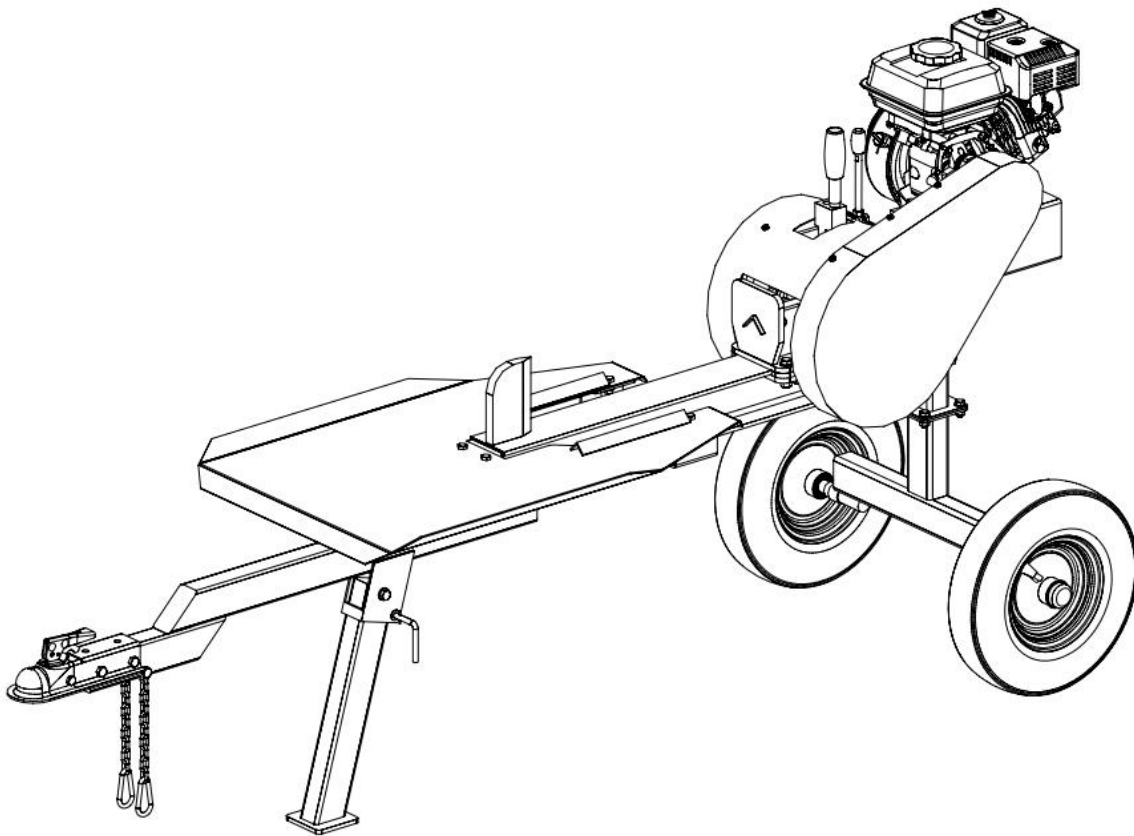


POWER KING[®]

22TON KINETIC LOG SPLITTER with ABS (Auto Braking System)

MODEL PK0322K



OWNER'S MANUAL AND OPERATIONS GUIDE



WARNING: This product can expose you to chemicals including benzene, carbon monoxide, and lead which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

General Safety Rules

WARNING

Read this Safety & Operating Instructions manual before using your PowerKing PK0322K Kinetic Log Splitter. Become familiar with the operation and service recommendations to ensure the best performance from your machine. If you have any questions or need assistance, don't hesitate to give us a call at 1-800-344-3371 or send us an E-mail at support@qvtools.com.

Warning Labels

Your PowerKing PK0322K Kinetic Log Splitter carries warning labels as reminders for proper and safe use. Below are copies of all the safety and information labels that appear on your equipment. Take a moment to study and make note of their location on your log splitter as you set up and before operation of the unit. Replace damaged or missing safety and information labels immediately.

Instruction for New User

Before starting the machine, we suggest the user to practice the following procedure:

1. Pull and hold the safety lever
2. Quickly push splitting handle until it stops and release
3. Keep hands clear of splitting handle
4. Auto-retract will spring the splitting handle to initial position
5. Release safety lever



! WARNING!	! CAUTION!
<p>AVOID SERIOUS INJURY OF DEATH Read Safety & Operating Instruction manual completely. Keep hands and all body parts away from splitting wedge, ram partially split wood and moving parts. Rotating parts inside can cause severe injury. Do NOT start or operate machine without all guards in place Shut off the engine and wait 30 seconds for the flywheels to stop Spinning to remove any stuck pieces of wood from the wedge, or before performing any actions around the ram or rack of the machine. Wait 5 minutes for engine to cool and flywheels to have stopped spinning before removing any guarding Hold logs by the sides, not the ends or top while loading Only one person is allowed to load logs and operate the log splitter Never operate log splitter under the influence of alcohol or drugs</p>	<p>Ram automatically retracts when the engagement handle is disengaged or released Keep hands and clothing clear of retracting ram Operate log splitter on flat, level, dry ground. Stay off slopes and slippery surfaces Never allow children or untrained adults to use log splitter Keep bystanders, children, and helpers at least 25ft away Wear safety glasses, hearing protection, tight fitting work gloves without loose straps or drawstrings, and safety shoes Never leave log splitter unattended during operation Split wood in the direction of the grain only</p>

Protecting Yourself and Those Around You

! WARNING

This is a high-powered machine, with moving parts operating with a high amount of energy. You must operate the machine safely. Unsafe operation can create a number of hazards for you as well as anyone else in the vicinity. Always take the following precautions when using this machine:

- Keep in mind that the operator is responsible for accidents or hazards occurring to other people, their property, and themselves
- Always wear protective goggle / safety glasses with side shields while using the log splitter to protect your eyes from debris
- Avoid wearing loose clothing or jewelry, which can catch on moving parts
- We recommend wearing gloves. Be sure your gloves fit properly and do not have loose cuffs or drawstrings
- Wear steel toed boots with non-slip treads. Do not use machine while barefoot or with open toed sandals

- Wear long pants / jeans
- Keep bystanders at least 50 feet away from your work area at all times. Stop the engine when another person or pet approaches.

Safety for Children and Pets

WARNING

Tragic accidents can occur if the operator is not alert to the presence of children and pets. Children are often attracted to the machine and the operation of the unit. Never assume that children will remain where you last saw them. Always follow these precautions.

- Keep children and pets at least 50 feet from the working area and ensure they are under the watchful care of a responsible adult.
- Be alert and turn the machine off if children or pets enter the work area.
- Never allow children to operate the log splitter.

Safety with Gas Powered Engines

WARNING

Gasoline is a highly flammable liquid. Gasoline also gives off flammable vapor that can be easily ignited and cause a fire or explosion. Never overlook the hazards of gasoline. Always follow these precautions:

- Never run the engine in an enclosed area or without proper ventilation as the exhaust from the engine contains carbon monoxide, which is an odorless, tasteless, and a deadly poisonous gas.
- Store all fuel and oil in containers specifically designed and approved for this purpose and keep away from heat and open flame, and out of reach of children.
- Fill the gasoline tank outdoors with the engine off and allow the engine to cool completely. Don't handle gasoline if you or anyone nearby is smoking, or if you're near anything that could cause it to ignite or explode. Reinstall the fuel tank cap and fuel container cap securely.

- If you spill gasoline, do not attempt to start the engine. Move the machine away from the area of the spill and avoid creating any source of ignition until the gas vapors have dissipated. Wipe up any spilled fuel to prevent a fire hazard and properly dispose of the waste.
- Allow the engine to cool completely before storing in any enclosure. Never store a machine that has gas in the tank, or a fuel container, near an open flame or spark such as a water heater, space heater, clothes dryer, or furnace.
- Never make adjustments or repairs with the engine running. Shut down the engine, disconnect the spark plug wire, keeping it away from the spark plug to prevent accidental starting, wait 5 minutes before making adjustments or repairs.
- Never tamper with the engine's governor setting. The governor controls the maximum safe operation speed and protects the engine. Over revving the engine is dangerous and will cause damage to the engine and to the other moving parts of the machine. The engine's governor setting has been preset by the factory.
- Keep combustible substances away from the engine when it is hot.
- Never cover the machine while the muffler is still hot.
- Do not operate the engine with the air cleaner or the carburetor air intake cover removed. Removal of such parts could create a fire hazard. Do not use flammable solutions to clean the air filter.
- The muffler and engine become very hot and can cause severe burns. DO NOT TOUCH!

A Note to all Users

No list of warnings and cautions can be all-inclusive. If situations occur that are not covered by this manual, the operator must apply common sense and operate the kinetic log splitter in a safe manner.

Mechanical Specifications

Model	PK0322K
Engine	4.5HP Kohler engine
Max splitting force	22Ton
Max splitting length	20.5in
Max splitting dia.	15.7in
Cycle time	2 Seconds
Splitter weight	322lbs
ABS Torque Spec	5-6 ft lbs

Important

The diameter listed is indicative of the maximum suggested sized. A small log can be difficult to split when it contains knots or a particularly tough fiber. On the other hand, it may not be difficult to split logs with regular fibers even if its diameter exceeds the maximum indicated above.

Log Splitter Operation

NOTICE

All logs should be no longer than 20.5 inches.

! WARNING

- Do not place your hands on the ends of the log when loading the log splitter. This is a very UNSAFE method and could result in injury to your hands.
- Do not reach or step across the beam while the log splitter is running. This is a very UNSAFE method which could cause personal injury or even death.

CAUTION

- Never attempt to split wood across the grain. The log splitter was not designed for cross-grain splitting. Doing so could damage the log splitter and may cause personal injury.
- Make sure both ends of the log you are splitting are cut as square as possible this will prevent the log from sliding out of position while under pressure.

NOTICE

The kinetic log splitter operates differently than a hydraulic splitter. Not operating the machine properly will result in damage to the machine. Always follow these notices:

- A rapid movement of the engagement handle is necessary for the rack and pinion to engage and disengage fully without damage.
- The engagement handle should never be stopped in any location between the fully forward or fully backward positions.
- Do not hold the handle in the forward position when the ram stops moving forward. Always pull the engagement handle rapidly back (Auto-Retract) position as soon as the log is split or when the ram is at the end of the stroke or when the ram stops moving forward due to a tough log.

Procedure

1. Place the log on the log splitter. Grasp the log on the sides near the middle of the block. Center the log, side to side, on the rail of the log splitter making sure that one end is against the splitting wedge.

2. With one hand, actuate and hold the safety lever towards you, then rapidly actuate the engagement handle fully towards the engine until it contacts the hard stop and release.
3. Keep hand clear of engagement handle as auto-retract will spring handle back after the split cycle.
4. Release safety lever.

Splitting Tough Logs

If the ram stops before the end of the stroke while splitting a tough log, quickly actuate the engagement handle back to the Auto-Retract position. Let the ram return and allow the flywheels to gain momentum for another full power split.

Maintenance

Regular maintenance is the way to ensure the best performance and long life of your machine. Please refer to this manual for proper maintenance procedures.



Before performing any maintenance procedure or inspection, stop the motor, unplug the power cord and wait 5 minutes to allow all parts to cool. Disconnect the spark plug wire to prevent accidental startup.

Maintenance Checklist

PROCEDURE	Before each use	Every 5 hours	Every 25 hours	Every 100 hours
Check engine oil level	Δ			
Check general equipment	Δ			
Grease surface of slide rail	Δ			
Grease bearings	Δ			
Check belts	Δ			
Grease rack and pinion	Δ			
Clean engine exterior and cooling		Δ		
Change engine oil	First time 5hours		Δ	
Replace air filter			Δ	
Replace spark plug				Δ

Engine Service

Refer to the engine manufacturer's user manual for engine maintenance.

Lubrication

We recommend 1 pump of lithium grease in each pillar bearing before each use.

Greasing the Rack and Pinion

The entire rack and pinion should be greased before every use.

ABS Torque Spec

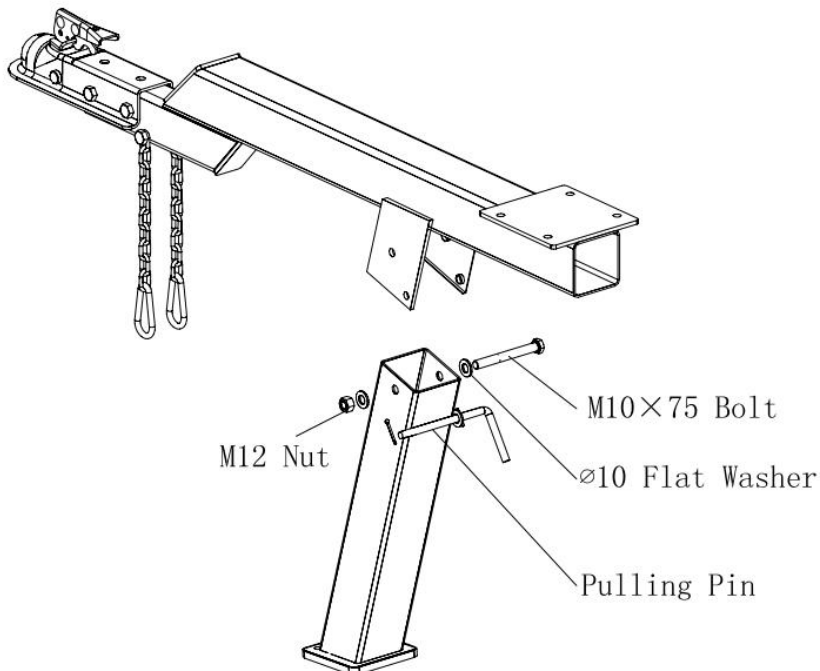
Check Torque Spec of ABS System bolts on the flywheel brake disc. Make sure they are set to 5-6ft lbs.

Troubleshooting

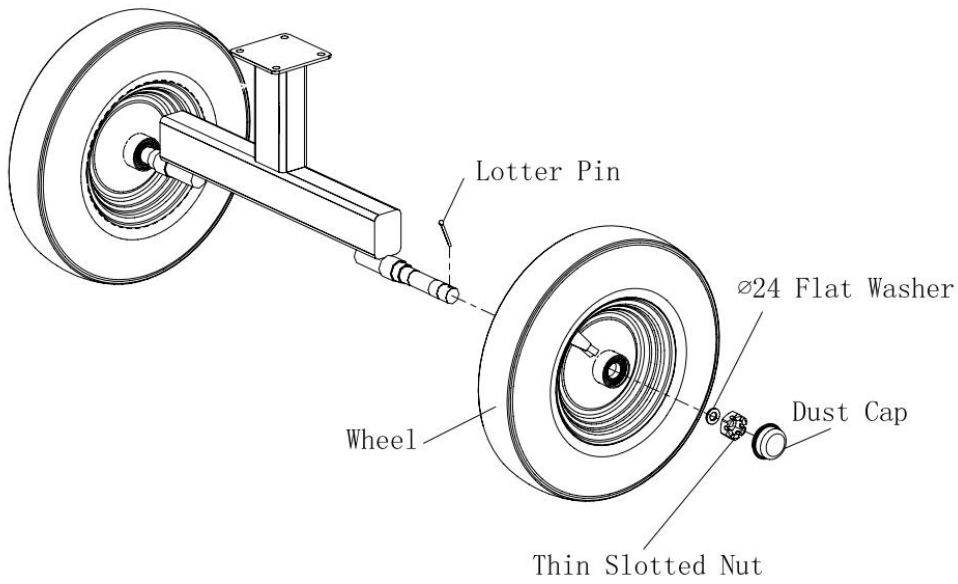
SYMPTOM	POSSIBLE CAUSE
The engine won't start. (Please refer to the engine user manual for engine-specific procedures.)	<input type="checkbox"/> Is the ignition switch in the "ON" position? <input type="checkbox"/> Is the fuel shut-off valve on? <input type="checkbox"/> Are you using fresh, clean gas? If the gas is old, change it. Use a fuel stabilizer if you keep gas longer than 30 days. <input type="checkbox"/> Is the spark plug clean? If the spark plug is dirty or cracked, change it. If it's oily, leave it out, hold a rag over the plug hole and pull the recoil cord several times to blow out any oil in the cylinder, then wipe off the plug and reinsert it.
The engine lacks power or is not running smoothly. (Please refer to the engine user manual for engine-specific procedures.)	<input type="checkbox"/> Check that the Throttle Lever is in the "Run" position. <input type="checkbox"/> Is the air filter clean? If it's dirty, change it following the procedure in the engine manufacturer's owner's manual. <input type="checkbox"/> Is the spark plug clean? If it's fouled or cracked, change it. If it's oily, leave it out, hold a rag over the plug hole and pull your recoil cord several times to blow out any oil in the cylinder, then wipe off the plug and reinsert it. <input type="checkbox"/> Are you using fresh, clean unleaded gas? If it's old, change it. Use a fuel stabilizer if you keep gas longer than 30 days. <input type="checkbox"/> Does your engine have the right amount of clean oil? If it's dirty, change it following the procedure in the engine manufacturer's owner's manual. <input type="checkbox"/> Check the oil level and adjust as needed.
Engine smokes. (Please refer to the engine user manual for engine-specific procedures.)	<input type="checkbox"/> Check the oil level and adjust as needed. <input type="checkbox"/> Check the air filter and clean or replace if needed. <input type="checkbox"/> You may be using the wrong oil—too light for the temperature. Refer to your Engine Owner's Manual for detailed information. <input type="checkbox"/> Clean the cooling fins if they're dirty.
Rack catching on tail tube (at end of stroke).	<input type="checkbox"/> Adjust carriage hold downs (slide guides). <input type="checkbox"/> Check for wood chips or debris between ram bushing plate and beam. <input type="checkbox"/> Check rack lift bearing for alignment or damage.

Rack returning very slow or not going all the way back.	<input type="checkbox"/> Return spring is unhooked or damaged. Reconnect or replace as needed. <input type="checkbox"/> Machine wedge end too low. Must be almost level or wedge end slightly higher.
Operator Lever Snapping out of gear or not staying in gear.	<input type="checkbox"/> Lever not all the way forward when rack comes under full load. Push lever quicker and more forcefully into the full forward position. <input type="checkbox"/> Ram has been overloaded at lower part of face. Check rack gear for straightness.
Rack slamming back too fast.	<input type="checkbox"/> Wedge end of machine too high. Must be almost level with ram end or just slightly higher. <input type="checkbox"/> Springs not operating properly. Fix or replace as needed.
Machine does not seem to have full splitting power.	<input type="checkbox"/> The belts may be too loose and slipping. Adjust or replace belts as needed. <input type="checkbox"/> Check Torque Specs of ABS system bolts. 5-6ft lbs.
Operator Lever not engaging rack with pinion gear.	<input type="checkbox"/> Clean wood chips or other debris from under rack. <input type="checkbox"/> Clean accumulated dirt from frame where carriage assembly rests against rubber bumpers.

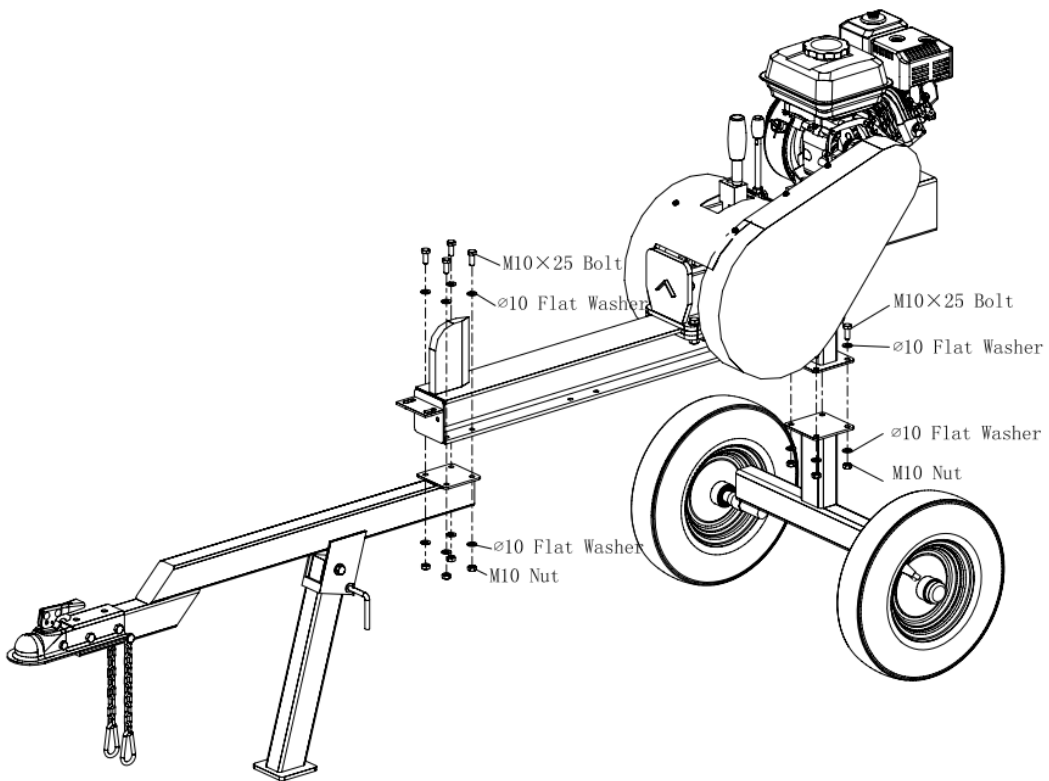
Assembly



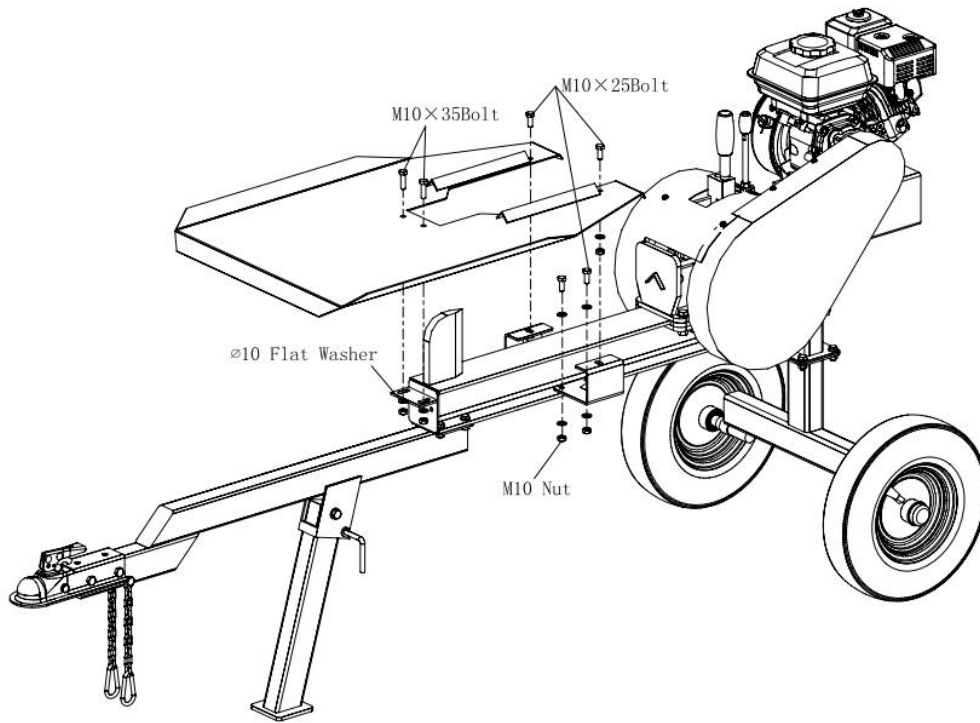
Step 1



Step 2

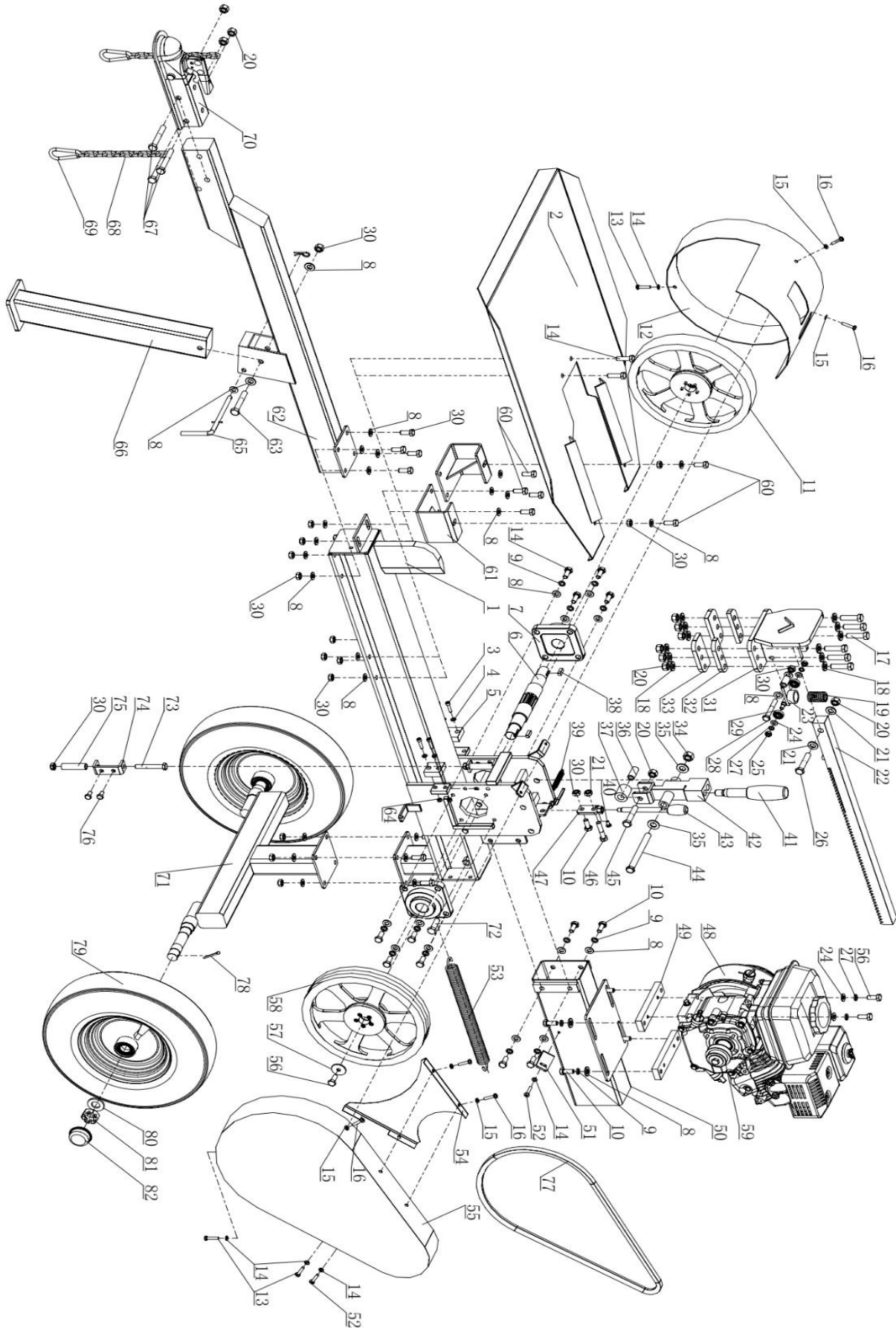


Step 3



Step 4

Exploded View



Parts List

No.	Description	Qty	No.	Description	Qty
1	Body	1	35	Washer ϕ 14	2
2	Table	1	36	Sleeve	1
3	Hex Bolt M6x30	4	37	Roller	1
4	Flat washer ϕ 8	9	38	Key 8x7	2
5	Damping block	2	39	Safety tension spring	1
6	Gear shaft	1	40	Cross recessed pan head bolt M6x10	1
7	Bearing housing	2	41	Operating handle	1
8	Washer ϕ 10	37	42	Operating pressure block	1
9	Spring washer M10	16	43	Safety handle	1
10	Hex Bolt M10x25	9	44	Hex Bolt M4x140	1
11	Flywheel	1	45	Hex Bolt M12x60	1
12	Flywheel cover	1	46	Hex Bolt M10x75	1
13	Hex Bolt M6x12	3	47	Safety block	1
14	Hex Bolt M10x30	10	48	Engine	1
15	Washer ϕ 6 Big	5	49	Engine seat	2
16	Hexagon socket head bolt M6x10	5	50	Engine tailstock	1
17	Hex Bolt M12x45	6	51	Wheel cover fixing plate	1
18	Washer ϕ 12	14	52	Hex Bolt M6x16	2
19	Return spring	1	53	Return spring	2
20	Non-metallic insert locking nut M12	11	54	Safety Cover	1
21	Hexagon nut M10	1	55	Pulley cover	1
22	Rack	1	56	Hex Bolt M8x25	7
23	Reset seat	1	57	Washer ϕ 8x30x3	3
24	Washer ϕ 8	6	58	Pulley	1
25	Non-metallic insert locking nut M8	2	59	Engine pulley	1
26	Hex Bolt M12x70	1	60	Hex Bolt M10x25	6
27	Spring washer M8	6	61	Seat	2
28	Hex Bolt M10x70	1	62	Tow pole	1
29	Bearing 609-2Z	2	63	Hex Bolt M10x80	1
30	Non-metallic insert locking nut M10	19	64	Non-metallic insert locking nut M6	4
31	Propeller	1	65	Pin	1

32	Track liner	2		66	Support leg	1
33	Track plate	2		67	Hex Bolt M12x75	3
34	Non-metallic insert locking nut M14	1		68	Chain	2
69	Chain Cufflinks	2				
70	Trailer cover	1				
71	Wheel carrier	1				
72	Hex Bolt M12x16	2				
73	Hex Bolt M10x90	2				
74	Side roller seat	2				
75	Side roller	2				
76	Hex Bolt M8x16	4				
77	Triangle belt	2				
78	Cotter pin	2				
79	Wheel	2				
80	Washer M24	2				
81	Slotted nut M24	2				
82	Wheel cover	2				

WARRANTY POLICY

Thank you for choosing QV TOOLS Products. We're here to ensure that your experience is perfect. In some rare instances, you may need some help with a warranty claim.

Please call us at 1-800-344-3371.

Product must be registered to activate the warranty. Warranty registration is below. Warranty begins from date of purchase.

Engine Warranty

Kohler engines are covered with a 3-year commercial and 3-year residential warranty for Command Pro series. Parts and Labor are covered as well. Power King engines by Lifan are covered with a 1-year residential warranty. QV Power 3pt 40hp gear box warranty 1-year. Visit your engine manufacturer for warranty details or visit **www.QVTools.com**.

Equipment warranty

Manufactures defects of chassis and component parts are covered for 1 year. Only parts are covered. Shipping cost is not covered.

QV Tools will replace any part that is proven to be defective in material or workmanship. This warranty is not valid for products or parts affected or damaged by accident, collision, normal wear, fuel contamination, abuse, neglect, misuse, alteration and/or unsuitable use or unauthorized parts. Transportation charges to and from service centers, if assigned, is not covered. Shipping cost of product for repair is not covered. Labor to repair equipment is not covered. Consumable parts such as brake pads, tires, racks, splines, grinding teeth, blades, bar blades, etc. are not covered under warranty. Power King has all replacement parts at value pricing.

Damaged Products

You must take the time to inspect the goods before you sign the delivery receipt from the carrier. If you sign the delivery receipt without inspecting the shipment, you will be responsible for filing a freight claim and arranging for a repair or return of the damaged goods.

Concealed damage claims must be reported immediately.

Suspected Damage

On occasion, the outer carton may look damaged, but the product inside the box is perfectly fine. If you suspect concealed damage, notate "**Possible Freight Damage**" on the **delivery receipt while the driver is present. This way, if you discover later that the product is damaged, the remedy of a freight claim is less of a hassle.**

Obvious Damage

Do not sign for damaged products. If your product arrives damaged, **please (a) REFUSE DELIVERY and (b) Call where you purchased the item Immediately so the dealer can process the appropriate claims and coordinate an exchange for you.**

Defective Products

We encourage you to test your product within 15 days of receipt so we can quickly remedy any mechanical problems. If you think your product is defective, **call QVTools at 1-800-344-3371**. In most cases, it's a simple issue that can be resolved over the phone. We have expert technicians standing by to help resolve your issue. Please have your model number and serial number available and your proof of purchase receipt for faster service.

Original Owner Warranty

Warranty is non-transferable and covers the original owner only who purchased from a QVTOOLS authorized dealer.