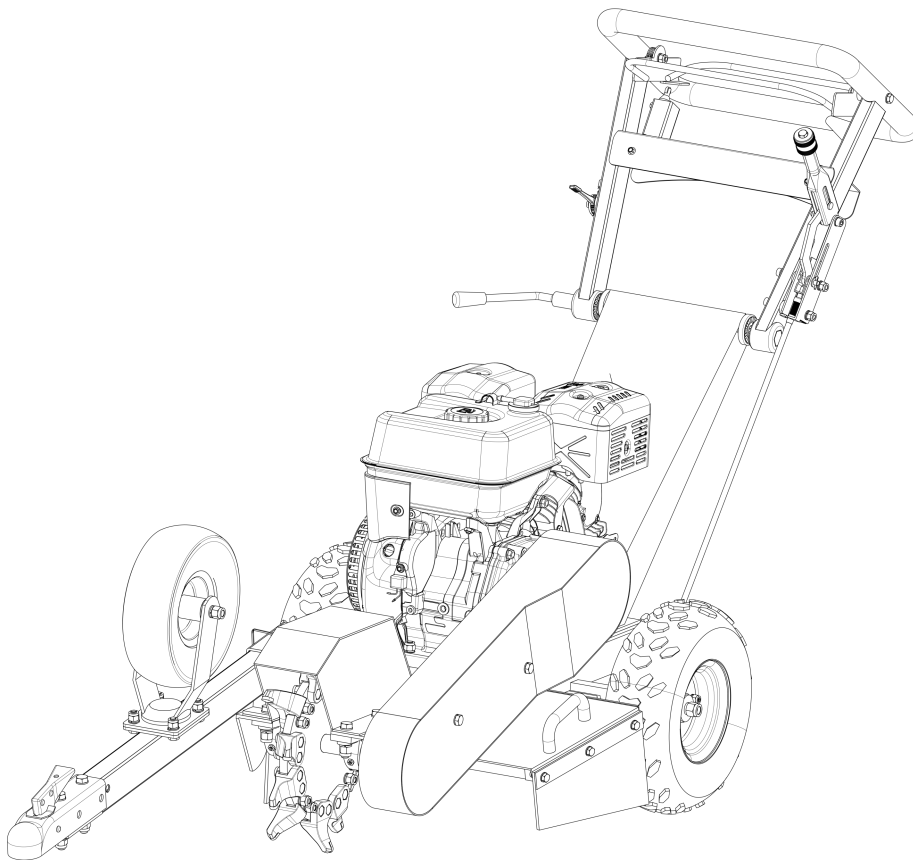


Walk Behind Stump Grinder

14HP KOHLER® Powered

MODEL: TMG-GSG12



- Please read the product manual completely before assembly
- Check against the parts list to make sure all parts are received
- Wear proper safety goggles or other protective gears while in assembly

Missing parts or questions on assembly?

Please call: 1-877-761-2819 or email: cs@tmgindustrial.com

Do not return the product to dealer, they are not equipped to handle your requests

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Conventions used in this manual

WARNING

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

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 its 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

<p>PRECAUTIONS BEFORE STARTING:</p> <ol style="list-style-type: none"> 1. Check gas and oil levels. 2. Consult the operator's manual, available from your distributor. 3. Wear eye, face and hearing protection as well as long pants and non-slip footwear. 4. Use of the stump grinder requires considerable strength and endurance. It should be operated only by an adult with good physical abilities. 5. Keep away from children! <p>STOP ENGINE AND SET BRAKE BEFORE LEAVING OPERATOR'S POSITION</p>	<p>SPECIAL OPERATOR HAZARDS</p> <ol style="list-style-type: none"> 1. Read and follow operator's manual before using. 2. Before adding fuel, stop the engine and allow engine to cool for at least 2 minutes. Wipe up fuel spills immediately. 3. Blade rotates at speeds similar to a rotary lawn mower and will throw stones, chips and debris up to 75 ft in any direction. Keep away from bystanders at least 75 ft, protect windows, vehicles or any object which might be damaged by flying debris. <p>KEEP BRAKE ENGAGED EXCEPT WHEN CHANGING LOCATIONS</p> <p><small>TMG-MACH-4028</small></p>
--	---

WARNING

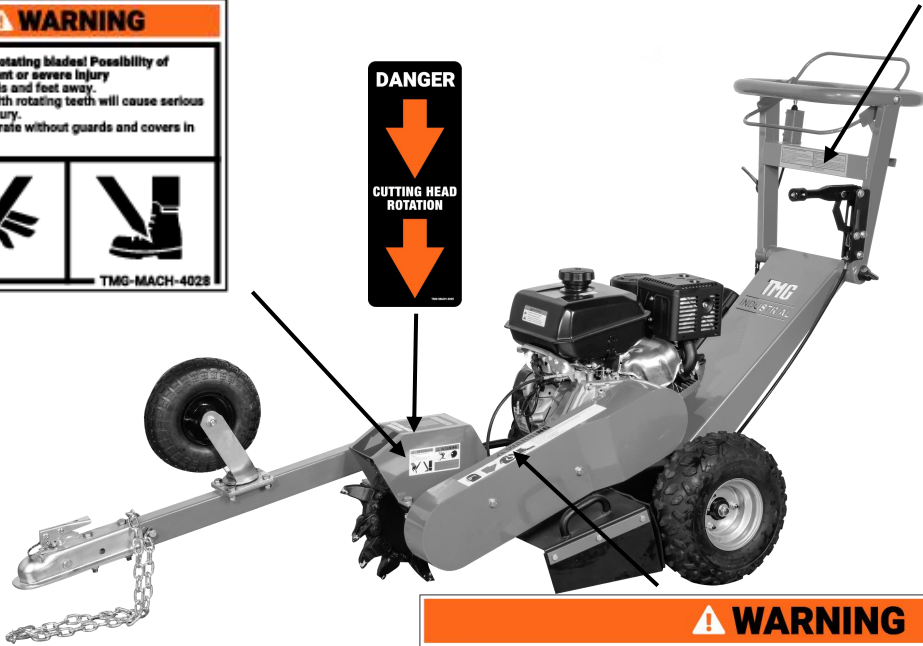
Beware of rotating blades! Possibility of entanglement or severe injury.

- Keep hands and feet away.
- Contact with rotating teeth will cause serious personal injury.
- Never operate without guards and covers in place.

TMG-MACH-4028

DANGER

CUTTING HEAD ROTATION



WARNING

Personal Injury Hazard
Never attempt to use this machine without proper personal protection. When using this machine, you must wear the following:

- Eye protection
- Hearing protection
- Heavy-duty work gloves
- Sturdy non-slip footwear
- Tight-fitting clothing

TMG-MACH-4030

DANGER WARNING

TMG-MACH-4031

SLOW

FAST

TMG-MACH-4029

DANGER WARNING

Read and follow operator's manual and power off before performing maintenance.

TMG-MACH-4027



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

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 your dealer 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 a number of 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. 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 chipping 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 - Powered Machines

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:

- 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 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.
 - 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

WARNING

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

- A. Your machine is a powerful tool, not a plaything. Exercise extreme caution at all times. 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.
- E. Never use the machine without ensuring that all guards and shields are in place.
- F. 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 invalidate your warranty.
- G. If the machine start 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 damaged parts and clean, repair and/or replace as necessary.
- H. Never tamper with safety devices. Check their proper operation regularly.

- I. 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.
 - J. 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 overload or attempt to chip woods beyond the manufacturer's recommendation. It could result in personal injury or damage to the machine.
 - 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 or traffic.
 - P. Keep all nuts and bolts tight and keep the equipment in good operating condition.
 - Q. Tow the equipment safely at 25MPH off road only. NEVER tow on paved streets as this will damage your ATV tires.
 - R. ALWAYS 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 the dealers for assistance in your area.

PART II: Familiar with the Stump Grinder

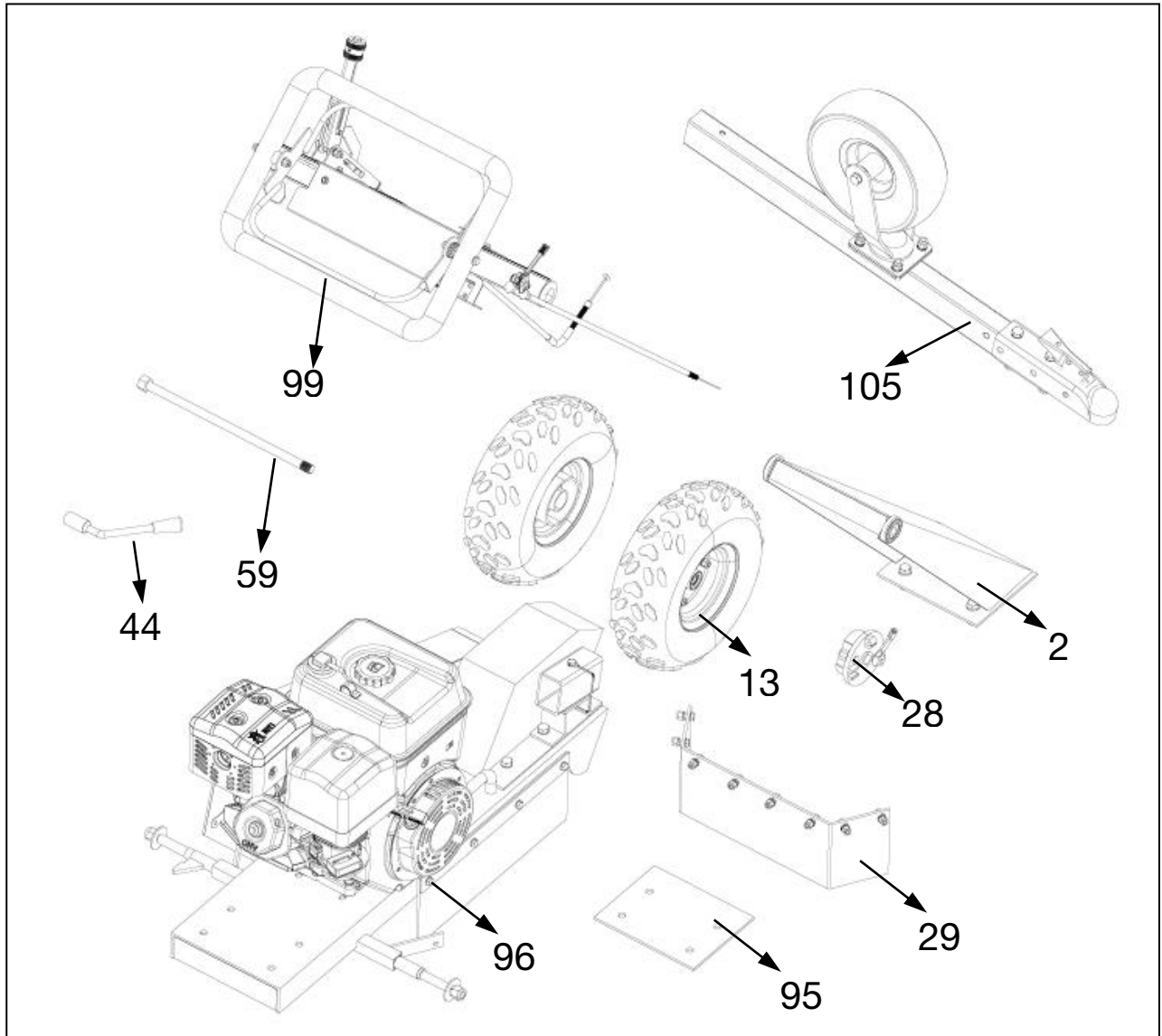
It may be helpful to familiarize yourself with the controls and features of the Stump Grinder. If you have any question, please contact the dealers in your area.

TECHNICAL SPECIFICATIONS

Start	Recoil Start
Engine	14HP four strokes
Power	Gasoline
Wheel Diameter	14 inch
Cutters	12
Stump Height	12 inch
Stump Diameter	Any
Tire	14.5*7.0-6

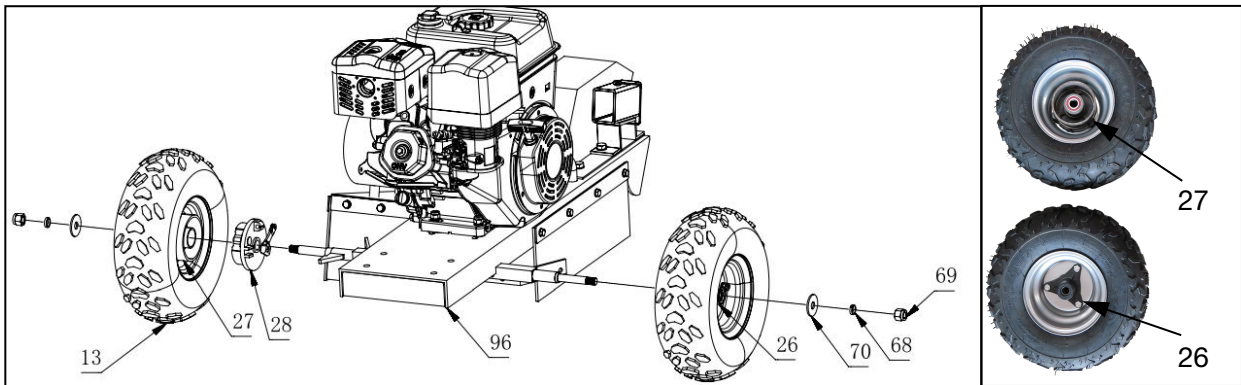
PART III: Install the Stump Grinder

1. After unpacking, check the following components



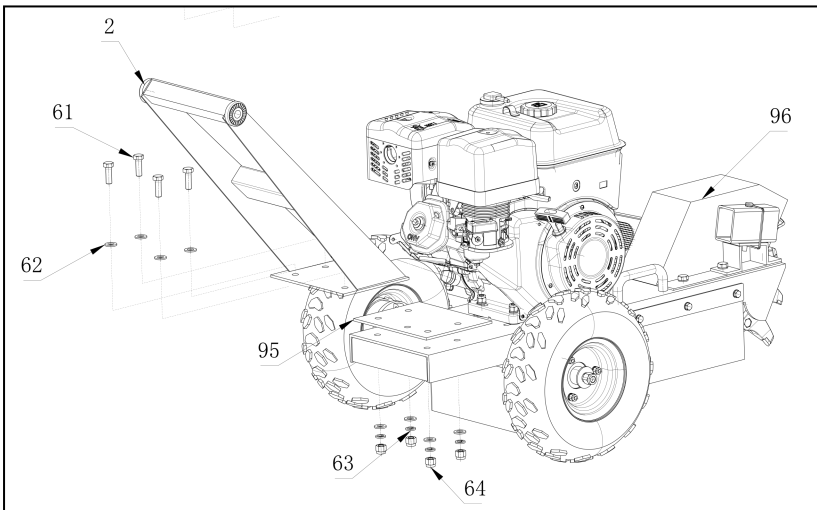
No	Description	Quantity	No	Description	Quantity
2	Bottom handrail	1	59	Ratchet fixing bolt	1
13	Tire	2	95	Cushioning	1
28	Drum brake cover	1	96	Machine body assembly	1
29	Behind splasher	1	99	Upper handrail assembly	1
44	Handle bar lock lever	1	105	Tower fixation	1

2. Installation the tire



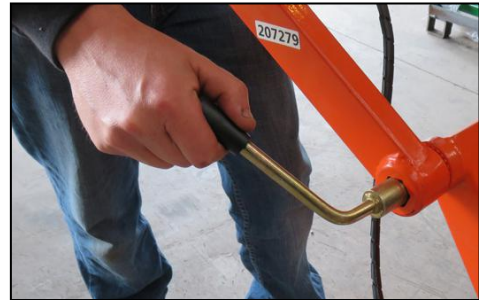
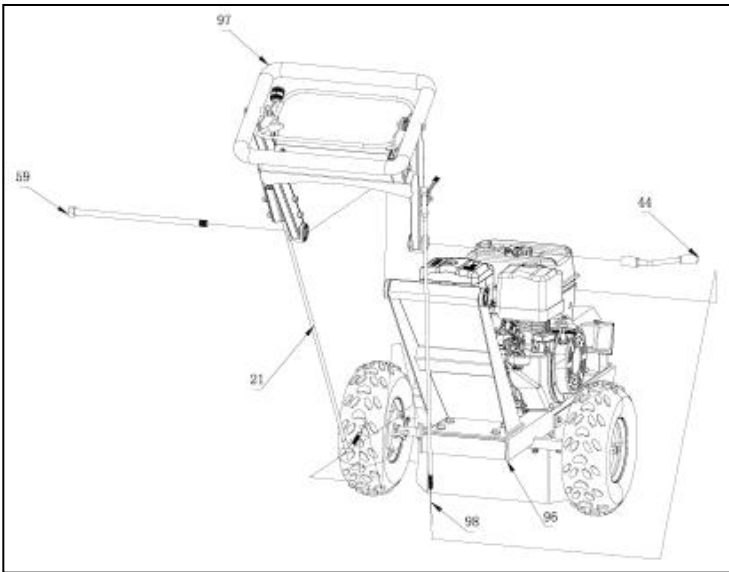
Parts no.	Description	Specifications	Quantity
13	Tire		2
26	Flange		1
27	Brake flange		1
28	Drum brake cover		1
68	Spring washer	M14	2
69	Nuts	M14	2
70	Washer	M14	2
96	Machine body assembly		1

3. Installation bottom handrail



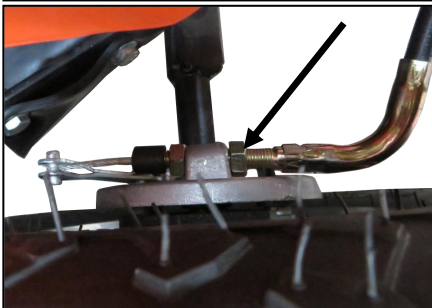
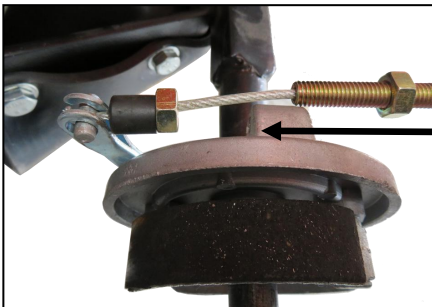
Parts no.	Description	Specifications	Quantity
2	Bottom handrail		1
61	Bottom handrail	M12x35	4
62	Washer	M12	8
63	Spring washer	M12	4
64	Nut	M12	4
95	Cushioning		1
96	Machine body assembly		1

4. Installation Upper handrail assembly



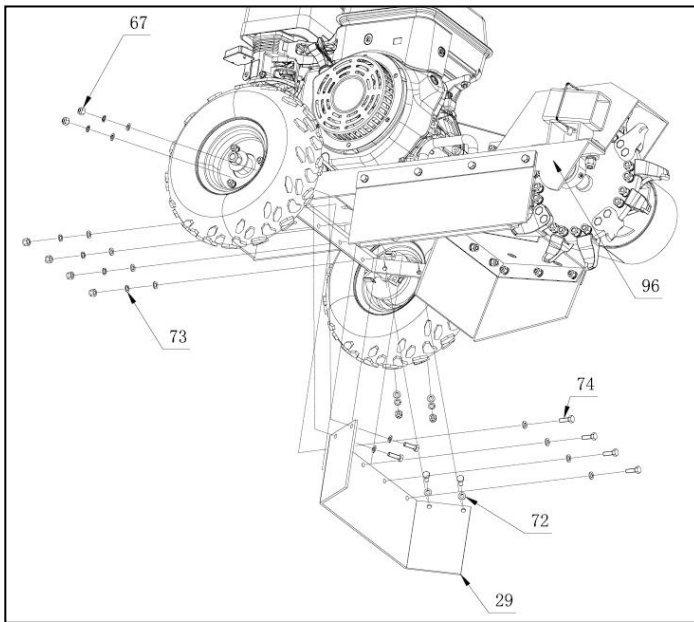
Parts no.	Description	Specifications	Quantity
21	Brake line		1
44	Handle bar lock lever		1
59	Ratchet fixing bolt	M16*360	1
96	Machine body assembly		1
99	Upper handrail assembly		1
98	Throttle cable assembly		1

5. Installation brake cable



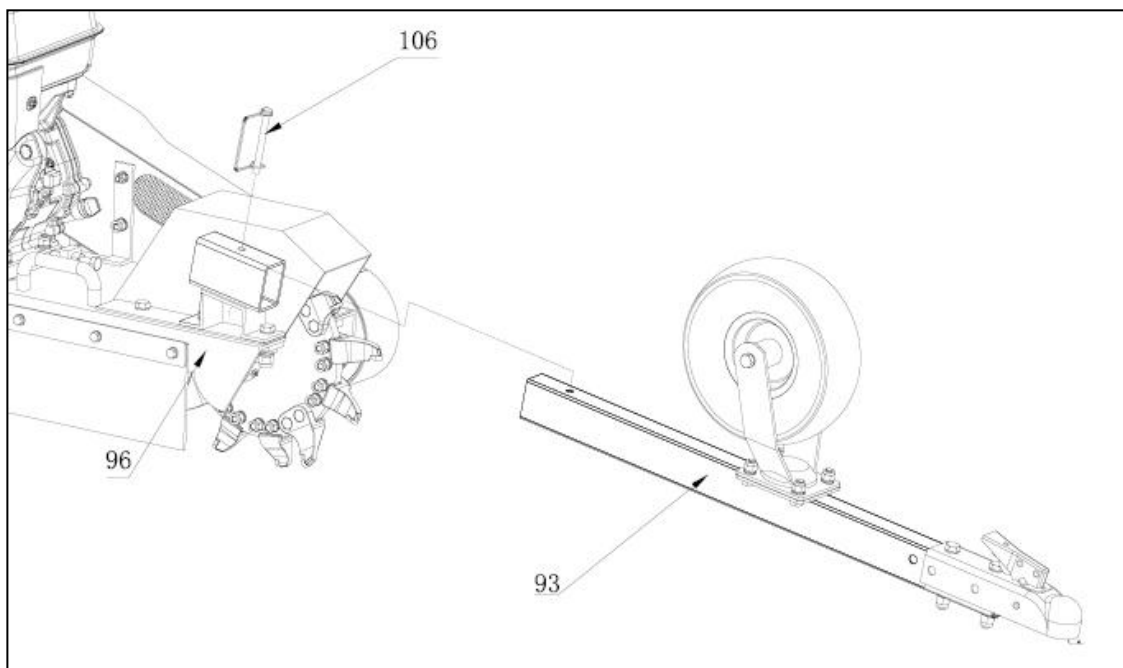
1. Install brake cable. Remove front jam nut and insert cable stop into brake lever.
2. Once inserted, pull cable back and insert into cable mount. Thread outer nut back on leaving about 15mm of thread showing. Using 13mm wrench tighten both jam nuts.
3. Fine tuning can be done with the knob on the end of the brake handle. Turning the knob clockwise will increase tension. Counter-clockwise will release tension.

6. Installation behind splasher



Parts no.	Description	Specifications	Quantity
29	Behind splasher		1
67	Nut	M8	8
72	Washer	M8	8
73	Spring washer	M8	8
74	Bolts	M8*25	8
96	Machine body assembly		1

7. Installation tow bar

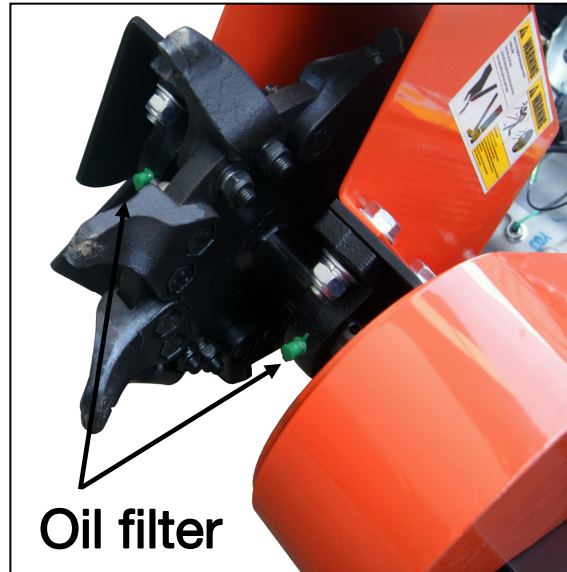


Parts no.	Description	Specifications	Quantity
93	Washer	6	1
96	Main frame assembly		1
106	D-Pin		1

8. Lubricating grease

WARNING

Lubricate the bearing before each use, Otherwise, the service life of the machine will be affected



PART IV: 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.

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 the dealers in your area.
 - B. When operating the Stump Grinder, make sure you are standing in the safe operating area (OPERATOR ZONE). You must stay in the safe operating area at all times when the ram is in motion (whether extending or retracting). Never place any part of your body into a position that causes an unsafe operating condition.
 - C. Before loading and 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

1. 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. Make sure the fuel shut-off valve is in the “ON” position.
4. Move the choke control lever to the “CHOKE” position (should only be needed if the engine is cold).
5. Move the throttle control lever to the “MID” position.
6. Adjust your bow handle to the desired position.
7. Depress safety shut off bail on the bow handle.
8. 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.
9. 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.
10. Electric Start: Turn and hold the Key in the start position until Engine starts then let the Key return to run position.
11. Move the choke control lever (if used for cold engine) slowly back to the “RUN” position when the engine is running well.
12. Increase engine speed to FULL RABBIT RPM.

Stopping

1. Let of the bail shut off on the bow handle
OR
2. Recoil Start: Slide the GAS leverl to the LEFT to shut engine off.
3. Electric Start: Turn the Key to the OFF position.

Operator Zone



Stump Grinder

NOTICE

Clear area around stump to remove all rocks and stones.

WARNING

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

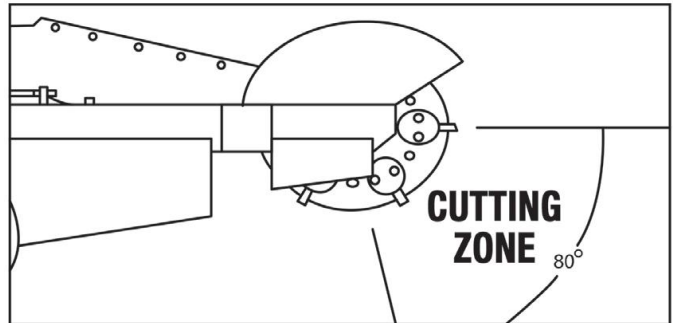
Never allow yourself or others to reach or step to the side or the front of the Stump Grinder when it is running. This is a very UNSAFE method witch could cause personal injury, ever death.

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.

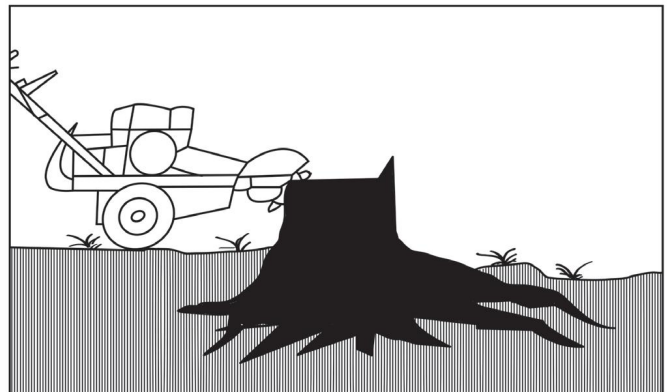
Removing Stumps

- Remove all loose pieces of wood, stones, wire and other debris from the area before beginning stump removal.
- Wind direction should be considered, as it influences the direction in which dust and wood chips are directed.
- Never operate the stump grinder after dark. There will not be adequate light to operate the stump grinder safely.
- Always allow a cold engine to warm up before cutting a stump.
- Only the portion of cutting wheel within the 80 degree area shown below should engage the stump. Never undercut the stump or use the bottom of the cutting wheel for cutting purposes.



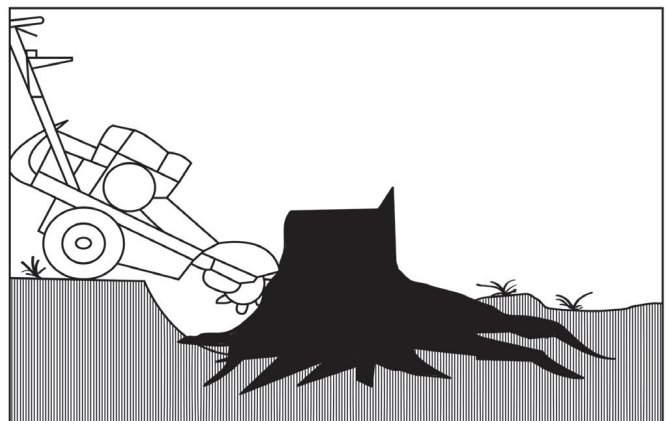
Prepare the Grinder at the Stump

Place the stump grinder into position with the cutting wheel near the top edge of the stump.



Removing Roots

1. Make sure the throttle is set to FAST. The cutter wheel will accelerate to cutting speed.
2. Swing the cutting wheel to one side, then lower it into the nearest roots that are buried at the foot of the stump.
3. Swing the cutting wheel before each sweep, until the roots are sufficiently removed
4. Raise the cutting wheel until the center of the cutting wheel is just above the top of the stump.
5. Allow the cutting wheel to stop, release the brake and reposition the machine.
6. Lock the brake again.

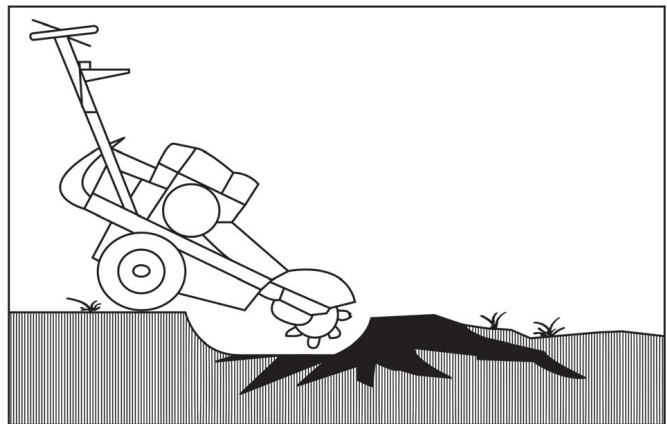


Cutting the Full Stump

1. Make sure the throttle is set to FAST. The cutter wheel will accelerate to cutting speed.
2. Direct the cutting wheel against the stump, beginning with the nearest top corner of the stump.
Steadily sweep it across the stump left and right, cutting away 1/2 inch of wood with each sweep.
3. Raise and lower the cutting wheel between sweeps by lowering and raising the control handle.
4. Roll the machine forward and back by pushing and pulling on the control handle. Re-lock it when the machine has been repositioned and continue cutting.

Continue with Final Root Removal

Cut the remaining roots until all roots are removed.



PART V: 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 Hours	Every 25 Hours	Every 100 Hours
Check engine oil level	Δ			
Check general equipment condition	Δ			
Check teeth and bolts	Δ			
Check belts	Δ			
Check tire pressure			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

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.

PART VI: 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 the dealers in your area.

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.

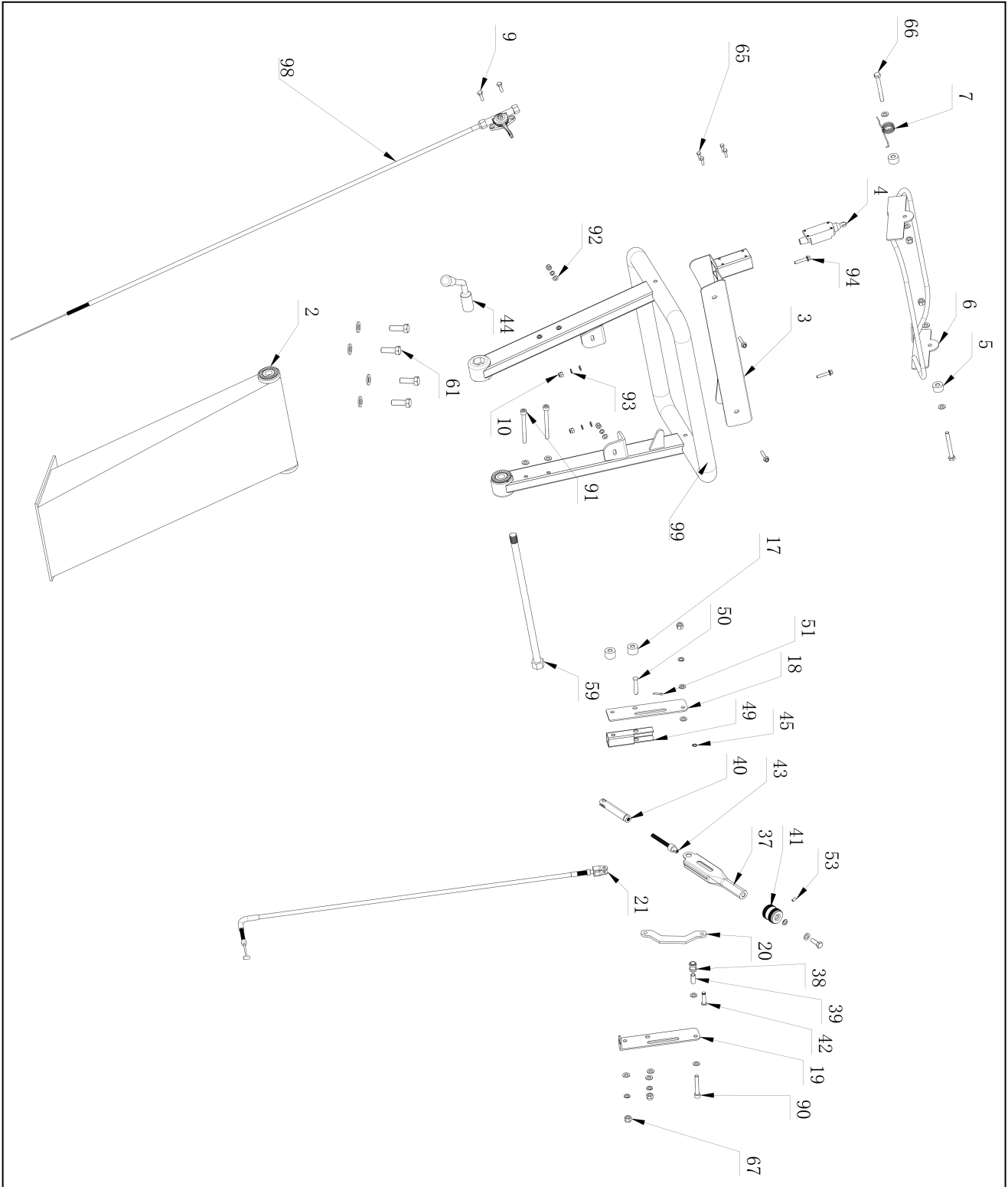
Troubleshooting Table

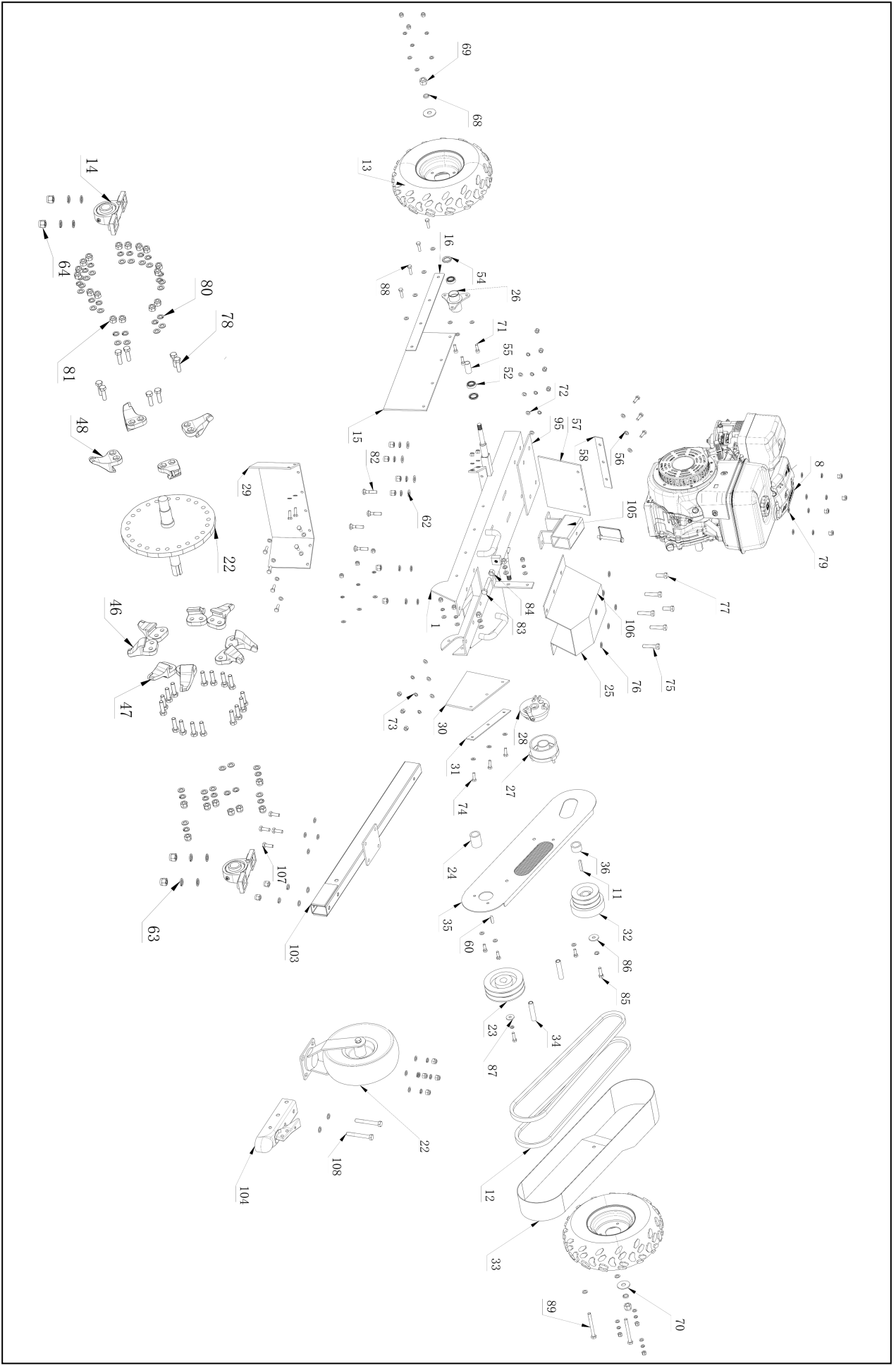
SYMPTOM	POSSIBLE CAUSE
<p><i>The engine won't start.</i></p> <p><i>(Please refer to the engine user manual for engine-specific procedures.)</i></p>	<ul style="list-style-type: none"> ➤ <i>Is the SAFETY BAR HELD DOWN to engage the safety cutoff switch?</i> ➤ <i>Is the fuel shut-off valve on? SLIDE THE LEVER ALL THE WAY TO THE RIGHT</i> ➤ <i>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.</i> ➤ <i>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.</i>
<p><i>The engine lacks power or is not running smoothly.</i></p> <p><i>(Please refer to the engine user manual for engine-specific procedures.)</i></p>	<ul style="list-style-type: none"> ➤ <i>Check that the Throttle Lever is in the "RABBIT" position. TURN OFF THE CHOKE</i> ➤ <i>Is the air filter clean? If it's dirty, change it following the procedure in the engine manufacturer's owner's manual.</i> ➤ <i>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.</i> ➤ <i>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.</i> ➤ <i>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.</i> ➤ <i>Check the oil level and adjust as needed.</i>
<p><i>Engine smokes.</i></p> <p><i>(Please refer to the engine user manual for engine-specific procedures.)</i></p>	<ul style="list-style-type: none"> ➤ <i>Check the oil level and adjust as needed.</i> ➤ <i>Check the air filter and clean or replace if needed.</i> ➤ <i>You may be using the wrong oil—too light for the temperature. Refer to your Engine Owner's Manual for detailed information.</i> ➤ <i>Clean the cooling fins if they're dirty.</i>
<p><i>Machine does not seem to have full grinding</i></p>	<ul style="list-style-type: none"> ➤ <i>The belts may be too loose and slipping. Adjust or replace belts as needed.</i>

power.

- The teeth may be dull or broken, replace.
- Run engine at full RPM when grinding.

Parts Diagrams





PARTS LIST

Ref.No.	Description	Qty	Ref.No.	Description	Qty
1	Main frame	1	41	Locating tube	1
2	Bottom handrail	1	42	Handle head	1
3	Handrail connecting plate	1	43	Pin	1
4	Switch	1	44	Handle bar lock lever	1
5	Spacer	2	45	Adjust handle	1
6	Emergency stop switch lever	1	46	Spring 8	1
7	Spring	1	47	Right teeth	3
8	Engine	1	48	Middle teeth	3
9	Bolt M6X20	3	49	Left teeth	3
10	Nut M6	5	50	Middle tube	1
11	KEY 7X7X45	1	51	Pin 2.9x14	1
12	Belt 17x1346	2	52	Bearing	2
13	Tire 145x7.0-6	2	53	Bolt M5x10	1
14	Bearing P205	2	54	Seal ring 32	2
15	Side splasher	1	55	Flange spacer	1
16	Rubber layering	1	56	Washer M8	36
17	Spacer brake fixation plate	1	57	Upper behind splasher	1
18	Brake fixation inner plate	1	58	Upper behind layering	1
19	Brake fixation outer plate	1	59	Ratchet fixing bolt	1
20	CONNECTION STRAP	1	60	Key 8X7X30	1
21	Brake line	1	61	Bolt M12X35	4
22	Blade plate	1	62	Washer M12	8
23	Pulley blade plate	1	63	Spring washer 8	10
24	Spacer blade plate	1	64	Bolt M12X1.75	10
25	Blade cover	1	65	Bolt M5x16	4
26	Flange	1	66	Bolt M8X70	2
27	Brake flange	1	67	Bolt M8x1.25	32
28	Drum brake cover	1	68	Spring washer 14	2
29	Behind splsher	1	69	Bolt M14x2	2
30	Side splasher	1	70	Washer M14	2
31	Rubber layering	1	71	Bolt M8x25	3
32	Clutch	1	72	Washer M8	29
33	Belt cover	1	73	Spring washer 8	32
34	Spacer belt cover	2	74	Bolt M8X25	18
35	Belt cover inner	1	75	Bolt M12X50	4
36	Spacer clutch	1	76	Washer M12	12
37	Handle	1	77	Bolt M12X30	2
38	Handle locating tube	1	78	Bolt M10X35	18
39	Spacer	1	79	Washer M10	26
40	Locating tube	1	80	Spring washer 10	25

Ref.No.	Description	Qty	Ref.No.	Description	Qty
81	Bolt M10X1.5	24	94	Bolt M6X30	4
82	Bolt M10X45	4	95	Rubber spacer	1
83	Bolt M12X70	1	96	Machine body assembly	1
84	Bolt M12X1.75	1	97	Upper handrail assembly	1
85	bolt 24x1-0.25	1	98	throttle cable	1
86	Washer M10	1	99	Upper handrail	1
87	Washer M8	1	103	Tower bar	1
88	Bolt M8X30	5	104	Tower hitch	1
89	Bolt M10X100	2	105	Tower fixation	1
90	Bolt M8X50	1	106	Pin D	1
91	Bolt M8X80	2	107	Bolt M10X30	4
92	Washer M6	4	108	Bolt M12X90	2
93	Spring washer 6	4			