

# HILTI

**SIW 22T-A  $\frac{1}{2}$ "**  
**SIW 22T-A  $\frac{3}{4}$ "**

English





## 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 symbols used



#### 1.2.1 Warnings

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

	<b>DANGER!</b> Draws attention to an imminent hazard that will lead to serious personal injury or fatality.
	<b>WARNING!</b> Draws attention to a potential hazard that could lead to serious personal injury or fatality.
	<b>CAUTION!</b> Draws attention to a potentially dangerous situation that could lead to minor personal injury or material damage.





#### 1.2.2 Symbols in the documentation

The following symbols are used in this document:

	Read the operating instructions before use
	Instructions for use and other useful information

#### 1.2.3 Symbols in the illustrations




The following symbols are used in illustrations:

	These numbers refer to the corresponding illustrations found at the beginning of these operating instructions.
	The numbering reflects the sequence of operations shown in the illustrations and may deviate from the steps described in the text.
	Item reference numbers are used in the <b>overview illustration</b> and refer to the numbers used in the key in the <b>product overview</b> section.
	This symbol is intended to draw special attention to certain points when handling the product.

### 1.3 Product-dependent symbols

#### 1.3.1 Symbols on the product

The following symbols are used on the product:

	Direct current (DC)
	Rated speed
	Revolutions per minute

### 1.4 Product information

Hilti products are designed for professional use and may be operated, 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 ancillary equipment can present hazards if used incorrectly by untrained personnel or if used not in accordance with the intended use.

The type designation and serial number are stated on the rating plate.

- Write down the serial number in the table below. You will be required to state the product details when contacting Hilti Service or your local Hilti organization to inquire about the product.

#### Product information

Type	SIW 22T-A $\frac{1}{2}$ "   SIW 22T-A $\frac{3}{4}$ "
Generation:	01
Serial no.:	

### 1.5 Declaration of conformity

We declare, on our sole responsibility, that the product described here complies with the applicable directives and standards. A copy of the declaration of conformity can be found at the end of this documentation.

The technical documentation is filed and stored here:

Hilti Entwicklungsgesellschaft mbH | Tool Certification | Hiltistrasse 6 | 86916 Kaufering, Germany

## 2 Safety

### 2.1 General power tool safety warnings

#### 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.**

#### Work area safety

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

#### Electrical safety

- **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.
- **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.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **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.
- **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.
- **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.

#### Personal safety

- **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.
- **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.
- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to 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.
- **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.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **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.

- ▶ **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.

#### **Power tool use and care**

- ▶ 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.
- ▶ **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.
- ▶ **Disconnect 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.
- ▶ **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.
- ▶ **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.
- ▶ **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- ▶ **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.

#### **Battery tool use and care**

- ▶ **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- ▶ **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- ▶ **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- ▶ **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

#### **Service**

- ▶ **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.

## **2.2 Additional safety precautions for screwdrivers**

#### **Personal safety**

- ▶ Only use the product if it is in perfect working order.
- ▶ Never tamper with or modify the tool in any way.
- ▶ Use the auxiliary grip supplied with the tool. Loss of control can cause personal injury.
- ▶ Always hold the power tool with both hands on the grips provided. Keep the grips clean and dry.
- ▶ Hold the power tool by the insulated gripping surfaces when performing an operation where the accessory tool may come into contact with concealed wiring. If the accessory tool comes into contact with a live wire, metal parts of the power tool may also become live, causing the operator to receive an electric shock.
- ▶ Avoid touching rotating parts – risk of injury!
- ▶ Wear suitable protective glasses, a hard hat, ear protection, protective gloves and light respiratory protection while using the tool.
- ▶ Wear protective gloves also when changing the accessory tool. Touching the accessory tool presents a risk of injury (cuts or burns).
- ▶ Wear eye protection. Flying fragments present a risk of injury to the body and eyes.
- ▶ Before starting work, check the hazard class of the dust that will be produced when working. Use an industrial vacuum cleaner with an officially approved protection class in compliance with the locally applicable dust protection regulations. Dust from materials such as lead-based paint, certain types of wood and concrete/masonry/stone containing quartz, minerals or metal may be harmful to health.
- ▶ Make sure that the working area is well ventilated and, where necessary, wear a respirator appropriate for the type of dust generated. Contact with or inhalation of dust may cause allergic reactions and/or respiratory or other diseases to the operator or bystanders. Certain kinds of dust, such as oak and beech

dust, are classified as carcinogenic, especially in conjunction with additives for treating wood (chromate, wood preservative). Materials containing asbestos may only be handled by specialists.

- ▶ Take breaks between working and do physical exercises to improve the blood circulation in your fingers. 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.

#### **Electrical safety**

- ▶ Before starting work, check the working area for concealed electric cables or gas and water pipes. If you damage an electric cable accidentally, external metal parts of the power tool may become live and present a risk of electric shock.

#### **Careful handling and use of power tools**

- ▶ Switch the power tool off immediately if the accessory tool jams. The power tool may go off course and veer to the side.
- ▶ Wait until the power tool has come to a complete stop before setting it down.

### **2.3 Careful handling and use of batteries**

- ▶ Observe the special guidelines applicable to the transport, storage and use of lithium-ion batteries.
- ▶ Do not expose batteries to high temperatures, direct sunlight or fire.
- ▶ Do not take apart, squash or incinerate batteries and do not subject them to temperatures over 80 °C.
- ▶ Do not attempt to charge or continue to use damaged batteries.
- ▶ If the battery is too hot to touch, it may be defective. In this case, place the power tool in a non-flammable location, well away from flammable materials, where it can be kept under observation and left to cool down. Contact **Hilti** Service after the battery has cooled down.







### 3 Description

#### 3.1 Overview of the product



- |  |  |
|--|--|
| ① 3/4" square drive with through hole                | ⑤ Belt hook (optional)   |
| ② Forward / reverse selector switch with safety lock | ⑥ Battery  |
| ③ Control switch                                     | ⑦ State-of-charge and fault display (Li-ion battery)                           |
| ④ Light to illuminate the work area                  | ⑧ Release button with additional function (state-of-charge display activation) |

### 3.2 Intended use

The product described is a hand-held cordless impact screwdriver. It is designed for tightening and releasing nuts, bolts, anchors and wood screws.

The impact screwdriver may be used only for applications that do not require a precise/specified torque. Failure to observe this point presents a risk of over-tightening and damage to the bolt, screw or workpiece.

- ▶ Use only **Hilti** lithium-ion batteries of the B 22 series with this product.
- ▶ Use only **Hilti** battery chargers of the C4/36 series for charging these batteries.

### 3.3 Items supplied

Impact screwdriver/wrench, operating instructions.



#### Note

To help ensure safe and reliable operation, use only genuine Hilti spare parts and consumables. Spare parts, consumables and accessories approved by us for use with the product can be found at your local **Hilti** Center or online at: [www.hilti.group](http://www.hilti.group)

## 4 Technical data

	SIW 22T-A 1/2	SIW 22T-A 3/4
<b>Rated voltage</b>	21.6 V	21.6 V
<b>Weight in accordance with EPTA procedure 01</b>	3.2 kg	3 kg
<b>Rated speed under no load</b>	0 /min ...2,000 /min	0 /min ...2,000 /min

### 4.1 Noise information and vibration values in accordance with EN 60745

The sound pressure and vibration values given in these instructions have been measured in accordance with a standardized test and may be used to compare one power tool with another. They may be used for a preliminary assessment of exposure.

The data given represents the main applications of the power tool. However, if the power tool is used for different applications, with different accessory tools or is poorly maintained, the data may vary. This may significantly increase exposure over the total working period.

An accurate estimation of exposure should also take into account the times when the power tool is switched off, or when it is running but not actually being used for a job. This may significantly reduce exposure over the total working period.

Identify additional safety measures to protect the operator from the effects of noise and/or vibration, for example: Maintaining the power tool and accessory tools, keeping the hands warm, organization of work patterns.

#### Noise emission values

	SIW 22T-A 1/2	SIW 22T-A 3/4
<b>Sound power level, <math>L_{WA}</math></b>	108 dB	111 dB
<b>Uncertainty for the sound power level, <math>K_{WA}</math></b>	3 dB	3 dB
<b>Sound pressure level, <math>L_{pA}</math></b>	97 dB	100 dB
<b>Uncertainty for the sound pressure level, <math>K_{pA}</math></b>	3 dB	3 dB

## Vibration values

	SIW 22T-A $\frac{1}{2}$	SIW 22T-A $\frac{3}{4}$
<b>Vibration emission value when tightening screws/bolts and nuts of the maximum permitted size</b>	14.5 m/s <sup>2</sup>	14.2 m/s <sup>2</sup>
<b>Uncertainty for tightening screws/bolts and nuts of the maximum permitted size</b>	1.5 m/s <sup>2</sup>	1.5 m/s <sup>2</sup>

## 5 Operation

### 5.1 Fitting the belt hook (optional)



#### **WARNING**

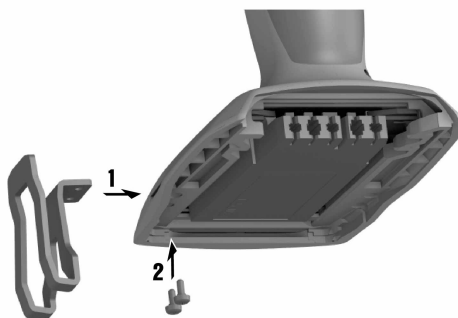
**Risk of injury!** Hazard presented by a falling power tool.

- ▶ A falling power tool may present a risk of injury to yourself and others. Check that the belt hook is fitted securely before beginning work.



#### **Note**

The belt hook allows the power tool to be attached to a belt worn by the operator. The belt hook can be fitted to allow attachment on the left or right side of the body.



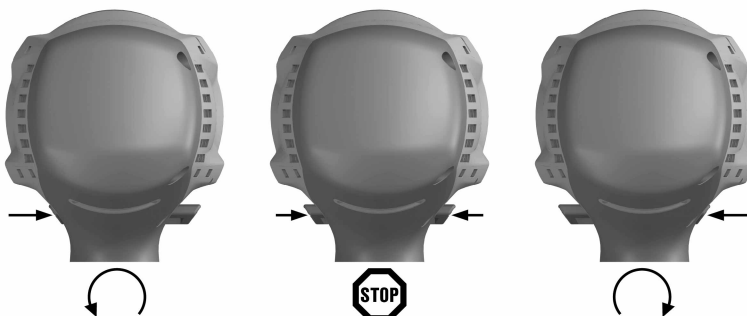
1. Disconnect the battery from the tool.
2. Fit the mounting plate into the guides provided.
3. Use the 2 screws to attach the belt hook and make sure that the screws are driven fully (countersunk head flush).

### 5.2 Setting forward or reverse rotation



#### **Note**

In the middle position, the forward / reverse selector switch serves as a safety lock.



- Set the forward / reverse selector switch to forward or reverse rotation.

### 5.3 Fitting the socket

SIW 22T-A  $\frac{1}{2}$ "



#### CAUTION

**Risk of injury** through use of the wrong type of accessory tool!

- Use only accessory tools of the locking type.
- Do not use worn or damaged accessory tools.



1. Set the forward/reverse switch to the middle position or remove the battery from the power tool.
2. Align the hole in the socket with the retention ball on the square drive.
3. Fit the locking ring on the socket.
  - ◁ The socket engages securely.

### 5.4 Fitting the socket

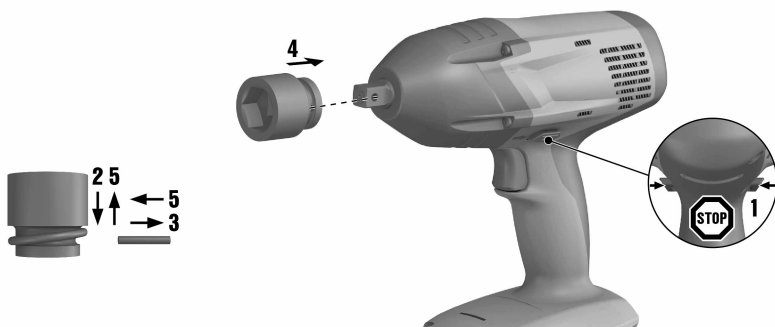
SIW 22T-A  $\frac{3}{4}$ "



#### CAUTION

**Risk of injury** through use of the wrong type of accessory tool!

- Use only accessory tools of the locking type.
- Do not use worn or damaged accessory tools.



1. Set the forward/reverse switch to the middle position or remove the battery from the power tool.
2. Remove the O-ring from the groove in the socket.
3. Place the socket on the square drive spindle of the tool.
4. Pull out the locking pin.
5. Place the socket on the square drive spindle of the tool.



#### Note

Take care to ensure that the holes in the square drive spindle and socket, into which the locking ring fits, are in alignment with each other.

6. Insert the locking pin in the socket.
7. Fit the O-ring on the socket.

### 5.5 Removing the socket

SIW 22T-A  $\frac{1}{2}$ "



1. Set the forward/reverse switch to the middle position or remove the battery from the power tool.
2. Pull the accessory tool off the square drive.

### 5.6 Removing the socket

SIW 22T-A  $\frac{3}{4}$ "



1. Set the forward/reverse switch to the middle position or remove the battery from the power tool.
2. Remove the O-ring from the groove in the socket.
3. Pull out the locking pin.
4. Remove the socket from the square drive spindle of the tool.
5. Fit the locking pin.
6. Fit the securing O-ring to the socket.

## 6 Care and maintenance of cordless tools



### WARNING

**Risk of electric shock!** Attempting care and maintenance with the battery fitted in the tool can lead to severe injury and burns.

- ▶ Always remove the battery before carrying out care and maintenance tasks!

### Care and maintenance of the tool

- Carefully remove stubborn dirt from the tool.
- Clean the air vents carefully with a dry brush.
- Use only a slightly damp cloth to clean the casing. Do not use cleaning agents containing silicone as these may attack the plastic parts.

### Care of the Li-ion batteries

- Keep the battery free from oil and grease.
- Use only a slightly damp cloth to clean the casing. Do not use cleaning agents containing silicone as these may attack the plastic parts.
- Avoid ingress of moisture.

### Maintenance

- Check all visible parts and controls for signs of damage at regular intervals and make sure that they all function correctly.
- Do not operate the cordless tool if signs of damage are found or if parts malfunction. Have the tool repaired by **Hilti** Service immediately.
- After cleaning and maintenance, fit all guards or protective devices and check that they function correctly.

## 7 Transport and storage of cordless tools

### Transport



### CAUTION

**Inadvertent starting during transport.** Uncontrolled starting during transport may occur if the battery is fitted, thereby resulting in damage to the tool.

- ▶ Always remove the battery before transporting the tool.

- ▶ Remove the battery.
- ▶ Transport the tool and batteries individually packaged.

- ▶ Never transport batteries in bulk form (loose, unprotected).
- ▶ Check the tool and batteries for damage before use after long periods of transport.

## Storage



### CAUTION

**Inadvertent damage caused by defective battery.** A leaking battery may damage the tool.

- ▶ Always remove the battery before storing the tool.
- 
- ▶ Store the tool and batteries in a place that is as cool and dry as possible.
  - ▶ Never store batteries in direct sunlight, on heating units or behind a window pane.
  - ▶ Store the tool and batteries in a place where they cannot be accessed by children or unauthorized persons.
  - ▶ Check the tool and batteries for damage before use after long periods of storage.

## 8 Troubleshooting

If the trouble you are experiencing is not listed in this table or you are unable to remedy the problem by yourself, please contact **Hilti** Service.

### 8.1 Troubleshooting

If the trouble you are experiencing is not listed in this table or you are unable to remedy the problem by yourself, please contact **Hilti** Service.

Trouble or fault	Possible cause	Action to be taken
The tool doesn't work.	The battery is not fitted correctly.	▶ The battery must be heard to engage. Remove the battery and refit it.
The tool doesn't work – 1 LED blinks.	1 LED blinks: The battery is empty.	▶ Remove the battery and charge it.
	The battery is too hot or too cold.	▶ Allow the battery to cool down / warm up to its working temperature.
The tool doesn't work – 4 LEDs blink.	The power tool was overloaded briefly.	▶ Release the control switch and then press it again.
The control switch cannot be pressed.	The forward / reverse selector switch is in the middle position.	▶ Push the forward / reverse switch to the left or right.
Speed of rotation drops considerably.	Low battery.	▶ Remove the battery and charge it.
The battery is not heard to engage.	The retaining lugs on the battery are dirty.	▶ Clean the retaining lugs.
The battery runs low more quickly than usual.	Very low ambient temperature.	▶ Warm up the battery slowly to room temperature.
The tool or the battery gets very hot.	The tool is overloaded (application limits exceeded).	▶ Intense heat is produced.

## 9 Disposal



### WARNING

**Risk of injury.** Hazards presented by improper disposal.

- ▶ Improper disposal of the equipment may have the following consequences: The burning of plastic components generates toxic fumes which may present a health hazard. Batteries may explode if damaged or exposed to very high temperatures, causing poisoning, burns, acid burns or environmental pollution. Careless disposal may permit unauthorized and improper use of the equipment. This may result in serious personal injury, injury to third parties and pollution of the environment.
- ▶ Dispose of defective batteries right away. Keep them out of reach of children. Do not disassemble or incinerate the batteries.
- ▶ Batteries that have reached the end of their life must be disposed of in accordance with national regulations or returned to **Hilti**.



Most of the materials from which **Hilti** tools and appliances are manufactured can be recycled. The materials must be correctly separated before they can be recycled. In many countries, your old tools, machines or appliances can be returned to **Hilti** for recycling. Ask **Hilti** Service or your Hilti representative for further information.



- ▶ Disposal of electric tools or appliances together with household waste is not permissible.

## 10 China RoHS (guideline on restriction of the use of dangerous substances)

The following links take you to the table of dangerous substances: [qr.hilti.com/r4265](http://qr.hilti.com/r4265) ( SIW 22T-A 1/2" ) and [qr.hilti.com/r2922676](http://qr.hilti.com/r2922676) (SIW 22T-A 3/4").

You will find a link to the RoHS table, in the form of a QR code, at the end of this document.

## 11 Manufacturer's warranty

- ▶ Please contact your local **Hilti** representative if you have questions about the warranty conditions.





**Hilti Aktiengesellschaft**  
Feldkircherstraße 100  
9494 Schaan | Liechtenstein

**SIW 22T-A 1/2" (01)**

[2013]

**SIW 22T-A 3/4" (01)**

[2013]

2006/42/EG

EN ISO 12100

2011/65/EU

EN 60745- 1

EN 60745-2-2

Schaan, 03/2013

A handwritten signature in black ink, appearing to read "Paolo Luccini".

**Paolo Luccini**

Head of BA Quality and  
Process-Management  
BA Electric Tools & Accessories

A handwritten signature in black ink, appearing to read "Tassilo Deinzer".

**Tassilo Deinzer**

Executive Vice President  
BU Electric Tools & Accessories

SIW 22T-A 1/2"



SIW 22T-A 3/4"







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[www.hilti.group](http://www.hilti.group)

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