

CONCRETE CHOP SAW TS 420 SAFE WORK PRACTICES

APPROVED AUGUST 19 2014

English

The machine may only be used for cutting. It is not suitable for cutting wood or wooden objects.

Asbestos dust is extremely toxic - the machine must therefore **never be used to cut asbestos!**

Other uses are not permitted and may lead to accidents or damage to the machine.

Never modify the machine in any way, as this could be extremely dangerous. STIHL excludes all liability for personal injury and damage to property caused while using unauthorized attachments.

Only use cutting wheels and attachments which have been approved by STIHL for this machine or which are technically equivalent. Contact a dealer if in doubt. Only use high-quality cutting wheels and attachments. Otherwise there may be a risk of accidents or damage to the machine.

STIHL recommends the use of genuine STIHL cutting wheels and attachments. These have been optimized for the product and the user's requirements.

Do not use high-pressure cleaners to clean the machine. The hard water jet can damage parts of the machine.

Do not spray the machine with water.



Never use circular saw blades, carbide, rescue or wood cutting attachments or saws of any kind – **these may cause fatal injuries!** Instead of uniformly removing particles as when cutting with a cutting wheel, the teeth of a circular saw blade may snag in the material. This causes the machine to react in a highly aggressive manner with uncontrolled and extremely dangerous kickback.

Clothing and equipment

Wear proper protective clothing and equipment.



Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. Wear snug fitting clothing with cut-retardant pads – an over-all, not a loose-fitting jacket.

When cutting steel, always wear clothing made of barely flammable material (e.g., leather or cotton with flame-retardant finish) – no manmade fibers – **risk of fire due to flying sparks!**

Ensure that there are no flammable deposits (chips, fuel, oil, etc.) on the clothing.

Do not wear clothing that could become trapped in moving parts of the machine – no scarves, no neckties, no jewelry. Long hair must be tied up and covered.



Wear **safety boots** with steel toe caps and non-slip soles.



Wear a **hard hat** wherever there is any risk of falling objects. Wear a face shield and always wear **safety glasses** – danger due to flying objects.

A face mask alone is not sufficient to protect the eyes.

Dust (e. g., crystalline material from the object being cut), fumes and smoke may be produced while cutting - **health hazard!**

Always wear a **dust mask** if dust is generated.

If fumes or smoke are anticipated (e. g., when cutting composite materials), wear **respiratory protection**.

Wear "personal" **hearing protection** – e. g., ear defenders.



Wear **heavy-duty, non-slip gloves** – preferably made of leather.

STIHL can supply a comprehensive range of protective clothing and equipment.



The permissible speed of the cutting wheel must be equal to or greater than the maximum spindle speed of the cut-off machine! Refer to the chapter "Specifications".

Before fitting a used cutting wheel, check that it is not cracked, chipped, or uneven, and does not display any signs of core fatigue or overheating (discoloration); check also that there are no damaged or missing segments and that the spindle bore is not damaged.

Never use a chipped, cracked or warped cutting wheel.

Substandard and/or unapproved diamond cutting wheels can shimmy during cutting. This shimmying can cause such diamond cutting wheels to be abruptly braked or become stuck in the cut – **Danger of kickback!**

Kickback can result in fatal cuts!

Diamond cutting wheels that shimmy constantly or even only intermittently must be replaced immediately.

Never straighten diamond cutting wheels.

Never use a cutting wheel that has been dropped – a damaged cutting wheel may break – **risk of accident!**

Observe the use-by date where resin cutting wheels are concerned.

Mounting cutting wheels

Check the cut-off machine spindle, do not use cut-off machines with damaged spindles – **risk of accident!**

Note the arrows indicating the direction of rotation on diamond cutting wheels.

Position front thrust washer – tighten tensioning nut – turn cutting wheel by hand, in the process making a visual inspection for radial and axial runout.

Storing cutting wheels

Store cutting wheels in a dry, frost-free place, on a flat surface, at constant temperatures – **danger of breakage and shattering!**

Always protect cutting wheels against sudden impact with the floor or objects.

Before starting

Check that the cut-off machine is in good condition - refer to the corresponding chapters in the Instruction Manual:

- The cutting wheel must be suitable for the material to be cut. It must be in good condition and fitted correctly (direction of rotation, securely seated).
- Check that the deflector is secure - consult a STIHL servicing dealer if it is loose
- The throttle trigger and throttle trigger interlock must move easily – throttle trigger must return automatically to the idle position when released
- Slide control / master control / stop switch must move easily to **STOP** or **0**
- Check that the spark plug boot is secure. A loose boot can lead to flying sparks which may ignite the escaping fuel/air mixture – **risk of fire!**

- Never attempt to modify the controls or safety devices
- Keep the handles dry and clean – free from oil and dirt – for safe control of the cut-off machine

The machine should only be used if it is in good working order – **risk of accident!**

Starting the engine

Move at least 3 meters away from the place at which the machine was refueled and never start the machine in enclosed spaces.

The machine may only be used on level ground. Ensure a firm and secure footing and hold the machine firmly. The cutting wheel must not touch any objects or the ground and must not be in the cut.

The cutting wheel may begin to rotate as soon as the machine is started.

The machine is operated by only one person. There should not be any other person within the working area, not even when starting the machine.

Do not drop-start the engine – start as described in the Instruction Manual.

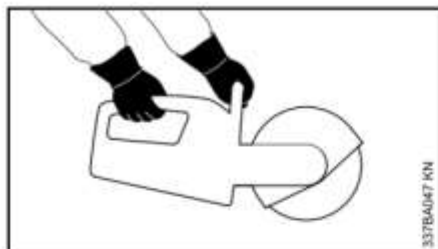
The cutting wheel continues to run for some time after the throttle trigger has been released – **Risk of injury due to coasting effect!**

Holding and guiding the machine

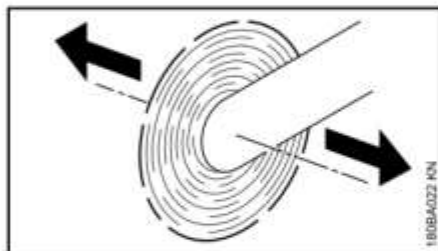
The cut-off machine may only be used for freehand cutting or when mounted on a STIHL cut-off machine cart.

English

Hand-held cutting



Always hold the machine **firmly with both hands**: Right hand on the rear handle – even if you are left-handed. To ensure reliable control, wrap your thumbs tightly around the handlebar and handle.



When a cut-off machine with rotating cutting wheel is moved in the direction of the arrow, a force is produced which causes the machine to tip sideways.

The object that is to be cut must be positioned firmly; always guide the machine to the workpiece – never vice versa.

Cut-off machine cart

STIHL cut-off machines can be mounted on a STIHL cut-off machine cart.

Deflector

The adjusting range of the deflector is determined by a stop pin. Never attempt to push the deflector over the stop pin.



Set the deflector correctly for the cutting wheel: so that particles of material are guided away from the user and machine.

Note the direction in which the cut particles are ejected.

During work

In the event of impending danger or in an emergency, switch off the engine immediately by moving the slide control / master control / stop switch to **STOP** or **0**.

Check for correct idling, so that the cutting wheel is no longer driven when the throttle trigger is released and comes to a complete halt.

Check and/or correct the idle setting regularly. Have the machine repaired by a STIHL servicing dealer if the cutting wheel continues to turn nevertheless.

Ensure that the working area is clear – watch out for obstacles, holes and pits.

Beware of **slipping** on ice, water, snow or uneven ground!

Never work on a ladder or on any other unsteady support. Do not work above shoulder height and never operate the machine with one hand - **risk of accidents!**

Ensure you always have a firm and safe footing.

Do not work alone – keep within calling distance of others in case help is needed.

Never allow anyone in the working area and keep well away from other people to protect them from noise and flying objects.

More care and attention than usual are required when wearing ear protection, as sounds warning you of impending danger (shouts, beeps, etc.) cannot be heard properly.

If you get tired, take a break in good time.

Work calmly and methodically – only with good lighting and visibility. Take care not to endanger other people!



Your power tool produces toxic exhaust fumes as soon as the engine is running. These gases may be colorless and odorless and may contain unburnt hydrocarbons and benzene. Never run the engine indoors or in poorly ventilated areas, even if your model is equipped with a catalytic converter.