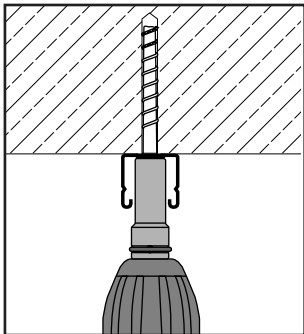
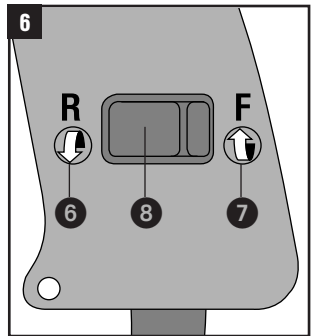
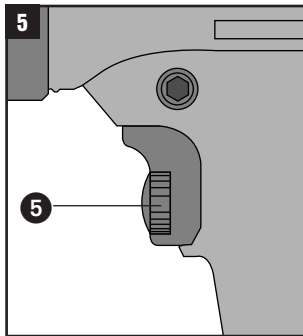
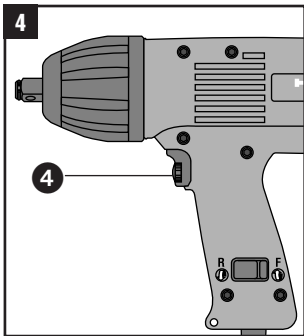
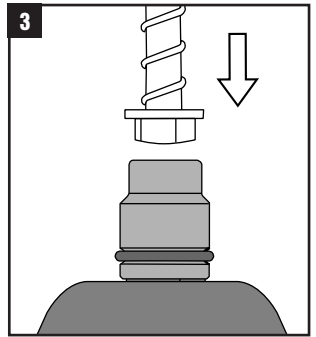
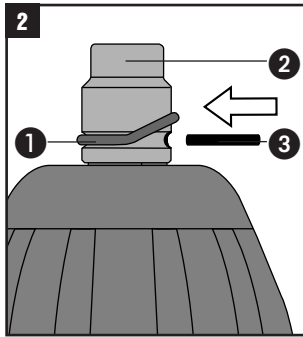
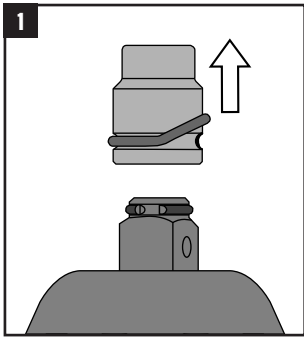
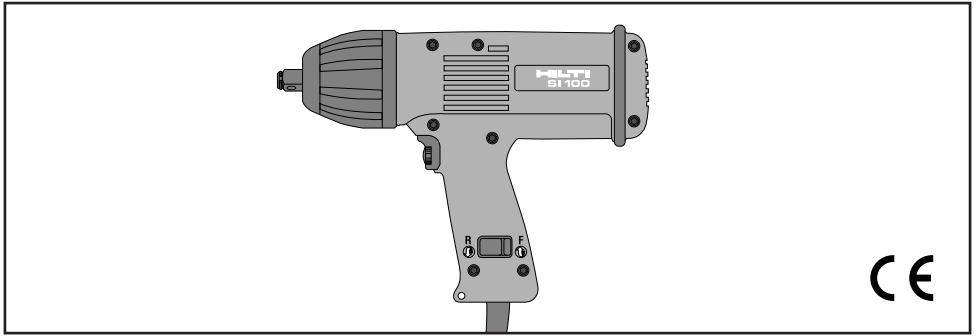


Bedienungsanleitung	de
Operating instructions	en
Mode d'emploi	fr
Istruzioni d'uso	it
Gebruiksaanwijzing	nl
Manual de instruções	pt
Manual de instrucciones	es
Brugsanvisning	da
Käyttöohje	fi
Bruksanvisning	no
Bruksanvisning	sv
Οδηγίες χρήσεως	el
Ръководство за обслужване	bg
Upute za uporabu	hr
Instrukcja obsługi	pl
Инструкция по експлуатации	ru
Návod na obsluhu	sk
Navodila za uporabo	sl
Návod k obsluze	cs
Használati utasítás	hu
取扱説明書	ja
دليل الاستعمال	ar



ORIGINAL OPERATING INSTRUCTIONS

SI 100 Impact Screwdriver

- Prior to using this electric tool, please read the operating instructions without fail.
- Always keep these operating instructions with the electric tool.
- Only pass on the electric tool complete with operating instructions to another person.
- Don't use this electric tool in any way other than described in the operating instructions.


Operating controls and component parts

- 1 O-ring
- 2 Nut setter socket
- 3 Retaining pin
- 4 Electronic switch for smooth starting
- 5 Speed and torque presetting wheel
- 6 Counter-clockwise rotation
- 7 Clockwise rotation
- 8 Reversing switch

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General information

 In these operating instructions, this symbol indicates points of particular importance to safety. The instructions at these points must always be observed in order to avoid the risk of serious injury.

 Danger: electricity

Symbols



Read the operating instructions before use.



Return waste material for recycling.

I The numbers refer to the illustrations. The illustrations can be found on the fold-out cover pages. Keep these pages open while you read the operating instructions.

In these operating instructions, the electric tool to which these operating instructions apply is referred to as “the tool”.

Description

The impact screwdriver SI 100 is a hand-held tool.

Recommended screwdriver usage:

- Driving Hilti screw anchors of the HUS-H 10 size and larger into concrete of C20 to C50 grade and removing them in accordance with the manufacturer's recommendations. The HUS 7.5 size may not be screwed in.
- Driving screws into Hilti HRD framing anchors and driving in D-FV insulation fasteners in accordance with the manufacturer's recommendations.

Technical data

Rated input:	470 W
Rated voltage: *	110 V 230 V
Rated current: *	4.3 A 2.1 A
Mains frequency:	50–60 Hz
No-load speed:	0–2200 r.p.m.
Impact speed:	Max. 2600 impacts/min.
Clockwise / counter-clockwise rotation:	Performance identical
Chuck:	1/2" square pin with retaining pin
Weight as per EPTA-Procedure 01/2003:	2.3 kg
Max. tightening torque:	100 Nm
Double insulation, class II:	EN 60745

*** This screwdriver is available wound for various nominal voltages. The nominal voltage and nominal current draw / input of your screwdriver are shown on the nameplate.**

-NOTE-

The vibration emission level given in this information sheet has been measured in accordance with a standardised test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure. The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period. An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period. Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns.

Noise and vibration measured (in accordance with EN 60745):

Typical A-weighted noise levels of the tool are:

– Sound pressure level	95 dB (A)
– Sound power level	106 dB (A)

For the given sound power level as per EN 60745, the tolerance is 3 dB.

Wear ear protection!

Triaxial vibration value (vibration vector sum)
measured in accordance with EN 60745-2-2

Impact tightening of fasteners

of the maximum capacity of the tool, (a_{h1}):

8,4 m/s²

Uncertainty (K) for triaxial vibration value:

1,5 m/s²


Right of technical modifications reserved

Anchor products / suitable setting tools

Setting tools	Anchor products	HUS-H 10/HUS-H 10.5/ HUS-H 12/HUS-H 12.5	HRD-U 10/HRD-S 10/ HRD-U 14	D-FV U10 D-FV S10
Socket wrench insert S-NSD 13 ¹ / ₂ L		●	●	
Socket wrench insert S-NSD 15 ¹ / ₂ L		●		
Socket wrench insert S-NSD 13 ¹ / ₂		●	●	
Socket wrench insert S-NSD 15 ¹ / ₂		●		
Socket wrench insert S-NSD 17 ¹ / ₂			●	
Bit holder S-BHU 50 ¹ / ₂ x ¹ / ₄		●	●	
Bit S-B-TX 40T			●	●
Bit S-B-TX 40			●	●
Bit S-B-TX 50			●	
Extensions S-V 125 ¹ / ₂ x ¹ / ₂		●	●	

Anchor products other than the above-mentioned may not be driven in with or tightened by the SI100 impact screwdriver.


Connection to mains supply

This electric screwdriver may only be connected to a mains electric supply complying with the data on the nameplate and it will only operate on a single-phase, a.c. electric supply. In compliance with European guidelines / directives, this screwdriver is double insulated  and, thus, may also be run off plug sockets (receptacles) without grounding / earthing connections.



Safety precautions

1. General Power Tool Safety Warnings

- a)  **WARNING**
Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. **Save all warnings and instructions for future reference.** The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1.1 Work area safety

- a) **Keep work area clean and well lit.** *Cluttered or 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 children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*

1.2 Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs**

with earthed (grounded) power tools. *Unmodified plugs and matching outlets will reduce risk of electric shock.*

- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*
 c) **Do not 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 for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
 e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*
 f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

1.3 Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are 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) **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
 c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.**

Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.

- d) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

1.4 Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

1.5 Service

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

2 Additional safety precautions

2.1 Personal safety

- a) **Hold power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring or its own cord.** Fasteners contacting a 'live' wire may make exposed metal parts of the power tool 'live' and could give the operator an electric shock.
- b) **Wear ear protection.** Excessive noise may lead to a loss of hearing.
- c) **To avoid tripping and falling when working, always lead the supply cord, extension cord and dust extraction hose away from the rear.**
- d) **The tool is not intended for use by children, by debilitated persons or those who have received no instruction or training.**
- e) **Children must be instructed not to play with the tool.**
- f) **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 to the operator or bystanders. Certain kinds of dust are classified as carcinogenic such as oak and beech dust especially in conjunction with additives for wood conditioning (chromate, wood preservative). Material containing asbestos must only be treated by specialists. **Where the use of a dust extraction device is possible it shall be used.** To achieve a high level of dust collection, use a suitable vacuum cleaner of the type recommended by Hilti for wood dust and/or mineral dust together with this tool. 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.

2.2 Power tool use and care

- a) **In the event of a power failure, switch the tool off and unplug the supply cord.** This prevents inadvertent starting when the power returns.

2.3 Electrical safety

- a) **Before beginning work, check the working area (e.g. with a metal detector) to ensure that no concealed electric cables or gas and water pipes are present.** External metal parts of the tool may become live if, for example, an electric cable is damaged inadvertently. This presents a serious risk of electric shock.
- b) **Check the condition of the supply cord and its plug connections and have it replaced by a qualified electrician if damage is found. Check the condition of the extension cord and replace it if damage is found. Do not touch the supply in the event of it suffering damage while working. Disconnect the supply cord plug from the socket.** Damaged supply cords and extension cords present a risk of electric shock.
- c) **Dirty or dusty electric tools should thus be checked at a Hilti service center at regular intervals, espe-**

cially if used frequently for working on conductive materials. Dust (especially dust from conductive materials) or dampness adhering to the surface of the tool may, under unfavorable conditions, present a risk of electric shock.

2.4 Work area

- Ensure that the workplace is well lit.
- Ensure that the workplace is well ventilated.
Poorly ventilated workplaces may be injurious to the health due to exposure to dust.

2.5 Personal protective equipment

The user and any other persons in the vicinity must wear suitable eye protection, ear protection and protective gloves when the tool is in use.



Wear eye protection




Wear ear protection



Wear protective gloves

2.6 Additional safety precautions

- Carefully examine the nut setter socket/bit holder/extension for wear, cracks or damage prior to use or starting the tool at any time. Never touch the rotating nut setter socket/bit holder/extension.
- Use protective gloves because the temperature of the chuck, the socket wrench insert/bit holder/extension and, under circumstances, the head of the screw just driven or removed can be high after longer periods of operation.
- Hold the screwdriver securely when working with it. Make sure you have a firm stance and always keep your balance. Make sure that no-one is below you when you are working with the screwdriver in a high position.
- Put the screw anchor into the socket wrench insert only just before driving it in. Keep an eye open for parts which might fall out during disassembly.
-  Don't hold or touch metal parts of the screwdriver or bit / other insert tool when driving screws into ceilings, walls and floors or other places which might contain electric cables, conduits, etc. Hold only the insulated grip surfaces of the screwdriver to avoid an electric shock on unintentionally driving a screw anchor / screw into an electric cable, etc.
- Always make sure the rubber cover at the front of the housing is properly fitted.
- Only run the tool where it is to be used. In particular, only switch it on after pointing it to where the fastening is to be made.


Operating instructions

Selection of nut setter socket/bit holder/extension

Only use Hilti impact screwdriver nut setter sockets. Use nut setter sockets with the same widths across flats as the screws or nuts being driven. Widths across flats not matching each other falsify the torque and damage the nut setter insert and the screw head / nut. Make sure that no foreign matter, such as small screws or nails, are held by magnetic socket wrench inserts in use when switching on the screwdriver.


Attachment of nut setter socket/bit holder/extension

1 2 3

 Prior to attaching or removing the nut setter socket/bit holder/extension, make sure the screwdriver is switched off and its plug is pulled out of the electric supply socket (receptacle).

Remove the O-ring from the groove in the nut setter socket and pull out the retaining pin. Put the nut setter socket/bit holder/extension onto the square drive pin of the screwdriver. Align the bores in the square drive pin and nut setter/bit holder/extension to permit insertion of the retaining pin. Insert the retaining pin and replace the O-ring to secure the nut setter socket/bit holder/extension. Carry out these operations in the reverse order for disassembly. **The retaining pin for the nut setter socket/bit holder/extension must be fitted and secured before using the screwdriver.**

Trigger switch 4

 Prior to plugging the screwdriver into an electric supply, always check that the trigger switch works properly and returns to the OFF position when released. When switching on the screwdriver, press the electronic trigger switch. The r.p.m. increase with greater pressure on the switch. To switch off, release the switch.

Speed and torque presetting wheel 5

The speed, and thus also the torque, can be preselected by turning this wheel. The maximum speed and torque are set when the screwdriver is delivered.

Reversing switch 6

The direction of rotation can be changed with the reversing switch. Press the right-hand side of the switch for clockwise rotation (F) and the left-hand side for counter-clockwise rotation (R).



- Always check the direction of rotation before starting to work.
- Never change the direction of rotation while the motor is running. If you do, the screwdriver can be damaged.

Hold the screwdriver firmly and place the nut setter socket over the screw head or nut. Drive in the screw or tighten the nut, while judging the time required.

Note:

- Hold the screwdriver perpendicular to the screw / nut-and-bolt fastening. Don't apply excessive pressure.
- Avoid using too high a torque. This can damage the screw / nut-and-bolt fastening.

After driving a screw / tightening a nut, check for correct tightening using a torque wrench and, if necessary, retighten the fastening. The torque is influenced by various factors, such as:

1. Mains voltage

A drop in voltage / undervoltage reduces the preselected maximum torque / speed.

2. Nut setter socket

Incorrectly matched widths across flats of the nut setter socket and screw head / nut reduce the torque. A worn nut setter socket (damaged hexagon head or square drive pin) reduces the torque.

3. Screws

For the same type of screw or fastening, the screw diameter governs the torque.

For the same screw diameter, the screw length and type of screw head determine the achievable torque.

4. Extensions

The use of extensions, link joints, etc. reduces the torque. This can be counteracted by driving the screw longer.

5. Base material

The way the screwdriver is used and the material being screwed into influence the torque.

In concrete base material (concrete screws), hole tolerance and different concrete strengths are responsible for different resistance to penetration.

It is recommended that trials be carried out with problematic screw fastenings on the jobsite.

Maintenance

Prior to working on the screwdriver, make sure the switch is in the OFF position and the plug is pulled out of the electric supply socket / receptacle.

To keep this screwdriver safe and reliable, its maintenance, repair and adjustment should only be carried out by workshops or customer service centres authorised by Hilti which use only original Hilti spare parts.

-CAUTION-

Keep the power tool, especially its grip surfaces, clean and free from oil and grease. Do not use cleaning agents which contain silicone.

The outer casing of the tool is made from impact-resistant plastic. Sections of the grip are made from a synthetic rubber material. Never operate the 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 tool. Clean the outside of the 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 tool.

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 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.

Disposal

Most of the materials from which Hilti power tools 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 electric tools for recycling. Please ask your Hilti customer ser-

vice department or Hilti sales representative for further information.



Only for EU countries

Disposal of electric tools together with household waste is not permissible!

In observance of European Directive on waste electrical and electronic equipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

EC declaration of conformity (original)

Description:	Impact Screwdriver
Designation:	SI 100
Year of desing:	1999

We declare, under our sole responsibility, that this product complies with the following directives and standards: 2006/42/EC, 2004/108/EC, EN 60745-1, EN 60745-2-2, EN ISO 12100, 2011/65/EU.

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