

# **OPG888E STUMP GRINDER**

**User Manual** 

## SAFETY AND OPERATION INSTRUCTIONS



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#### Conventions used in this manual



## **A** WARNING

This indicates a hazardous situation, which, if not avoided, could result in death or serious injury.



## **A** CAUTION

This indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.



## NOTICE

This information is important in proper using of your machine. Failure to follow this instruction could result in damage to your machine or property.

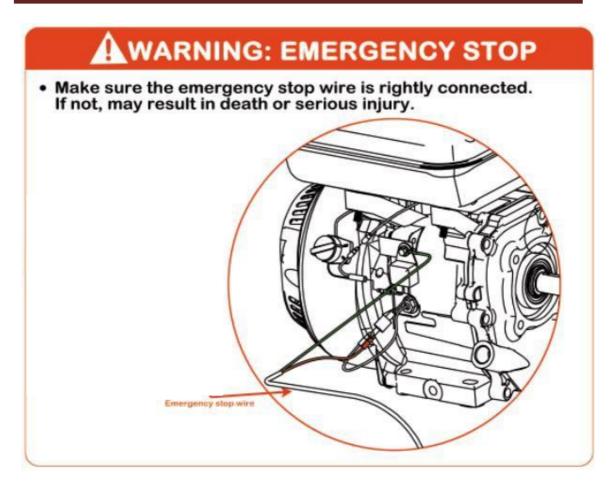
## **Additional Information and Potential Changes**

We reserve the right to discontinue, change, and improve our products at any time without notice or obligation to the purchaser. The descriptions and specifications contained in this manual were in effect at printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your machine.

# **PART I: General Safety Rules**

## **Safety Labels Found on Your Unit**





Should make sure the emergency stop switch is available before every use. Or may result in serious injury even death.



## **A** WARNING

Read this Safety & Operating Instructions manual before you use the Stump Grinder. Become familiar with the operation and service recommendations to ensure the best performance of your machine.

## **Propose**



# **A** CAUTION

This machine is designed solely to grind stumps and must not be used for any other purpose. It should only be used by trained operators who are familiar with the content of this manual. It is potentially hazardous to fit or use any parts other than DK2 OEM parts. The company disclaims all liability for the consequences of such use, which in addition voids the machine warranty.

#### **Before using the Stump Grinder**



## **NOTICE**

- A. Operators must be fully trained before using this machine.
- B. User Manual is read and understood.
- C. Machine is positioned on level ground; all guards are fitted and in good condition.
- D. Teeth are in good condition and secure.
- E. All fasteners are checked for tightness.
- F. Only stumps are removed with this machine.
- G. Emergency stop wire is correctly connected and the switch is functional.
- H. Fire extinguisher is available on site.

## When using the Stump Grinder



## **NOTICE**

- A. Always stay clear of the rotating cutter wheel.
- B. It is better to have a second trained operator within easy reach of the machine.
- C. Always maintain strict discipline and service machine at specified periods.
- D. DO NOT grind stumps with tow bar installed.
- E. DO NOT put any part of your body near the cutter while the machine is running.
- F. DO NOT operate the machine while under the influence of alcohol or drugs.
- G. DO NOT operate inside a building or confined space.

#### **Protecting Yourself and Those Around You**



## WARNING

This is a powerful machine, with moving parts operating with high energy. You must operate the machine safely. Unsafe operation can create several hazards for you, as well as anyone else in the nearby area. Always take the following precautions when using this machine:

- A. Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people, their property, and themselves.
- B. Always wear protective goggles or safety glasses with side shields while using the Stump Grinder to protect your eyes from possible thrown debris.
- C. Avoid wearing loose clothing or jewelry, which can catch on moving parts.
- D. We recommend wearing gloves while using the Stump Grinder. Be sure your gloves fit properly and do not have loose cuffs or drawstrings.
- E. Wear shoes with non-slip treads when using your Stump Grinder. If you have safety shoes, we recommend wearing them. Do not use the machine while barefoot or wearing open sandals.
- F. Wear long pants while operating the Stump Grinder.
- G. Always keep bystanders at least 50 feet away from your work area. 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 grinding activity. Never assume that children will remain where you last saw them. Always follow these precautions:

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

#### Safety with Gasoline -



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:

- A. 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.
- B. 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 the reach of children.
- C. Replace rubber fuel lines and grommets when worn or damaged and after 5 years of use.
- D. 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.
- E. 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.
- F. 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.
- G. Never adjust or repair 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 adjusting or repairing.
- H. Never tamper with the engine's governor setting. The governor controls the maximum safe operation speed and protects the engine. Over-speeding the engine is dangerous and will cause damage to the engine and to the other moving parts of the machine. If required, see your authorized dealer for engine governor adjustments.

- I. Keep combustible substances away from the engine when it is hot.
- J. Never cover the machine while the muffler is still hot.
- K. 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.
- L. The muffler and engine become very hot and can cause a severe burn; do not touch.

#### **General Safety**



## **A** WARNING

Operating this Stump Grinder safely is necessary to prevent or minimize the risk of death or serious injury. Unsafe operation can create several hazards for you. Always take the following precautions when operating:

- A. Your machine is a powerful tool, not a plaything. Exercise extreme caution always. The machine is designed to grind stumps. Do not use it for any other purpose.
- B. Know how to stop the Stump Grinder quickly.
- C. Never operate your unit on a slippery, wet, muddy, or icy surface. Exercise caution to avoid slipping or falling.
- D. See manufacturer's instructions for proper operation and installation of accessories.
- Never use the machine without ensuring that all guards and shields are in place.
- Never, under any conditions, remove, bend, cut, fit, weld, or otherwise alter standard parts on the Stump Grinder. This includes all shields and guards. Modifications to your machine could cause personal injuries and property damage and will invalid your warranty.
- G. If the machine starts to make an unusual noise or vibrate, shut down the engine, disconnect the spark plug wire, keeping it away from the spark plug to prevent accidental starting, wait 5 minutes for engine to cool down, then inspect for damage. Vibration is generally a warning of trouble. Check for broken or missing teeth, loose cutter wheel bearings and loose or worn drive belt. Also check engine mounting bolts.
- H. Never tamper with safety devices. Check their proper operation regularly.
- Before performing any maintenance or inspection procedure, shut down the engine, disconnect the spark plug wire keeping it away from the spark plug to prevent accidental starting, wait 5 minutes for machine to cool down.
- Never allow people who are unfamiliar with these instructions to use the machine. Allow only responsible individuals who are familiar with these rules of safe operation to use your machine.
- K. Never operate in gravel or stone. It could result in personal injury or damage to the
- L. While using, don't hurry or take things for granted. When in doubt about the equipment or your surroundings stop the machine and take time to look things over.
- M. Never operate the machine when under the influence of alcohol, drugs, or medication.

- N. Use the machine only in daylight.
- O. Stay alert for hidden hazards.
- P. Keep all nuts and bolts tight and keep the equipment in good operating condition.
- Q. Tow the equipment safely at 25 MPH off road only. NEVER tow on paved streets as this will damage your ATV tires.
- R. ALLWAYS take the brake off before towing.

#### A Note to All Users

List of warnings and cautions cannot be all-inclusive. If situations occur that are not covered by this manual, the operator must apply common sense and operate this Stump Grinder in a safe manner. Contact DK2POWER for assistance or questions.

# PART II: Familiar with the Stump Grinder

It may be helpful to familiarize yourself with the controls and features of the Stump Grinder. If you have any question, please contact DK2POWER at 702-331-5353 8-4 PST.

## TECHNICAL SPECIFICATIONS

	Recoil Start	Electric Start
Engine	14HP 4four stroke	14HP 4four stroke
Power	Gasoline	Gasoline
Wheel Diameter	14 inches	14 inches
Cutters	12	12
Stump Height	12 inches	12 inches
Stump Diameter	Any	Any
Tire	13.75D x 5.25W 145/70-6	13.75D x 5.25W 145/70-6

## PART III: Operating the Stump Grinder

It may be helpful to better familiarize yourself with the features of your Stump Grinder before beginning the steps outlined in this chapter.



## **A** WARNING

- A. Read and understand all instructions, safety precautions, and/or warnings listed in "PART I: General Safety Rules" before operating the Stump Grinder. If any doubt or question arises about the correct or safe method of performing anything found in this manual, please contact DK2POWER.
- When operating the Stump Grinder, make sure you are standing in the safe operating area (OPERATOR ZONE). Never place any part of your body into a position that causes an unsafe operating condition.
- C. Before operating the Stump Grinder, always wear protective gear, including safety goggles, hearing protection, tight-fitting gloves without draw strings or loose cuffs, and steel-toed shoes.
- D. Never use an incorrect or unsafe method of operation.

#### **Starting**

- Position your Stump Grinder on flat, dry ground.
- 2. Put the brake on making sure the brake pin and wheel is engaged and locked.
- **3.** Remove the towbar and towbar locking pin from the unit.
- 4. Make sure the fuel shut-off valve is in the "ON" position. Slide to the right.
- 5. Move the choke control lever to the "CHOKE" position (should only be needed if the engine is cold). Left is on, Right is off.
- Move the throttle control lever to the "MID" position.
- 7. Adjust your bow handle to the desired position.
- Depress the safety shut off bail on the bow handle.
- Raise the cutter teeth off the ground and start the engine. This is a direct drive unit and the cutter wheel will rotate during starting.
- 10. Recoil Start: Turn the Ignition Switch to the "On" position. Grasp the recoil starter handle and slowly pull until you feel resistance. Let the cord retract a little bit then pull the cord rapidly to start the engine. One or two pulls usually starts the engine.
- 11. Electric Start: Turn and hold the Key in the start position until Engine starts then let the Key return to run position.
- 12. Move the choke control lever (if used for cold engine) slowly back to the "RUN" position when the engine is running well. All the way to the right.
- 13. Increase engine speed to FULL RABBIT RPM.

## **Stopping**

1. Let go of the bail shut off on the bow handle

OR

- 2. Recoil Start: Slide the GAS lever to the LEFT to shut engine off.
- 3. Electric Start: Turn the Key to the OFF position.



#### **Stump Grinding**



## **NOTICE**

Clear area around stump to remove all rocks and stones



## WARNING

Do not place your feet or hands into the cutting wheel area. This is a very UNSAFE and could result in injury or death.

Never allow yourself or others to reach or step to the side or the front of of the Stump Grinder when it is running. This is a very UNSAFE method which could cause personal injury, even death.

#### **VIBRATION**

If the unit starts to vibrate abnormally shut the unit down. Inspect for missing or broken teeth and replace if required. Check your teeth bolts that are tight. Check your drive belts.

# PART IV: Maintaining the Stump Grinder

Regular maintenance is the way to ensure the best performance and long life of your machine. Please refer to this manual and the engine manufacturer's user manual for maintenance procedures.



## **WARNING**

Before performing any maintenance procedure or inspection, stop the engine, wait five minutes to allow all parts to cool. Disconnect the spark plug wire, keeping it away from the spark plug. Disconnect the Battery Terminals (Electric start only).

## **Regular Maintenance Checklist**

Procedure	Before Each Use	Every 3	Every 25	Every 100
		Hours	Hours	Hours
Check engine oil level	Δ			
Check general equipment	Δ			
condition				
Check teeth and bolts	Δ			
Check belts	Δ			
Check tire pressure			Δ	
Clean engine exterior and			Δ	
recoil cover				
Change Engine Oil	First time		Δ	
	5hours			
Replace air filter			Δ	
Replace spark plug				Δ

## **Engine Service**

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

## Lubrication



## NOTICE

All Bearings of your Stump Grinder are sealed units and should have enough lubricant to last the life of your machine with normal use. Grease Zerks are installed if grease is ever needed. Use standard bearing grease.

FOR ENGINE WARRANTY CONTACT YOUR NEAREST KOHLER ENGINE DEALER. VISIT <u>WWW.KOHLERENGINES.COM</u> AND ENTER YOU ZIP CODE IN THE FIND A DEALER SECTION.



# **PART V: Troubleshooting and Parts List**

Most problems are easy to fix. Consult the Troubleshooting Table below for common problems and their solutions. If you continue to experience problems, contact DK2POWER in LAS VEGAS at 702-331-5353 8-4 PST



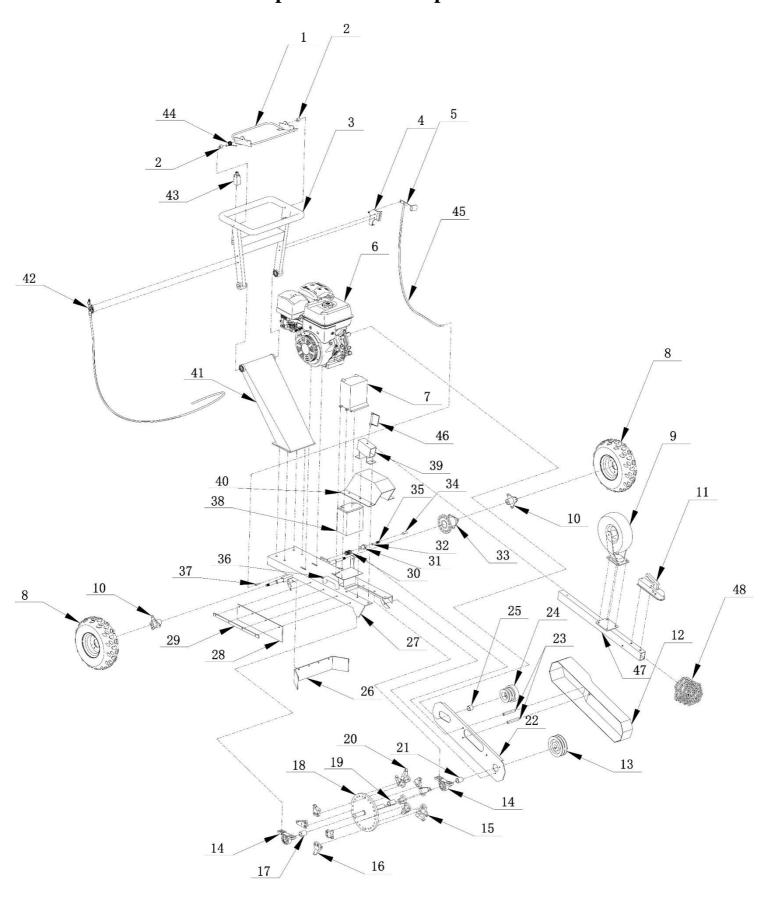
## **A** WARNING

Before performing any maintenance procedure or inspection, stop the engine, wait five minutes to allow all parts to cool. Disconnect the spark plug wire, keeping it away from the spark plug.

## **Troubleshooting Table**

SYMPTOM	POSSIBLE CAUSE
The engine won't start. (Please refer to the engine user manual for engine-specific	<ul> <li>➤ Is the SAFETY BAR HELD DOWN to engage the safety cutoff switch?</li> <li>➤ Is the fuel shut-off valve on? SLIDE THE LEVER ALL THE WAY TO THE RIGHT.</li> <li>➤ 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.</li> <li>➤ 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.</li> </ul>
procedures.)  The engine lacks power  or is not running  smoothly.	<ul> <li>Check that the Throttle Lever is in the "RABBIT" position. TURN OFF THE CHOKE.</li> <li>Is the air filter clean? If it's dirty, change it following the procedure in the engine manufacturer's owner's manual.</li> <li>Is the spark plug clean? If it's fouled or cracked, change it. If it's oily, leave it out, hold a rag over</li> </ul>
(Please refer to the engine user manual for engine-specific procedures.)	<ul> <li>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.</li> <li>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.</li> <li>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.</li> <li>Check the oil level and adjust as needed.</li> </ul>
Engine smokes.  (Please refer to the engine user manual for engine-specific procedures.)	<ul> <li>Check the oil level and adjust as needed.</li> <li>Check the air filter and clean or replace if needed.</li> <li>You may be using the wrong oil—too light for the temperature. Refer to your Engine Owner's Manual for detailed information.</li> <li>Clean the cooling fins if they're dirty.</li> </ul>
Machine does not seem to have full grinding power.	<ul> <li>The belts may be too loose and slipping. Adjust or replace belts as need.</li> <li>The teeth may be dull or broken, replace.</li> <li>Run engine at full RPM when grinding.</li> </ul>

## **Explosion View and parts list**



Ref	Description	Ref2	Description3
1	Stop frame	25	Clutch spacer
2	Spacer bush	26	8 holes rubber
3	Top handrail	27	Main frame
4	Brake line fixed block	28	4 holes rubber
5	Brake line fixing piece, plastic handle	29	4 holes rubber fix
6	Engine	30	External compression spring
7	Plastic battery box	31	Pin retaining sleeve
8	Tire	32	Brake cable limit plate
9	Universal wheel	33	The brake chuck
10	Flange	34	The brake pin
11	Tow hitch	35	Internal compression spring
12	Belt cover	36	Main frame handle
13	Cutter belt wheel	37	Brake line adjusting bolt
14	Bearing	38	Battery
15	Stright blade	39	Trailer rod holder
16	Right blade	40	The knife cover
17	Plate spacer right	41	Bottom handrail
18	Plate	42	Throttle cable
19	Plate spacer right	43	Stop switch
20	Left blade	44	Torsion Spring
21	Plate pulley spacer	45	Brake cable
22	Inner belt cover	46	Tow bar Pin
23	Belt cover spacer	47	Tow bar
24	Clutch	48	Chain



#### PLEASE DO NOT RETURN TO THE STORE

YOU HAVE A 1 YEAR WARRANTY AND DK2 WILL REPLACE A DEFECTIVE PART FOR FREE

CALL US AT 702-331-5353 FOR FAST WARRANTY PARTS AND QUESTIONS

#### WHAT IS COVERED

DK2 Inc. warrants to the original purchaser of any DK2 product that it will be free and clear of manufacturing defects in workmanship and materials under normal use and service for a period of one (1) year from the date of the original purchase.

If within one (1) year from the original date of purchase this product fails due to defect in material or workmanship. DK2 POWER outdoor power equipment is 1-year parts only warranty no labor.

Upon expiry of one (1) year, Detail K2 will have no further liability related to the product. Detail K2 does not authorize any party, including its authorized distributors or dealers, to offer any other warranty on behalf of Detail K2 Inc.

KOHLER ENGINES – KOHLER CH SERIES ENGINES COMMERCIAL 3 YR PARTS AND LABOR WARRANTY see your Kohler manual for specific warranty.

DIESEL TRACTORS – Chassis component parts only, no labor, ENGINES – 1 YR KOHLER WARRANTY DK2 POWER OUTDOOR EQUIPMENT – 1-Year parts only, no labor.

#### THIS WARRANTY DOES NOT COVER OR APPLY TO:

Damage to the product due to misuse, mishandling and abuse

- (b)) Improper installation, maintenance and storage
- (c)Expendable parts such as nuts and bolts, pins and springs, wiring and switch components, hydraulic hoses and fittings, cutting teeth, cutting chains, cutting blades, throttles, belts and tires.
- (d) Normal wear and tear
- (e) Consequential damage & incidental damages such as damage to persons or property

#### PROCEDURE FOR OBTAINING AN RETURN AUTHORIZATION

Within the one (1) year warranty period, the purchaser of the product must notify DK2 of the claimed defect and provide proof of original purchase. At this time the validity of the claim will be determined, and if approved replacement parts will be issued.

No returned product will be accepted under warranty unless accompanied by an RGA# issued by Detail K2 Inc.

#### **RESOLUTION FOR A DEFECTIVE PRODUCT**

DK2 POWER – Tractors, Chippers, Stump Grinders, Log Splitters, and Outdoor Power Equipment. Call DK2 at **702-331-5353** in Las Vegas between 8am-4pm M-F Pacific Time.