m**. Unplug the remote, clutch OUT, and finish winding the drum by hand.

Winch fitted inside a bumper (hidden)? Wind the rope in under power but keep your hands clear.

Using your winch

Handbrake on	Neutral (P if auto)	Chock wheels	Engine idling
P	N		+ −

1. **Park safely.** Handbrake on. Gearbox in neutral (Park on an automatic). Chock the wheels on a slope. Engine idling to protect the battery. Never winch with the vehicle in gear.

2. **Clutch OUT.** Pull the rope out by hand to your anchor point.



3. **Fix the hook** to a strong anchor (see page 11). Do not wrap the rope round the load and hook it back onto itself.

4. **Clutch fully IN.** Now the winch is ready to pull. Never move the clutch with the motor running.



5. **Check everything again.** Plug in the wired remote, or use the wireless remote. Stand to the side, well clear of the rope.

6. **Press IN to pull, OUT to pay out.** Use short bursts. Stop about every metre and check the rope winds on evenly. If it piles up at one end of the drum, reverse a little to take the load off, then move your anchor point towards the centre line of the vehicle.

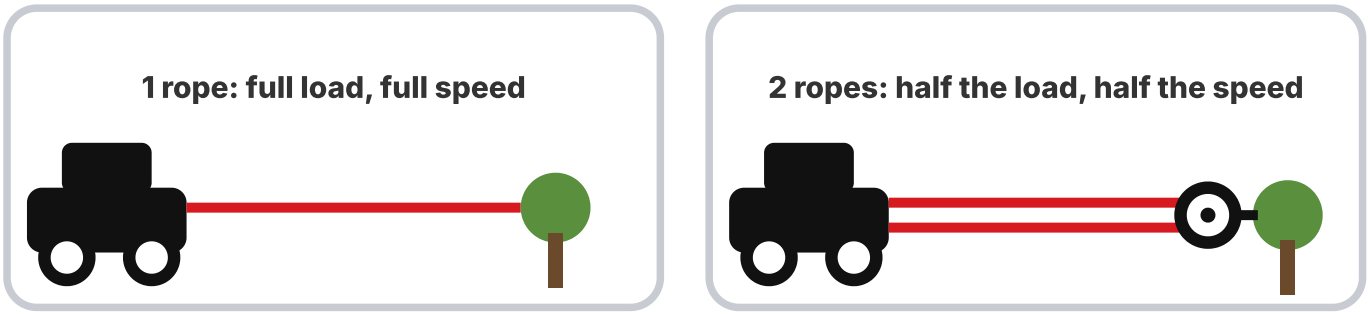
7. **Finished?** Clutch OUT. Unplug the remote and store it inside the vehicle. Re-wind the rope neatly.

Wireless remotes are paired

Your wireless remotes are paired to the small receiver inside the V2 control box. They only work with that receiver, so you cannot buy one new remote on its own. If you lose or break a remote, order a full replacement package: a new receiver and two new remotes. Range is about 60 to 80 metres. This is not guaranteed, because radio interference can reduce it.

Anchors · Double line pull · Shock loads

DOUBLE LINE PULL — A SNATCH BLOCK



A snatch block doubles the pull and halves the load on your winch. The winch runs at half the speed. Fix the hook back to a recovery point on your vehicle chassis. Use a block and shackle rated for the load.

Anchor points

Use a tree trunk protector strap, chain or sling that is strong enough. Fit it low on the anchor. Never use the winch rope itself to wrap round the anchor.

Rope damper

Drape a heavy blanket or coat over the middle of the rope. If the rope snaps, it helps to hold it down.

Shock loads

A shock load is a sudden jerk on the rope. A vehicle rolling back on a slack rope causes one. It can break the rope. Take up slack gently. Never drive to help the winch.

Stay within the rating

13,500 lb (6,124 kg) is the most, on the first layer of rope only. Pulling a heavy load? Use a snatch block.

Pull in a straight line where you can. Pulling at a steep angle makes the rope pile up at one end of the drum.

Rope: how much pull you really have

The more rope on the drum, the **less** the winch can pull. Keep your pull within the layer you are on.

Layer	Rated pull	Total rope out
1	**13,500 lb** 6,124 kg	17 ft 4.8 m rope
2	**10,010 lb** 4,550 kg	41 ft 12.0 m rope
3	**8,840 lb** 4,018 kg	71 ft 21.0 m rope
4	**7,410 lb** 3,368 kg	85 ft 26.0 m rope

Keep at least 5 wraps on the drum
Never pay out the last 5 wraps. The rope end is only held by a clamp.

LOOKING AFTER THE ROPE

- **Steel rope:** a little light oil now and then (light penetrating oil). Look for broken strands. Replace damaged rope.
- **Synthetic rope:** do not oil it. Keep it clean. Replace it if it is cut, flattened or glazed (melted) by heat.
- Always wear leather gloves. Broken wires cut.
- Never fit a rope that is weaker than the one supplied.

FITTING A NEW ROPE

1. Roll the new rope out along the ground. This stops kinks.
2. Take off the old rope. Look at how it is fixed to the drum flange. Fit the new one the same way.
3. Put thread locker (for example Loctite 222) on the rope clamp screw. Tighten it firmly but do **not** over-tighten.
4. Do the first-use wind-in under load (page 9, step 3).

Looking after your winch · Fault finding

Use it once a month

Power the rope out 15 m. Free spool 5 m by hand (clutch OUT). Power it back in. This keeps the winch in good working order so it works when you need it.

- The gears are packed with high-temperature lithium grease at the factory. They do not need greasing.
- Keep every electrical connection clean and tight. Clean the remote plug and socket.
- Check the mounting bolts are still tight.

FAULT FINDING

What happens	Why	What to do
Motor will not run	Remote not pushed in firmly	Push the remote plug in firmly.
	Loose battery cable	Tighten the nuts on the cable connectors.
	No click from the V2 control box	Check every lead is tight and matches the colour guide (page 8). Still no click? Call us.
	Faulty remote	Replace the remote.
	Water in the motor	Drain and dry it. Run it in short bursts with no load until it is fully dry.
Motor gets very hot	Long run	Stop. Let it cool down.
Motor slow or weak	Battery low	Run the engine to charge the battery.
	Poor connection	Clean, tighten or replace the connector.
Motor runs, drum does not turn	Clutch not IN	Move the clutch to IN. Still nothing? Do not use it. Call us.
Runs one way only	Lead loose or on the wrong post	Check the yellow, blue and red leads are tight and on the matching posts (page 8). Still wrong? Call us.
	Faulty remote	Replace the remote.

Specifications — 13500

Rated pull (one rope)	**13,500 lb (6,124 kg)**
Motor	6.5 hp / 4.8 kW, series wound
Voltage	12 V or 24 V — check the label on your winch
Control	Wired remote switch and wireless remote, both supplied
Gear train	3-stage planetary, 265:1
Brake	Automatic load-holding brake
Drum	Ø 63.5 mm × 224 mm (2.5" × 9.6")
Rope	Steel 9.5 mm (3/8") × 24 m (78.7 ft), or synthetic rope 10 mm × 23 m
Battery	650 CCA recommended
Weight	36 kg with steel rope · 28 kg with synthetic rope
Size (L × W × H)	526 × 160 × 218 mm
Mounting bolt pattern	254 × 114.3 mm (10" × 4.5")

PULL, SPEED AND CURRENT (FIRST ROPE LAYER)

Line pull	Line speed	Current
0	6.5 m/min	65 A
2,000 lb · 909 kg	3.5 m/min	126 A
4,000 lb · 1,818 kg	2.85 m/min	175 A
6,000 lb · 2,727 kg	2.4 m/min	230 A
8,000 lb · 3,636 kg	2.0 m/min	280 A
10,000 lb · 4,545 kg	1.75 m/min	355 A
13,500 lb · 6,124 kg	**1.28 m/min**	**420 A**

Speeds are in metres per minute. Current is for a 12 V winch. A 24 V winch draws roughly half.

Fitting checklist

Tick every box before you use the winch for real.

- [ ] Winch fitted on a strong, flat steel mount
- [ ] All mounting bolts tight
- [ ] Roller fairlead fitted
- [ ] Leads match the colours (Y, B, R, E)
- [ ] Black earth lead to battery (–) or clean bare metal body
- [ ] Red lead to battery positive (+)
- [ ] Battery isolation switch fitted
- [ ] Battery voltage matches your winch
- [ ] Rope checked: no kinks, no broken strands
- [ ] Rope wound in under load (practice run)
- [ ] No-load test: motor runs IN and OUT
- [ ] Clutch moves IN and OUT freely
- [ ] Everyone knows to stand clear of the rope

NOTES

Warranty and contact

Warranty

1 year. If your winch is faulty, return it to us for repair.

Keep your order number.

Your winch

Date fitted: _____ / _____ / _____

Order number: _____

Contact us

oxwinch.com

support@pumaspeed.co.uk

01924 201120

A and K McQuire Ltd

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