



4 INCH Quad Cycle Chipper Shredder

PK0903 POWERKING Manual



Read through this owner's manual carefully before using product, to insure the safety of yourself and others.

Due to continuing improvements, actual product may differ slightly from the product described herein.

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Preface

Read through this owner's manual carefully before using machine. Protect yourself and others by observing all safety information, warnings and cautions. The operating instructions involved safety instruction, structural feature, main technical parameters, working process, using instructions, maintenance, transport and storage, trouble shooting for users reference during the use of the machine.



I . Safety instructions

1.The machine must not be used in any other way than described in the manual.



2.Use only original equipment and spare parts. If you use non-approved spare parts, there is increased risk and this is, therefore, not permissible. All liability is renounced in the event of an accident or other damage caused by the use of non-approved parts.



3.Before using the machine for the first time, read and follow this manual.



4.When using the machine you are responsible for any third party in the area where the machine is in operation. Never use the machine in the presence of others, especially children or animals.



5.Do not allow minors to operate the machine.



6.The machine may only be lent to mechanics who are familiar with operating the machine. Always keep the safety and operational instructions attached with the machine.



7.Do not remove or add other parts after finishing installing the machine at the factory, e.g. removing the belt guard.



8.Check all the safety parts in their proper positions and remember to tighten all bolts and nuts before starting the machine.



9.Choose a flat work place. Machine can only used in the outdoors or in the well ventilated case. Away from flammable and explosive object. Avoid buns, fall, fire, explosion and other safety incident.



10.When working with the machine wear close-fitting work clothes, sturdy work gloves, eye protector, ear muff, dustproof mask and antiskid shoes .



11.Before and after using the machine, proper maintenance is necessary. This could avoid some security incidents, and extend the life of the machine.



12.Before using the machine, please read the carefully the instructions and understand well .

Failure to comply with instructions could result in personal injury and/or damage to product or property.

13. Safety labeling and significance



Read the instructions carefully before operating.



DANGER, pay attention to safety.



Keep hands away from the rolling parts.



Beware of cutting the fingers.



Keep a safe distance from the working machine.



Beware of objects thrown out of the machines.

II . Technical parameter

1. Model: PK0903

Max. Chipping Capacity: 4 INCHES DIA

Chipping Fineness: Granulated Detrital

Function: Chipping leaves, branches, crop straw and farming feed, etc.

Max. Blade Speed: 2530r/min

Engine Type: OHV4-stroke190F

Displacement: 420cc

Max Output: 15HP/3600rpm

Fuel Volume: 6.5L

Oil Volume: 1.1L(10W-30)

Starting System: Recoil

Fuel Type: 93# clean Unleaded Gasoline

Efficacy: 1000-5500kg/h

Principal axis rotation direction: anticlockwise

Carton Size: 1110mm×630mm×1000mm

Attachment: Users manual and toolkit

III. Structural character

This series of high efficient machine has safe protection, firm structure, steady operation. Fuselage are all made of high quality steel, blades are made of high speed steel HSS, sharp cutting edge have good toughness, hardness, impact resistance and anti-abrasive.

The machine are consist of frame1, feed hopper9, outlet hopper 10, wheel2, support frame 4 (details please find in attachment). The crush room, transmission device and power device are fixed in fuselage1.

IV. Working process

There are hopper and discharge port on the machine, drawing materials in hopper when it is in operation, the materials through hopper to get into inner crusher room. Due to the blades of cutter wheel in inner crusher room are made a relative movement in high speed and cut the materials during the movement. After cutting, materials are discharged through the discharge port.

V. Operating instructions and warnings

Please read carefully and understand the engine instruction manual before using. The engine shipped from factory without lubricant and fuel.

Do not drink ; take drugs or narcotic drugs before starting the machine.

Take some protective measures before starting the machine.

It is necessary to have an empty running test to make sure linking parts are firm enough, and check the amount of oil and fuel before operation. Turn on the motor to have an empty running test. (Detail information please find in the motor manual instruction.) After testing, it can be had a test with load from slight to heavy. Do not operate machine with overload, the raw material put the feeding hopper should be too big .it is determined by motor load. If it is overload, immediately reduce or stop to draw the materials in. After a period of regular movement, putting into production under no unusual noise or overheat phenomenon.

Keep the minors away from the spot.

Do not put hands or other body parts into hopper.

Do not get close to discharge port, the chips are expelled from discharge port can hurt you or may cause serious injury.

If the machine makes abnormal vibration or unusual noises, immediately turn the machine off and check it.

If there are many uncut materials, blades may be needed to sharpen or intervals are needed to make adjustment. It is easy to cause injury due to blades are sharp enough. Sharpen or adjust blades should go to indicate maintenance point. The recommendation of blade intervals is 1-2mm.

Choice of chipping material: the fresh cut trees branches and straws can be chipped directly. Due to different hardness and moisture content, the engine may stop midway or the machine body may shake during the working, that's normal. Our recommend max. chipping capacity point to the annual plant, such as trees, and straws. If chipping the perennial plant, you should shorten the chipping diameter and lessen the material to feeding hopper . The ideal chipping for this machine is suitable for fresh cut with 80% moisture content plant. During the chipping process, you should obey the rule: Big side first, small side later, the trunk first, the branch later. In order to get good chipping, it's better put branches and leaves together with the the bulk or segment of big trees. Block and short materials are not allowed to be chipped separately, for the safety of the operator and the good of the blades, they are better to be crushed with branches or straw.

VI. Maintenance instructions

This series of machine is only the main shaft bearing, which is needed to infuse lubricating oil. After a period of using, it is necessary to infuse the grease. How often to infuse grease is determined by using environment and it's frequency. You must

infuse the grease after using 50 hours because the lack of grease can easily cause bearing damage. Check all the parts regularly with 1-2 times monthly including bearing, blades, belt etc. Make sure they are flexible and sharp. Replace the blades as soon as the chipping performance begins to deteriorate. The blades are needed to check regularly. The blunt blades will lower working efficiency and cause the damage of machine.

Protection and maintenance of machine should carry out in accordance with the engine manual construction.

VII. Installation instructions

Packing is after the dismantling of the machine, remove parts from the packing box after the dismantling of the machine. According to attachment can make a simple assembly for use. Remember: the bulk and weight of partial components are large; you should get help to assemble the machine in order to ensure the safety. (This schematic is only used for simple installation, but not for technical or other uses.

VIII. Transport and storage

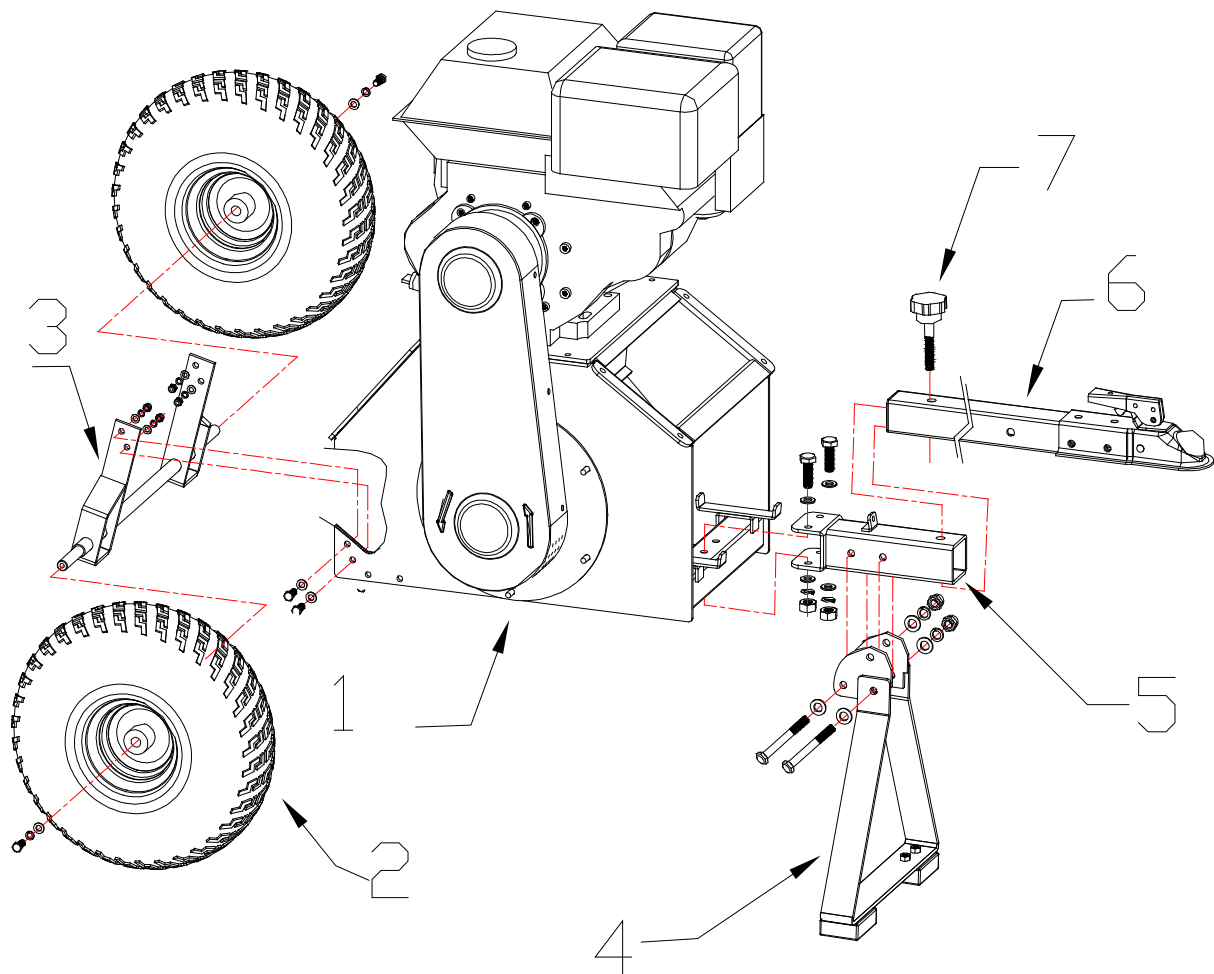
Turn off the engine before moving the machine, and turn off the fuel controls to maintain its lever in order to prevent overflowing the fuel, or it may cause the fire.

If you need to store the machine for a long time, please note the following points:

1. Please choose the place of good ventilated and clearance, and make sure that without adults can not be ran or used.
2. Please discharge gasoline into proper fuel tank, and safe keeping of it.
3. Do maintenance and deal with the rust-proof treatment.

IX. Attachment

Pic1. Frame installation(PK0903 series)



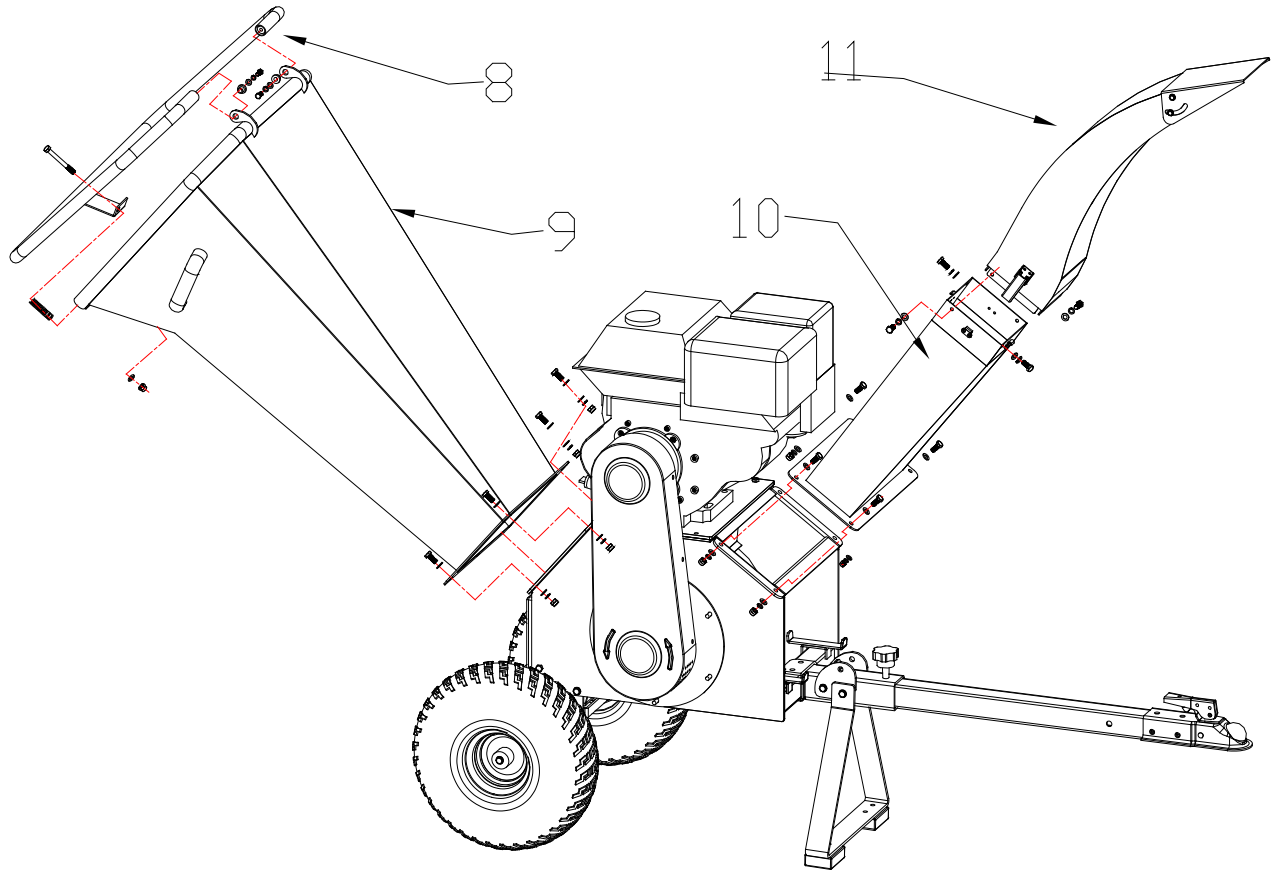
Serial Number	1	2	3	4	5	6	7
description	frame	wheel	axle stand	support frame	joint pipe	tow bar	knob

Installation procedure: first, lay the frame 1 on a elongated support or platform that is about 30cm high from the ground, and leave some space at the sides of the frame for the installing of the wheel2 and support frame 4, as it is showed in the pic, fix wheel2 with suitable fasteners to axle stand3, then fix the finished structure to frame1. Install joint pipe5 to the corresponding position on the frame, and then connect and fix support frame 4 and joint pipe5 ,and mount tow bar6 and knob7.After the installation is complete, the elongated support or platform can be removed and step into next phase.



In the process of installation, do not place hands or any other body parts within a radius of cutter wheel rotary. Do not touch the blades with your hands or any other body parts. Considering the heavy weight of the machine, pls do not try to install it by oneself in case of the possible injury.

Pic2. Feed Hopper and Out let Hopper Installation



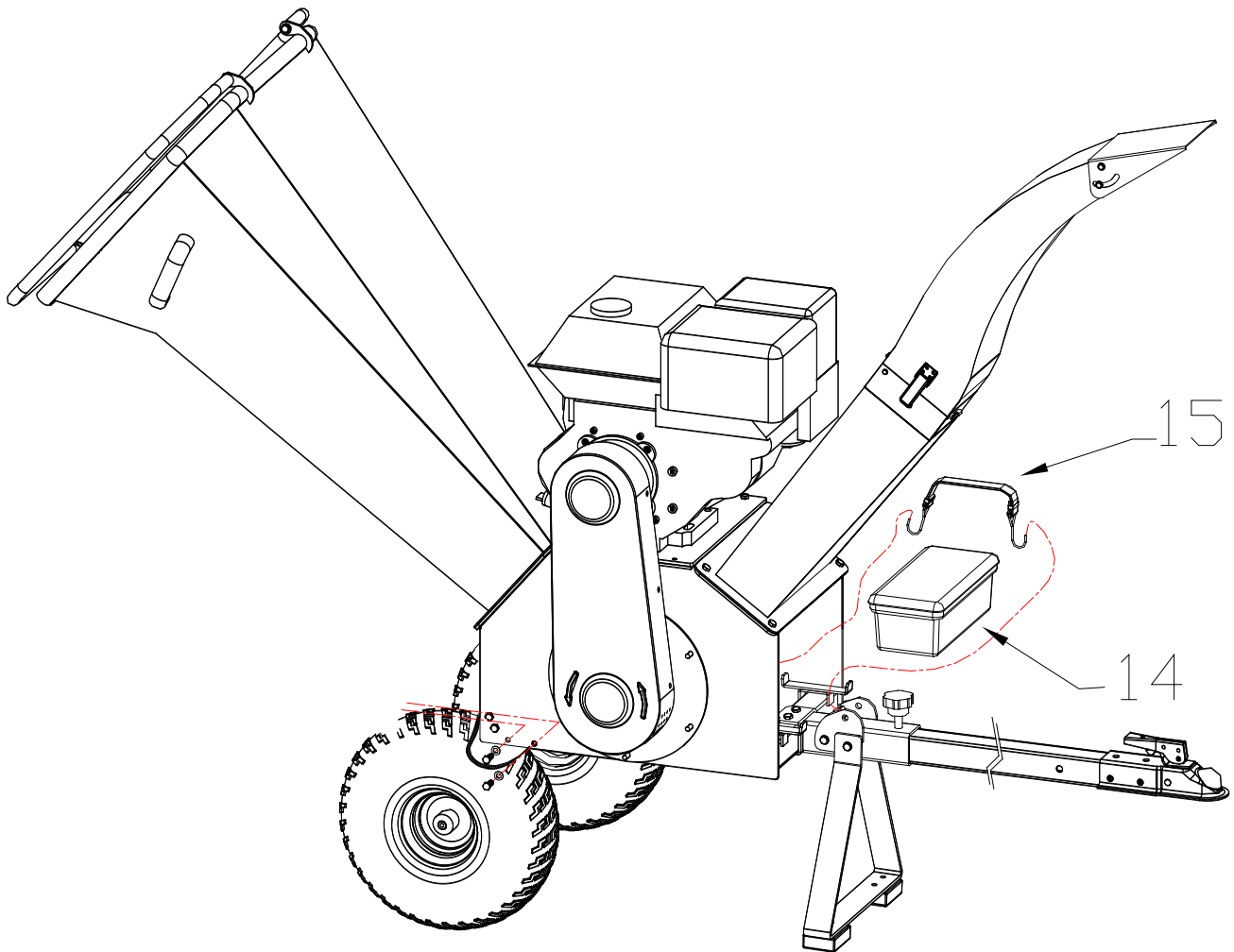
Serial Number	8	9	10	11
Designation	Safety device	Feed Hopper	Lower part of Outlet Hopper	Upper part of Outlet Hopper

Installation procedure: first fix the safety device 8 with bolts and shaft sleeve into the corresponding position on feed hopper 9, meanwhile make the long bolt passed through the hole on the welded sheet iron which is at the bottom of the safety device 8, and then set the long bolt through compression spring and fix them into the corresponding hole on the feed hopper 9 with nut, don't forget to adjust the spring to a suitable height. Then fix the feed hopper 9 to the frame 1 with bolts. Considering the weight of the feed hopper, when installation, please use the lifting device or with 3 or more people. Finally, connect and fix the upper part and the lower part of the feed hopper 10&11 with bolts and adjustable buckles, and fix the complete hopper structure to the frame 1.



In the process of installation, do not place hands or any other body parts within a radius of cutter wheel rotary. Do not touch the blades with your hands or any other body parts. Regarding the heavy weight of the machine, pls do not try to install it by oneself in case of the possible injury.

Pic3. Installation of Storage Battery and the Toolkit (PK0903)



Serial Number			14	15
Designation			Toolkit	Bundling belt

Place the toolkit on corresponding bracket position, connecting one end of the bundling belt to the retaining ring on the fuselage¹, while the other end to the anchor point on the connecting pipe, then bundle the toolkit to fix it on the frame bracket.



In the process of installation, do not place hands or any other body parts within a radius of cutter wheel rotary. Do not touch the blades with your hands or any other body parts. Regarding the heavy weight of the machine, pls do not try to install it by oneself in case of the possible injury.

X. Troubleshooting

The common faults		Elimination method
1	The engine cannot be started	Read the engine users' manual, check the fuel ON-OFF, see if it's ON, check if gets enough fuel and lubrication oil, check the emergency stop button.
2	Engine flameout midway	Check if the engine is stopped by overloading, check if something blocked in the chipping hopper, check the emergency stop button and protection switch.
3	The hopper blocked	Stop the machine, and remove the hoppers and the cap of bearing, turn the shaft of roller by the right spanner in the toolkit to clear the blocked material. Don't touch the blade during the working, make sure your hands not to be cut by the blades.
4	Has strange noise	Stop the machine, check if the fastener gets loose, if not, let the professionals to check the repair.
5	The blade destroyed	Go to the professional repair point to change or repair the blades.
6	The belt damage	Open the belt cover and change the belt.
7	The material grinding not sufficient	Let the professional to adjust the blade space, the recommended space for rough chipping is 1.5mm-3mm, for fine chipping is 0.1mm-1.2mm.



QVTOOLS, LLC.

Warranty Statement

QVTOOLS, LLC warrants all gas power equipment 1 year for manufacture defects, Kohler engine 3 years from date of purchase. Proof of purchase date required for warranty repairs. Keep your receipt. QVTOOLS, LLC will provide parts and labor of Powerking products only at our approved service centers, Customer is responsible for delivery and pickup of the product to and from the service center. Please call us at 800-344-3371 for warranty claims and to be assigned a service center. Gas Equipment is non-returnable and will be serviced by authorized service centers only. Only authorized service centers have parts and can perform repairs as to not void your warranty. This warranty does not cover cosmetic defects such as paint, decals or wear items. This warranty does not cover failures or problems due to acts of God, or events or forces beyond the control of the QVTOOLS, LLC. Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, or accidents, repairs or alterations, or a lack of maintenance. QVTOOLS shall in no event be liable for death, injuries to persons or property, or for incidental, special, or consequential damages arising from the use of our products.

All NON-GAS products are covered with 1 year warranty from manufactures defects and will be repaired or replaced by QVTOOLS, LLC. or our Retailers with proof of purchase date. Please call 800-344-3371 PST to our customer service department for product return assistance.

1-800-344-3371 9-4 PST

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