

1 Information about the documentation

1.1 About this documentation

- Read this documentation before initial operation or use. This is a prerequisite for safe, trouble-free handling and use of the product.
- Observe the safety instructions and warnings in this documentation and on the product.
- Always keep the operating instructions with the product and make sure that the operating instructions are with the product when it is given to other persons.

1.2 Explanation of signs used

1.2.1 Warnings

Warnings alert persons to hazards that occur when handling or using the product. The following signs: words are used in combination with a symbol.

- DANGER!** Draws attention to imminent danger that will lead to serious personal injury or fatality.
- WARNING!** Draws attention to a potentially dangerous situation that could lead to serious personal injury or fatality.
- CAUTION!** Draws attention to a potentially dangerous situation that could lead to slight personal injury or damage to the equipment or other property.

1.2.2 Mandatory signs

The following mandatory signs are used:

- Wear ear protection, eye protection, respiratory protection and a hard hat.
- Wear protective gloves.
- Wear safety shoes.

1.2.3 Symbols

The following symbols are used:

- Read the operating instructions before use.
- Instructions for use and other useful information
- Warning
- Rotation direction arrow on the guard
- Engine stop position
- Engine run position
- Primer bulb
- Full-throttle jet adjusting screw
- Idling jet adjusting screw
- Idling adjusting screw
- Fuel mixture
- Fuel tank cap turning direction (to open)

1-1 Check only on DSH 700 or DSH 900

1/2 Half throttle only on DSH 700 or DSH 900

1.2.4 Illustrations

The illustrations in these operating instructions are intended to convey a basic understanding and may differ from the actual version of the product:

- These numbers refer to the illustrations at the beginning of the operating instructions.
- The numbering in the illustrations reflects the order of the work steps in the illustration and may deviate from the numbering of work steps in the text.
- Item reference numbers are used in the overview illustration. In the product overview section, the numbers shown in the legend relate to these item reference numbers.
- Points to which particular attention must be paid (in the illustrations)

1.3 Adhesive labels on the machine

Warning signs

- Warning: Flying sparks present a fire risk.
- Warning: Risk of kickback.
- Warning: Don't inhale toxic vapors or exhaust fumes.
- Maximum rotor speed
- Warning: hot surface

Prohibition signs

- Don't use toothed cutting discs.
- Don't use damaged cutting discs.
- Smoking and naked flames prohibited.

1.4 Product information

Hilti products are designed for professional use and may be copyrighted, serviced and maintained only by trained, authorized personnel. This personnel must be informed of any particular hazards that may be encountered. The product and its auxiliary equipment may present hazards when used incorrectly by untrained personnel or when used not as directed.

- Make a note of the designation and serial number printed on the identification plate in the following table.

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HILTI

DSH700

- Always quote this information when you contact a Hilti representative or Hilti Service regarding questions about the product:

Product information

| | |
|---------------------------|-----------------------|
| Abrasive disc cut-off saw | DSH 700 DSH 900 |
| Generation: | 01 |
| Serial no.: | |
| Abrasive disc cut-off saw | DSH 700-X DSH 900-X |
| Generation: | 02 |
| Serial no.: | |

2 Safety

2.1 Safety instructions

In addition to the safety rules listed in the individual sections of these operating instructions, the following rules must be strictly observed at all times:

2.1.1 Personal safety

- Use the right machine for the job. Do not use the machine for purposes for which it was not intended. Use it only as directed and when in technically faultless condition.
- Never tamper with or modify the machine in any way.
- The product may be used only by persons who are familiar with it, who have been trained on how to use it safely and who understand the resulting hazards. The product is not intended for use by children.
- Stay alert, watch what you are doing and use common sense when working with the product. Do not use the product while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating the product may result in serious personal injury.
- The user and any other persons in the vicinity must wear ANSI Z87.1 approved protective glasses, a hard hat, ear protection, protective gloves, protective footwear and hand/foot protection while the machine is in use.
- Always hold the machine with both hands on the grips provided. Keep the grips dry, clean and free from oil and grease.
- Never use the machine without the guard (hood). Adjust the guard to the correct position. The guard must be securely attached and positioned for maximum safety, so that the smallest possible part of the cutting disc is exposed to the operator. Take steps to ensure that any sparks created while the product is in use do not present a hazard. The guard helps to protect the operator from broken disc fragments, accidental contact with the disc and uncontrolled flying sparks.
- Before using the product, or if an obstacle is contacted while the product is in use, check the guard immediately for possible damage. Damaged or broken guards must be replaced immediately.
- Avoid touching rotating parts - risk of injury!
- Keep proper footing and balance at all times. This will allow you to control the product better, even in unexpected situations, for example, in the event of expiring kickback or rotational forces. Avoid unusual body positions.
- Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- If the product or the cutting disc has been dropped or has fallen, check the product and the cutting disc for damage. Change the cutting disc if necessary.
- Switch the product off before adjusting the guard or changing the cutting disc.
- Wear protective gloves when changing the cutting disc. Touching the cutting disc presents a risk of injury (cuts or burns).
- Never start you have a fire-extinguishing agent available as the possibility of flying sparks while working and the use of flammable fuel presents a risk of fire.
- Use of reducing sleeves is not permitted.
- Use of the wet cutting method is preferable in order to reduce the amount of dust produced when cutting mineral materials and asphalt.
- Avoid skin contact with the sawing slurry created when using the wet cutting method.
- Dust from material such as paint containing lead, some wood species, minerals and metal may be harmful. Contact with or inhalation of the dust may cause allergic reactions and/or respiratory diseases.

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among operators or bystanders. Material containing asbestos may be worked on only by specialists. To reduce the amount of dust produced when cutting, we recommend use of the wet cutting method. Ensure that the workplace is well ventilated. The use of a dust mask of filter class P2 is recommended. Follow national requirements for the materials you want to work with.

- improve the blood circulation in your fingers by relaxing your hands and exercising your fingers during breaks between working. Exposure to vibration during long periods of work can lead to disorders of the blood vessels and nervous system in the fingers, hands and wrists.
- Consult the responsible structural engineer, architect or person in charge of the building project before beginning the work. Sites cut in load-bearing walls of buildings or other structures may influence the statics of the structure, especially when steel reinforcing bars or load-bearing components are cut through.
- Apply appropriate safety measures at the opposite side of the workplace in work that involves breaking through. Pieces of debris could drop out and/or fall down and injure other persons.
- Never leave the product running while unattended. Switch the engine off and wait until the cutting disc has completely stopped rotating before placing the product on the ground or before transporting it.
- If the product is operated without an external water pump, it is essential that the pump cover is fitted.
- Switch the product off after use.
- Look after the product carefully. Check to ensure that no parts are broken or damaged in such a way that the product may no longer function correctly. If parts are damaged, have the parts replaced before use of the product.
- To reduce the risk of injury, use only genuine Hilti accessories and accessory tools.
- Have the product repaired only by qualified, skilled personnel, using only genuine Hilti spare parts. The safety of the product can thus be maintained.
- Observe the national health and safety requirements.

2.1.2 Electrical safety

- Before beginning work, check the working area for concealed electric cables or gas and water pipes. External metal parts of the machine may give you an electric shock if you damage an electric cable accidentally.

2.1.3 Safety at the workplace

- Ensure that the workplace is well lit.
- Don't work in closed rooms. Carbon monoxide, unburned hydrocarbons and benzene in the exhaust gas may cause asphyxiation.
- Keep the workplace tidy. Objects which could cause injury should be removed from the working area. Untidiness at the workplace can lead to accidents.
- Hot exhaust gases containing sparks or spalls generated by the cutting operation may cause fire or explosion. Take care to ensure that the sparks generated do not ignite flammable (gasoline, dry grass, etc.) or explosive (gas, etc.) substances.
- Before fitting the water pump, check to ensure that the maximum permitted water supply pressure of 6 bar is not exceeded.
- Fit the filled water tank only after the saw has been mounted on the saw trolley. This will help to prevent the trolley falling over.
- Do not stand the product and the saw trolley on an inclined surface. Always check to ensure that the product and the saw trolley are standing securely.

2.1.4 Liquids (gasoline and oil) and vapors

- Allow the product to cool before refueling.
- Never smoke while refueling.
- Don't refuel the product at the workplace area. When refueling, take care to avoid fuel spillage. Use a suitable funnel.
- Avoid inhaling gasoline vapors and exhaust fumes. Take care to ensure adequate ventilation.
- Don't use the gasoline or other flammable liquids for cleaning.

2.1.5 Cutting work using cutting discs

- Use only cutting discs with a rated maximum permissible speed that's at least as high as the highest spindle speed.
- Check that the outside diameter and the thickness of the cutting disc comply with the capacity rating of the product.

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- Never use cutting discs that are damaged, run untrue or vibrate.
- Do not use damaged diamond cutting discs (cracks in the steel disc, broken or polished segments, damaged arbor hole, bent or distorted steel disc, heavy discoloration due to overheating, steel disc worn away beneath the segments, diamond segments with no lateral overhang, etc.).
- Do not use toothed accessory cutting tools (e.g. toothed saw blades).
- When fitting the cutting disc, always take care to ensure that the disc's specified direction of rotation corresponds to the direction of rotation of the spindle.
- The cutting disc and flange or any other accessory must fit the arbor of the product exactly. Cutting discs or accessories with arbor holes that do not match the mounting hardware of the product will not cut out of balance, vibrate excessively and may cause loss of control.
- Always use an undamaged clamping flange of the correct diameter which fits the cutting disc used. The correctly fitting clamping flange supports the cutting disc and thus reduces the possibility of disc breakage.
- Guide the product smoothly and do not apply lateral pressure to the cutting disc. Always bring the cutting disc into contact with the workpiece at right angles. Don't attempt to alter the line of cut by applying lateral pressure or by bending the cutting disc while cutting is in progress.
- Wear protective gloves when changing the cutting disc as the disc will get hot during use.
- Abrasive cutting discs which are used for wet cutting must be used on the same day as long periods of exposure to moisture have a negative effect on the strength of the disc.
- Observe the expiry date for resin-bonded cutting discs and don't use the discs after this date.

2.1.8 Transport and storage

- Switch the product off before transporting it.
- Remove the cutting disc from the product after use. The cutting disc may suffer damage during transport with the disc fitted.
- Handle the cutting disc carefully and store it in accordance with the manufacturer's instructions.
- Always store and transport the product in an upright position, not lying on its side.
- Do not carry the saw trolley and the product together. Remove the water tank before transporting the saw trolley.
- Do not fit the product and the saw trolley by crane. This is not permissible.
- Store the product in a secure place when not in use. Products which are not in use must be stored in a dry, high place or locked away out of reach of children.
- When laying the product down, make sure that it stands securely.
- After use, allow the product to cool down before packing it away or placing a cover over it.
- Store gasoline and oil in a well-ventilated room in fuel containers that comply with regulations.

3. Description

3.1 Overview of the product

3.1.1 Gasoline-powered cut-off saw

- | | |
|---------------------------------------------------------|---------------------------------------------------------------------------------|
| ① Head | Ⓜ Spark plug connector |
| ② Water supply | Ⓝ Decompression valve |
| ③ Forward grip | Ⓞ Throttle safety grip |
| ④ Water valve | Ⓟ Start/stop switch (DSH 700 OR DSH 900) |
| ⑤ Starter handle | Ⓠ Start/stop switch with integrated kill/throttle lock (DSH 700-X OR DSH 900-X) |
| ⑥ Fuel tank cap | Ⓡ Primer bulb |
| ⑦ Choke lever / half-throttle lock (DSH 700 OR DSH 900) | Ⓢ Water connection |
| ⑧ Throttle trigger | Ⓣ Grip for guard adjustment |
| ⑨ Rear grip | Ⓤ Base rotation (reaction arrow in front part of guard) |
| Ⓚ Flaring plate | ⓖ Saw arm |
| Ⓛ Fuel gauge | ⓗ Hole for locking pin for changing cutting disc |
| Ⓜ Guide wheels | Ⓢ Pump cover |
| Ⓨ Cutting disc | Ⓣ Air filter cover |
| Ⓩ Clamping screw | |
| ⓑ Clamping flange | |

4. Technical data

4.1 Gasoline-powered cut-off saw

| | DSH 700 39/12" / DSH 700-X 39/12" | DSH 700 39/14" / DSH 700-X 39/14" | DSH 900 39/14" / DSH 900-X 39/14" | DSH 900 42/10" / DSH 900-X 42/10" |
|------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------|----------------------------------------------|----------------------------------------------|
| Cubic capacity | 4.19 in ³ (68.7 cm ³) | 4.19 in ³ (68.7 cm ³) | 5.3 in ³ (87 cm ³) | 5.3 in ³ (87 cm ³) |
| Weight without cutting disc, tank empty | 26.9 lb (11.6 kg) | 26.5 lb (11.8 kg) | 26.5 lb (12.0 kg) | 26.9 lb (12.2 kg) |
| Weight with saw carriage, without cutting disc, tank empty | 30.9 lb (42.6 kg) | 30.9 lb (42.6 kg) | 34.8 lb (43.0 kg) | 35.2 lb (43.2 kg) |
| Power rating | 4.7 hp (3.5 kW) | 4.7 hp (3.5 kW) | 5.3 hp (4.0 kW) | 5.8 hp (4.3 kW) |
| Maximum arbor speed | 5,100 /min | 5,100 /min | 5,100 /min | 4,700 /min |
| Maximum cutting depth | 3.9 in (100 mm) | 4.9 in (125 mm) | 4.9 in (125 mm) | 5.9 in (150 mm) |

4.2 Additional technical data

| | |
|------------------------------------------------------|------------------------------------------------|
| Engine type | Single-cylinder, air-cooled two-stroke engine |
| Engine speed | 9500 ± 200 /min |
| No-load speed | 2,500 /min ... 3,000 /min |
| Ignition (type) | Electronically-controlled ignition timing |
| Electrode gap | 0.02 in (0.5 mm) |
| Spark plug | Manufacturer: NGK, type: CMH7A-5 |
| Tightening torque for fitting the spark plug | 9 lbs. (12 kg) |
| DSH 700/900 carburetor | Manufacturer: Walbro, model: WF, type: 865 |
| DSH 700-X/900-X carburetor | Manufacturer: Walbro, model: WF, type: 1152 |
| Fuel mixture | AFI-TC oil 2% (150) |
| Tank capacity | 54.9 in ³ (900 cm ³) |
| Cutting disc arbor size / diameter of centering bush | 0.8 in (20 mm) |
| Cutting disc arbor size / diameter of centering bush | 1.00 in (25.4 mm) |
| Minimum flange outside diameter | 4.0 in (102 mm) |
| Max. disc thickness (steel disc thickness) | 0.29 in (7.5 mm) |
| Tightening torque for fitting the cutting disc | 18 lbs. (25 Nm) |

5. Reference

5.1 Fuel

The two-stroke engine runs on a mixture of gasoline and oil. The quality of the fuel mixture decisively influences the running and life expectancy of the engine.

5.1.2 Saw trolley (accessory)

- | | |
|----------------------------|--------------------|
| ① Oil | Ⓜ Water connection |
| ② Throttle trigger | Ⓝ Axial adjustment |
| ③ Cutting depth adjustment | Ⓞ Throttle cable |
| ④ Hold-down device | Ⓟ Machine cradle |
| ⑤ Water tank | |

5.2 Intended use

The product described is a gasoline-powered cut-off saw for the wet or dry cutting of asphalt, mineral construction materials or metals using diamond cutting discs or abrasive cutting discs. It can be held and guided by hand or mounted on a saw trolley.

The saw is not suitable for use in environments where there is risk of fire or explosion.

5.3 Recommendations for use

We recommend:

- Use of the wet cutting method is preferable in order to reduce the amount of dust produced when cutting. By using the self-priming water pump (accessory) you can work without need for a water supply pipe. The water can be drawn, for example, directly from a container.
- Do not cut right through the workpiece in one pass. Move the saw back and forward several times until it gradually reaches the desired cutting depth.
- To avoid damaging the diamond cutting disc when dry cutting, lift the disc out of the cut for approx. 10 seconds every 30 to 60 seconds while the product is still running.
- Reshaped polished diamond segments (no diamonds subject from the segment matrix) by cutting with the disc in a very abrasive material such as sandstone.
- For outdoor floor sawing applications, mount the saw on the trolley (accessory).

5.4 Cutting disc specifications

Diamond cutting discs in accordance with ANSI B7.1 are to be used with the product. Synthetic resin-bonded, fiber-reinforced cutting discs in accordance with ANSI B7.1 (straight, not disc-shaped, type cutting-off wheel) may also be used with the product for working on metals.

The disc mounting instructions and instructions for use issued by the cutting disc manufacturer must be observed.

5.5 Items supplied

Gasoline-powered saw, DSH tool set, DSH consumables set (only with the DSH 700-X/900-X), operating instructions. You can find other system products approved for your product at your local Hilti Center or online at www.hilti.com

5.6 Consumables and wearing parts

- Air filter
- Cord (5 pcs)
- Starter
- Fuel filter
- Spark plug
- Tool set
- Cylinder set
- Mounting screw Assy.
- Flange (2)
- Centering ring 20 mm / 1"

DANGER

Risk of fire and explosion. Gasoline vapors are highly flammable.

- Never smoke while refueling.
- Don't refuel the product at the area where you are working (move at least 3 meters / 10 feet away from the working area).
- Don't refuel the product while the engine is running. Wait until the engine has cooled down.
- Make sure there are no naked flames or sparks that could ignite the gasoline vapors.
- Take care to avoid fuel spillage. If fuel is spilled, clean up the areas affected immediately.
- Check to ensure there is no leakage from the fuel tank.

CAUTION

Risk of injury. The inhalation of gasoline vapors and skin contact with gasoline may be hazardous to the health.

- Avoid direct skin contact with gasoline. Wear protective gloves.
- If your clothing becomes soaked with gasoline, it is essential to change your clothing.
- Ensure that the workplace is well-ventilated in order to avoid breathing in gasoline fumes.
- Use a fuel container that complies with the applicable regulations.

Note

Alkylate gasoline does not have the same density (specific weight) as conventional gasoline. To avoid damage when alkylate gasoline is used, the engine settings must be readjusted by Hilti Service. Alternatively, the oil content can be increased to 4% (125).

5.1.1 Using two-stroke oil

- Use good-quality, two-stroke oil for air-cooled engines that meets at least the AFI-TC specification.

5.1.2 Gasoline

- Use regular or super gasoline with an octane rating of at least 89 RON.

Note

The alcohol content (e.g. ethanol, methanol or others) of the fuel used must not exceed 10%, otherwise the life expectancy of the engine will be greatly reduced.

5.1.3 Mixing fuel

Note

The engine will suffer damage if run with fuel mixed in the wrong ratio or with unsuitable oil. Use a mixing ratio of 1:25. This corresponds to 1 part good-quality two-stroke oil that complies with the AFI-TC specification and 50 parts gasoline (e.g. 100 ml oil and 5 liters of gasoline mixed in a suitable container).

1. Pour the required quantity of two-stroke oil into the fuel canister.
2. Then fill the gasoline into the fuel canister.
3. Close the fuel canister.
4. Mix the fuel by shaking the fuel container.

Note

If the quality of the two-stroke oil or the gasoline is unknown, then increase the mixing ratio to 1:25.

5.1.4 Filling the fuel tank

1. Mix the fuel two-stroke oil / gasoline mixture by shaking the fuel container.
2. Place the product in a steady upright position.
3. Open the fuel tank by turning the cap counterclockwise and then removing the cap.
4. Fill the tank slowly using a funnel.
5. Close the fuel tank by fitting the cap and then turning it clockwise.
6. Close the fuel canister.

5.2 Assembly and adjustment

WARNING

- Risk of injury.** Contact with the rotating cutting disc can lead to injury. Hot parts of the machine or a hot cutting disc may cause burning injuries.
- Before fitting or adjusting any parts of the product, make sure that the engine is switched off, that the cutting disc has completely stopped rotating and that the product has cooled down.
 - Wear protective gloves.

5.2.1 Fitting a cutting disc

CAUTION

Risk of injury and damage. Damaged cutting discs may break.

- Never use cutting discs that are damaged, run uneven or warped.
- Don't use synthetic resin-bonded fiber-reinforced cutting discs which have exceeded their use-by date or already softened due to water absorption.

CAUTION

Risk of injury and damage. Cutting discs or fastening parts that don't fit correctly can suffer impermissible damage or lead to loss of control of the product.

- Use only cutting discs with a rated maximum permissible speed that's at least as high as the maximum speed stated on the product. The cutting discs, flanges and screws used must fit the product.
- Use only cutting discs with an arbor size (mounting hole diameter) of 20 mm or 25.4 mm (1").

1. Insert the locking pin in the hole in the drive belt cover and turn the cutting disc until the locking pin engages.
2. Release the securing screw by turning the screw counterclockwise with the wrench and then remove the screw and washer.
3. Remove the locking pin.
4. Remove the clamping flange and the cutting disc.
5. Check that the mounting bore of the cutting disc to be fitted corresponds with the centering collar of the cutting disc mounting flange.

Note

The mounting flange is equipped with a 20 mm diameter centering collar on one side and a 25.4 mm (1") diameter centering collar on the opposite side.

6. Clean the clamping and centering surfaces on the product and on the cutting disc.
7. Place the cutting disc with centering collar on the drive arbor and check that the direction of rotation is correct.
 - The direction-of-rotation arrow on the cutting disc must match the direction of rotation indicated on the product.
8. Place the clamping flange and washer on the drive arbor and tighten the securing screw by turning it clockwise.
9. Insert the locking pin in the locking hole in the drive belt cover and turn the cutting disc until the locking pin engages.
10. Tighten the clamping screw securely (tightening torque: 25 Nm).
11. Remove the locking pin.

Note

After fitting a new cutting disc allow the product to run at full speed under no load for approx. 1 minute.

4. Connect the pump hose to the hose connector on the saw.
5. Connect the water pump to the water supply or bring this suction hose in a container filled with water.

Note

The maximum permitted water supply pressure is 6 bar.

5.6 Removing the water pump (accessory)

1. Disconnect the water supply from the water pump.
2. Disconnect the connector between the pump and the product.
3. Release the three fastening screws on the pump and then remove the pump.
4. Fit the pump cover on the product, insert the three retaining screws and tighten the screws securely (tightening torque: 4 Nm).

6 Operation

6.1 Starting the engine

DANGER

Risk of asphyxiation. Carbon monoxide, unburned hydrocarbons and benzene in the exhaust gas may cause asphyxiation.

- Don't work in closed rooms, trenches or pits and make sure the area is well ventilated.

WARNING

Risk of burning injury. The exhaust system gets extremely hot when the engine is running. It stays hot for a long time after the engine is switched off.

- Wear protective gloves and avoid touching the exhaust system.
- Do not lay the product down on flammable material while hot.

WARNING

Risk of injury. A damaged exhaust system will raise the noise level above the permissible limit and thus cause hearing damage.

- Never use the product if the exhaust system is damaged, missing or if it has been tampered with.

6.1.1 Starting the engine

059 100
059 100
059 100

1. Press the decompression valve (piston).
2. Squeeze the primer bulb 2 to 3 times until the primer bulb is completely filled with fuel.
3. Move the start/stop switch to the "start" position.
4. Select one of the following alternatives. This action includes 2 alternatives.
 - Alternative 1 / 2**
 - If the motor is cold, pull the choke lever upwards.
 - The choke and half throttle are engaged.
 - Alternative 2 / 2**
 - If the motor is hot, pull the choke lever up and then push it back down.
 - Half throttle is engaged, the choke is not engaged.
 - 5. Check that the cutting disc is free to rotate.
 - 6. Position your right foot over the lower part of the rear grip.
 - 7. Pull the starter handle slowly with your right hand until resistance is felt.
 - 8. Pull the starter handle vigorously.
 - 9. When the motor fires for the first time (after 2 to 5 pulls of the starter), move the choke lever back down to its original position.
 - 10. Pull the starter handle vigorously and repeat this action until the engine starts.

5.2.2 Adjusting the guard

DANGER

Risk of injury. Flying fragments or sparks could cause injury.

- Adjust the guard so that flying particles or fragments of the material removed and flying sparks are directed away from the operator and the product.
- Hold the guard by the grip provided and rotate it to the desired position.

5.2.3 Conversion from normal cutting to flush cutting

Note

The front section of the saw arm can be converted to allow flush cuts to be made (e.g. as close as possible to edges and walls).

- If you wish to use the product in the flush cutting position, have the product converted by Hilti Service.

6.5 Locking rotary movement of the guide wheels

WARNING

Risk of injury. The saw could move inadvertently or fall down.

- When working on roofs, scaffolds and/or on slightly sloping ground or surfaces, always take steps to prevent rotation of the guide wheels when the saw is not in use.

1. Release the guide wheel mounting screws and remove the guide wheels.
2. Reverse the guide wheels (turn through 180°) and retighten the mounting screws.
 - The stoppage locking function is active.
3. Check that the guide wheels are securely fastened.

5.4 Mounting the gasoline-powered saw on the saw trolley (accessory)

1. Remove the water tank from the saw trolley.
2. Move the cutting depth adjustment lever into the upper position.
3. Open the hold-down device by releasing the screw knob.
4. Fit the saw into the forward mount with the wheels as shown and swing the grip of the saw under the hold-down device.
5. Secure the saw by tightening the screw knob.
6. Fit the water tank after fitting it.
7. Adjust the grip to a convenient working height.
8. Adjust the guard to the correct position. → page 10

Note

Especially when using the machine in this configuration for the first time, check to ensure that the throttle cable is correctly adjusted. When the throttle trigger is pressed fully, the product must run up to maximum speed. If this is not the case, the throttle cable can be readjusted by way of the cable tensioner.

When the throttle is not actuated, the engine must be idling and the cutting disc must not rotate. If this is not the case, switch off by pushing the start/stop switch to the "stop" position and then adjust the throttle cable or have the idling speed adjusted by Hilti Service.

5.5 Fitting the water pump (accessory)

1. Release the three pump cover retaining screws, remove the parts and store the pump cover in a safe place.

Note

The pump cover must be fitted if the product is used without the water pump.

2. Bring the water pump into place while rotating the cutting disc slightly until the bothing on the water pump and inside the clutch housing match and the teeth mesh correctly.
 - The position is locked so it is not possible to position the pump incorrectly.
3. Fit the three retaining screws and tighten them securely (tightening torque: 4 Nm).

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Note

The motor will flood if the starting procedure is repeated too many times with the choke engaged.

11. Press the throttle trigger briefly as soon as the engine starts.
 - This disengages the half-throttle position and the engine then runs at idling speed when the throttle is released.

6.1.2 Starting the engine

059 100 x
059 100 x
059 100 x

1. Press the decompression valve (piston).
2. When starting the cold engine (only when cold), squeeze the primer bulb 2 to 3 times (until the primer bulb is completely filled with fuel).
3. Press the throttle safety grip and keep it pressed.
4. Press the throttle trigger and keep it pressed.
5. Move the start/stop switch to the "start" position.
6. Release the throttle safety grip and throttle trigger.
 - This half-throttle position is activated.
7. Check that the cutting disc is free to rotate.
8. Position your right foot over the lower part of the rear grip.
9. Pull the starter handle slowly with your right hand until resistance is felt.
10. Pull the starter handle vigorously.
11. Repeat this action until the engine starts.
12. Press the throttle trigger briefly as soon as the engine starts.
 - This disengages the half-throttle position and the engine then runs at idling speed when the throttle is released.

6.2 Checks after starting the engine

1. Check that the cutting disc remains stationary when the engine is idling and, after briefly running at full speed, that the disc again comes to a complete standstill.
 - Readjust (reduce) the idling speed if the cutting disc doesn't stop rotating when the engine is idling. If this is not possible, please bring the product to Hilti Service.
2. Check that the start/stop switch is functioning correctly. Move the start/stop switch to the "stop" position.
 - 059 100
059 100
 - If the engine doesn't stop, push the choke lever upwards. If the engine still doesn't stop, pull the spark plug connector off the spark plug and bring the product to Hilti Service.
 - 059 100 x
059 100 x
 - If the engine doesn't stop, compress the primer bulb. If the engine still doesn't stop, pull the spark plug connector off the spark plug and bring the product to Hilti Service.

6.3 Switching the engine off

WARNING

Risk of injury. A rotating cutting disc can break or shatter, possibly resulting in flying fragments.

- Allow the rotating cutting disc to come to a complete standstill before you lay the saw down.

1. Release the throttle trigger.
2. Move the start/stop switch to the "stop" position.
 - The engine stops.

6.4 Cutting techniques

In order to work optimally with this product, the following safety instructions must be observed:

- Always hold the product and the saw trolley with both hands on the grips provided. Keep the grips dry, clean and free from oil and grease.

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- Before beginning the work, or if an obstacle was previously inadvertently contacted, check the cutting disc and guard immediately for possible damage.
- Check that no persons are present in the working area and, in particular, in the direction in which the cut is to be made. Keep other persons approx. 15 m away from your workplace.
- Guide the product smoothly and do not apply lateral pressure to the cutting disc.
- Always bring the cutting disc into contact with the workplace at right angles. Don't attempt to alter the line of cut by applying lateral pressure or by bending the cutting disc while cutting is in progress.
- Secure the workplace. Use a clamp or a vice to hold the workplace in position. The workplace is thus held more securely than by hand and both hands remain free to operate the product.
- Secure the workplace and the part to be cut off in order to prevent uncontrolled movement.
- When working with the saw trolley, check before use that the gasoline-powered saw is mounted correctly on the saw trolley.
- Switch the gasoline-powered saw off immediately at the start/stop switch in the event of the saw trolley throttle cable sticking or if the throttle trigger sticks.
- Always apply full throttle when cutting.

6.4.1 Avoiding stalling

- CAUTION**
 Risk of disc breakage or kickback. Application of excessive pressure causes distortion of the cutting disc. Sticking or stalling of the cutting disc increases the probability of kickback or disc breakage.
- Avoid applying excessive pressure when cutting and don't allow the cutting disc to stick and stall.
 - Don't attempt to make an excessively deep cut.

1. Cutting through thick workpieces should be accomplished, as far as possible, by making a several cuts. Avoid making excessively deep cuts.
2. Support slabs or large workpieces so that the kerf remains open during and after the cutting operation.

6.4.2 Avoiding kickback

1. Always bring the cutting disc into contact with the workplace from above.
 - Allow the cutting disc to contact the workplace only at a point below its rotational axis.
2. Take special care when inserting the cutting disc in an existing kerf.

7 Care and maintenance

- WARNING**
 Risk of injury. Touching the rotating cutting disc or hot parts of the machine may lead to injury or burns.
- Switch the engine off and allow the product to cool down before all maintenance, repairs, clearing or servicing.

7.1 Maintenance

7.1.1 Before use

1. Check that the product is complete, not leaking and that it is in faultless condition. Repair it if necessary.
2. Check that the product is not dirty and clean it if necessary.
3. Check that the operating controls function correctly. Have them repaired if necessary.
4. Check that the cutting disc is in faultless condition and replace it if necessary.
5. Check the tightness of all externally accessible screws and nuts and retighten them if necessary.

7.1.2 Every 6 months

1. Check the tightness of all externally accessible screws and nuts and retighten them if necessary.
2. Check the fuel filter for dirt or clogging and replace it if necessary.

7.1.3 If necessary

1. Check the tightness of all externally accessible screws and nuts and retighten them if necessary.
2. Change the air filter if the engine fails to start or if its performance drops noticeably.
3. Check fuel filter for dirt or clogging and replace it if necessary.