



BANDIT 38HP TRACK DRIVE STUMP GRINDER OPERATION AND SAFETY



HAVE CUSTOMER INITIAL THIS PAGE AND ATTACH
TO ABC'S COPY OF INVOICE



CUSTOMER UNDERSTANDS THAT DAMAGES AND ENGINE
FAILURE WILL OCCUR WHEN OPERATED IN ORANGE DANGER
ZONE ON THE TILT INDICATOR GAUGE.

CUSTOMER WILL BE RESPONSIBLE TO PAY FOR DAMAGES
SEE REFERENCE #11 IN PICTURE

**CUSTOMER INITIALS THAT HE IS
AWARE _____**

PROBLEMS WILL OCCUR OPERATING ON SLOPES BEYOND IT'S NORMAL OPERATION OR
LOADING AND UNLOADING ON TOO STEEP OF TRAILER, AND ANY OTHER WAY THE OVER
TILTING CAN OCCUR.

EVEN IF THIS PAGE DOES NOT GET INITIALS, CUSTOMER INITIALS ON ABC'S INVOICE STATING
CUSTOMER RECEIVED SAFETY INSTRUCTIONS CUSTOMER WILL STILL BE RESPONSIBLE TO PAY
FOR DAMAGES.

THIS SHEET IS MERELY AN ADDITIONAL CHECK



INTRODUCTION

The purpose of this manual is to provide the user with specifications and procedures for the operation, maintenance and repair of this BANDIT product. As with any piece of equipment, safety should always be a constant thought while the machine is being operated, serviced or stored. In order to highlight this consideration, the material which addresses safety is preceded by the following signal words:

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, **WILL** result in death or serious injury (contains white letters on red background).

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, **COULD** result in death or serious injury (contains black letters on orange background).

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **COULD** result in minor or moderate injury (contains black letters on yellow background).

NOTICE

NOTICE indicates information considered important, but not hazard related (contains white italic letters on blue background).

SAFETY INSTRUCTIONS

SAFETY INSTRUCTIONS indicate general instructions relative to safe work practices and reminders of proper safety procedures (contains white italic letters on green background).

The equipment is designed and manufactured in accordance with the latest product industry standards. This alone does not prevent injury. It is the operator's responsibility to use good judgement and follow the warnings and instructions as indicated in this manual, on the machine and follow all safety standards per ANSI and OSHA instructions.

⚠ WARNING

Improper use of the product can result in severe personal injury. Personnel using the equipment must be qualified, trained and familiar with the operating procedures as defined in this manual, prior to operating the product.

⚠ WARNING

It is the responsibility of the owner or employer to ensure that the operator is trained and practices safe operation while using and servicing the machine. It is also the owner's responsibility to provide and follow a regularly scheduled preventative maintenance and repair program on the product, using only factory approved replacement parts. Any unapproved repairs or modifications may not only damage the machine and its performance, but could result in severe personal injury. Unapproved repairs or modifications will void warranty and eliminate manufacturer of any liability claims. Consult the equipment manufacturer with any questions.

Each machine is shipped with a manual, a customer's check sheet on the product, and any available parts & service manuals on component parts not produced by this manufacturer. Additional copies of these manuals and check sheets can be purchased from the manufacturer, or through the dealer. Engine parts, service and maintenance manuals **MUST** be purchased through the engine manufacturer or their dealer.

NOTICE

The producer of this Bandit product reserves the right to make any modifications or revisions to the design or specifications of its machine without advance notice. The producer also reserves the right to change machine and part prices as needed without advance notice.



SAFETY PROCEDURES

YOUR SAFETY IS VERY IMPORTANT TO US!

⚠ WARNING

Before operating the machine, you must have all potential operators read and follow manuals and decals, watch the video and follow the guidelines.

Read and follow all the instructions in this manual thoroughly. Your safety is dependent on your knowledge of how to operate and maintain this machine. You may obtain additional copies of this manual from your Bandit Dealer.

Always be cautious and careful when operating your equipment.

This equipment is intended for use by adults who have been properly trained and are physically capable of operating the machine safely. Never allow minors to operate this machine. Never operate any machine while under the influence of drugs or alcohol. Never operate equipment that is in need of repair or adjustment. Keep children, bystanders and animals clear of working area.

There must be at least two qualified and trained operators at the work site. They must be positioned in safe working locations, following safety procedures and instructions, and aware of each others whereabouts. There must, also, be at least two people on site during maintenance and service procedures in case an accident should occur.

This machine is equipped with safety decals, guards and designs for your protection.

Accidents are typically caused by making mistakes. The operator does not read the manual, overlooks safety decals, or fails to use lockouts provided for their safety. This occurs after the operator has become familiar with the machine. The operator is very cautious in the initial start up and operation because they do not understand the machine.

⚠ DANGER

Do not go near the rotating cutter wheel for any reason. Do not go near the cutter wheel while the engine is running or the cutter wheel is coasting to a stop. Contact with a rotating cutter wheel will result in severe injury or death.

Avoid moving parts. Keep hands, feet, and clothing away from power driven parts. Keep all guards and shields in place and properly secured. Contact with moving parts will result in severe injury or death.

Never sit, stand, lay, climb or ride anywhere on this machine while it is running, operating, or in transit. You will be injured.

Keep hands clear of all pinch points. Failure to do this will result in serious injury or death.

NOTICE

Before starting the machine, take a minute to check a few things. The machine should be in an area restricted from people passing by. This area around the machine must be free of all objects that can obstruct your movement when working with the machine. The machine should be checked for loose tools or foreign objects. All tools not in use should be secured in a tool box.

Operators must at all times be located within easy reach of all control and shut-off devices when the unit is running. They must be attentive and prepared to activate the devices.

⚠ DANGER

Torn or loose clothing is more likely to get caught in moving machinery parts. Keep such items as long hair, shirt sleeves, and shirt tails properly contained. Avoid wearing necklaces, rings, watches, and especially neckties while operating this machinery.

Wear all personal protection equipment (PPE) and follow all safety standards per ANSI and OSHA instructions. Examples of equipment: hard hat, face shield, safety glasses, gloves, ear protection, high visibility vest, and steel toe boots. Do not wear gauntlet or secured fit gloves. Always keep a fully charged fire extinguisher with the machine while operating or servicing the machine. Failure to do this will cause severe injury or death.

Do not start the engine with the clutch or cutter wheel engaged. Any debris may become a dangerous projectile. Contact with the rotating cutter wheel will result in serious injury or death.

Do not operate this machine indoors. Exhaust fumes can be fatal.

Never refuel while the machine is running. Never refuel in the shop or building. Always refuel in a well ventilated area, away from sparks or open flames. Do not smoke while refueling. Extinguish all smoking materials. Wipe up all spilled fuel before restarting the engine.



SAFETY PROCEDURES

⚠ DANGER

Do not start to grind a stump unless you are completely sure there are not any utility lines in the area above or below the ground level where you are grinding. Always contact the utility locating service in your area or local utility companies to mark underground utility lines. Failure to do so will result in severe injury or death.

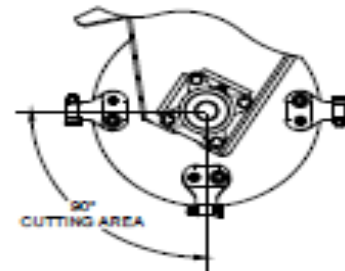
Make sure everyone is clear of machine before moving the machine. Stay clear of undercarriage travel system when the machine is moving. Contact with the undercarriage travel system will cause severe injury or death.

⚠ WARNING

Do not work on the machine if the engine is running with the clutch or cutter wheel disengaged. Severe injury or death may occur if the cutter wheel was engaged.

For optimum performance, the stump should be cut with the portion of the cutter wheel shown below. Never undercut the stump. Undercutting the stump may cause severe kickback, vibration and component damage. Never cut the stump from the top. The cutter wheel will throw debris up and toward the operator, instead of down and under the machine.

Do not go near or in-line with the debris field of the stump grinder while in operation. While grinding stumps, the chips and portions of the stump fly from the cutter wheel and can cause severe injury.



Do not go near hydraulic leaks. High pressure oil easily punctures skin causing serious injury, gangrene, or death. Avoid burns from fluid. Hot fluid under pressure can cause severe burns. Do not use fingers, skin, or bare hands to check for leaks. Use an object such as a piece of cardboard to find leaks. Lower load or relieve hydraulic pressure before loosening fittings. Relieve all pressure in the system before disconnecting the lines, hoses, or performing other work. Allow system to cool down to ambient temperature before opening any coolant or hydraulic oil system.

Do not touch hot machine surfaces. The machine surfaces may be hot due to the machine operating recently or the machine setting in the sunlight. Contact with hot machine surfaces may cause severe injury.

Clean machine of all debris. Do not leave this machine unattended until all potential fire debris is removed, no fire or smoldering exists, and hot spots are cold. The engine creates many hot spots including: exhaust manifold, exhaust, turbo (if equipped), etc. Remove all flammable debris such as wood, chips, leaves, oils, fuels, etc. from engine exhaust, engine turbo (if equipped), beside, around, and under engine, around and under tanks, inside belt shields and guards, inside battery and tool boxes, inside cabinets (if equipped), and anywhere materials collect. Always keep several type A:B:C fire extinguishers operational and on the job at all times.

Never grind materials that might contain wires, stones, nails, or other metal objects which may damage the teeth. Damaged teeth and foreign objects may become dangerous projectiles and can cause severe injury or death. Remove all foreign objects from stump grinding area.

Before performing maintenance on the machine remove all debris, oil, grease, water, snow, ice, etc. from all machine surfaces.

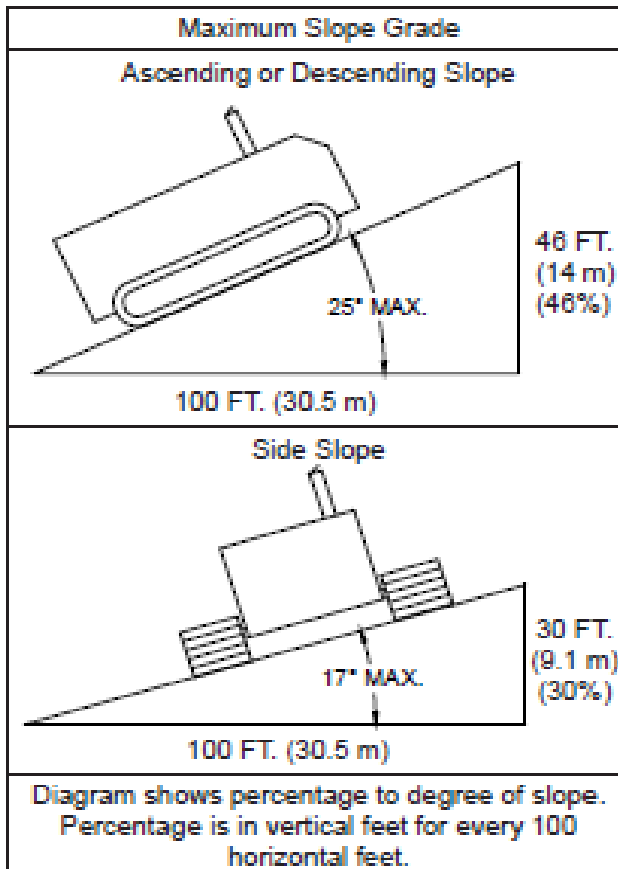
Sparks can occur if cutter teeth strike rocks, metal, or other hard objects. Do not use in high or very high fire hazard severity zones.

Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrester may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.



SAFETY PROCEDURES

⚠ WARNING



Do not attempt to operate the machine on an ascending or descending slope of more than 25° or 46% or a side slope of more than 17° or 30%, it is dangerous and could be fatal. This is the maximum slope grade the machine can be operated on if the hydraulic system, self propelled undercarriage, and engine are running at maximum performance and good traction is sustained.

Use extreme caution when traveling over non-level surfaces. This machine can tip over or tip backwards on non-level surfaces. You will cause engine damage, machine damage and possible personal injury or death.

The machine should never be parked on a slope at any time. The machine can coast or creep causing equipment damage and/or personal injury.

NOTICE

Do not attempt to start the engine or engage the cutter wheel on this machine if the cutter wheel is jammed or frozen in place. If you do, you will damage the cutter wheel drive system, which will not be covered under warranty and will cost you down time and money.

Engage and disengage the cutter wheel at idle. Failure to do this will damage the cutter wheel drive system.

Any increase from the specified maximum operating angles may cause loss of lubrication function and damage the engine.

Keep the machine in good condition. Be sure the machine is in good operating condition and that all safety devices, including guards and shields are installed and functioning properly. Visually inspect the machine daily before starting the machine. Refer to the "Daily Start Up & Maintenance". Do not make any modifications to your equipment unless specifically recommended or requested by Bandit Industries Inc.

Do not continue to operate the machine if the cutter wheel stalls. Immediately lift cutter wheel out of the stump, dirt, etc. and start again with less bite. Prolonged cutter wheel stall will ruin the cutter wheel drive system, creating extreme heat and possible fire hazard.

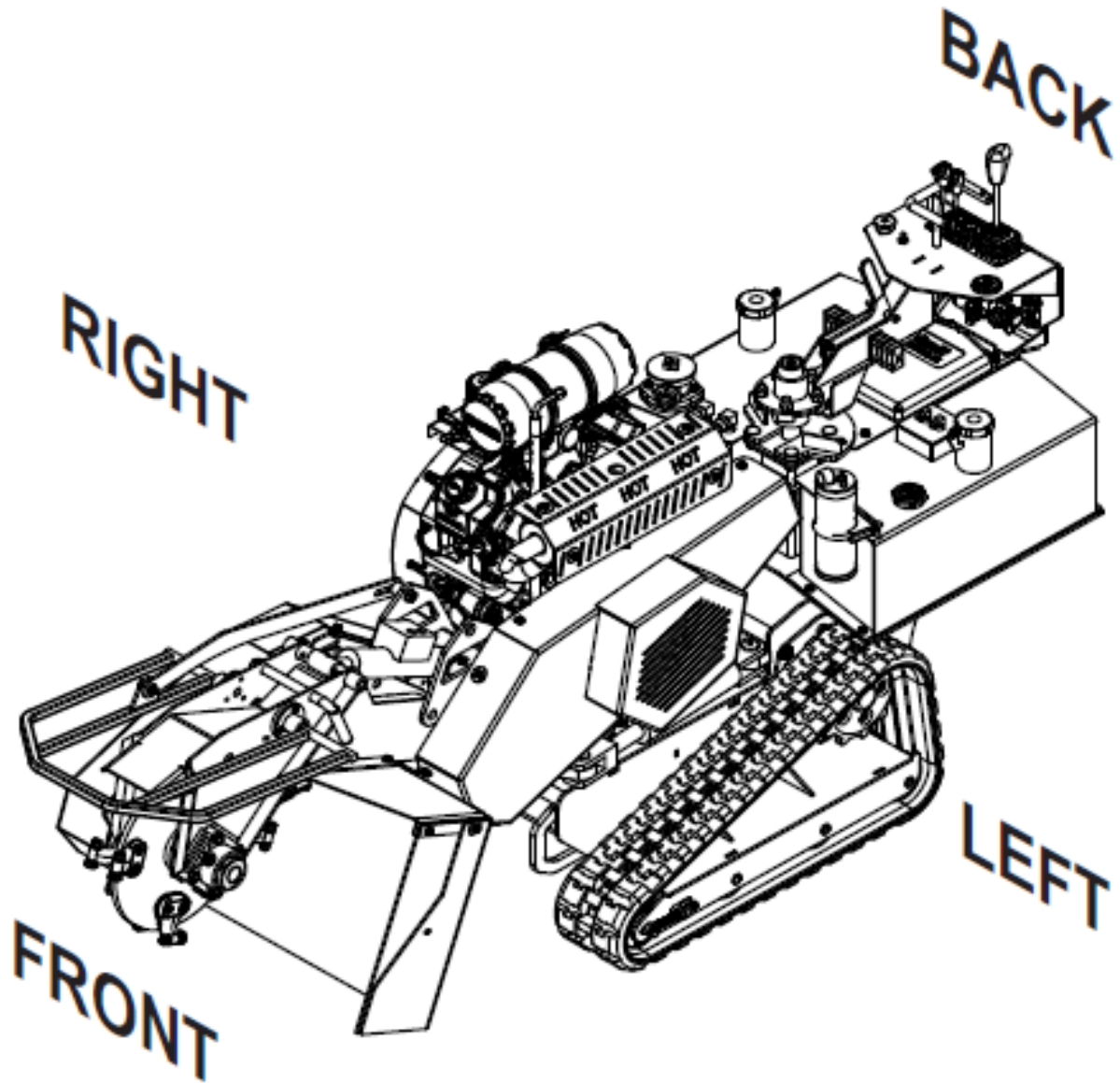
SAFETY INSTRUCTIONS

Before attempting any type of maintenance, disengage clutch or cutter wheel engagement, wait for the cutter wheel to come to a complete stop, turn off engine, remove the ignition key, make sure the ignition key is in your possession, disconnect the battery, and install the cutter wheel lock pin.



BANDIT 38HP TRACK DRIVE STUMP GRINDER OPERATION AND SAFETY

MACHINE ORIENTATION REFERENCE





BANDIT 38HP TRACK DRIVE STUMP GRINDER OPERATION AND SAFETY

ENGINE OPERATING SPEEDS

NOTICE

Refer to the Completion/Check Sheet, that is shipped with the machine for the correct engine RPM. If needed, contact your local dealer or Bandit Industries.

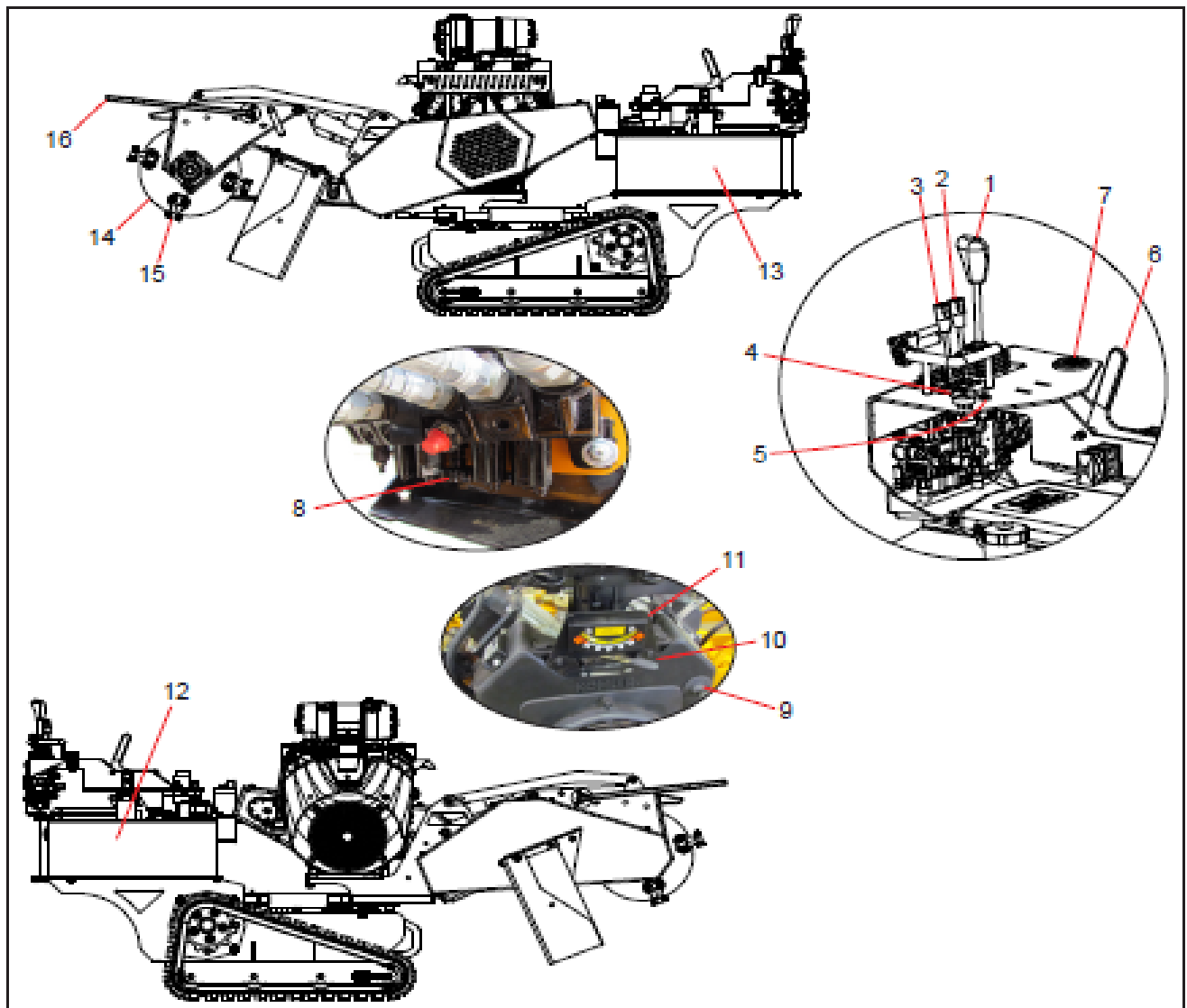
Some Current Engine Types	Maximum RPM
Kohler CH980 38 Hp EFI	3600

CONTROLS & COMPONENTS

Basic Location of Controls & Components

#	Control
1	Cutter Wheel Up/Down & Swing Left/Right
2	Left Track Forward/Reverse
3	Right Track Forward/Reverse
4	Emergency Stop Button
5	Cutter Wheel On/Off Switch
6	Swing Out Console Lock
7	Tach/Hour Meter
8	Swing Speed Control

#	Control
9	Ignition Switch
10	Throttle Up/Down Lever
11	Level Gauge
12	Hydraulic Tank
13	Fuel Tank
14	Cutter Wheel
15	Cutter Wheel Teeth
16	Cutter Wheel Bar





CONTROLS

- A. Cutter Wheel Up/Down:** To move the cutter wheel up; pull the joystick on the valve bank towards the back of the machine. To move the cutter wheel down; push the joystick on the valve bank towards the front of the machine.

B. Swing Left/Right: To move the cutter wheel to the left; push the joystick on the valve bank towards the left side of the machine. To move the cutter wheel to the right; push the joystick on the valve bank towards the right side of the machine.
- Left Track Forward/Reverse:** To move the left track forward; push the handle on the valve bank labelled "L.Track Forward" towards the front of the machine. To reverse the left track; pull the handle on the valve bank labelled "L. Track Reverse" towards the back of the machine.
- Right Track Forward/Reverse:** To move the right track forward; push the handle on the valve bank labelled "R. Track Forward" towards the front of the machine. To reverse the right track; pull the handle on the valve bank labelled "R. Track Reverse" towards the back of the machine.
- Emergency Stop Button:** When the emergency stop button is pressed the entire machine will shut down. The cutter wheel will not stop immediately stop, it will coast to a stop.
- Cutter Wheel On/Off Switch:** Before turning the cutter wheel on, make sure the engine is at low idle. Flip the switch to the "On" position, then throttle the machine up.
- Swing Out Console Lock:** To change the swing out position, pull the swing out console lock handle towards the back of the machine and move the console swing arm to the left or right side, and release the handle. Continue to move the console swing arm until it locks into place.
- Tach/Hour Meter:** The tach/hour meter keeps track of the amount of hours on the machine.
- Swing Speed Control:** To control the swing speed so the swing speed is increased, loosen the swing speed valve. To control the swing speed so the swing speed in decreased, tighten the swing speed valve.
- Ignition Switch:** To start the machine, insert the ignition key, and turn towards the front of the machine. To turn the machine off, turn the key to the back of the machine, and remove the key.
- Throttle Up/Down Lever:** To throttle the machine up move the lever to the high RPM symbol. To throttle the machine down move the low RPM symbol.

NOTICE

Refer to engine manufacturer's manual for specific engine controls and operation.



MACHINE OPERATION

⚠ DANGER

Do not start to grind a stump unless you are completely sure there are not any utility lines in the area above or below the ground level where you are grinding. Always contact the utility locating service in your area or local utility companies to mark underground utility lines.

Keep clear of cutting wheel, moving machine parts and grinder debris field.

⚠ WARNING

Wear all personal protective equipment per ANSI, OSHA and manuals.

1. Before starting the machine check all fluids, and follow all daily maintenance procedures.
2. Make sure the lock pin is not in the frame lock hole or the cutter wheel lock hole.
3. Start the engine.
4. Test the following controls to make sure they function properly.
 - a. Swing Left/Right
 - b. Cutter Wheel Up/Down
 - c. Travel Forward/Reverse
5. Make sure the machine is at low idle.
6. Engage the cutter wheel.
7. Throttle the machine up to ensure the cutter wheel rotates properly (if the cutter wheel does not rotate properly shut the machine down and diagnose the issue).
8. Throttle the machine down.
9. Disengage the cutter wheel.
10. Throttle the machine up.
11. Move the machine to the first stump.
12. Raise the cutter wheel above the stump.
13. Swing the cutter wheel all the way to the left and to the right to ensure there are no obstructions.
14. Make sure the cutter wheel is positioned on the right side of the stump.
15. Throttle the machine down.
16. Engage the cutter wheel.
17. Throttle the machine up.

NOTICE

The stump must be cut as low to the ground as possible to reduce the amount of grinding material, debris, and lessen the chance of flying debris in the work area.

DO NOT operate machine with extremely worn or broken teeth.

DO NOT operate machine without a full set of teeth. Operating the machine without a full set of teeth can cause excessive vibration and premature bearing failure.

Use only original equipment manufacturer's teeth. The use of any other aftermarket teeth may cause damage or premature failure to the drive train.

18. Lower the cutter wheel to the stump and make a few light passes at the stump to get a feel for the cutting action.
19. Gradually increase the cutting action and work away at the stump by swinging the cutter wheel left-to-right-to-left through the stump in a side-to-side motion. The cutting actions should be smooth and effortless. If it is not either back the machine up or lift the cutter wheel up to take a smaller bite.
20. Continue cutting the stump by adjusting the cutter wheel progressively lower until the stump is cut well below ground level.
21. Raise the cutter wheel above the ground.
22. Swing the cutter wheel back to the right side of the stump.
23. Move the machine closer to the stump for the next series of passes and continue cutting.
24. Repeat steps 19 through 23 until the stump has been fully removed.
25. If working with a large stump, you may need to reposition the machine in order to fully remove the stump.
26. Repeat steps 8 through 25 until all required stumps are removed.
27. When all stumps are removed, return the cutter wheel to the center position
28. Insert the lock pin in the frame lock hole.
29. Load the machine according to the instructions in the Transportation Procedures.



MACHINE OPERATION

If the grinding material starts to interfere with the machine operation, follow the steps below before removing any grinding material. Never remove any grinding material with cutter wheel running. Contact with a rotating cutter wheel will result in serious bodily injury or death.

1. Disengage the cutter wheel.
2. Position the machine away from the stump.
3. Before attempting any type of maintenance, disengage clutch or cutter wheel engagement, wait for the cutter wheel to come to a complete stop, turn off engine, remove the ignition key, make sure the ignition key is in your possession, install the cutter wheel lock pin, wait 2 minutes then disconnect the battery.
4. Clear the grinding material away from the stump.
5. Start the machine and reposition it at the stump before engaging the cutter wheel.

CUTTING AREA

⚠ DANGER

For optimum performance, the stump should be cut with the portion of the cutter wheel shown below. Never undercut the stump. Undercutting the stump may cause severe kickback, vibration and component damage. Never cut the stump from the top. The cutter wheel will throw debris up and toward the operator, instead of down and under the machine.

