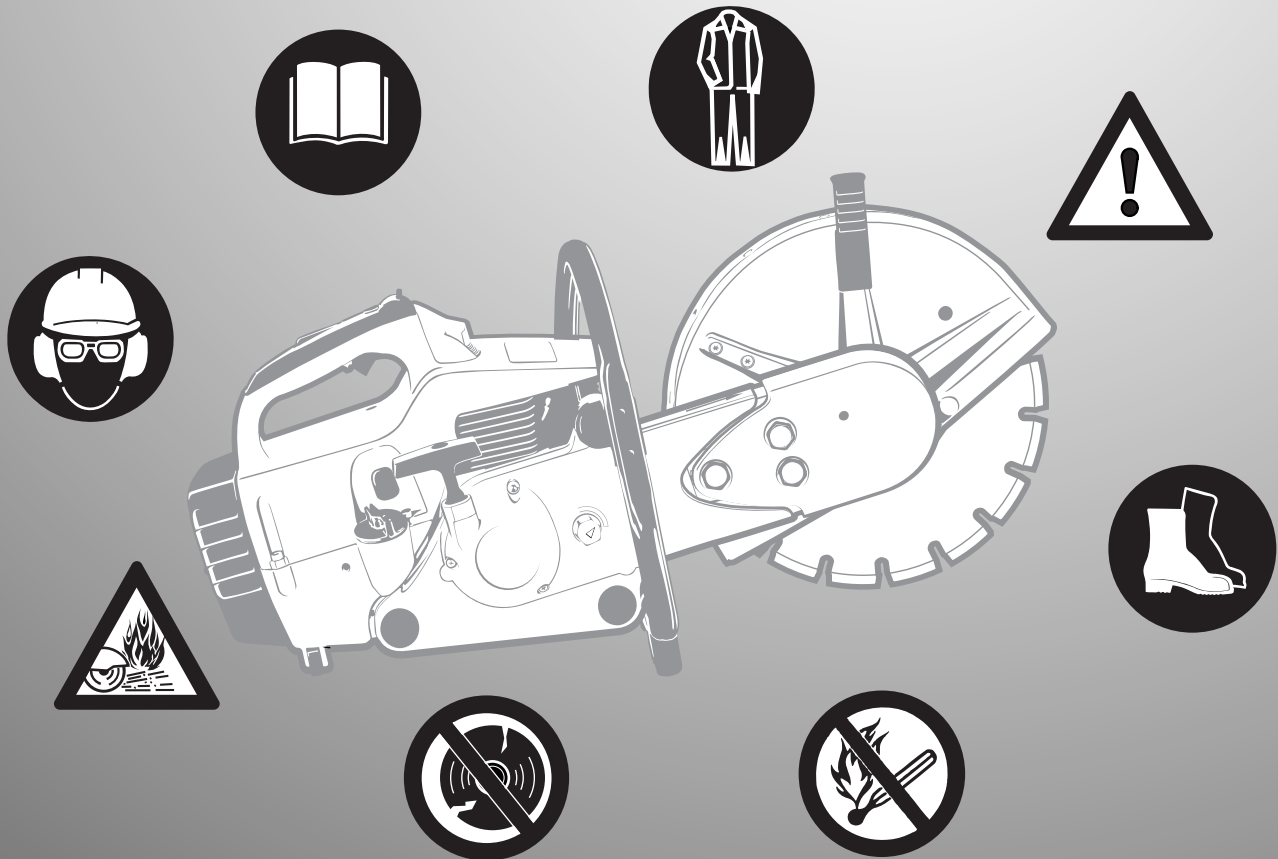


# Cut-off-Machine Safety Manual



## Contents



### Warning!

Because a cut-off-machine is a high-speed cutting tool, some special safety precautions must be observed to reduce the risk of personal injury.

Careless or improper use may cause serious or even fatal injury.

To receive maximum performance and satisfaction from your STIHL cut-off-machine, it is important that you read and understand the maintenance and safety precautions before using your cut-off-machine.

Please note that the illustrations on page 2 show the Cutquik<sup>®</sup> TS 460. Since other types may feature different main parts, it is important always to consult the owner's manual for the model concerned.

Contact your STIHL dealer or the STIHL distributor for your area if you do not understand any of the instructions in this manual.

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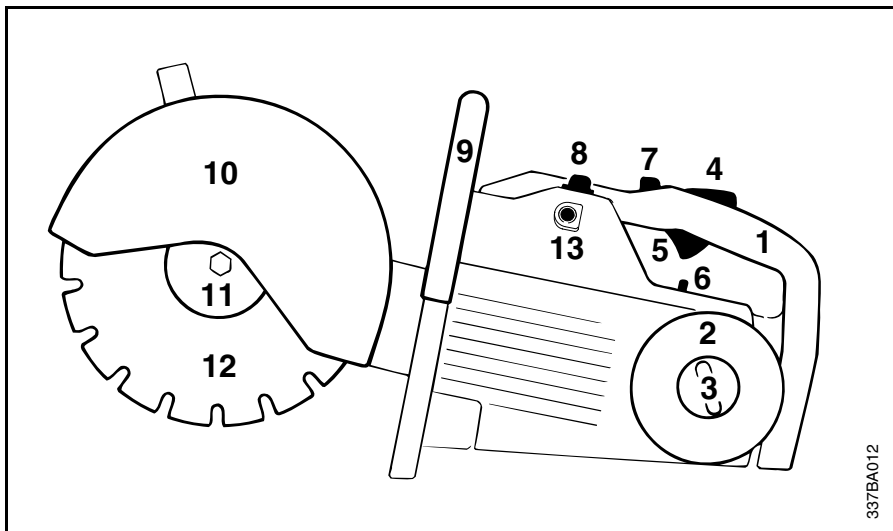
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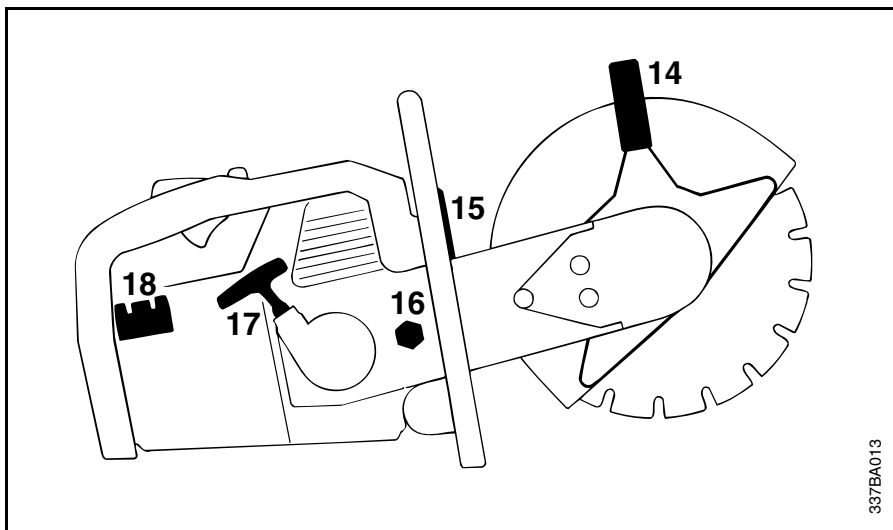
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**STIHL**<sup>®</sup>

## Main Parts of Cutquik®



- 1 = Rear Handle
- 2 = Air Filter
- 3 = Wingnut of Filter Cover
- 4 = Throttle Trigger Interlock
- 5 = Throttle Trigger
- 6 = Choke Lever
- 7 = Slide control
- 8 = Spark Plug Boot
- 9 = Front Handle
- 10 = Wheel Guard
- 11 = Thrust Washer
- 12 = Cutting Wheel
- 13 = Decompression valve



- 14 = Adjusting Lever of Wheel Guard
- 15 = Muffler
- 16 = Tensioning nut  
(V-belt tensing system)
- 17 = Starter Grip
- 18 = Fuel Filler Cap

## Definitions

1. **Rear Handle:**  
The support handle for the right hand.
  2. **Air Filter:**  
Prevents dust and foreign matter from entering the carburetor.
  3. **Wingnut of Filter Cover:**  
For removing filter cover; permits filter to be cleaned.
  4. **Throttle Trigger Interlock:**  
Must be depressed before activating the throttle trigger.
  5. **Throttle Trigger:**  
Controls the speed of the engine.
  6. **Choke Lever:**  
Eases engine starting by enriching mixture.
  7. **Slide Control:**  
Starting throttle lock and stop switch. Keeps the throttle partially open during starting, switches the engine's ignition off and stops the running of the engine.
  8. **Spark Plug Boot:**  
Connects the spark plug with the ignition wire.
  9. **Front Handle:**  
Handle bar for the left hand at front of cut-off-saw .
  10. **Wheel Guard:**  
Guards the wheel and deflects sparks.
  11. **Thrust Washer:**  
Distributes clamping pressure of mounting nut evenly over cutting wheel.
  12. **Cutting Wheel:**  
Can either be an abrasive wheel or a diamond cutting wheel.
  13. **Decompression Valve:**  
Makes starting easier.
  14. **Adjusting Lever of Wheel Guard:**  
To adjust the wheel guard in a way that the beam of sparks gets directed forward.
  15. **Muffler:**  
Attenuates exhaust noises and diverts exhaust gases in required direction.
  16. **Tensioning Nut:**  
For tensioning the V-belt.
  17. **Starter Grip:**  
The grip of the pull starter which is the device to start the engine.
  18. **Fuel Filler Cap:**  
For closing the fuel tank.
- Clutch:**  
Couples engine to the V-belt pulley when engine is accelerated beyond idle speed.  
(not illustrated)
- V-Belt Pulley:**  
The wheel that drives the V-belt and the cutting wheel.  
(not illustrated)

## Safety Precautions



The use of any cut-off machine may be hazardous. Because a cut-off machine is a high-speed, fast-cutting power tool, special safety precautions must be observed to reduce the risk of personal injury and fire.

It is important that you read, fully understand and observe the following safety precautions and warnings.



Read the Owner's Manual and the safety instructions periodically.

Careless or improper use of any cut-off machine may cause serious or fatal injury.

Have your STIHL dealer show you how to operate your cut-off machine.

Observe all applicable local safety regulations, standards and ordinances.



### **Warning!**

Minors should never be allowed to use a cut-off machine. Bystanders, especially children and animals should not be allowed in the area where a cut-off machine is in use. Never let the cut-off machine run unattended.

Do not lend or rent your cut-off machine without the Owner's Manual. Be sure that anyone using your cut-off machine understands the information contained

in this manual. Employers should establish a training program for operators of gasoline powered, hand held portable, cut-off machines to assure safe operation of these machines. These safety precautions and warnings apply to the use of all STIHL Cutquiks<sup>®</sup>.

Different models may have different parts and controls. See the appropriate section of your owner's manual for a description of the controls and function of the parts of your model cut-off machine.

Safe use of a cut-off machine involves

- the operator
- the cut-off machine
- the use of the cut-off machine.

## **THE OPERATOR**

### **Physical Condition**

You must be in good physical condition and mental health and not under the influence of any substance (drugs, alcohol, etc.) which might impair vision, dexterity or judgement. Do not operate a cut-off machine when you are fatigued. Be alert - if you get tired while operating your cut-off machine, take a break, tiredness may result in loss of control.

Working with any cut-off machine can be strenuous. If you have any condition that might be aggravated by strenuous work, check with your doctor before operating a cut-off machine.



### **Warning!**

Prolonged use of cut-off machines (or other machines) exposing the operator to vibrations may produce whitefinger disease (Raynaud's phenomenon) or carpal tunnel syndrome. These conditions reduce the hand's ability to feel and regulate temperature, produces numbness and burning sensations and cause nerve and circulation damage and tissue necrosis. All factors which contribute to whitefinger disease are not known, but cold weather, smoking and diseases or physical conditions that affect blood vessels and blood transport, as well as high vibration levels and long periods of exposure to vibration are mentioned as factors in the development of whitefinger disease. In order to reduce the risk of whitefinger disease and carpal tunnel syndrome, please note the following:

- Most STIHL cut-off machine models are available with an anti-vibration ("AV") system designed to reduce the transmission of vibrations created by the engine to the operator's hands. An AV system is recommended for those persons using cut-off machines on a regular or sustained basis.
- Wear gloves and keep your hands warm.
- Keep the AV system well maintained. A cut-off machine with loose components or with damaged or

worn AV buffers will tend to have higher vibration levels.

- Maintain a firm grip at all times, but do not squeeze the handles with constant, excessive pressures, take frequent breaks.

All the above mentioned precautions do not guarantee that you will not sustain whitefinger disease or carpal tunnel syndrome. Therefore continual and regular users should monitor closely the condition of their hands and fingers. If any of the above symptoms appear, seek medical advice immediately.

#### Proper Clothing



Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. Avoid loose-fitting jackets, scarfs,

neckties, jewelry, flared or cuffed pants, unconfined long hair or anything that could become caught on any obstacles or moving parts of the unit. Wear overalls or long pants to protect your legs. Do not wear shorts.



#### Warning!

When cutting metal, a cut-off machine generates sparks which can ignite clothing. Most fabrics used in clothing are flammable - even flame retardant fabrics will ignite at higher temperatures. To reduce the risk of burn injury STIHL recommends wearing clothing made of leather, wool, flame-retardant treated

cotton or a tightly woven, heavier cotton such as denim. Some flame-retardant synthetic fabrics are also suitable but others such as polyester, nylon, rayon and acetate can melt during fire into a tar-like matter that burns into the skin. Keep clothing free of oil, fuel, grease and other flammable substances.



Protect your hands with gloves when handling the cut-off machine. Heavy-duty, nonslip gloves improve your grip and protect your hands.



Good footing is most important in cut-off machine work. Wear sturdy boots with nonslip soles. Steel-toed safety

boots are recommended.



#### Warning!

Loose objects may be thrown toward the operator by the cutting tool.



To reduce the risk of injury to your eyes never operate a cut-off machine unless wearing goggles or properly fitted safety

glasses with adequate top and side protection complying with ANSI Z 87.1. Proper eye protection is a must.

Wear an approved safety hard hat to protect your head. cut-off machine noise may damage your hearing.

Always wear sound barriers (ear plugs or ear mufflers) to protect your hearing. Regular users should have their hearing checked regularly.



#### Warning!

Cutting masonry, concrete and other materials may create dust. Many types of dust are dangerous when breathed and can cause serious or fatal injury or illness, such as respiratory disease or cancer. If you are unfamiliar with the risks associated with the particular dust at issue, review the material safety data sheet for the material being cut and/or consult your employer, the material manufacturer/supplier, governmental agencies such as OSHA and NIOSH and other sources on hazardous materials.

California and some other authorities, for instance, have published lists of substances known to cause cancer, reproductive toxicity, etc. Control dust at the source where possible. In this regard use good work practices and follow the recommendations of the manufacturer/supplier, OSHA/NIOSH, and occupational and trade associations. A water attachment kit is available for your cut-off machine and should be used for dust suppression when wet cutting is feasible. When dust can not be eliminated, the operator and any bystanders should always wear a respirator approved by NIOSH/MSHA for the material being cut.



### **Warning!**

Cutting masonry, concrete and other materials with silica in their composition may give off dust containing crystalline silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory disease, including silicosis. In addition, California and some other authorities have listed respirable crystalline silica as a substance known to cause cancer. When cutting such materials, always follow the respiratory precautions mentioned above.



### **Warning!**

Breathing asbestos dust is dangerous and can cause severe or fatal injury, respiratory illness or cancer. The use and disposal of asbestos containing products have been strictly regulated by OSHA and the Environmental Protection Agency. Do not use your cutting-off machine to cut or disturb asbestos, asbestos containing products, or products such as pipes which are wrapped or covered with asbestos insulation. If you have any reason to believe, that you might be cutting asbestos, immediately contact your employer or a local OSHA representative.

## **THE CUT-OFF MACHINE**

Parts of the cut-off machine, illustrations and definitions of the parts see pages 2 and 3.



### **Warning!**

Never modify a cut-off machine in any way. Only attachments supplied by STIHL or expressly approved by STIHL for use with the specific STIHL cut-off machine models are authorized. Although certain unauthorized attachments are useable with the STIHL powerhead, their use may, in fact be extremely dangerous.



### **Warning!**

Dust may collect on the powerhead, especially around the carburetor and may collect gasoline resulting in danger of fire. Clean dust from the powerhead regularly.

### **Abrasive wheels**



### **Warning!**

Before assembling your cutting wheel make sure that the maximum operating wheel speed is above or equal to the spindle speed of your cut-off machine as provided in the Specifications of this manual.

Abrasive wheels for free-hand cutting are subjected to particularly high bending and compressive stresses.



### **Warning!**

Unauthorized wheels may shatter or break. Use only STIHL wheels or other authorized wheels with approved RPM ratings.



Inspect the abrasive wheel frequently and replace immediately if the abrasive wheel is cracked or warped. Cracked or

warped wheels may shatter or break and cause serious personal injury.

Out-of-round or unbalanced abrasive wheels increase vibration and reduce the service life of the cut-off machine. Use STIHL wheels approved for this unit. Abrasive wheels are heat sensitive.

Always store your cut-off machine in a place where the cutting wheel is not exposed to direct sunlight or other sources of heat. Store spare cutting wheels in a dry place where there is no risk of frost damage. Failure to follow these directions may cause the wheel to shatter or crack in use causing serious or fatal injury.



### **Warning!**

Never use carbide-tipped, wood-cutting or circular saw blades. They can cause

severe personal injury from reactive forces, blade contact or thrown objects. Your STIHL dealer stocks a range of special abrasive wheels for the many applications of the cut-off machine.



### **Warning!**

Use of the wrong abrasive wheel or material for which it was not designed may cause that wheel to shatter causing serious or fatal injury.

Only use the abrasive wheel approved for the type of material to be cut. There are different abrasive wheels each specially marked, for example:

1. Stone  
Also can be used for concrete, masonry, reinforced concrete and brick cutting.
2. Steel  
Can be used for all ferrous metal cutting.
3. Asphalt  
Also can be used for aggregate concrete cutting.
4. Ductile iron  
Also can be used for certain grades of cast iron (SG 17-24), bronze and copper cutting.

For cutting composite materials please ask your STIHL dealer.

## **Diamond abrasive wheels**

Diamond abrasive wheels have a much better cutting performance than the abrasive wheels. The wheels are steel centered and diamond particles are imbedded in their cutting edges.

They can be used for concrete, asphalt, natural stone, clay pipe, brick and the like.

They are not suitable for cutting metal or other materials.

Wet or dry cutting is possible. With wet cutting you get a longer life of your wheel. Water attachments are available for your STIHL cut-off machine. See the appropriate section of your owner's manual.



### **Warning!**

Do not remount a used diamond abrasive wheel without first inspecting for under-cutting, flatness, core fatigue, segment damage or loss, signs of overheating (discoloration) and possible arbor hole damage. Check the wheel for cracks and make sure that no pieces have broken off the wheel before use.

Always fit the wheel so that the arrow on the wheel points in direction of the rotation of the spindle.

## **THE USE OF THE CUT-OFF MACHINE**

### **Transporting the Cutquik™**



#### **Warning!**

Always stop the engine before putting a cut-off machine down or carrying it. The abrasive wheel continues to rotate for a short while after the throttle trigger is released (flywheel effect). Carrying a cut-off machine with the engine running is extremely dangerous. Accidental acceleration of the engine can cause the wheel to rotate. Avoid touching the hot muffler.

By hand: When carrying your cut-off machine by hand, the engine must be stopped and the cut-off machine must be in the proper position. Grip the front handle and place the muffler at the side away from the body.



#### **Warning!**

Always protect the cutting wheel from hitting the ground or any other objects. Damaged wheels may shatter and cause serious or fatal injury.

**By vehicle:** Properly secure your cut-off machine to prevent turnover, fuel spillage and damage to the cut-off machine.

**Never transport with cutting wheel mounted.**



A wheel damaged during transportation may shatter during operation and cause serious personal injury.

### Preparation for the use of the cut-off machine

For assembly, follow the procedure described at the appropriate section of your owner's manual.

Before operation of your cut-off machine be sure the controls (e.g. throttle trigger, stop switch.) and the safety devices are working properly, the carburetor idle and maximum speed are correctly adjusted, and the wheel guard is in place and securely fastened to your unit. All wheels should be carefully inspected for good condition before mounting.



Adjust the wheel guard so that sparks, dust and cut material are deflected away from the operator, and cannot reach flammable surroundings. See operating instructions of your owner's manual.

Never operate a cut-off machine that is damaged, improperly adjusted or not completely and securely assembled. Inspect for safety in operation.

Proper tension of the V-belt is important. In order to avoid a false setting the tensioning procedure must be followed as described in your Manual. Always

make sure the hexagonal collar nuts for the cast arm are tightened securely. Check V-belt tension after one hour of operation and correct if necessary.



### Warning!

(for TS 350 and TS 360 only)

The STIHL TS 350 and TS 360 Cutquik<sup>®</sup> is supplied with a fuel filler elbow connector to facilitate easier refueling. Always keep the connector and fuel filler cap tightened and properly sealed. A loose or improperly seated connector or cap may vibrate loose during operation causing fuel spillage which may result in a fire which can cause serious or fatal injury. Never operate the unit with a cracked, broken or improperly seated or adjusted filler neck. This could permit fuel leakage and lead to fire. Do not fill tank above the threefourths level of the neck entry diameter into the tank. Do not fill tank above the "max" line on the fuel filler elbow. Overfilling reduces the room in the tank for fuel expansion and may lead to fuel spillage through the tank vent and risk of fire.

### Fueling

Your STIHL cut-off machine uses an oil-gasoline mixture for fuel (see chapter "Fuel" of your owner's manual.).



### Warning!

Gasoline is an extremely flammable fuel. If spilled or ignited by a spark or

other ignition source, it can cause fire and serious burn injury or property damage. Use extreme caution when handling gasoline or fuel mix. Do not smoke or bring any fire or flame near the fuel.

### Fueling Instructions

Fuel your cut-off machine in well-ventilated areas, outdoors only. Always shut off the engine and allow it to cool before refueling. Relieve fuel tank pressure by loosening the fuel cap slowly.

Select bare ground for fueling and move at least 10 feet (3 m) from fueling spot before starting the engine. Wipe off any spilled fuel and check for leakage.



### Warning!

If fuel gets spilled on clothes, especially trousers, it is very important to change clothes immediately. Do not rely upon evaporation. Flammable quantities of fuel may remain on clothes after a spill for longer than expected. Cutting metal with cut-off machine when clothes are wet or damp from gasoline is extremely dangerous as the operator's clothes might catch fire and cause serious or fatal injury.

Always make sure that the fuel cap is tightened securely. Check for fuel leakage while refueling and during operation. If a fuel leak is suspected, do

not start or run the engine until leak is fixed and spilled fuel has been wiped away.

 **Warning!**

Unit vibrations can cause an improperly tightened fuel cap to loosen or come off and spill quantities of fuel.



In order to reduce risk of fuel spillage and fire, tighten fuel cap by hand with as much force as possible.

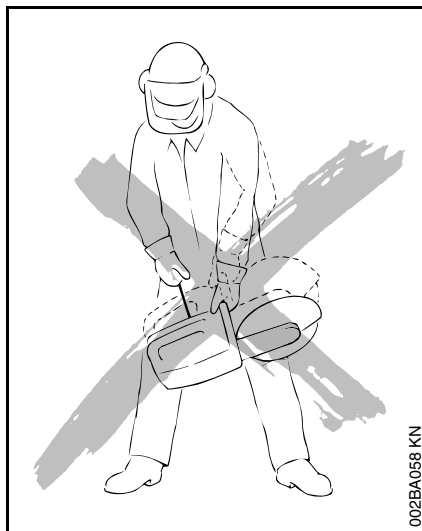
The screw driver end of the STIHL combination wrench or other similar tool can be used as an aid in tightening slotted fuel caps.

## Starting

 **Warning!**

Your cut-off machine is a one-person tool. Do not allow other persons to be near the cut-off machine. Start and operate your cut-off machine without assistance. For specific starting instructions, see the appropriate section of your owner's manual.

Do not drop start. This method is very dangerous because you may lose control of the cut-off machine. Place the cut-off machine on firm ground or other solid surface in an open area.



Maintain a good balance and secure footing. Be absolutely sure that the cutting wheel is clear of you and all other obstructions and objects, including the ground; because when the engine starts at starting-throttle, engine speed will be fast enough for the clutch to engage V-belt pulley and turn the wheel. Never attempt to start the cut-off machine when the abrasive wheel is in a cut. When you pull the starter grip, don't wrap the starter rope around your hands. Do not allow the grip to snap back, but guide the starter rope slowly back to permit the rope to rewind properly. Failure to follow this procedure may result in injuries to hand or fingers and may damage the starter mechanism. Always stop the engine and be sure the

wheel has stopped rotating before setting down the cut-off machine.

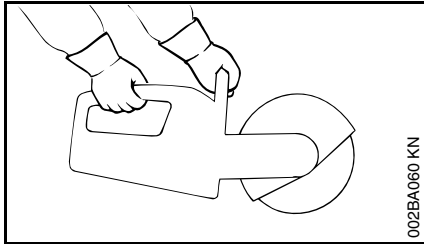
## Working Conditions

Operate the cut-off machine under good visibility and daylight conditions only.

 **Warning!**

Your cut-off machine produces poisonous exhaust fumes as soon as the combustible engine is running. These gases (e.g. carbon monoxide) may be colorless and odorless.

To reduce the risk of serious or fatal injury from breathing toxic fumes, never run the cut-off machine indoors or in poorly ventilated locations. Ensure proper ventilation when working in trenches or other confined areas.



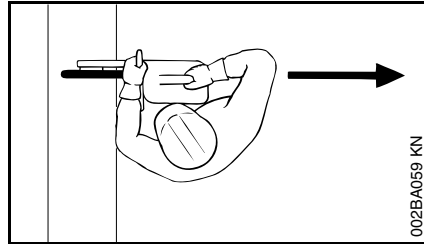
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Never use the cut-off machine with one hand. Your STIHL cut-off machine is designed for hand-held use or operation on a cut-off machine cart. Cutting with your cut-off machine resting on the ground or other surface can cause excessive wear to the bracket designed to protect the bottom of the tank housing. Loss of fuel and personal injury from fire may result. Replace damaged or badly worn brackets immediately.

**Grip:** Always hold the cut-off machine firmly with both hands when the engine is running. Place your left hand on front handle bar and your right hand on rear handle and throttle trigger.

Left-handed users should follow this instruction too.

Wrap your fingers tightly around the handles, keeping the handles cradled between your thumbs and forefingers. Make sure your cut-off machine handles and grip are in good condition and free of moisture, pitch, oil or grease.



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Avoid standing in direct line with the wheel.



**Warning!**

Take extreme care in wet and freezing weather (rain, snow, ice). Clear the area where you are working.



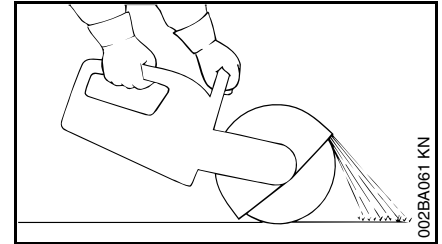
**Warning!**

Avoid stumbling on obstacles and watch out for holes or ditches. Be extremely cautious when working on slopes or uneven ground.



**Warning!**

Never operate the cut-off machine with the starting-throttle lock engaged as this does not permit proper control of the speed of the unit and may lead to serious injury.



002BA061 KN



**Warning!**

Sparks from cutting metal can burn or cause clothing to catch fire. Don't use a cut-off machine on flammable ground. Always direct sparks away from the operator or any flammable surroundings.



**Warning!**

To reduce the risk of injury from fire, do not cut into any pipe, drum or other container without first insuring that it does not contain volatile or flammable substance.

**Operating Instructions**



**Warning!**

The wheel guard is adjustable. It is extremely important that the wheel guard is in place and set to suit the type of work and your stance. The guard should always be adjusted so that the user is not endangered by particles of the material being cut, sparks or pieces of damaged wheels either directly or by

ricochet. Failure to follow this instruction could result in serious or fatal injury. The ideal working speed of the cut-off machine depends on many factors, e. g., the material being cut, the type and quality of the cutting wheel.

It is essential to determine the direction of the cut exactly before applying the abrasive wheel to the work. Wheels are constructed for **radial** pressure only. **Lateral** pressure must be avoided.

Check for cracks and make sure that no pieces have broken off from the wheel when it is stopped.

Check the wheel guard for cracks. If you discover any cracks, fit a new guard.



#### **Warning!**

Hold the cut-off machine steady. Do not change the direction of the cut during the cut as this may produce a high torsional load on the abrasive wheel and may cause it to break or shatter.

To achieve a clean and efficient cut, pull the abrasive wheel across the work or move it "to and fro" in the cutting direction. Do not use force to push the abrasive wheel into the work.

Insert the wheel into the material only as deep as necessary to make the cut. To reduce the amount of dust created, do not cut all the way through stone and concrete materials - leave a thin piece uncut. For most such materials, this

piece can be easily broken afterwards. Do not cock, jam or wedge the wheel in the cut.



#### **Warning!**

Do not use abrasive wheels for rough grinding. Large bending stresses occur during such work and abrasive wheels may shatter or break and could cause serious or fatal injury.

If a cut-off machine cart is used, sweep debris from the path of the wheels as such may cause flexing of the abrasive wheel. This would result in high frictional forces and thus greatly reduce the engine power available for the actual cutting work.

Always use the cart to cut in a straight line.

#### **Wet cutting with abrasive wheels**

When cutting masonry with a water attachment:

1. Make certain water does not flow on wheel that is not running, since the wheel will absorb water and that will affect wheel balance.
2. Shut water off before wheel stops so that excess water will be dissipated.

3. Be certain water is applied to both sides of wheel, since uneven distribution can cause "one sided" wear with possible wheel breakage.
4. Use these wheels up the same day. Do not store and reuse a wheel that has been used with water.

#### **Important Adjustments**

At correct idle speed, wheel should not turn. For direction to adjust idle speed, see the appropriate section of your owner's manual.

Do not use a cut-off machine with incorrect idle speed adjustment. The rotating wheel may cause injury.

Have your STIHL dealer check your cut-off machine and make proper adjustments or repairs.

Never touch a rotating wheel with your hand or any part of your body.

#### **Reactive forces**



#### **Warning!**

Reactive forces may occur at any time the cutting wheel on at cut-off machine is rotating. If the wheel is slowed or stopped by frictional contact with any solid object or by a pinch, reactive forces may occur instantly and with great force.

These reactive forces may result in the operator losing control of the cut-off machine, which may, in turn, result in serious or fatal injury.

An understanding of the causes of these reactive forces may help you avoid loss of control. Reactive forces are exerted in a direction opposite to the direction in which the wheel is moving at the point of contact or pinch.

Pull-away, climbing and rotational forces.

The most common reactive forces are pull-away and climbing. If the contact is at the bottom of the wheel, a cut-off machine will try to pull away from the operator (pull-away). If the contact is at the front of the wheel, the wheel may attempt to climb the object being cut (climbing). If the wheel is severely pinched at the front, the wheel may be instantly thrown up and back towards the operator with a great force in a rotational motion. The greater the force generated, the more difficult it will be for the operator to control the cut-off machine. Any of the reactive forces can, in some circumstances, cause the operator to lose control of a cut-off machine, allowing the rotating wheel to come into contact with the operator. Severe personal injury or death can result.

Use only cutting attachment authorized by STIHL. **Never** use chipped abrasive

wheels, circular saw blades, carbide tipped blades, rescue blades or wood-abrasive or toothed blades of any nature on a cut-off machine. The use of such wheels or blades will greatly increase the risk of loss of control and severe personal injury or death from reactive forces, since the chipped section of an abrasive wheel, or the teeth of a saw blade may catch in the material being cut and generate substantially greater reactive forces.

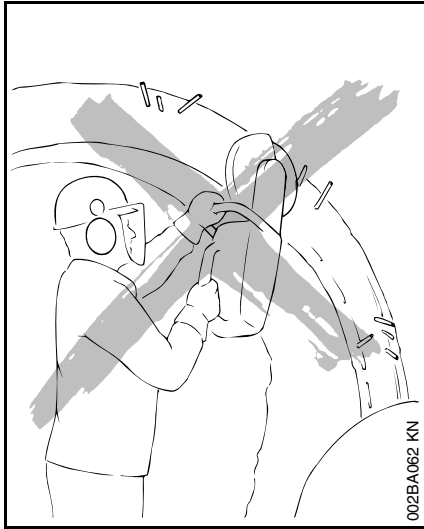
Cut-off machines are designed for use with abrasive wheels in good condition **only**. Machines designed for use with wood-abrasive or other toothed blades use different types of guarding systems which provide the protection necessary for those types of blades. Machines, such as a cut-off machine, which are designed for use with abrasive abrasive wheels, require a different guarding system which is not designed to provide protection against all dangers presented by circular saw blades, carbide-tipped blades, rescue blades or wood-abrasive or toothed blades of any nature.



### **Warning!**

To reduce the risk of injury from loss of control or from the shattering of an abrasive wheel:

1. Hold the cut-off machine firmly with both hands.
2. Maintain good balance and footing at all times. Never cut while standing on a ladder.
3. Do not exceed the maximum operating speed marked on the wheel.
4. Do not use a wheel that has been dropped.
5. Never use circular saw blades, carbide-tipped blades, rescue blades, wood-abrasive blades or toothed blades of any nature. Their use increases the risk of injury from reactive forces, blade contact and thrown tips.
6. Do not cut any material for which the abrasive wheel is not authorized.
7. Position the cut-off machine in such a way that your body is clear of the abrasive attachment.
8. Begin abrasive and continue at full throttle.
9. Do not overreach.



10. Do not cut above shoulder height.
11. Use your cut-off machine for abrasive only. It is not designed for prying or shoveling away any objects.
12. Do not grind on side of the abrasive wheel.
13. Do not twist, thrust, knock or drop the machine. This can cause damage to the wheel.
14. Be especially alert for reactive forces when abrasive with the front of the wheel.

15. Be alert to shifting of the work piece or anything that could cause the cut to close and pinch the wheel.
16. Release the pressure on the cut-off machine as you reach the end of the cut. Too much pressure may cause the operator to lose control of the cut-off machine when the abrasive wheel completes the cut. The abrasive wheel may contact the operator or strike some foreign object and shatter.
17. Use extreme caution when re-entering a cut and do not turn the wheel at an angle or push the wheel into the cut as this may result in a pinching of the wheel.

#### **MAINTENANCE, REPAIR AND STORING OF THE CUT-OFF MACHINE**

Never operate a cut-off machine that is damaged, improperly adjusted or not completely or securely assembled.

Follow the maintenance and repair instructions in the appropriate section of your owner's manual.

Use only STIHL replacement parts for maintenance and repair. Use of parts manufactured by others may cause serious or fatal injury.

#### **Warning!**

Always stop the engine and make sure that the wheel is stopped before doing any maintenance or repair work or cleaning the cut-off machine. Do not attempt any maintenance or repair work not described in your owner's manual. Have such work performed at your STIHL service shop only.

Clean grinding dust after finishing work. Empty the fuel tank before storing for longer than a few days.

Fuel may only be stored in correctly labeled and approved containers. Avoid direct skin contact and do not in-hale the petrol vapours.

Keep the handles dry, clean and free of oil and fuel. Tighten all nuts, bolts and screws except the carburetor adjustment screws after each use.

#### **Warning!**

Never test the ignition system with ignition wire terminal removed from spark plug or with unseated spark plug, since uncontained sparking may cause a fire.

#### **Warning!**

To reduce the risk of fire and burn injury, use only spark plugs authorized by STIHL. Always press spark plug boot

snugly onto spark plug terminal of the proper size. (Note: If terminal has detachable SAE adapter nut, it must be attached.) A loose connection between spark plug terminal and ignition wire connector in the boot may create arcing that could ignite combustible fumes and cause a fire. Keep spark plug clean, and make sure ignition lead is in good condition.



**Warning!**

Do not operate your cut-off machine if the muffler is damaged, missing or modified. An improperly maintained muffler will increase the risk of fire and hearing loss.

Never touch a hot muffler or burn will result. If your muffler was equipped with a spark-arresting screen to reduce the risk of fire (e. g. in the USA, Canada and Australia), never operate your cut-off machine if the screen is missing or damaged.

Store spare wheels on a flat surface in a dry place preferably at a constant temperature where there is not risk of frost, preferably at a constant temperature. Store cut-off machine in a high or locked place, away from children.

Do not store a cut-off machine with a wheel mounted on the machine.

# Maintenance Chart

<b>Please note:</b> Different models may have different parts and controls.		Before starting work	After work or daily	Every time after refuelling	Weekly	Monthly	In the event of a malfunction	If damaged	As required
Complete machine	Visual inspection (condition, absence of leaks)	x		x					
	Clean		x						
Throttle trigger, throttle trigger interlock, slide control	Functional test	x		x					
Filter in fuel tank	Check					x			
	Replace						x		
Fuel tank	Clean					x			
V-belt	Clean					x			
	Replace							x	x
Air filter (prefilter, auxiliary filter)	Clean	x					x		
Air filter (all filter components)	Replace							x	x
Cooling air intake ports	Clean		x						
Cylinder fins	Clean		x						
Spark arresting screen in the muffler	Inspect		x						
	Clean or replace								x
Carburetor	Check idle speed - the cutting wheel must not run on	x		x					
	Adjust idle speed								x
Spark plug	Adjust electrode gap						x		
Accessible nuts and bolts (but not adjusting screws)	Retighten								x
Rubber buffer (AV element)	Check				x				
	Have replaced by the STIHL customer service							x	
Cutting wheel	Check	x		x					
	Replace							x	x
Support/Bracket/Rubber buffer (Bottom side of unit)	Check		x						
	Replace							x	x



