This Product is Certified
Ce produit est homologué
Producto homologado por
Este producto está registrado
ORIGINAL OPERATING INSTRUCTIONS

DAG 700-P angle grinder

It is essential that the operating instructions are read before the power tool is operated for the first time.

Always keep these operating instructions together with the power tool.

Ensure that the operating instructions are with the power tool when it is given to other persons.

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1 These numbers refer to the corresponding illustrations. The illustrations can be found on the fold-out cover pages. Keep these pages open while studying the operating instructions. In these operating instructions, the designation “the power tool” always refers to the DAG 700-P angle grinder.

Parts, operating controls and indicators 1

1 Clamping nut
2 Outer clamping flange for flat discs
3 Flat disc
4 Inner clamping flange for flat discs
5 Offset disc
6 Clamping flange for offset discs
7 Keyed locating lug
8 Guard
9 Spindle
10 Adjusting screw
11 Clamping lever
12 Steadying rib
13 Threaded bushing for grip
14 Drive spindle lockbutton
15 Side handle
16 Lockable on / off switch
17 Wrench

1 General information

1.1 Safety notices and their meaning

DANGER
Draws attention to imminent danger that will lead to serious bodily 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.

NOTE
Draws attention to an instruction or other useful information.

1.2 Explanation of the pictograms and other information

Warning signs

![General warning](image)

![Warning: electricity](image)
Obligation signs

- Wear eye protection
- Wear a hard hat
- Wear ear protection
- Wear protective gloves
- Wear breathing protection

Symbols

- Read the operating instructions before use
- Return waste material for recycling
- Volts
- Amps
- Hertz
- Alternating current
- Rated speed
- Revolutions per minute

Location of identification data on the power tool

The type designation and serial number can be found on the type identification plate on the machine or tool. Make a note of this data in your operating instructions and always refer to it when making an enquiry to your Hilti representative or service department.

Type:

Generation: 01

Serial no.: 

2 Safety instructions

2.1 General safety rules

2.1.1 Work area

a) Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.
b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
c) Keep bystanders, children and visitors away while operating a power tool. Distractions can cause you to lose control.

2.1.2 Electrical safety

a) Double-insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double Insulation eliminates the need for the three-wire grounded power cord and grounded power supply system.
b) Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
c) Don’t expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
d) Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

e) When operating a power tool outside, use an outdoor extension cord marked “W-A” or “W”. These cords are rated for outdoor use and reduce the risk of electric shock.

2.1.3 Personal safety

a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

b) Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.

c) Avoid accidental starting. Be sure switch is off before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.

d) Remove adjusting keys or switches before turning the tool on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

e) Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.

f) Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat or hearing protection must be used for appropriate conditions.

2.1.4 Tool use and care

a) Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.

b) Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.

c) Do not use tool if switch does not turn on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.

d) Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

e) Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

f) Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.

g) Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the tool’s operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

h) Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.

2.1.5 Service

a) Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.

b) When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

2.2 Specific safety rules

a) Always use proper guard with grinding wheel. A guard protects operator from broken wheel fragments.

b) Accessories must be rated for at least the speed recommended on the tool warning label. Wheels and other accessories running over rated speed can fly apart and cause injury.

c) Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a “live” wire will make exposed metal parts of the tool “live” and shock the operator.

2.3 Safety warnings common for grinding, danding, wire brushing, polishing or abrasive cutting-off operations

a) This power tool is intended to function as a grinder, sander, wire brush or cut-off tool. Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

b) Operations such polishing are not recommended to be performed with this power tool. Operations for which the power tool was not designed may create a hazard and cause personal injury.

c) Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.

d) The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly apart.

e) The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled.

f) The arbour size of wheels, flanges, backing pads or any other accessory must properly fit the spindle of the power tool. Accessories with arbour holes that do not match the mounting hardware of the
Do not operate the power tool near flammable materials. Using water or other liquid coolants may result in electrocution or shock.

2.4 Kickback and related warnings
Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory’s rotation at the point of the binding. For example, if an abrasive wheel is snapped or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the wheel’s movement at the point of pinching. Abrasive wheels may also break under these conditions. Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

a) Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up. The operator can control torque reactions or kickback forces, if proper precautions are taken.

b) Never place your hand near the rotating accessory. Accessory may kickback over your hand.

c) Do not position your body in the area where power tool will move if kickback occurs. Kickback will propel the tool in direction opposite to the wheel’s movement at the point of snagging.

d) Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory. Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.

e) Do not attach a saw chain woodcarving blade or toothed saw blade. Such blades create frequent kickback and loss of control.

2.5 Safety warnings specific for grinding and abrasive cutting-off operations

a) Use only wheel types that are recommended for your power tool and the specific guard designed for the selected wheel. Wheels for which the power tool was not designed cannot be adequately guarded and are unsafe.

b) The guard must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. The guard helps to protect operator from broken wheel fragments, accidental contact with wheel and sparks that could ignite clothing.

c) Wheels must be used only for recommended applications. For example: do not grind with the side of cut-off wheel. Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.
d) Always use undamaged wheel flanges that are of correct size and shape for your selected wheel. Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage. Flanges for cut-off wheels may be different from grinding wheel flanges.

e) Do not use worn down wheels from larger power tools. Wheel intended for larger power tool is not suitable for the higher speed of a smaller tool and may burst.

2.6 Additional safety warnings specific for abrasive cutting-off operations

a) Do not "jam" the cut-off wheel or apply excessive pressure. Do not attempt to make an excessive depth of cut. Overstressing the wheel increases the loading and susceptibility to twisting or binding of the wheel in the cut and the possibility of kickback or wheel breakage.

b) Do not position your body in line with and behind the rotating wheel. When the wheel, at the point of operation, is moving away from your body, the possible kickback may propel the spinning wheel and the power tool directly at you.

c) When wheel is binding or when interrupting a cut for any reason, switch off the power tool and hold the power tool motionless until the wheel comes to a complete stop. Never attempt to remove the cut-off wheel from the cut while the wheel is in motion otherwise kickback may occur. Investigate and take corrective action to eliminate the cause of wheel binding.

d) Do not restart the cutting operation in the workpiece. Let the wheel reach full speed and carefully reenter the cut. The wheel may bind, walk up or kickback if the power tool is restarted in the workpiece.

e) Support panels or any oversized workpiece to minimize the risk of wheel pinching and kickback. Large workpieces tend to sag under their own weight. Supports must be placed under the workpiece near the line of cut and near the edge of the workpiece on both sides of the wheel.

f) Use extra caution when making a "pocket cut" into existing walls or other blind areas. The protruding wheel may cut gas or water pipes, electrical wiring or objects that can cause kickback.

2.7 Additional safety instructions for sanding operations

a) Do not use excessively oversized sanding disc paper. Follow manufacturers recommendations, when selecting sanding paper. Larger sanding paper extending beyond the sanding pad presents a laceration hazard and may cause snagging, tearing of the disc or kickback.

2.8 Safety warnings specific for wire brushing operations

a) Be aware that wire bristles are thrown by the brush even during ordinary operation. Do not overstress the wires by applying excessive load to the brush. The wire bristles can easily penetrate light clothing and/or skin.

b) If the use of a guard is recommended for wire brushing, do not allow any interference of the wire wheel or brush with the guard. Wire wheel or brush may expand in diameter due to work load and centrifugal forces.

2.9 Additional safety instructions

2.9.1 Personal safety

a) Wear ear protectors. Exposure to noise can cause hearing loss.

b) Always hold the power tool securely with both hands on the grips provided. Keep the grips dry, clean and free from oil and grease.

c) Breathing protection must be worn if the power tool is used without a dust removal system for work that creates dust.

d) Improve the blood circulation in your fingers by relaxing your hands and exercising your fingers during breaks between working.

e) Avoid touching rotating parts. Switch the power tool on only after bringing it into position at the workpiece. Touching rotating parts, especially rotating insert tools, may lead to injury.

f) Always lead the supply cord and extension cord away from the power tool to the rear while working. This helps to avoid tripping over the cord while working.

g) Children must be instructed not to play with the power tool.

h) The power tool is not intended for use by children, by debilitated persons or those who have received no instruction or training.

i) WARNING: Some dust created by sanding, cutting and drilling contains chemicals known to cause cancer, birth defects, infertility or other reproductive harm; or serious and permanent respiratory or other injury. Some examples of these chemicals are: lead from lead-based paints, crystalline silica from bricks and cement, and arsenic and chromium from chemically-treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. To reduce exposure to these chemicals, wear personal protective equipment, some examples of which are: dust mask, rubber gloves, and protective clothing and/or skin.

To reduce exposure to these chemicals, work in a well-ventilated area.

"Prolonged contact with dust" means that dust particles can enter and cause injury to the eyes, skin and respiratory system. Avoid prolonged contact with dust. Wear protective clothing and wash exposed areas with soap and water. Allowing dust to get into your mouth, eyes, or to remain on your skin may promote absorption of harmful chemicals.
b) Check that the grinding disc is fitted in accordance with the manufacturer's instructions.

c) If use of a spacer ring or other intermediate part is specified and the part is supplied with the grinding disc, check to ensure that the part is fitted.

d) Never use the power tool without the guard.

e) The workpiece must be fixed securely in place.

f) Do not use cutting discs for grinding.

g) After disc breakage, or if the power tool is dropped, falls or suffers other mechanical damage, it must be checked at a Hilti Service Center.

h) Take steps to ensure that flying sparks from the power tool do not present a hazard, i.e. by striking yourself or other persons. Adjust the position of the guard accordingly.

i) In case of an interruption in the electric supply: Switch the power tool off and unplug the supply cord. This will prevent accidental restarting when the electric power returns.

2.9.3 Electrical safety

a) Before beginning work, check the working area (e.g. using a metal detector) to ensure that no concealed electric cables or gas and water pipes are present. External metal parts of the power tool may become live, for example, when an electric cable is damaged accidentally. This presents a serious risk of electric shock.

b) Check the power tool's supply cord at regular intervals and have it replaced by a qualified specialist if found to be damaged. If the power tool's supply cord is damaged it must be replaced with a specially-prepared supply cord available from Hilti Customer Service. Check extension cords at regular intervals and replace them if found to be damaged. Do not touch the supply cord or extension cord if it is damaged while working. Disconnect the supply cord plug from the power outlet. Damaged supply cords or extension cords present a risk of electric shock.

c) Dirty or dusty power tools which have been used frequently for work on conductive materials should be checked at regular intervals at a Hilti Service Center. Under unfavorable circumstances, dampness or dust adhering to the surface of the power tool, especially dust from conductive materials, may present a risk of electric shock.

d) When working outdoors with an electric tool check to ensure that the tool is connected to the electric supply by way of a ground fault circuit interrupter (GFCI) with a rating of max. 30 mA (tripping current). Use of a ground fault circuit interrupter reduces the risk of electric shock.

e) Use of a ground fault circuit interrupter (GFCI) with a maximum tripping current of 30 mA is recommended.

2.9.4 Work area

a) Ensure that the workplace is well lit.

b) Ensure that the workplace is well ventilated. Exposure to dust at a poorly ventilated workplace may result in damage to the health.

2.9.5 Personal protective equipment

The user and any other persons in the vicinity must wear ANSI Z87.1-approved eye protection, a hard hat, ear protection, protective gloves and breathing protection while the power tool is in use.

3 Description

3.1 Use of the product as directed

The power tool is an electrically-powered angle grinder for professional use in the construction industry. The power tool is designed for cutting, grinding and brushing metal or mineral materials (concrete, stone, etc.) without use of water.

Observe the information printed in the operating instructions concerning operation, care and maintenance.

Working with metals: Cutting, rough grinding, fine grinding, brushing

Working with mineral materials: Cutting, slitting and grinding.

Use only grinding or cutting discs of max. 7" in diameter that are approved for use at a spindle speed of at least 8500 rpm and with a permissible peripheral speed of 80m/sec.

To avoid the risk of injury, use only genuine Hilti accessories and insert tools.

Working on materials hazardous to the health (e.g. asbestos) is not permissible.

Nationally applicable industrial safety regulations must be observed.

Modification of the power tool or tampering with its parts is not permissible.

The power tool may be operated only when connected to a power supply providing a voltage and frequency in compliance with the information given on its type identification plate.
The working environment may be as follows: construction site, workshop, renovation, conversion or new construction. The power tool is designed for professional use and may be operated, serviced and maintained only by trained, authorized personnel. This personnel must be informed of any special hazards that may be encountered. The power tool and its ancillary equipment may present hazards when used incorrectly by untrained personnel or when used not as directed. Take the influences of the surrounding area into account. Do not use the power tool or appliance where there is a risk of fire or explosion.

### 3.2 Grips
- Side handle

### 3.3 Switches
- Lockable on / off switch

### 3.4 Items supplied as standard include:
1. Power tool
2. Guard
3. Side handle
4. Clamping flange for offset discs
5. Clamping nut
6. Wrench
7. Operating instructions
8. Cardboard box

### 3.5 Using extension cords
Use only extension cords of a type approved for the application and with conductors of adequate cross section. The power tool may otherwise lose performance and the extension cord may overheat. Check the extension cord for damage at regular intervals. Replace damaged extension cords.

<table>
<thead>
<tr>
<th>Conductor cross section</th>
<th>14 AWG</th>
<th>12 AWG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mains voltage 110-120 V</td>
<td>75 ft</td>
<td>125 ft</td>
</tr>
</tbody>
</table>

Do not use extension cords with 16 AWG conductor cross section.

### 3.6 Using extension cords outdoors
When working outdoors, use only extension cords that are approved and correspondingly marked for this application.

### 3.7 Using a generator or transformer
This power tool may be powered by a generator or transformer when the following conditions are fulfilled: The unit must provide a power output in watts of at least twice the value printed on the type identification plate on the power tool. The operating voltage must remain within +5% and -15% of the rated voltage at all times, frequency must be in the 50 – 60 Hz range and never above 65 Hz, and the unit must be equipped with automatic voltage regulation and starting boost. Never operate other power tools or appliances from the generator or transformer at the same time. Switching other power tools or appliances on and off may cause undervoltage and / or overvoltage peaks, resulting in damage to the power tool.

### 3.8 Guard with cover plate
**CAUTION**
When grinding with straight grinding discs and cutting with cutting discs in metalworking applications, use only the guard with cover plate. This is available as an optional accessory.
4 Technical data

Right of technical changes reserved.

<table>
<thead>
<tr>
<th>Power tool</th>
<th>DAG 700-P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated voltage</td>
<td>120 V</td>
</tr>
<tr>
<td>Rated current input</td>
<td>15 A</td>
</tr>
<tr>
<td>Rated frequency</td>
<td>60 Hz</td>
</tr>
<tr>
<td>Rated speed</td>
<td>8,500/min</td>
</tr>
<tr>
<td>Cutting disc</td>
<td>Diameter 7&quot;</td>
</tr>
<tr>
<td>Dimensions (L x H x W) without hood</td>
<td>473 mm (18.62&quot;) x 136 mm (5.35&quot;) x 105 mm (4.13&quot;)</td>
</tr>
<tr>
<td>Weight of power tool</td>
<td>5.7 kg (12.57 lb)</td>
</tr>
</tbody>
</table>

Information about the power tool and its applications

Drive spindle thread (arbor size) | ⁵⁄₈"-11
Spindle length | ³⁄₄"
Protection class | Protection class II (double insulated)

5 Before use

WARNING
Never use the power tool without the guard.

5.1 Fitting the side handle

WARNING
The side handle must be fitted for all types of work.

The side handle may be screwed onto the left, right or top side of the power tool.

5.2 Guard

CAUTION
The closed side of the guard must always face the operator.

NOTE
The keyed locating lug on the guard ensures that only a guard designed for use with the power tool can be fitted. The keyed locating lug also prevents the guard from coming into contact with the disc.

5.2.1 Fitting and removing the guard

1. Disconnect the supply cord plug from the power outlet.
2. Fit the guard so that the locating lug engages in the notch in the spindle collar and then rotate it into the required working position.
3. Secure the guard by tightening the screw.
4. To remove the guard from the power tool, follow the instructions for fitting the guard but carry out the steps in the reverse order.

5.2.2 Adjusting the guard

1. Disconnect the supply cord plug from the power outlet.
2. Slacken the screw.
3. Rotate the guard to the desired position.
4. Secure the guard by tightening the screw.

5.2.3 Fitting and removing the guard (keyless)

NOTE
The guard is already set to the correct tension by way of the adjusting screw. If the tension is found to be too low when the guard is fitted, the adjusting nut can be tightened slightly to increase the tension.

1. Disconnect the supply cord plug from the power outlet.
2. Release the clamping lever.
3. Fit the guard onto the spindle collar so that the keyed locating lug engages in the recess provided.
4. Rotate the guard to the required position.
5. Secure the guard by closing the clamping lever.
6. To remove the guard from the power tool, follow the instructions for fitting the guard but carry out the steps in the reverse order.

5.2.4 Adjusting the guard (keyless)

1. Disconnect the supply cord plug from the power outlet.
2. Release the clamping lever.
3. Rotate the guard to the desired position.
4. Close the clamping lever.

5.3 Fitting discs

DANGER
Check that the speed rating printed on the cutting or grinding disc is equal to or higher than the rated speed of the power tool.

DANGER
Check the condition of the grinding disc before using it. Do not use discs that are broken, cracked or damaged in any way.

DANGER
Do not use discs larger than 7” in diameter.

5.3.1 Fitting flat discs

CAUTION
When grinding with straight grinding discs and cutting with cutting discs in metalworking applications, use only the guard with cover plate. This is available as an optional accessory.

WARNING
Use of a flat disc with an offset clamping flange may lead to breakage of the disc.

6 Operation

NOTE
Adjust the position of the guard to suit the requirements of the work being done.

DANGER
Wear ear protectors. Exposure to noise can cause hearing loss.

CAUTION
The closed side of the guard must always face the operator.

WARNING
Test new cutting or grinding discs by allowing them to run at maximum speed in a protected area for at least 30 seconds.

1. Disconnect the supply cord plug from the power outlet.
2. Clean the clamping flange for flat discs.
3. Place the clamping flange for flat discs on the drive spindle.
4. Fit the flat disc.
5. Place the outer clamping flange for flat discs on the drive spindle.
6. Screw on the clamping nut and tighten it.
7. CAUTION Do not press the spindle lock button before the drive spindle has stopped rotating. Press the spindle lock button and hold it in this position.
8. Use the wrench to tighten the clamping nut securely and then release the spindle lock button.

5.3.2 Fitting offset discs

WARNING
Use of a flat disc with an offset clamping flange may lead to breakage of the disc.

1. Disconnect the supply cord plug from the power outlet.
2. Clean the clamping flange for offset discs.
3. Place the clamping flange for offset discs on the drive spindle.
4. Fit the offset disc.
5. Screw on the clamping nut and tighten it.
6. CAUTION Do not press the spindle lock button before the drive spindle has stopped rotating. Press the spindle lock button and hold it in this position.
7. Use the wrench to tighten the clamping nut securely and then release the spindle lock button.

WARNING
Slits cut in loadbearing 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. Consult the structural engineer, architect, or person in charge of the building project before beginning the work.

WARNING
The electric supply voltage must comply with the information given on the type identification plate on the power tool.

WARNING
Always use the side handle with the power tool.

CAUTION
Use clamps or a vice to hold the workpiece securely.
WARNING
Cutting or grinding may cause splintering of the material. Wear eye protection.

CAUTION
Breathing protection must be worn if the power tool is used without a dust removal system for work that creates dust.

WARNING
Avoid touching rotating parts. Switch the power tool on only after bringing it into position at the workpiece. Touching rotating parts, especially rotating insert tools, may lead to injury.

CAUTION
The insert tool may get hot during use. Wear protective gloves when changing insert tools.

WARNING
Reduce the load on the power tool by avoiding tilting the disc in the kerf when cutting. The disc may otherwise break, or the power tool may kick back or stall.

CAUTION
The direction in which the cut is made is important. The disc must always cut in counter-rotating mode. Failure to observe this point presents a risk of the cutting disc being forced uncontrollably out of the kerf.

NOTE
Special discs should be used for working on non-ferrous metals (e.g. aluminium).

NOTE
The cutting disc may overheat and suffer damage when cutting very hard mineral materials with a high hard pebble content. A trail of sparks right round the circumference of the cutting disc is a sure indication of this. In this case, the cutting operation should be interrupted and the cutting disc allowed to cool by running the power tool under no load for a short time.

NOTE
A decrease in the rate of cutting progress may be an indication of blunt/dull segments. The segments can be resharpened by making a few cuts in an abrasive material (Hilti sharpening plate or sand-lime block).

CAUTION
Never use cutting discs for grinding.

When rough grinding, maximum efficiency is achieved when the power tool is held with the disc at an angle of 30° to the work surface. Excessive pressure applied while grinding will damage the power tool, increase disc wear and reduce grinding efficiency.

7 Care and maintenance

CAUTION
Disconnect the mains plug from the power outlet.

7.1 Care of the power tool

DANGER
Under extreme conditions, when used for working on metal, conductive dust may accumulate inside the tool. This may have an adverse effect on the tool’s protective insulation. Under such conditions, the tool should be plugged into a ground fault circuit interrupter (GFCI) and use of a stationary dust removal system and frequent cleaning of the tool’s cooling air slots is recommended.

The outer casing of the power tool is made from impact-resistant plastic. Sections of the grip are made from a synthetic rubber material. Never operate the power tool when the ventilation slots are blocked. Clean the ventilation slots carefully using a dry brush. Do not permit foreign objects to enter the interior of the power tool. Clean the outside of the power tool at regular intervals with a slightly damp cloth. Do not use a spray, steam pressure cleaning equipment or running water for cleaning. This may negatively affect the electrical safety of the power tool. Always keep the grip surfaces of the power tool free from oil and grease. Do not use cleaning agents which contain silicone.
7.2 Maintenance

WARNING
Do not operate the power tool if parts are damaged, if the electronic control unit is defective or when the controls do not function faultlessly. Have the power tool repaired by Hilti Service.

WARNING
Repairs to the electrical section of the power tool may be carried out only by trained electrical specialists.

7.3 Checking the power tool after care and maintenance

Check all external parts of the power tool for damage at regular intervals and check that all controls operate faultlessly.

8 Insert tools, accessories

Discs of max. 7" diameter designed for use at 8500/min and a peripheral speed of 80 m/sec

<table>
<thead>
<tr>
<th>Designation</th>
<th>Short designation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasive discs</td>
<td>Type 1, type 41, type 42</td>
<td></td>
</tr>
<tr>
<td>Diamond discs</td>
<td>DC-D 7&quot;</td>
<td></td>
</tr>
<tr>
<td>Wire brushes</td>
<td>Ø Max. 7&quot;</td>
<td></td>
</tr>
<tr>
<td>Abrasive flap discs</td>
<td>Ø Max. 7&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Accessories

<table>
<thead>
<tr>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guard with cover plate</td>
</tr>
<tr>
<td>Vacuum cleaner from the Hilti range</td>
</tr>
<tr>
<td>Inner clamping flange for flat discs</td>
</tr>
<tr>
<td>Outer clamping flange for flat discs</td>
</tr>
</tbody>
</table>

9 Troubleshooting

<table>
<thead>
<tr>
<th>Fault</th>
<th>Possible cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The power tool doesn’t start.</td>
<td>Interruption in the electric supply.</td>
<td>Plug in another electric appliance and check whether it works.</td>
</tr>
<tr>
<td>The supply cord or plug is defective.</td>
<td>Have the parts checked by a trained electrical specialist and replaced if necessary.</td>
<td></td>
</tr>
<tr>
<td>The carbon brushes are worn.</td>
<td>Have it checked by a trained electrical specialist and replaced if necessary.</td>
<td></td>
</tr>
<tr>
<td>The power tool doesn’t achieve full power.</td>
<td>The extension cord’s conductor cross section is inadequate.</td>
<td>Use an extension cord with an adequate conductor cross section.</td>
</tr>
</tbody>
</table>

10 Disposal

Most of the materials from which Hilti power tools or appliances are manufactured can be recycled. The materials must be correctly separated before they can be recycled. In many countries, Hilti has already made arrangements for taking back your old power tools or appliances for recycling. Please ask your Hilti customer service department or Hilti representative for further information.
11 Manufacturer’s warranty - tools

Hilti warrants that the tool supplied is free of defects in material and workmanship. This warranty is valid so long as the tool is operated and handled correctly, cleaned and serviced properly and in accordance with the Hilti Operating Instructions, and the technical system is maintained. This means that only original Hilti consumables, components and spare parts may be used in the tool.

This warranty provides the free-of-charge repair or replacement of defective parts only over the entire lifespan of the tool. Parts requiring repair or replacement as a result of normal wear and tear are not covered by this warranty.

Additional claims are excluded, unless stringent national rules prohibit such exclusion. In particular, Hilti is not obligated for direct, indirect, incidental or consequential damages, losses or expenses in connection with, or by reason of, the use of, or inability to use the tool for any purpose. Implied warranties of merchantability or fitness for a particular purpose are specifically excluded.

For repair or replacement, send the tool or related parts immediately upon discovery of the defect to the address of the local Hilti marketing organization provided.

This constitutes Hilti’s entire obligation with regard to warranty and supersedes all prior or contemporaneous comments and oral or written agreements concerning warranties.