

EN- Original instructions

I. Parts List

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I. PARTS LIST

<p>Fig.1a- PE12V/2500</p> <p>1- Remote Control 2- Remote Control cable 3- Control box 4- Motor 5- Steel wire cable and spool 6- Clutch</p>	<p>Fig.1b- PE12V/9000</p> <p>7- Hook 8- Pulling hook (PE12V/2500only) 9- Pulley block (PE12V/2500 only) 10- Battery cable 11- Fairlead (PE12V/9000 only)</p>

II. CARACTÉRISTICS

Reference	PE12V/2500	PE12V/9000
Model / Type	KDJ-2500H	KDJ-9000L
Voltage	12V	12V
Steel Cable dimensions	14m x Ø 4.8mm	29m x Ø 8.3mm
Cable resistance	Max. 1530Kg (*)	Max. 4330 Kg (*)
Cable tensile strength	1870 N/mm ²	1870 N/mm ²
Line speed (with load)	1.2 m/min	1.6 m/min
Hook Dimensions	1/4"	5/16"
Pulley block rating	5000 Lbs / 2200 Kg	Nil
Mounting plate (mm)	80mm	254 x 114mm (LxW)
Overall Dimensions (mm)	320 (L) x 105 (W) x 160 (H) mm	570mm (L) x 160mm (W) x 230mm (H)
Net weight (approx.)	9.5 Kg	36 Kg

(*) Cable resistance to traction

Winch capacity according to type of load :	PE12V/2500		PE12V/9000
	without pulley-block	with pulley-block	Without pulley-block
	Lbs / Kg	Lbs / Kg	Lbs / Kg
(R) Rolling load	3750 / 1701	7500 / 3402	13500 / 6123
(M) Marine load	5000 / 2268	10000 / 4536	18000 / 8165
(T) Pulling load (Traction)	2500 / 1100	5000 / 2200	9000 / 4000

III. SAFETY INSTRUCTIONS






Before operating the product, read and understand all Important Safety Information. Basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons and animals and damages.

The instructions and the recommendations for use herein tool must be made available to all users. They must be read carefully and perfectly understood before using the product or carrying any intervention, maintenance or repair on the product.

It is important to keep them carefully and ensure that they are always available.

Failure to comply with these instructions may result in injuries (to persons and/or animals) or damages (to property or other products) or damage to the product itself.

3.1- Symbols

	Caution! Risk of injury and/or damage and/or deterioration of product in case of non compliance to safety requirements
	Read the instructions manual.
	This winch must be mounted with the wire rope in an underwind direction. Do NOT overwind the wire steel rope.
	Do not hold the hook with bare hand. Always use protective gloves or the pulling hook (8) [only available with PE12V/2500]
	Keep persons (esp. children) and animals away from product and working area

3.2- General safety instructions

1. Keep the work area clean and free from obstacles
 - Cluttered areas invite accidents.
2. Observe work area environment conditions
 - Do not expose the product to rain.
 - Do not use in damp or wet locations.
 - Ensure that work area environment is kept well lit (sunlight or artificial lighting).
 - Do not use the product in case of fire or explosion hazard (in the presence of flammable gases or liquids).
3. Dress properly
 - Do not wear loose clothing or jewelry that could be caught in moving parts.
 - Rubber gloves and non-skid footwear are recommended as well as a cap to contain long hair.
 - Wear appropriate personal protective equipment (eg. safety goggles, ear protection, dust mask...) according to work environment and work requirements.
4. Use the most appropriate product and do not force the product.
 - Do not force a small product or accessory to do the work of a heavy-duty product.
 - Do not use the product for purposes other than those for which it is intended. The product will do a better and safer job at its rated speed if it is used for the purposes it was designed for
5. Keep a safe distance and keep children away
 - Keep yourself and others at a safe distance from the work area, the product, power cord, and the steel cable when it is pulling under load.
 - Keep bystanders (esp. children) and animals away from the work area. Children must never be allowed in the work area.
 - Keep the product away from children or from their environment.

Never allow children to operate the product. Children should be supervised to ensure that they do

not play with the product.

6. Do not damage the power cord

- Never move the product by dragging it by the power cable.
- Never pull the power cable to disconnect it.
- Do not step over the power cable.
- Keep the power cable away from heat, oil and sharp edges.

7. Safety at work

- Use proper protective equipment according to the work environment.
- Keep proper footing at all times and balance.
- If the motor overheats, stop it and leave it to cool down for a few minutes.
- Do not leave the power connected to the winch if the motor stops.
- Important: never exceed the maximum line pull ratings shown in the table.
- Do not pull loads greater than the maximal capacity of the winch.
- Do not attempt to pull stationary or fix loads.
- Do not apply any side force on the load
- Excessive inching (e.g. giving short pulses to the motor) shall be avoided.
- Never transport persons

8. Do not step over or under the product or steel cable

- During operation, **do not** step over or under the product or the steel cable.

9. Avoid starting the product unintentionally

- The winch clutch should be disengaged when the product is not in use, and fully engaged when in use.
- Keep the remote control in a safe place. Be sure that the switch is in the “OFF” position when not in use.

10. Check for damaged parts

- Before each use, check the product carefully. Any part that is damaged should be repaired or replaced by an authorized service center.
- Do not use the product if the remote control does not operate properly.

11. Repair the tool

- When repairs are carried out, only identical replacement parts should be used to avoid endangering the user.
- Repair the product by a qualified technician.
- Repairs should be carried out by qualified technicians, using only original spare parts; to avoid any danger for the user.

12. Product maintenance

- Keep the product properly maintained and clean for a better and safer performance.
- Follow the instructions for lubricating and changing the accessories,
- Inspect power cords periodically and, if they are damaged, have them repaired or replaced by an authorized service centre.
- Inspect all moving parts and mounting bolts and nuts prior to use
- Keep handles dry, clean and free from oil and grease.

13. Rewind the cable

To rewind the cable correctly, a slight load must be kept on the cable.

For this purpose, hold the cable in one hand (wearing protective gloves) and the remote control in the other hand, starting as far back and as centrally as possible, walking up and keeping the load on the cable as the winch is powered in.

Do not allow the cable to slip through your hand and do not approach the winch too closely.

Turn the winch off and repeat the operation until almost all of the cable has been rewound.

Disconnect the remote control and finish rewinding the cable by rotating the drum by hand with the clutch disengaged.

If the winch is not accessible, rewind the cable with the winch turned on, keeping hands clear.

14. Attention: do not overreach and stay alert
 - Keep proper footing and balance at all times
 - Pay attention to what you are doing and use your common sense
 - Do not operate the product when you are tired, while under the influence of alcohol, prescription medicines or drugs.
Read warning labels of prescriptions to determine whether your judgment or reflexes would be impaired while taking drugs. If there is any doubt, do not operate the tool.
 - Do not reach over or across running machines
15. Important
 - The user and/or operator are responsible for any damages or injury caused to properties and persons.
16. Store idle equipment
 - When not in use, product must be locked up in a dry location. Always lock up product and keep out of reach of children
17. Remove adjusting keys and wrenches.
 - Be sure that keys and adjusting wrenches are removed from the product before operation
18. Check for damaged parts.
 - Before using or re-using the product, carefully check for all parts, to determine if product will operate properly and perform its intended function. Components may be affected by exposure to chemicals, salts, and rust.
 - Check for alignment and binding of moving parts, any broken parts or mounting fixtures, and any other condition that may affect proper operation.
 - Regularly check the steel cable for signs of tear and wear. Replace any damaged cable at an authorized service centre.
 - Unless otherwise stated in the instructions, any part that is damaged should be properly repaired or replaced by a qualified technician.
 - Do not use the product if the remote control does not turn on and off properly. Repair or replace it at an authorized service centre.
19. Accessories.
 - The use of any accessories, other than those recommended by the manufacturer or stated in the instructions manual, may result in injury or may cause damages.
20. Remark:
 - The safety precautions and instructions given in this manual are unable to cover in detail all the conditions and situations that may arise.
 - The operator and/or user must use common sense and caution when operating the product especially for any matters that are not referred in the above.

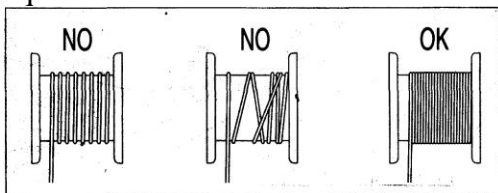
3.3- Special warnings when using the electric winch

1. Become familiar with the controls and proper use of the product.
2. Only well-instructed adults should operate the product.
This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety
3. Never connect a hook to the wire steel cable. This could damage the cable.
Always use proper couplings when connecting winch cable hook to load i.e. use a sling or chain of a suitable strength.
4. There is no problem if the cable is rewound unevenly while pulling a load, unless there is a pile-up of the cable at one end of the drum. If such pile-up happens, reverse the winch to relieve the load and move the anchor point further to the centre of the vehicle.
5. When the job is done, we recommend unwinding the cable and then rewinding it neatly.
6. Store the remote control inside the vehicle where it will not be damaged and inspect it before use.

7. Watch your winch while it is in operation; if a vehicle is used, keep at a safe distance.
8. First get a few feet out to ensure the cable is not pulling just on one side.
A jammed cable can break the winch.
9. The winch hook must be attached to the vehicle frame.
Do not attach two hooks to the winch mounting apparatus. They must be attached to the vehicle frame.
10. As the greatest pulling power is achieved on the innermost layer of the winch, it is advisable to unwind as much cable as you can for heavy loads (remembering to leave at least 5 turns on the drum). If this is not practical, use a snatch block and double line arrangement.
11. A neat, tight winding prevents the cable from twisting and being pinched when a load is applied. If the cable should become twisted and pinched, power the winch and unwind and then rewind a few inches of the cable.
12. Do not use a twisted cable under load, unwind it by hand.
13. Apply blocks to wheels if the vehicle is on an incline

3.4- About the cable

- Before starting, make sure that the steel cable is correctly wound around the drum and the pitch is equal to the cable diameter.



- Make sure the cable is in good condition and is attached properly.
- Do not use the winch if the cable is worn, frayed.
- Do not move the vehicle to pull a load. Do not move vehicle with cable extended and attached to a load to pull it. The cable could snap
- Please check and respect the maximum load listed on the label of the winch, neglecting the capacity marked on the hook.
- If the steel cable is worn out, it must be replaced with an original or same specifications' cable, by an authorized service centre. Do not replace the cable with a cable of lesser strength

3.5- About the battery

- Make sure the battery is in good condition. Avoid contact with battery acid and other contaminants
- Always wear eye protection when working on a battery.
- Keep the engine running when using the winch in order not to make the battery flat.

3.6- About safety

- Use gloves while handling cable
- Keep away from the cable pulling line. If the cable should slip or break, it would “whiplash” along this line.
- Keep hands, body, clothing, hair and jewelry clear of the winch, cable, fairlead when in use
- Ask another person to help you make sure the winch is operating safely. Make sure this person is at a distance from the vehicle and the cable before starting the winch.
- Never come or stand in between the winch and the load when operating. Do not cross over or under cable while under load.
- Secure load after moving:

After moving an item with the winch, secure the item. Do not rely on the winch to hold it for an extended period of time, as the winch does not have a locking mechanism.

- When loading a boat into a trailer without keel or side hull rollers, make sure the trailer is submerged in the water when the boat is loaded by the winch.

Attempting to drag the boat onto the trailer while on land can cause winch failure and possible injury.

3.7- About the limits

- Never exceed the pulling limits of the winch.
- Do not overload the winch (for loads over capacity, we recommend the use of an optional pulley block to double line the wire rope). It will do the job better at the load for which it was intended.
- Do not use inappropriate attachments to extend the length of the winch cable.
- Do not apply a load to the winch when the cable is fully extended. Keep at least 5 full turns of cable on the reel.

IV. GETTING STARTED

4.1- Unpacking

Unpack product and accessories from packing.

Check that both product and accessories are free from damage.

4.2- Mounting the winch

Mount the winch on the vehicle or other fixed installation by using Screw, Nut, Flat Washer and Lock Washer (not provided).

The winch should be aligned and secured to a solid part of the vehicle (either at the front or rear) where the full rate load will be evenly distributed.

Be certain winch is properly bolted to a structure (or vehicle) that can withstand and hold the winch load.

Reminder! The winch is designed for horizontal pull, not vertical pull.

Warning! The winch must be mounted with the wire rope in an underwind direction (see Fig.2).

Improper mounting could damage your winch.

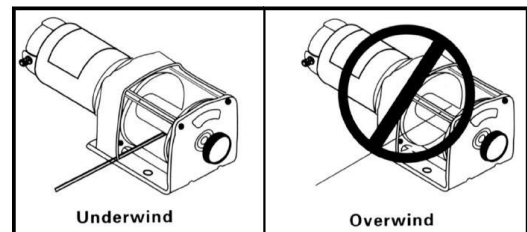


Fig. 2

4.3- Wiring the electric winch

Warning: ensure that you are using a 12V battery in good condition.

1. Lift the rubber seal on side of the winch, and plug in the remote control power cord.
2. Route the electric cord from the winch to your battery, taking care not to tangle it in moving parts, or to create any hazard (e.g. tripping hazard...)
3. Connect the red cable to the positive (+/red) terminal of your 12V battery.
4. Connect the black cable to the negative (-/black) terminal of your 12V battery

Remarks:

Plan the wiring route between the winch and the battery. This route must be safe, away from moving parts, obstacles and any other part that could cause damage, cut the cables or cause injury.

Caution: Battery cables should not be drawn taut. Leave slack for some cable movement.

5. Check rotating direction of the drum.

Pull and turn the clutch knob / lever to the "Off" position (drum can therefore turn freely).

Pull out some cable from the drum, and then turn the clutch knob / lever to the "In" position.

Press the "Cable out" button on the handheld remote control switch, if the cable is releasing then the connection is properly done in the right way.

Otherwise please change the line connected the motor. You should exchange the two lines, and repeat the above-mentioned checking operation.

6. Battery warnings

a. Make sure to use a 12V automotive battery or equivalent in good condition.

Always connect Red with Red (Positive to Positive) and Black with black (Negative with Negative).

b. Never use your winch or other accessory continuously until the battery completely runs down

or becomes flat.

c. You may wish to keep your engine running while using this winch to continually recharge the battery. However, do not use the winch with a moving vehicle.

d. Do not use a dirty, corroded or leaking battery. You may suffer injury from acid burns.

e. Always wear safety glasses when working around or with a battery.

V. OPERATION

CHECK THE WINCH CAREFULLY BEFORE STARTING AND RUNNING IT!

5.1- Description and Intended use

The 2500 winch is equipped with a permanent magnet motor and the 9000 winch is equipped with a series wound motor. Both are designed for intermittent duty general use.

They should not be used in a constant duty application.

The duration of the pulling job should be kept as short as possible. If the winch motor becomes very hot to the touch, stop the winch and let it cool down for several minutes.

Never pull for more than one minute at or near the rated load.

Do not maintain power to the winch if the motor stalls.

The winch must NOT be used for industrial or commercial purposes

The winch must NOT be used for lifting purposes, and never can it be used for moving people.

Improper use could damage your winch and could result in serious injury and/or property damage.

Free spool clutch is operated by a lever (6) or a pull and turn knob (6) [according to model], which can disengage the gearbox, and wire rope will be pulled out by gloved protected hand or with hand saver bar (pulling hook (8)).

The winch is designed for ground use only and solely for horizontal pulling use (do not lift items vertically.)

Do not use it for hoisting as for this type of application hoists must comply with particular safety requirements,

The winch shown in this operation manual is not intended for the transportation of persons (**Never lift people or hoist loads over people.**).

This winch must only be used to recover vehicles or to pull a non-fixed load within its pulling capacity.

5.2- Suggestion:

The best way to get acquainted with how the winch operates is to carry out a few test runs before you actually need to use it.

Pay attention to the noise the winch makes during operation. It is important to recognize the difference in sound between a light, steady pull, a heavy pull and sounds caused by load jerking or shifting.

5.3- Operation:

1. Secure vehicle in position before using winch:

Put your vehicle in neutral. Put the hand brake on. Always apply blocks to the wheels to prevent rolling (whether vehicle is parked on flat terrain or on an incline).

2. To pull out the cable:

- Disengage the clutch: pull and turn the clutch knob (6) (for model 2500) or place clutch lever (6) (for 9000 model) to the "OFF" position to loosen the gearbox.

- With glove protected hand or with pulling hook (8) (for 2500 model only), pull the cable to the required length.

Note: Always leave at least five turns of cable around the spool to prevent the cable from being pulled out of the winch.

3. Before hooking the load, make sure the distance between the load and steel rope is minimal.

Hook up the load using a pulling point, tow strap or chain.

Do not wrap the cable around the load and do not hook the load directly onto the cable. This could damage the load and twist or fray the cable.

4. To pull-in the cable:

- Re-engage the clutch knob / lever: pull and turn the clutch knob (6) (for model 2500) or place clutch lever (6) (for 9000 model) to the "IN" position to engage the clutch.

CAUTION: Clutch must be fully engaged before winching. Never operate the clutch while drum is turning.

- Press the "Cable in" button on the handheld remote control and the cable is re-spooled.

- Press the "Cable out" button to reverse directions.

WARNING! Wait until the motor stops before reversing directions.

5. The operator/user shall pull the load with the minimum speed available at the winch. The rope shall be tightened and shall not be in the slack-condition when the load is being pulled.

It is important that lay a blanket or jacket over the wire rope near the hook end when pulling a load (See Fig.3). This will slow the snap back of a broken wire rope and help to prevent serious injure and damage.

Stand at a safe distance and press the power switch on the remote control to retract the cable, and winch the item as required.

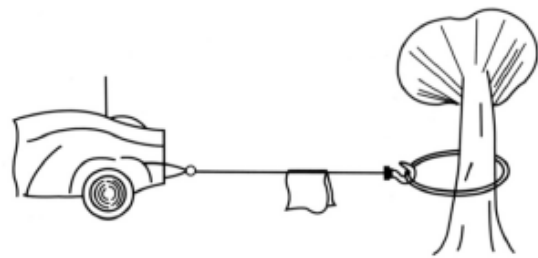


Fig.3

6-After finishing the pulling / towing operation

- Always rewind the steel cable in its spool.

- Remove the remote control plug form connector on the motor, and replace the rubber seal connector cover.

7. Warning:

a. Do not use the winch with the vehicle in gear or in "P" (park brake) position on as this could damage the vehicle transmission. Use the hand brake and chock vehicle.

b. Do not wrap the cable around the load and do not hook the load directly onto the cable. This could damage the load and twist or fray the cable

c. Keep hands, clothing, hair, and jewelry clear of the drum area and cable when using the winch

d. Do not use the winch if the cable is frayed, twisted or damaged.

e. Do not allow anyone to stand near the cable or in the cable pulling line, behind the winch while it is on. If the cable should slip of break, it could whiplash

f. Do not leave the remote control plugged when the winch is not in use.

VI. MAINTENANCE AND STORAGE



Disconnect winch from battery before carrying any intervention, maintenance, cleaning or repair on the winch.

6.1- Maintenance

1. Lubrication

a) The gearbox has been lubricated using high temperature grease in the factory. Therefore no internal lubrication is required except when winch requires being repaired

b) Periodically lubricate the cable and hook with slight grease.

Grease the gears every 6 months. To do this release the clutch knob and separate the left and right housing. Use good quality waterproof grease.

2. Inspect periodically all parts, steel cable, accessories and replace them if damaged or used.

3. Have damaged parts replaced by an authorized service center.

4. Check the nuts periodically and tighten them if they are loose.
5. Periodically check that the functions buttons are in good operating condition.
6. Replacing the wire rope

This intervention is recommended to be performed by a qualified person or authorized repair centre. When inserting the wire rope into the drum, insert it under-winding into the correct end of the hole provided. Tighten the set screw tightly.

7. Gearbox / clutch: do not attempt to disassemble the gearbox.

6.2- Cleaning

- Always clean product after use.
- Clean product with a soft clean cloth.
- Do not use aggressive cleansers (solvents or abrasive cleansers), or an abrasive sponge.

6.3- Troubleshooting

TROUBLES	CAUSES	REMEDIES
The motor runs in only one direction	- Defective or blocked solenoid. - Defective remote control switch.	- Shake solenoid to free contacts Check by applying 12Volts to coil terminal (it should make an audible click when energized), - Disengage winch clutch, remove the remote control switch plug. Motor should
Motor runs but overheats, Motor runs but with insufficient power or at low speed.	- Long period of operation. - Insufficient battery - Bad connection. - Insufficient battery charger system.	- Cooling-off periods are essential to prevent overheating. - Check that the battery terminal voltage under load is 10 Volts at least, replace the battery or add another. - Check battery cables for corrosion, clean or grease. - Replace with a larger capacity battery charger system.
Motor runs, but drum does not turn.	- Clutch not engaged.	- If the clutch is engaged but the symptom persists the winch must be disassembled to determine the cause and repaired.
Motor will not operate.	- Defective or blocked solenoid. - Defective remote control switch. - Defective motor - Loose connections.	- Shake solenoid to free contacts Check the solenoid by applying 12 Volts to coil terminal (it should make an audible click when energized). - Disengage winch clutch. Motor should run. - If the solenoid operates, check for voltage in the core, replace motor. - Tighten connection on lower side of the
Motor damaged by water.	The motor has been submerged in water or washed with high pressure water.	Allow to dry thoroughly, then run motor without load in short bursts to dry windings

6.4- Storage

Product must be stored in a dry location. Always lock up product and keep out of reach of children

6.5- Disposal

Do not dispose the product with household garbage. Do not throw into the environment.

Dispose of the product in a collection centre, or a waste drop-off centre; or seek advice from your local municipality.

Disposal of the product, accessories and packaging should be carried out according to local regulations governing environment protection.