# Operator's manual SG13

English

Please read these instructions carefully and make sure you understand them before using the machine.

To implement improvements, specifications and designs can be altered without prior notification.

Note that no legal demands can be placed based on the information contained in these instructions.

Use only original parts for repairs. The use of other parts voids the warranty.

Do not modify or install non-standard equipment to the unit without consent from the manufacturer. Modifications to the unit may cause unsafe operations or damage the unit.

When this product is worn out and no longer used, it should be returned to the reseller or other party for recycling.

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## CONTENTS

INTRODUCTION	4
Use	4
Good Service	4
Serial Number	4
SYMBOLS AND DECALS	5
SAFETY	7
General use	7
Preparations	9
Operating	10
Movement/Transport	11
Storage	11
Children	11
Fuel System	12
Maintenance	13
PROTECTION EQUIPMENT	14
Personal Protection Equipment	14
SET-UP	
CONTROLS	18
Components and Controls	18
Speed Control Lever	
Starter	19
Starter Handle	19
Fuel Valve	20
Choke Control	20
Fuel Tank	21
Fueling	21
Centrifugal Clutch	21
Operator Presence (OP) Grip Bar	22
Throttle	22
Control Panel On/Off Engine Switch	22
Brake	23
Handle Adjustment Bar	23
•	

OPERATION	24
Preparation	24
Starting The Engine	25
Handle Engine Switch	
OP Grip Bar	
Starter Handle	
Throttle	
Procedure	27
Operating On Hills	29
Transport	29
Normal Shutdown	
Emergency Shutdown	
MAINTENANCE	31
Maintenance Schedule	31
Drive Belt	32
Cutting Wheel	
Removing/Refitting Wheels	
Brake Adjustment	
Two Minute Rule	35
Cleaning	35
LUBRICATION	
Right Wheel	
Cutter Wheel Bearing	
TROUBLESHOOTING	
STORAGE	
Winter Storage	
Service	
TECHNICAL DATA	41
CONFORMITY CERTIFICATES	
SCHEMATICS	43
SERVICE JOURNAL	

## Congratulations

Thank you for purchasing a Husqvarna stump grinder. Through your confidence in us, you have chosen an exceptionally high quality product.

This manual is a valuable document. It describes your new Husqvarna machine. Read the manual carefully before attempting to use the machine. Following the instructions (use, service, maintenance, etc.) can considerably increase the life-span of your machine and even increase its resale value. Please contact your dealer for more information.

If you sell your Husqvarna machine, make sure to give the operator's manual to the new owner.

#### Use

The stump grinder is used to remove tree stumps. By moving the blade in lateral sweeping movements over the top and front of the stump, it is gradually chipped away. Read the chapter "Safety instructions" before you use the machine for the first time.

## **Insure Your Machine**

Contact your insurance company to check on insurance coverage for your new machine. You should have all-inclusive insurance for liability, fire, damage and theft.

## **Good Service**

Husqvarna's products are sold all over the world and only in specialized retail trade with complete service. This ensures that you as a customer receive only the best support and service. Before the machine was delivered it underwent inspection and was adjusted by your dealer. When you need spare parts or support in service questions, guarantee issues, etc., please consult the following professional:

This Parts Manual belongs to the machine with the seria number:	Engine

## **Serial Number**

The serial number can be found on the printed plate attached to the frame in front of engine. The plate includes the following information:

- The machine's type designation (MODEL).
- The machine's serial number (S/N).

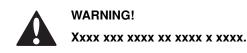
Please state the type designation and serial number when ordering spare parts.

The engine's serial number is punched in the crankcase under the oil level guard.

The engine type is specified on the crankcase to the right of the oil level guard but also appears on the decal on the starter.

Please state these when ordering spare engine parts.

## SYMBOLS AND DECALS

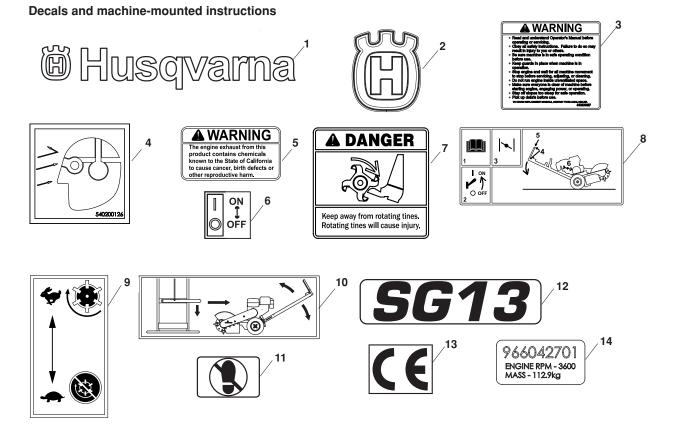


Used in this publication to notify the reader of a risk of personal injury, particularly if the reader DOES NOT follow the instructions given in the manual.

#### **IMPORTANT INFORMATION**

#### XXXX XXX XXXX XX XXXX X XXXX.

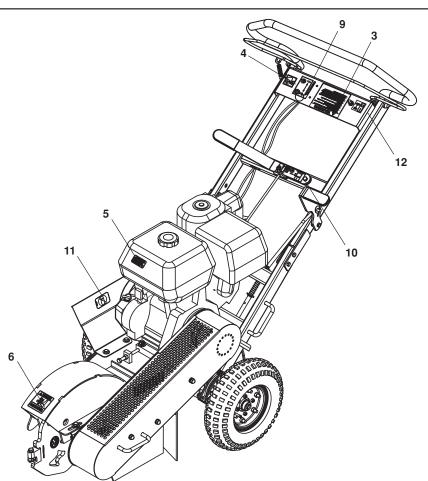
Used in this publication to notify the reader of a risk of material damage, particularly if the reader DOES NOT follow the instructions given in the manual. Used also when there is a potential for misuse or misassembly.



#### Missing or illegible decals must be replaced before using the machine.

- 1. Husqvarna logo
- 2. Husqvarna logo
- 3. General precautions
- 4. Use ear and eye protection
- 5. Exhaust warnings
- 6. Handle engine switch
- 7. DANGER risk for injury from cutter blade

- 8. Starting procedure
- 9. Throttle
- 10. Handle adjustment
- 11. Do not step here
- 12. SG13
- 13. CE conformity marking. Only for European market.
- 14. Model Number



#### Decal 3

#### Important information

Read and make sure you understand the Operator's Manual before use or maintenance.

To obtain a replacement manual, contact your dealer.

Observe all safety instructions; otherwise you may injure yourself or others.

Make sure the machine is in serviceable condition prior to use.

Stop the engine and wait until all machine movement comes to a standstill before service, adjustment or cleaning.

Do not run the engine in poorly ventilated spaces. Make sure nobody is in the vicinity of the machine before starting and during use.

Avoid slopes that are too steep to use the machine safely.

Clear any debris prior to use.

#### Decal 4

Wear goggles or safety glasses and ear protection when using the unit.

## Decal 5

#### Warning

Engine exhaust, some of its constituents and certain vehicle components contain or emit chemicals considered by the State of California to cause cancer, birth defects or other reproductive harm. The engine emits carbon monoxide, which is a colorless, poisonous gas. **DO NOT** use the machine in enclosed spaces.

8064-008

#### Decal 6

There is DANGER to your feet from the cutting blades.

#### Decal 9

Rabbit = Fast engage clutch. Turtle = Slow disengage clutch.

#### Decal 10

Handle adjustment.

#### Decal 11 No step.

## Decal 12

O = off, I = on

## General use

Use this manual to help operate the Husqvarna machine safely and to give information about how to maintain the machine.

Read this manual carefully and make sure you understand it before using the machine or performing any maintenance. If the user cannot read this manual, it is the responsibility of the machine owner to explain the contents to the user.

If after reading the operator's manual you are still unsure about the safety risks associated with use of the machine, you should not use the machine. Please contact your dealer for more information.

These safety instructions only address the basics for safe use. It would be impossible in the safety instructions to describe all possible risk situations that could arise when using the machine. You can, however, prevent accidents by always using common sense.

To obtain extra copies of the operator's manual, please contact your dealer.



## WARNING!

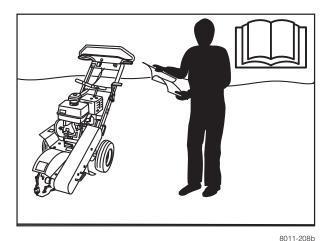
Under no circumstances may the original design of the machine be modified without written approval from the manufacturer. Such modifications not only affect the performance and durability of the machine but may even pose a safety risk for users and those in the vicinity. Unauthorized modifications to the design of the machine may absolve the manufacturer from liability for any resulting personal injury or property damage. Modifying the machine without written approval from the manufacturer may void the guarantee.

#### **IMPORTANT INFORMATION**

Do not use the machine until you have read the operator's manual carefully and understand the instructions given. All maintenance work or adjustments not described in this manual must be performed by an authorized Husqvarna service workshop.

## WARNING!

The stump grinder can be dangerous if used improperly or with out due care. This can lead to serious accidents or, in the worst cases, even fatal accidents. It is very important to read this operator's manual and understand the instructions before attempting to use the machine.



Read this manual carefully before starting the machine.

- Follow all safety instructions. Failure to do so may result in injury to yourself or others.
- Accident prevention regulations, other general safety regulations, occupational safety rules and traffic regulations must be followed without fail.
- All users shall be trained in use of the machine. The owner is responsible for training users.
- Engage an authorized Husqvarna workshop for all service and repairs not described in this manual.
- Husqvarna original spare parts are designed and specified to maintain high quality and correct fit for optimal durability and life-span. From a safety point of view, you should only use Husqvarna original spare parts.
- Learn how to use the machine and its controls safely and learn to recognize the safety decals.
- Only use the machine for removing tree stumps. It is not intended for any other use.
- Check that the machine is in serviceable condition prior to use; see Maintenance.
- Only use the machine in daylight or in other well-lit conditions. Keep the machine a safe distance from holes or other irregularities in the ground. Pay attention to other possible risks.
- Only allow the machine to be used by adults who are familiar with its use.
- Never allow persons not trained in the use of the machine to service it.
- Never allow persons or children not trained in the use of the machine to operate it. Local laws may regulate the age of the user.
- People and animals can distract you causing you to lose control of the machine. For this reason, you should always concentrate and focus on the task at hand.
- Never leave the machine unsupervised with the engine running.
- Make sure that other people are nearby when you are using the machine so that you can call for help should an emergency arise.
- The machine is tested and approved only with the equipment originally provided or recommended by the manufacturer.



#### WARNING!

The engine can become very hot. To avoid being burned, you must turn off the engine and wait until all parts have cooled before touching the engine.



## WARNING!

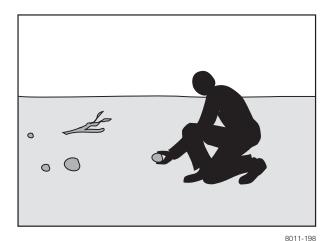
Overexposure to vibration may lead to circulatory or nerve damage, particularly in people who have impaired circulation. Contact your doctor if you experience symptoms that could have been caused by overexposure to vibration. Examples of common symptoms include numbness, pain, muscle weakness, change of skin color or an uncomfortable feeling of tingling. These symptoms appear most frequently in the fingers, hands or wrists.

#### **IMPORTANT INFORMATION**

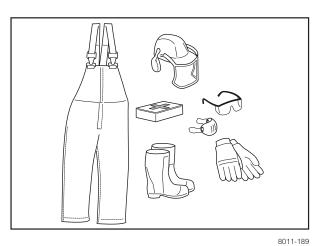
Never use a stump grinder that is damaged or incorrectly adjusted. Never use the stump grinder if any component is missing or if it is not properly assembled. Check that the cutting tools stop rotating when you reduce the throttle. If you find yourself in a situation where you are not sure what to do, always seek expert assistance. DO NOT try to attack any problem you are not qualified to resolve.

## **Preparations**

- Make sure that you always have first aid equipment at hand when using the machine.
- Make sure nobody else is in the vicinity of the machine when you start the engine, engage the drive or run the machine.
- Make sure animals and people maintain a safe distance from the machine.
- Check that the dead man's grip and all guards are fitted and functioning. DO NOT use the machine if it is not working properly.
- Makes sure no clothing, long hair or jewelry can catch in moving machine parts.
- Check that all safety decals are in place. See the chapter "Location of decals".
- Use face protection, protective gloves with good grip and protective clothing which you can move unrestricted. Also use leg protection to protect from sparks and the cutting tools.
- Never use the machine when barefoot. Always wear anti-slip protective shoes or protective boots preferably with steel toes.
- Use a helmet with a full face visor or a mesh visor and protective glasses. Wear approved earprotection when running the machine. Ask your dealer about approved protective glasses, ear protection and recommended helmets.



Clear the work area before beginning work.



Use appropriate equipment.



#### WARNING!

Always use approved protective clothing and approved protective equipment when using the machine. Protective clothing and protective equipment cannot eliminate the risk of accidents, but wearing proper clothing and the correct equipment will reduce the degree of injury should an accident occur. Ask your dealer about approved protective clothing and approved protective equipment recommended by Husqvarna.

## Operating

- Do not use the machine on grades of more than 10°.
- Do not use the machine if you are tired, if you have consumed alcohol, or if you are taking other drugs or medication that can affect your vision, judgment or coordination.
- Never use the machine indoors or in spaces lacking proper ventilation.
- Make sure you have a proper foothold when using the machine, particularly when backing. Walk, don't run. Never work on wet grass. Poor traction may cause you to slip.
- Keep your hands and feet away from moving parts.
- Keep your hands and feet away from the work tools.
- Do not use your feet or other parts of your body to gain greater bearing pressure against the stump.
- Smoking, open flames or sparks in the vicinity of the machine are strictly forbidden. Gasoline is extremely flammable and carelessness in handling can result in personal injury or fire.
- Never use a machine with a defective muffler.
- In very warm and dry climates, stump grinder operation poses a risk of forest fires.
- Stop and inspect the equipment if you run over or into anything. If necessary, make repairs before beginning again.
- Before leaving the operating position behind the machine park the machine on even ground, disengage the drive, engage the brake, turn off the engine and wait until all moving parts have stopped.

## WARNING!

Engine exhaust, some of its constituents and certain vehicle components contain or emit chemicals considered to cause cancer, birth defects or other reproductive harm. The engine emits carbon monoxide, which is a colorless, poisonous gas. Do not use the machine in enclosed spaces.

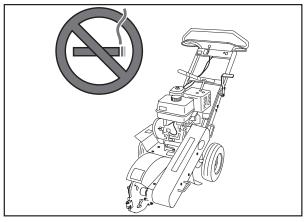


The engine exhaust is poisonous. Never run the engine indoors.



8011-091

Make sure you keep your hands and feet away from moving parts.



Smoking near the machine is strictly prohibited.

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## Movement/Transport

- To turn and steer the machine, press down on the handle and turn on the back wheels.
- Turn off the engine and allow it to cool at least two minutes before transport.
- Collapse the handle if the machine is equipped with a collapsible handle.
- Use safe lifting and moving techniques when loading/unloading the machine.
- It is recommended to have two people to lift the machine.
- Activate the parking brake during transport.
- Fasten the machine properly in place with approved fasteners, such as tension belts, chains or rope. Always check for compliance with applicable traffic regulations before transporting the machine.

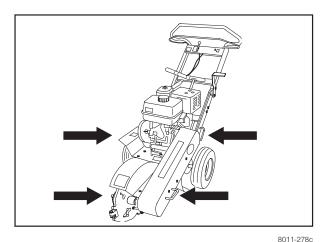
## Storage

- Allow the engine to cool before storing the machine. Never store the machine near a open flame.
- Store the machine with the fuel valve closed.
- Store the machine and fuel in such a way that there is no risk that leaking fuel or fumes can come in contact with flames or sparks from electrical machines, electric engines, relays, switches, boilers or similar.
- Store the machine in a locked space away from children and adults untrained in its use.

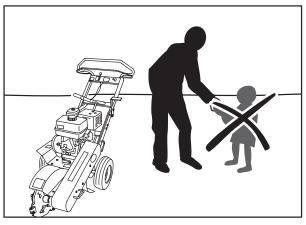
## Children

Serious accidents can occur if you fail to be on guard for children in the vicinity of the machine. Never assume that children will stay where you last saw them.

- Keep children away from the machine.
- Keep children away from the work area and under close supervision by another adult.
- Shut off the machine if children enter the work area.
- Never allow children to operate the machine.
- Be particularly careful near corners, bushes, trees or other objects that obstruct view.

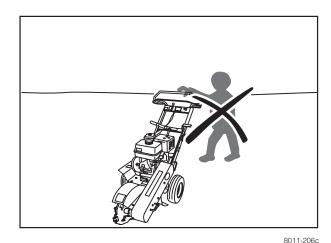


Lift the machine with the side handles.



Keep children away from the machine.

8011-207c



Never allow children to operate the machine.

## SAFETY



## WARNING!

Gasoline and gasoline fumes are poisonous and extremely flammable. Be especially careful when handling gasoline, as carelessness can result in personal injury or fire.

#### **Fuel System**

Only store fuel in containers approved for that purpose.

Never remove the fuel cap and fill the fuel tank when the engine is running.

Always stop the engine when refueling.

Do not smoke when filling the gasoline tank and do not pour gasoline in the vicinity of sparks or open flame.

Never fill the fuel tank indoors.

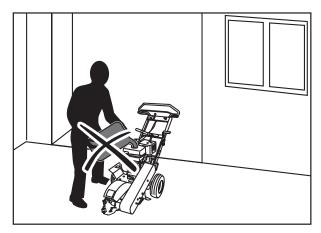
Before starting the machine after refueling, it should be moved at least 10 feet (3 M) from the location where it was filled.

Turn off the fuel supply for storage or transport.

If leaks arise in the fuel system, the engine must not be started until the problem has been resolved.

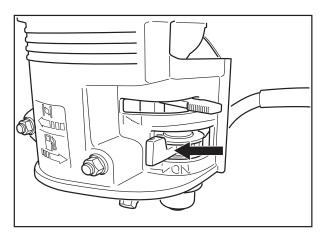
Check the fuel level before each use and leave space for the fuel to expand. Heat from the engine and sun can cause the fuel to expand and overflow.

Avoid overfilling. If you spill gasoline on the machine, wipe up the spill and wait until it has evaporated before starting the engine. Change your garments if you spill gasoline on your clothing.



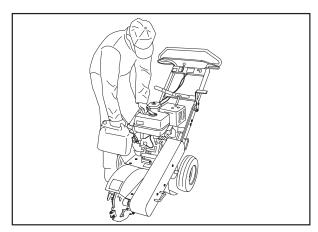
Never fill the fuel tank indoors.

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Close the fuel valve.

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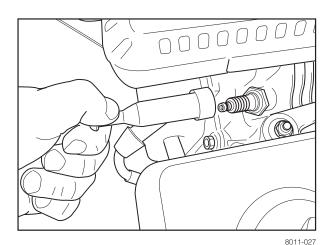


Fueling always poses an element of risk

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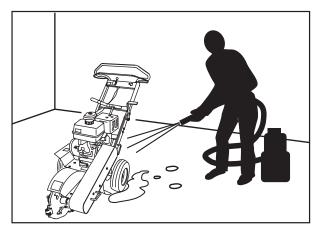
## Maintenance

- Never make adjustments with the engine running.
- Disengage the drive units, shut off the engine and wait until all moving parts come to a complete stop before making adjustments, performing maintenance or cleaning the machine.
- Disconnect the spark plug cable before beginning repair work.
- Keep all components in serviceable condition and make sure all nuts, bolts and other hardware are tight. Replace worn or damaged decals.
- Be careful when checking work tools. Use gloves when performing maintenance work.
- Never allow persons not trained in the use of the machine to perform service on it.
- Always park the machine on even ground before performing maintenance or making adjustments.
- Do not disassemble the engine. This can invalidate the engine warranty. Contact the dealer for questions regarding service or guarantee matters. Follow all maintenance instructions.
- Do not change the setting of governors and avoid running the engine with overly high RPM. If the engine is run too fast, damage to the machine components can occur.
- Do not modify safety equipment. Check regularly to be sure it works properly. The machine must not be run with defective or disassembled safety equipment.
- The muffler is designed to maintain sound levels at an approved level and keep direct exhaust away from the user. Exhaust gases from the engine are extremely hot and may contain sparks that can cause fires or burn the user.
- Never use a machine with a defective muffler.
- Reduce the risk of fire by removing grass, leaves and other debris that may have caught in the machine.



Remove the spark plug cable.

WARNING! Wait until all moving parts are completely still before performing maintenance on the machine. Turn off the engine and remove the spark plug cable.



Keep the machine clean.

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## **Personal Protection Equipment**

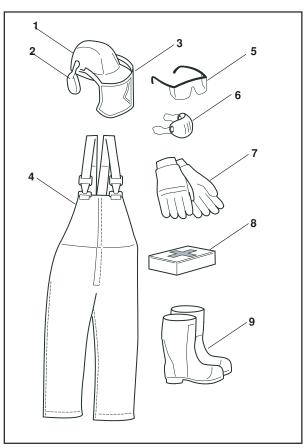
Consult your Husqvarna dealer when selecting protective equipment. Dealers have a broad assortment of equipment for professionals (such as forestry workers) and knowledge about occupational environment requirements and protective levels.

Before using the stump grinder, you may need to cut back the object with a power saw. It is therefore practical to use personal protective equipment that fulfils requirements for working with both stump grinders and power saws.

The main difference is that you should wear protective glasses when operating the stump grinder while the wire mesh visor is sufficient when using a power saw. Thus when using the stump grinder, it is recommended to use both a wire mesh visor to protect your face and protective glasses. A Plexiglas face guard is an alternative, but has been found to scratch easily and is susceptible to soiling and fogging.

You require the following personal protective equipment:

- 1. Protective helmet (hard hat)
- 2. Ear protection
- 3. Face guard
- 4. Protective trousers
- 5. Protective glasses
- 6. Breathing protection (dusty work environment)
- 7. Protective gloves
- 8. First aid kit
- 9. Protective boots or steel-toed shoes



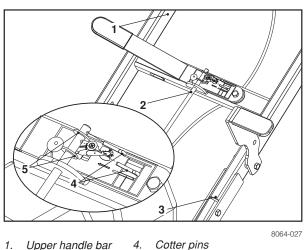
Personal protection equipment

8011-189a

- 1. Remove crate top and sides.
- 2. Remove upper handle bar assembly and lay aside.
- 3. Open bag containing loose hardware.
- 4. Using four (4) screws, flat washers and nuts attach the upper handle bar assembly to lower handle bar assembly.

NOTE: Handle fit is tight. When aligning holes use a tapered type pilot to help align holes (i.e. punch or phillips style screw driver).

- 5. Attach the position adjusting rod to bracket on the upper handle bar assembly with the washers and cotter pins placed above the rod bracket. Attach the lower adjustment bar to the unit and secure with cotter pin.
- 6. Assemble the compression spring, two (2) flat washers and yoke to brake rod assembly.
- 7. Screw yoke onto the rod assembly until rod is even or through threaded portion of yoke about 1/4" (6.35 mm).



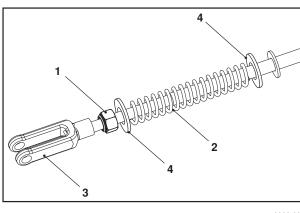
4.

5.

- Upper handle bar 1. 2.
  - Adjusting rod Lower handle bar

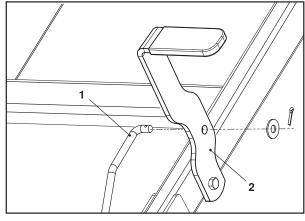
З.

Washers



- 1. Nut 2. Spring
- Yoke З. Washer 4.
- 8060-039

8. Attach brake rod assembly to brake handle on the upper handle bar assembly.



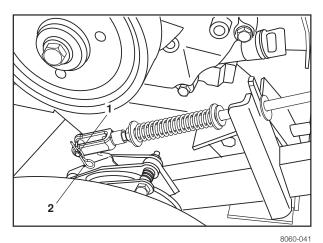
- Brake rod assembly 1.
- 2. Brake handle

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Attach the yoke to the brake's top mounting hole using the clevis pin and cotter pin.

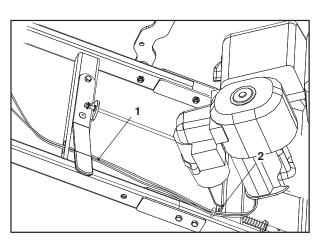
NOTE: Adjust the brake before inserting hair pin. To engage brake, pull back on handle until brake rod assembly goes "over center" and locks the brake ON. Turning the yoke clockwise shortens the rod tightening the grip on the brake disc by the brake pads. Counter clockwise loosens the clamping force. Brake adjustment is correct when wheel will slide but not turn when handle is over center, and the wheel turns freely when the brake handle is disengaged.



- Clevis pin 1.
- 2. Hair pin
- 1. Remove air cleaner and double wire clamp from

8060-042

- 2. Route the wire harness from engine and the throttle cable through guide and handle crossmember.
- 3. Connect upper and lower wire harness together, yellow to yellow-black to black.
- 4. Push throttle control lever on console forward to full extent. Pull throttle control lever on engine back as far as possible.

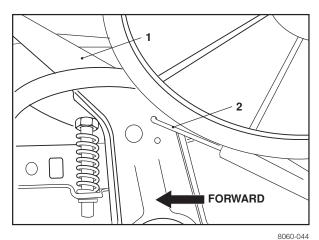


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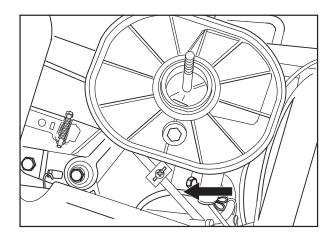
- 1. Wire harness and throttle cable
- 2 Guide

engine.

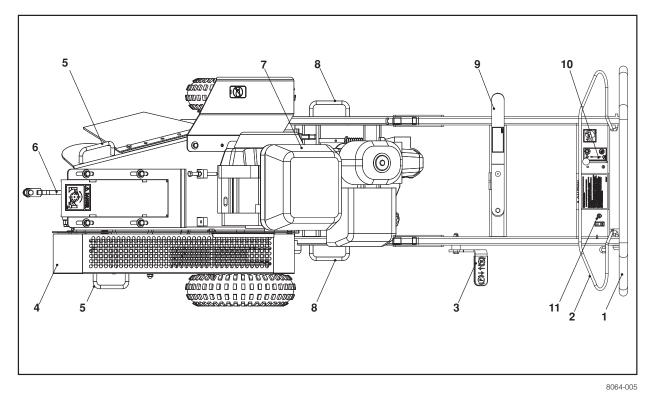
5. Insert "L" end of throttle cable into the outside hole of the engine throttle control lever.



- 1. Engine throttle control lever
- 2. Throttle cable
- 6. Attach the throttle cable to the engine using the double wire clamp removed in Step 1.
- 7. Test throttle control by pulling back throttle handle on console. Throttle arm on engine should be pushed completely forward. Cable should not slip in clamp when doing this test.
- 8. Test proper wire length by pulling on the handle adjustment lever and raising and lowering the handle to maximum position without any pull on harness.
- 9. Reattach air cleaner to engine.
- 10. Remove unit from pallet.



## **Components and Controls**

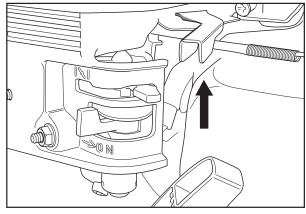


- 1. Handle
- 2. Operator Presence Grip Bar
- 3. Brake Lever
- 4. Cutter Drive Belt Guard
- 5. Front Lifting Handles
- 6. Cutting Wheel

- 7. Engine\*
- 8. Rear Lifting Handles
- 9. Handle Adjustment Bar
- 10. Throttle
- 11. Engine Switch
- \* For operation and maintenance of the engine, refer to the manufacturer's Owners Manual.

## **Speed Control Lever**

The speed control lever on the engine is normally not used. It is connected to the throttle on the handle. If the cable should bind or break, you can reduce the throttle with the lever on the engine as an emergency measure to slow the engine speed to an idle and stop the cutting wheel.



8011-034a

## Starter

The magnapull-type starter has spring return. To replace the return spring or starter cord, contact an authorized service workshop.

#### **IMPORTANT INFORMATION**

Do not let the recoil cord snap back by itself. This may damage the cord or the recoil starter assembly.

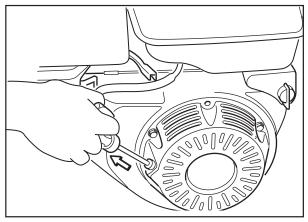
## **Starter Handle**

Misuse of the starter handle can damage the starter. Do not twist the starter cord around your hand. Pull out the handle slowly until the gears mesh. Do not pull out the starter cord completely and do not let go of the starter handle when extended.



#### WARNING!

Do not run the engine indoors, in enclosed or poorly ventilated spaces. Engine exhaust fumes contain poisonous carbon monoxide.

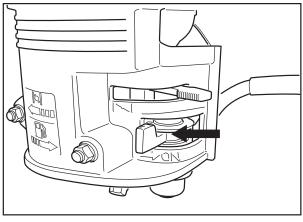


## **Fuel Valve**

The fuel valve opens and closes the connection between the tank and the carburetor. The illustration shows the tank valve closed; to open, turn the lever completely to the right. There is no middle position. Turn off the valve when the machine is not in use to avoid flooding the carburetor. The fuel valve is combined with a sludge reservoir.

## WARNING!

Do not run the engine indoors, in enclosed or poorly ventilated spaces. Engine exhaust fumes contain poisonous carbon monoxide.



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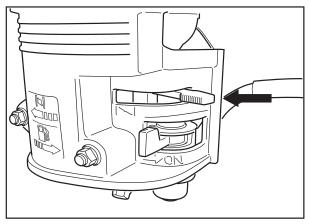
## **Choke Control**

The choke control opens and closes the choke valve in the carburetor. This is only used to start a cold engine.

If the engine is warm, the control should be in the far right position.

If the engine is cold, place the lever completely or partly to the left. Move the lever back to the right once the engine starts. Forgetting the choke is evident if the engine runs roughly and produces black smoke.

This also results in increased fuel consumption.



8060-024b

## **Fuel Tank**

Underneath the tank, there is a fuel filter combined with the fuel valve. Tank capacity is 1.72 gallons (6.5 liters)

## Fueling

Read the safety instructions before fueling.

Keep the fuel and fuel tank clean. Avoid filling the machine with dirty fuel. Make sure the fuel cap is properly tightened and the gasket is not damaged, particularly before washing the machine.

Use unleaded gasoline with minimum 86 octane rating. Never use gasoline mixed with two-cycle oil. For ethanol and methanol fuel, the following applies:

Maximum allowable ethanol 10% (volume).

Maximum allowable methanol 5% (volume).

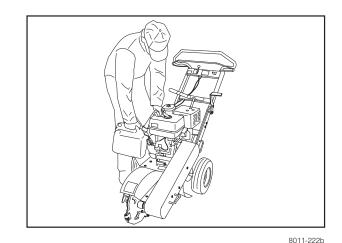
Maximum allowable MTBE (Methyl Tertiary Butyl Ether) 15% (volume).

If the engine jerks at normal load it can be damaged. Change the fuel. If this does not help, contact an authorized service workshop.

Do not fill the tank completely; leave space for the fuel to expand as it warms up.

## **Centrifugal Clutch**

The engine is equipped with a centrifugal clutch that is connected to the crankshaft. When the engine speed increases, the drive for the cutting wheel engages automatically. The centrifugal clutch is maintenance-free; it is not possible for the user to make adjustments.

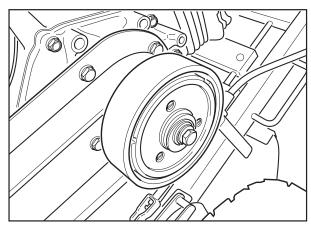


Use clean, fresh fuel



## WARNING!

Gasoline is highly flammable. Observe caution and fill the tank outdoors (see the safety instruction).



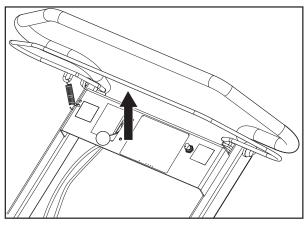
## **Operator Presence (OP) Grip Bar**

The bar must be held against the handle for the engine to run. If the grip is released, the ignition system short-circuits and the engine stops.



## WARNING!

Do not over-ride the safety system by binding the bar to the handle.



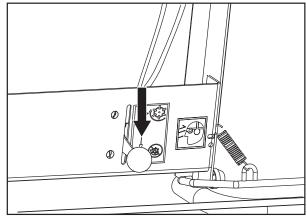
8064-010

## Throttle

The lever controls engine speed.

With the lever down, the engine runs at idle and functions as start position.

When the engine speed increases, the centrifugal clutch drive automatically engages the cutting wheel.



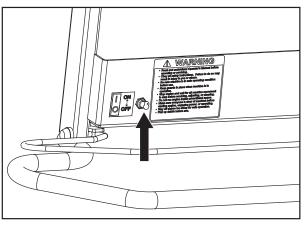
8064-011

## **Control Panel On/Off Engine Switch**

The ON/OFF engine switch can be used to stop the engine. The illustration shows the toggle switch in the OFF position (short circuited electrical system).

A second switch with the same function is activated by the OP grip bar.

To start the engine, the control panel switch must be set to the ON position and the OP grip bar must be held in.



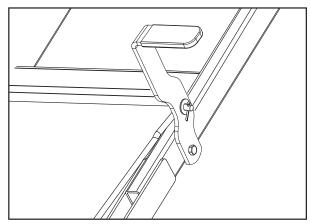
## Brake

The lever activates a disk brake on the left wheel when it is pulled backwards. The brake should always be activated when the grinder is parked, is being transported or when it is in operation



## WARNING!

NEVER operate a machine with a defective brake.



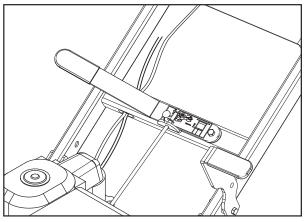
8064-013

## WARNING!

To avoid the risk of losing control of the machine, DO NOT pull out the adjustment bar when the cutting wheel is rotating.

## Handle Adjustment Bar

As the tree stump is ground away, the handle position will need to be adjusted. Pull the handle backwards and set the handle at a suitable working height. Engagement rods are spring loaded to insure positive locking when released, but always make sure bolts are locked into place after adjustments are made.



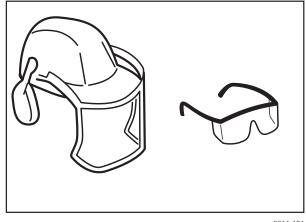
## Preparation

- Dig away the earth and remove any stones near ٠ the tree stump that may interfere with your work. Check that the ground is free of foreign objects, such as electrical cables, barbed wire, etc.
- Cut or trim the stump as necessary using a power • saw.
- Review all of the machine's safety decals.



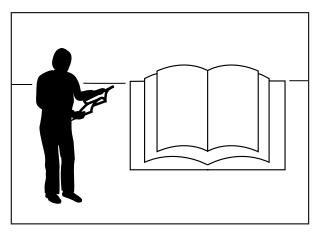
8011-141

Use a hard hat, ear and eye protection. A mesh visor alone does not provide sufficient eye protection; supplement with protective glasses.



8011-191

- Make sure that you are familiar with safety . regulations and shutdown procedures described previously in the operator's manual.
- Make sure that all guards are in place and in good • condition.
- Make sure that the blades and cutters are in place and in good condition.
- Make sure that the work area and cutter are free of metallic objects such as wire or nails that could damage the equipment or be thrown out and injure persons in the vicinity.
- Make sure that everyone, including children and • animals, maintains a distance of at least 50 feet (15 M) from the machine. Debris can be thrown out and injure people and animals.



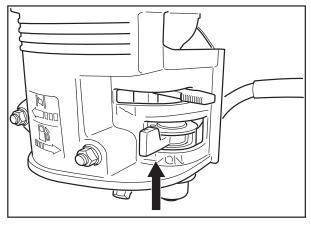
8011-193

## **Starting The Engine**

Check that all daily maintenance as described in the maintenance schedule has been performed. Check that there is sufficient fuel in the tank.

#### Fuel valve

Open the fuel valve. Push the lever fully to the right.

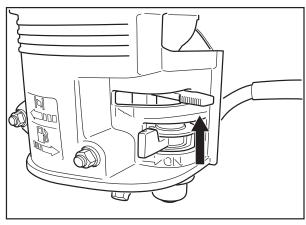


8060-024b

#### **Choke control**

When starting the engine warm, the lever should be in the right position; see the illustration.

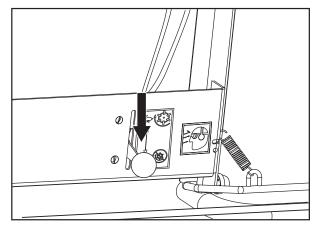
When starting the engine cold or partially warm, place the lever completely or partly to the left. Move the lever back to the right once the engine starts. When the engine is cold, it may be best to move the lever back in several stages. Find the position where the engine runs smoothly.



8060-024b

#### Throttle

Set the throttle on the handle to the SLOW (START) / DISENGAGE position.



8064-011

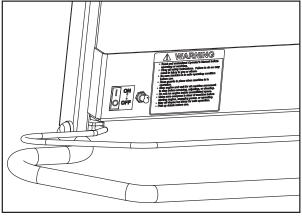
## **OPERATION**

## Handle Engine Switch

Set the toggle switch to ON.

#### Engine ON/OFF Switch

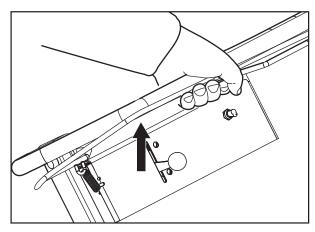
The switch on the engine is disconnected. Use the Handle Engine Switch.



8064-012

## **OP Grip Bar**

Hold in the bar for the OP grip bar against the handle.



8060-029

## **Starter Handle**

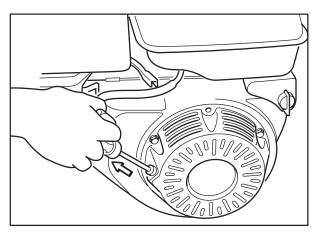
The OP grip bar must be held against the handle when starting the engine.

Misuse of the starter handle can damage the starter. DO NOT twist the starter cord around your hand.

Pull out the handle slowly until the gears mesh. Then give a sharp pull on the starter handle. DO NOT pull out the starter cord completely and DO NOT let go of the starter handle when extended. Return handle to recoil position.

## Throttle

Keep the throttle at idle. When the throttle is increased, the cutting wheel will begin rotating.



## **OPERATION**

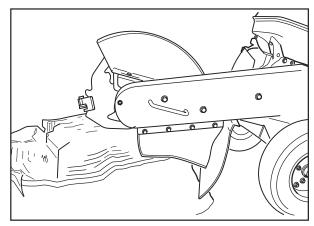
## Procedure



#### WARNING!

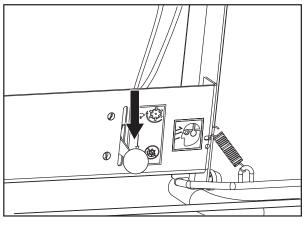
NEVER allow the blade to touch the ground until it has stopped turning.

- 1. Place the cutting blade near the top front edge of the tree stump.
- 2. Set the brake to lock position.



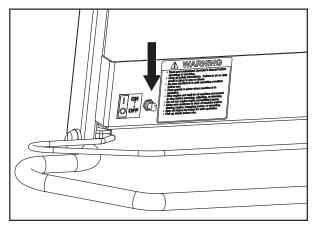
8011-201c

3. Set the throttle to SLOW (START) DISENGAGE.

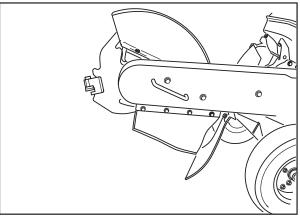


8064-011

4. Set engine switch on handlebar to ON.

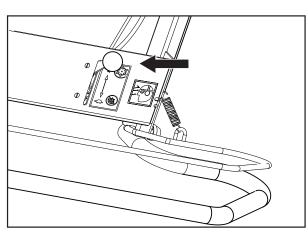


- 5. Tilt the machine on its wheels, lifting the cutting wheel off the ground.
- 6. Hold in the OP grip bar and start the engine.
- 7. Allow the engine to warm up for two minutes at idle before grinding.



8011-200

8. Set the handle throttle to FAST to engage clutch. Always set the throttle to the FAST position during grinding operation. Slower engine speeds can the damage the clutch.

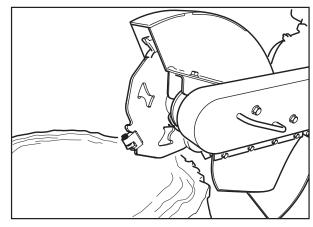


8060-027

- Place the middle of the cutting wheel approximately 1" (2.5 cm) above and <sup>3</sup>/<sub>4</sub>" to 1<sup>1</sup>/<sub>2</sub>" (2-4 cm) into the stump.
- Place the cutting wheel in the upper front edge of the stump. Swing the cutting wheel from side to side while lowering it about 1" (2.5 cm) after each pass until the front edge of the stump is gone.

#### IMPORTANT INFORMATION

If the cutting wheel is too low, the machine may start to "climb" over the stump and become unstable.



8011-203a

## **OPERATION**

- 11. Before moving the machine forwards, you should ensure that the cutting wheel is above the ground and located on either side of the stump. Move the machine forward by releasing the brake, pushing it forward, activating the brake again and repeating Steps 9 and 10.
- 12. Repeat Steps 9 through 11 until the upper portion of the stump has been removed. DO NOT cut deeper than ground level at this stage.
- 13. Set the throttle to SLOW/(START) DISENGAGE and wait until the cutting wheel stops rotating.
- 14. Release the brake and pull the machine away from the stump.
- 15. It may be necessary to clear wood chips from the area around the stump.
- 16. If you want to grind below the ground level, it may become necessary to adjust the handle position to achieve a better hand and arm work position. Pull the handle control lever and adjust the handle to the desired position.
- 17. Repeat Steps 6 through 10 until you reach the desired depth.
- 18. Shut off the machine when you are done.

## **Operating On Hills**

Be very careful when operating the stump grinder on hills because the machine can slip or move unexpectedly.

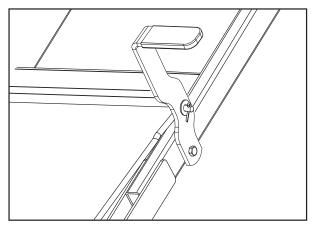
NEVER use the machine on grades of 10° or steeper.

## Transport

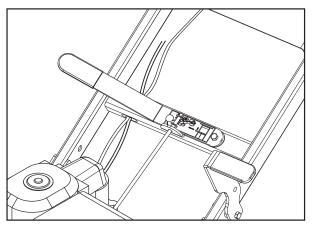
The Husqvarna stump grinder can be transported in a truck, trailer, van or a large SUV (Sport Utility Vehicle). The stump grinder is equipped with four lifting handles (two on each side) so that two people can lift the machine if necessary.

DO NOT attempt to lift the machine alone. Use safe lifting techniques and DO NOT exceed your physical limitations.

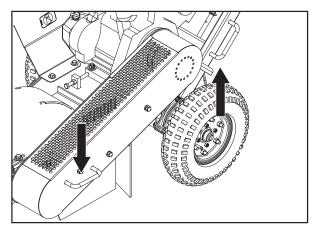
Secure the machine with tensioning belts, chains or other approved materials.



8064-013



8064-014



8064-014

The lifting handles can also be used to secure the machine for transport.

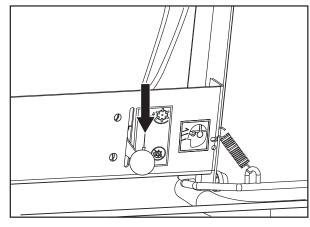
## OPERATION

## **Normal Shutdown**

## Throttle

Set the throttle to SLOW/DISENGAGE.

If the engine has been running full out, let it run easily for about 30 seconds to 1 minute at low speed. DO NOT let front of unit touch ground until you are sure cutting wheel has stopped turning.



8064-011

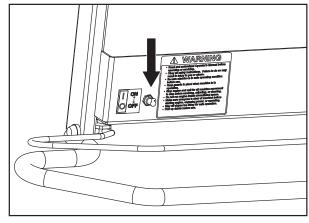
#### **Engine switch**

Wait at least 20 seconds, until the blade has stopped. Set the toggle switch to OFF.

Make sure that the blade is resting against the ground and has stopped completely before doing anything.

#### Brake

Activate the brake by pulling the lever backwards.



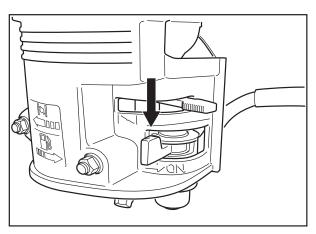


#### Fuel valve

Close the fuel valve. Turn the lever all the way to the left.

## **Emergency Shutdown**

Release the OP grip bar. Wait until the blade stops. Make sure that the blade is resting against the ground and has stopped completely before continuing.



8060-024b

## Maintenance Schedule

The following is a list of maintenance procedures that MUST be performed on the machine. For those points not described in this manual, visit an authorized service workshop.



## WARNING!

No service operations may be performed on the engine or unit unless:

- The engine is stopped.
- The ignition cable has been removed from the spark plug.
- The machine is securely parked where it will not tip or begin rolling.

MAINTENANCE INTERVALS - MONTHS/HRS

	Daily	-/10	1/25	3/50	6/100	12/300
MAINTENANCE				ĺ		
Check engine oil level	•			İ		
Change engine oil 1)			•	İ		
Check air filter	•		1	İ		
Clean air filter 2)			1	•		
Replace air filter cartridge 2)		1	İ	İ		•
Clean sludge reservoir for fuel system					•	
Check and clean spark plug				İ	•	1
Replace spark plug				İ		•
Check engine switch function <sup>3)</sup>	•		1	İ		1
Check idle speed			1	İ		•
Check and adjust play in valves 4)			1	İ		•
Clean fuel tank 4)			1	İ		•
Check, replace fuel lines as necessary 4, 5)		1	İ	İ		•
Check throttle and cable 3)	•			İ		
Check blade and cutter <sup>3)</sup>				İ		1
Check decals and warning signs 3)	•		1	İ		1
Check wear and tension on belts 3)			1	İ		1
Check chassis, bolts and set screws		•	1	İ		
Grease the blade bearings (use high temperature grease such as Mobilith SHC 220 or equal) <sup>6)</sup>						
Grease the wheels (standard lithium base)						
Check tire air pressure (25 psi max)					1	

• Refer to the engine manufacturer's Owner's Manual

- Described in this manual
- Not described in this manual

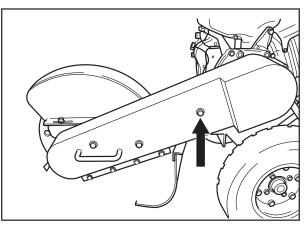
<sup>1)</sup>First change after 20 hours. <sup>2)</sup>In dusty conditions maintenance is required at shorter intervals. <sup>3)</sup>Before each use. <sup>4)</sup>Performed by authorized service workshop. <sup>5)</sup>Performed every second year. <sup>6)</sup>Grease every 4 hours.

## **Drive Belt**

1. Remove the belt guard by removing the three acorn nuts and lockwashers on the front of the belt guard.

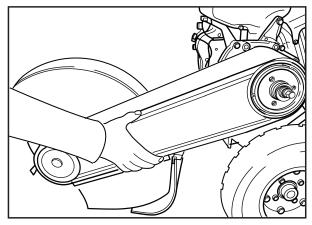
## WARNING!

Prevent the engine from being started by removing the ignition cable from the spark plug.



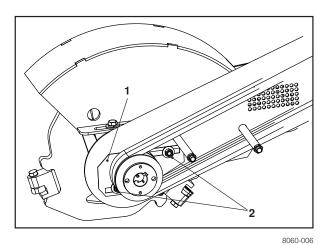
8011-226a

- Check that the belt is properly tensioned by squeezing the belt together. It should be possible to squeeze the belt down about <sup>1</sup>/<sub>4</sub> - <sup>3</sup>/<sub>8</sub>" (6 - 10 mm) from the original position.
- 3. Loosen screws holding cover plate to belt guard backing plate.



8011-227

4. Undo the two screws on each side of the cutting shroud.



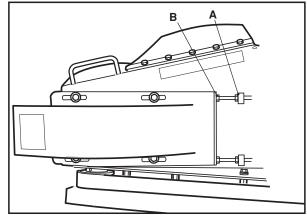
- 1. Cover plate
- 2. Screws

## MAINTENANCE

- 5. Loosen the locking nuts (A) on the two tension bolts.
- 6. Turn the two tension bolts (B) counter-clockwise to loosen the belt or clockwise to tighten it.

#### IMPORTANT INFORMATION

If pulley on cutter head shaft must be moved, the set screws MUST be fully removed, fresh Loctite 242<sup>®</sup> put on threads and retorqued to 100 - 110 in./lbs. (11.30 / 12.43 Nm).



8011-228

- Check that the pulleys are aligned using a straight edge along the inside face of the clutch and pulley. Pulleys must be in line. Maximum gap or misalignment is <sup>1</sup>/<sub>16</sub>" (.062) or 15.7 mm. Adjust using the tension bolts as necessary. Recheck belt tension.
- 8. Tighten all screws and nuts when the adjustment is complete. Be certain cover plate is not rubbing against cutter wheel shaft.
- 9. Refit the belt guard.

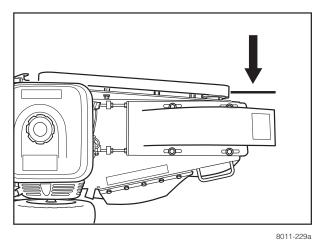


## WARNING!

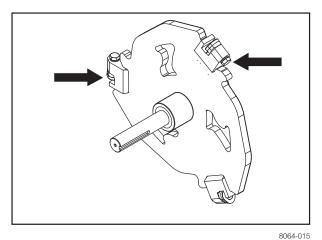
The cutters can come loose from the cutting wheel if the bolts are not sufficiently tight. Comply with the recommended torque settings.

## **Cutting Wheel**

Tighten the screws to 30 ft/lbs. (40.67 Nm). NOTE: The cutter teeth each have three cutting sides. Individual teeth may be repositioned twice before replacement is necessary.



Check clutch and pulley alignment using inside face



Tooth cutter (carbide face)

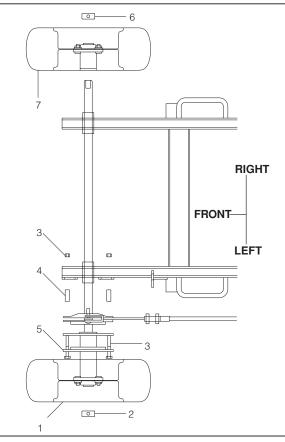
## **Removing/Refitting Wheels**

## Left Wheel

To remove the left wheel (1) from the stump grinder, remove the locking collar (2), the  $\frac{1}{4}$ " screws (3), the  $\frac{1}{4}$ " hex nuts (3), the springs (4) and the brake pad (5). The wheel can now be removed from the axle.

#### **Right Wheel**

To remove the right wheel (6), remove the locking collar (7) and slide the wheel off the axle.

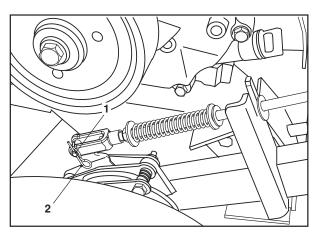


8011-217c

## **Brake Adjustment**

The overcenter-type handle activates the brakes. Undo clevis pin from brake and turn clockwise to tighten brake or counter clockwise to loosen.

Tighten so handle snaps down when locked but unlocks easily when handle is moved forward. Brake is properly adjusted when wheel will not turn when you try to push or pull unit.



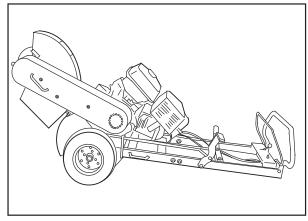
8060-041

Clevis pin
Hair pin

## **Two Minute Rule**

The machine may be tipped backward or on its side to facilitate access for cleaning or service, but no longer than two minutes.

If the machine is held in this position for too long, the engine can be damaged by gasoline draining into the crankcase. Should this happen, perform an extra oil change on the engine. Remove the spark plug and turn the engine over a few revolutions with the starter handle before starting the engine again.



8064-007

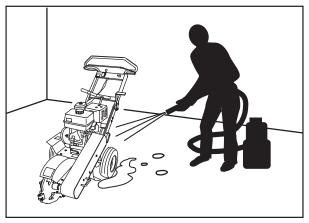
## Cleaning

Regular cleaning and washing will increase the machine's lifespan. Make it a habit to clean the machine directly after use, before the dirt sticks.

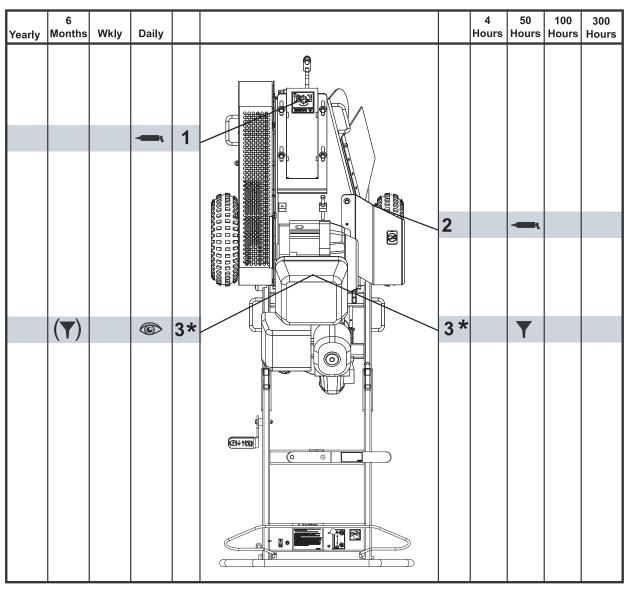
Check before rinsing that the fuel tank cap is properly in place to avoid getting water in the tank.

Use caution when using high-pressure spray because warning decals, instruction signs and the engine can be damaged. Do not exceed 1000 PSI / 70 bar water pressure when cleaning.

Lubricate the machine after cleaning. This is particularly important if the machine is to be stored.



8011-210c

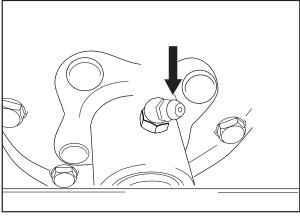


\* For maintenance of the engine, refer to the manufacturer's Owners Manual.

### **Right Wheel**

Some models may require lubrication of the right wheel. Lubricate using a grease gun until the grease squeezes out one nipple.

Use good quality MP grease. Grease from well-known brand names (petrochemical companies, etc.) usually maintains a good quality.

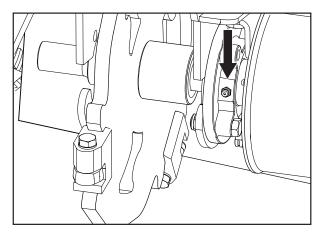


8011-231

### **Cutter Wheel Bearing**

Lubricate using a grease gun, one pump after each use.

Use good quality MP grease. Grease from well-known brand names (petrochemical companies, etc.) usually maintains a good quality.



8011-231

# TROUBLESHOOTING

PROBLEM	CAUSE	ACTION
Engine will not start		•
User error	Fuel valve closed Choke valve open Engine switch in OFF position	Open the fuel valve Close the choke with cold engine Turn the engine switch to ON
Fuel system	Fuel tank empty Machine stored without observing proper procedure from chapter "Storage/Winter storage" Contamination, water or ice in fuel system Carburetor problems	Fill with fuel Clean tank, sludge reservoir and empty carburetor Fill the tank with fresh fuel Clean tank, sludge reservoir and empty carburetor Fill the tank with fresh fuel Contact an authorized service workshop
Spark plug	Wrong spark plug type Build-up on electrodes Short circuit Gasoline or oil on the spark plug	Replace the spark plug Check electrode gap and clean or replace spark plug Clean the spark plug Air the engine out Start with full throttle
No spark after checking spark plug	Faulty engine switch, cable or ignition	Contact an authorized service workshop
Low compression	Serious interior engine damage or faulty valves	Contact an authorized service workshop
Engine is weak or runs unevenly		
Air filter	Clogged air filter	Clean or replace the air filter
Fuel system	Machine stored without observing proper procedure from chapter "Storage/Winter storage"	Clean tank, sludge reservoir and empty carburetor Fill the tank with fresh fuel
Blue or voluminous blue-white exhaust	Contaminated or incorrect fuel	Clean tank, sludge reservoir and empty carburetor Fill the tank with proper fuel
Black exhaust	Choke left on Clogged air filter Carburetor problems	Open choke valve Clean or replace the air filter Contact an authorized service workshop
Ignition system	Wrong spark plug type Build-up on electrodes Short circuit Faulty ignition unit	Replace the spark plug Check electrode gap and clean or replace spark plug Contact an authorized service workshop
Low compression	Serious interior engine damage or faulty valves	Contact an authorized service workshop

# TROUBLESHOOTING

PROBLEM	CAUSE	ACTION
Belt comes off		•
	Pulleys not aligned	Adjust belt tension
	Belt tension is insufficient	
Belt engages late or slip	s	- <b>I</b>
		Tighten the belt as described in the
		operator's manual
		Reduce cutting depth
Belt not staying tight after	er adjustment	
	Damaged axle, pulley or key	Replace damaged parts
		Make sure the setscrews are
		properly tightened
Cutting wheel does not i		
	Engine speed is insufficient to	Make sure the throttle cable is
	activate the centrifugal clutch Belt tension is insufficient	working properly
	Clutch is worn	Adjust belt tension
		Replace shoes and springs, and/or clutch bearings
Cutting wheel continues	to rotate	
	The engine speed is not under	Check for damage on the throttle
	1000 rpm, which is required to	cable
	disengage the centrifugal clutch	Check that the throttle cable is properly mounted on the throttle
		valve
		Inspect springs on clutch shoes,
		if tension on clutch shoes is not
		enough to pull shoes back, replace springs and clutch shoes
Parking brake slips	I	
a service on po		Adjust the brake tension in the
		manner described in the
		operator's manual
		Check for damage on the brake rod
		or lever
		Check for wear on the brake pads. replace as necessary

### Winter Storage

At the end of the season, the machine should be readied for storage (or if it will not be in use for longer than 30 days). Fuel allowed to stand for long periods of time (30 days or more) can leave sticky residues that can plug the carburetor and disrupt engine function.

Fuel stabilizers are an acceptable option as regards sticky residues during storage. If alkylate gasoline (Aspen) is used, stabilizers are unnecessary because this fuel is stable. However, you should avoid switching between regular and alkylate gasoline as sensitive rubber components can harden. Add stabilizer to the fuel in the tank or in the storage container. Always use the mixing ratios specified by the manufacturer of the stabilizer. Run the engine for at least 10 minutes after adding the stabilizer so that it reaches the carburetor. DO NOT empty the fuel tank and the carburetor if you have added stabilizer.

### Service

When ordering spare parts, please specify the purchase year, model, type, and serial number. Always use genuine Husgvarna parts.

An annual check-up at an authorized service workshop is a good way to ensure that your machine performs its best the following season.

To ready the machine for storage, follow these steps:

- 1. Clean the machine carefully, particularly the chassis and working equipment. Touch up damage to the paint to prevent rust.
- Inspect the machine for worn or damaged parts and tighten any nuts or screws that may have become loose.
- 3. Change the engine oil; dispose of properly.
- 4. Lubricate all grease nipples, joints and cables as described in Lubrication.
- 5. Store the machine in a clean, dry place and cover it for extra protection.
- 6. Cover the blade and cutters with a thin coat of oil to avoid rust.



#### WARNING!

NEVER store an engine with fuel in the tank indoors or in poorly ventilated spaces where fuel vapor can come in contact with open flame, sparks or a pilot light such as in a boiler, hot water tank, clothing drier, etc. Handle the fuel with caution. It is very flammable and careless use can cause serious damage to person and property. Drain the fuel into an approved container outdoors and far away from open flame. NEVER use gasoline for cleaning. Use a degreaser and warm water instead.

## **TECHNICAL DATA**

	SG13HB CE / 966042701
Engine	
Manufacturer	Honda
Cylinder Volume	337 cc (20.6 cu in)
Power	13 hp (9.2 kW at 3600 RPM)*
Torque	17.36 ft/lb / 23.54 Nm at 2500 RPM
Idling speed	1250-1550 RPM
Oil capacity including filter	2.2 qt / 2.1 liter
Spark plug	NGK BP6ES or BPR6ES
Fuel tank volume	1.7 gal. / 6.5 L
Chassis	
Tires	4.10-6 (12" pneumatic)
Brake	Disk - Lever activated
Drive	Direct
Belt	Dayco double V-belt
Clutch	Amsbeck or Noram centrifugal clutch
Cutting Wheel	14" dia. x <sup>3</sup> /8" thick disc (157.5 mm x 9.5 mm)
Cut Depth	Approx 10" (25.4 cm)
Dimensions	
Length	62"- 73" (157- 185 cm) depending on handle position
Width	27" (69 cm)
Height	24"- 43" (61 - 109 cm) depending on handle position
Weight	249 lb. (112.9 kg)
Vibration	
Daily Exposure	
Hand/Arm - A(8)	2.81 m/s <sup>2</sup>
Equivalent Vibration	
Hand/Arm - a <sub>hv,eq</sub>	3.97 m/s <sup>2</sup>
Standard Deviation	
Hand/Arm - ahv,eq	0.4 m/s <sup>2</sup>

\*The power rating of the engines indicated is the average net power output (at specified rpm) of a typical production engine for the engine model measured to SAE standard J1349/ISO1585. Mass production engines may differ from this value. Actual power output for the engine installed in the final machine will depend on the operating speed, environmental conditions and other variables.

## CONFORMITY CERTIFICATES

#### **USA Requirements**

Labels are placed on the engine and/or in the engine compartment stating that the machine will fulfill the requirements. This is also applicable to special requirements for any of the states, (California emission rules etc.). Do not remove any of these labels. Certificates can also be supplied with the machine at delivery or written in the Engine manual. Take care of them as they are valuable documents.

#### **CE Requirements**

The Declaration of Conformity is included as an addendum to the operators instructions.

#### Stump Grinder

Machine complies with: 2006/42/EC 2004/108/EC

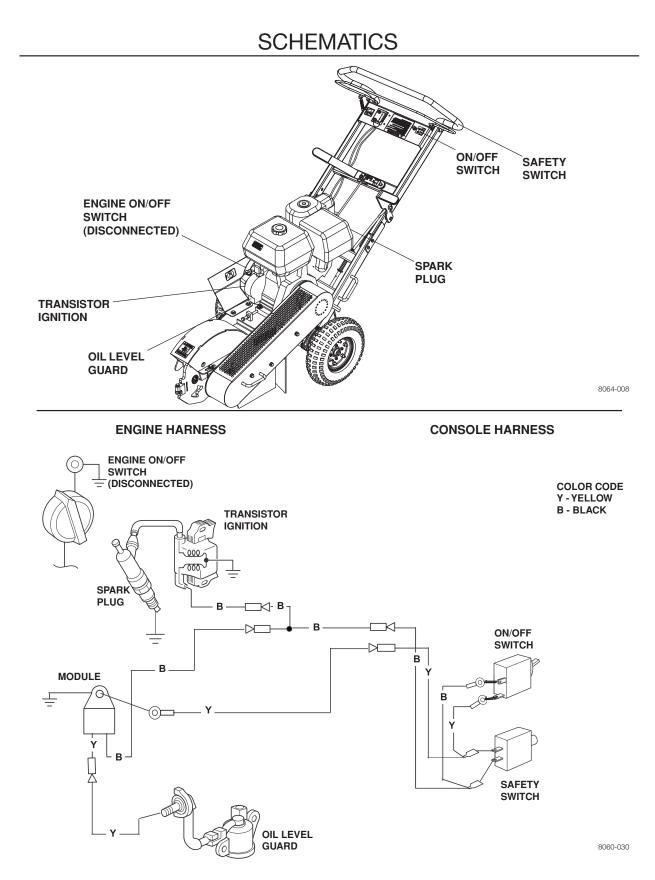
2000/14/EC

#### **Business Name & Address:**

Husqvarna Turf Care 401 North Commerce Beatrice, NE 68310 USA

### Notified Body:

TUV SUD Industrie Service GmbH Westendstrasse 199 D-80686 Muenchen



Act	ion	Date, stamp, signature
De	livery service	
1.	Open packaging and make sure machine has not been damaged in transport.	
2.	Where applicable, assembly accompanying components.	
3.	Check that machine design corresponds to customer order.	
4.	Check that right amount of oil is in engine and transmission.	
5.	Check and adjust air pressure in tires. (25 psi max.)	
6.	Check that working equipment is properly set.	
7.	Check drive pulleys and sprockets for alignment.	
8.	Check belts and chains for proper adjustment.	
9.	Lubricate the machine as described in the lubrication schedule.	
10.	Fill fuel tank and start engine.	
11.	Check that machine and working equipment do not move in neutral.	
12.	Check all operating instruments.	
13.	Check decals and information attached to unit.	
14.	Check engine speed (RPM), see Technical Data.	
15.	Check for leakage.	
16.	Inform the customer about:	
	The need and advantages of following the service schedule.	
	The need and advantages of leaving the machine for service every 300 hours.	
	The effects of service and maintaining a service journal on the machine's resale value.	
17.	Fill in the sales papers, etc.	
		Delivery service has been carried out.
		No remaining notes.
		Certified:
Af	ter the first 20 hours	
1.	Change engine oil.	
2.	Change oil in reduction gear, where applicable.	
З.	Check that belts and chains are properly adjusted.	
4.	Tighten screws and nuts.	

44

## SERVICE JOURNAL

Action	Date, stamp, signature
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Action	Date, stamp, signature
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