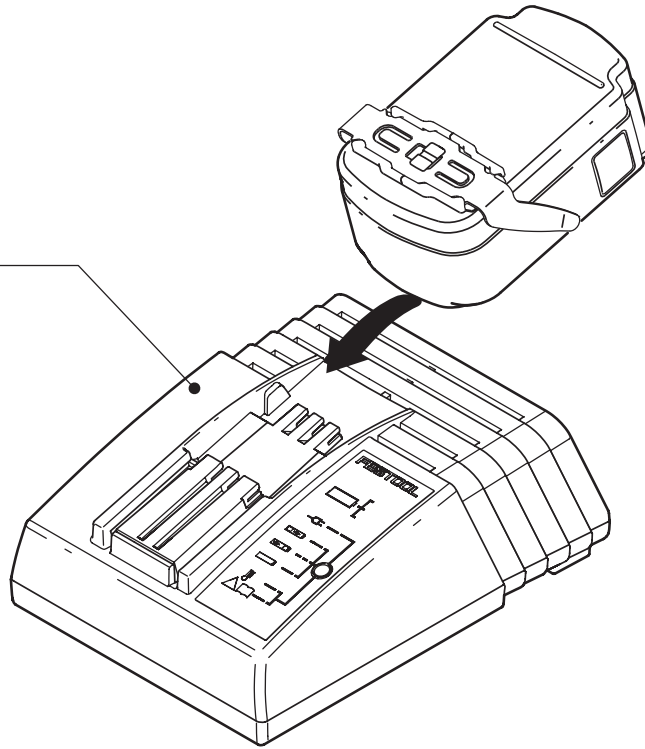
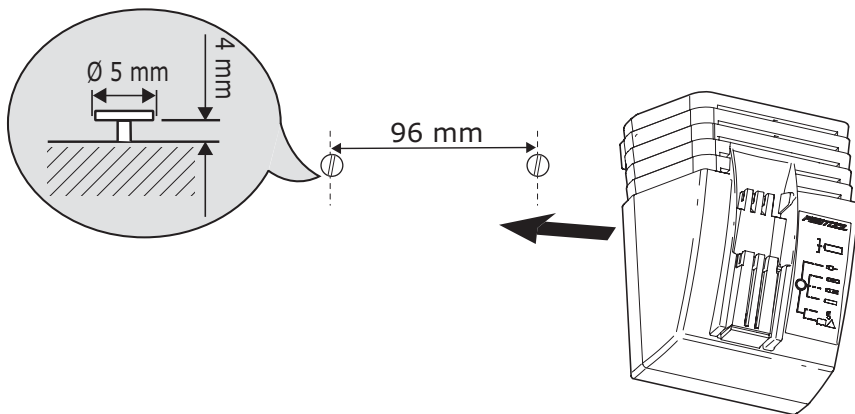
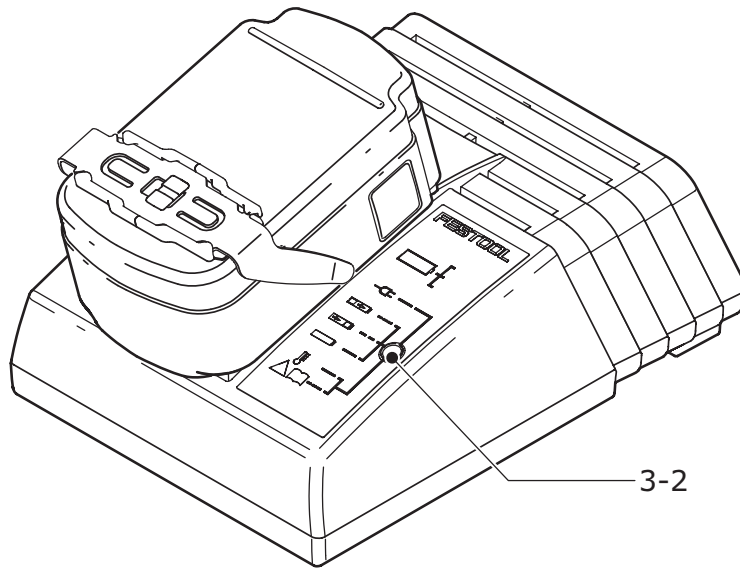


3-1

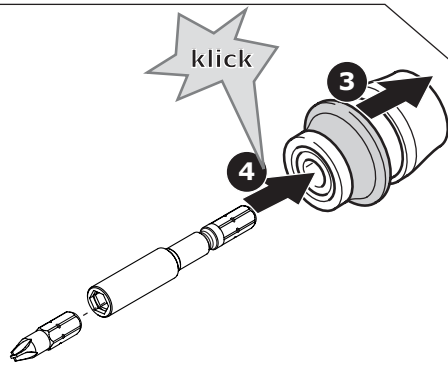
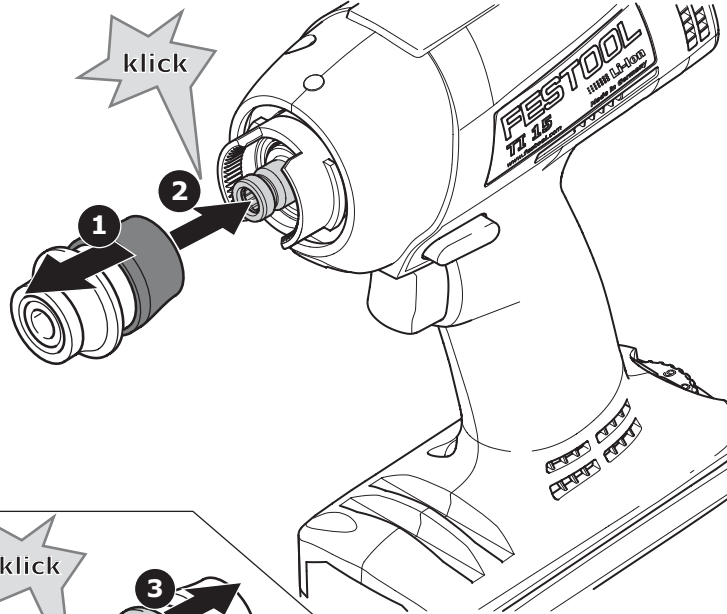


3-2

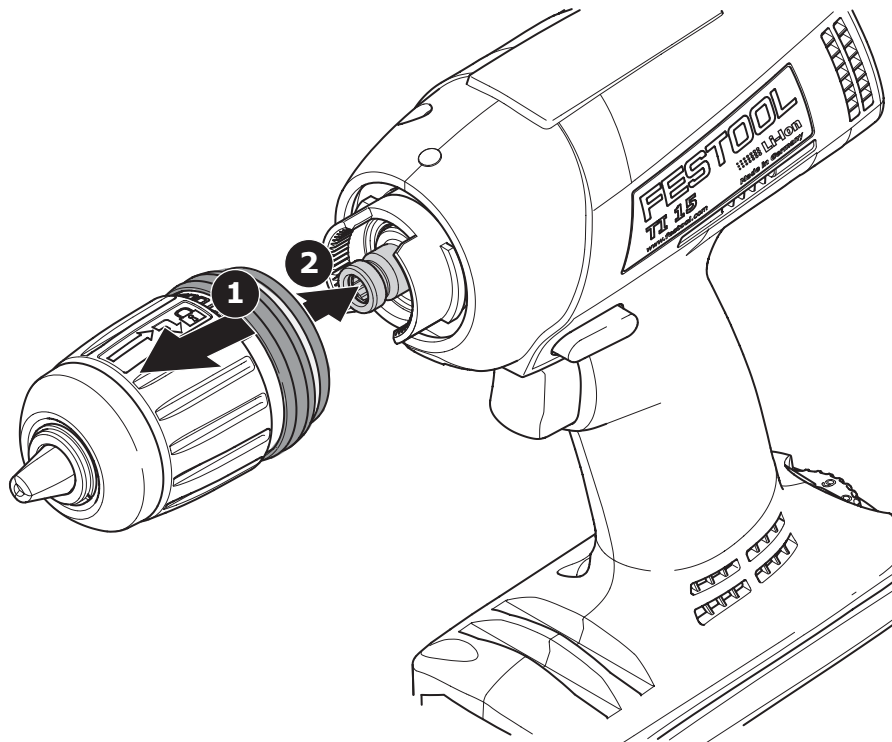


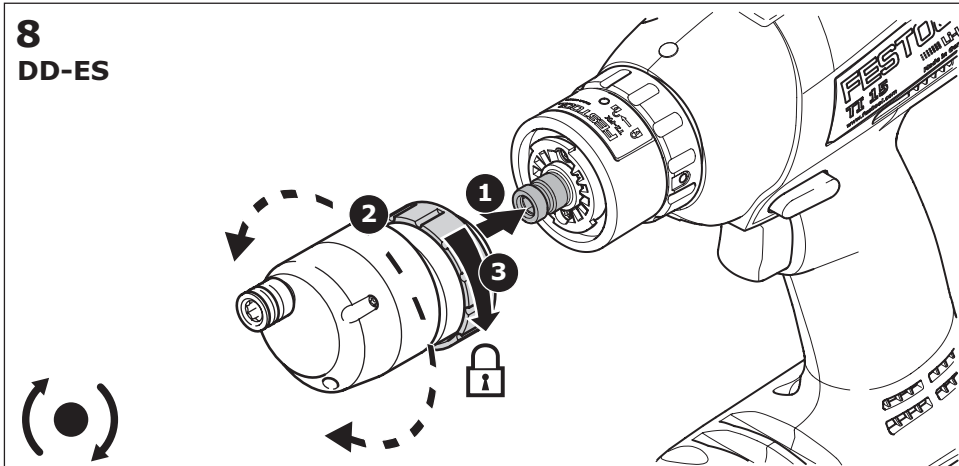
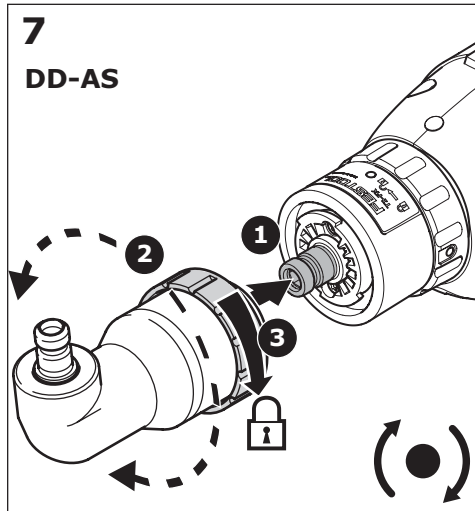
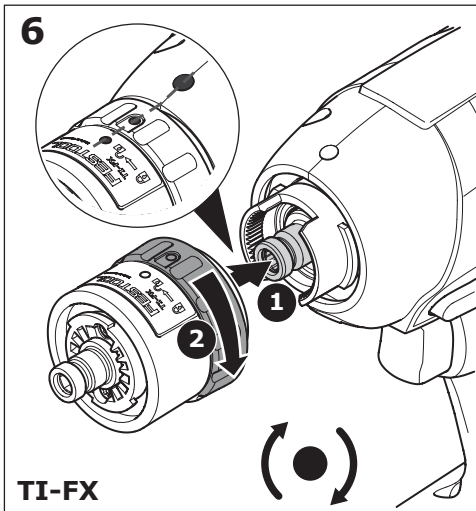
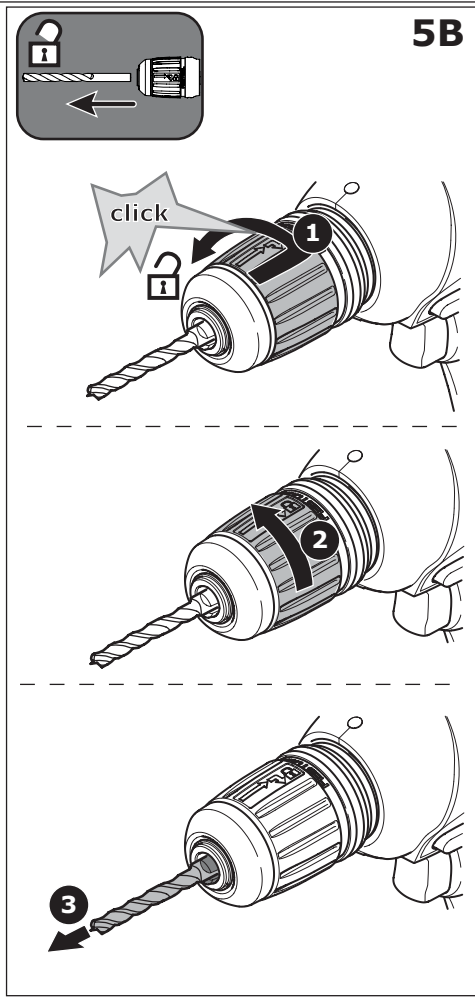
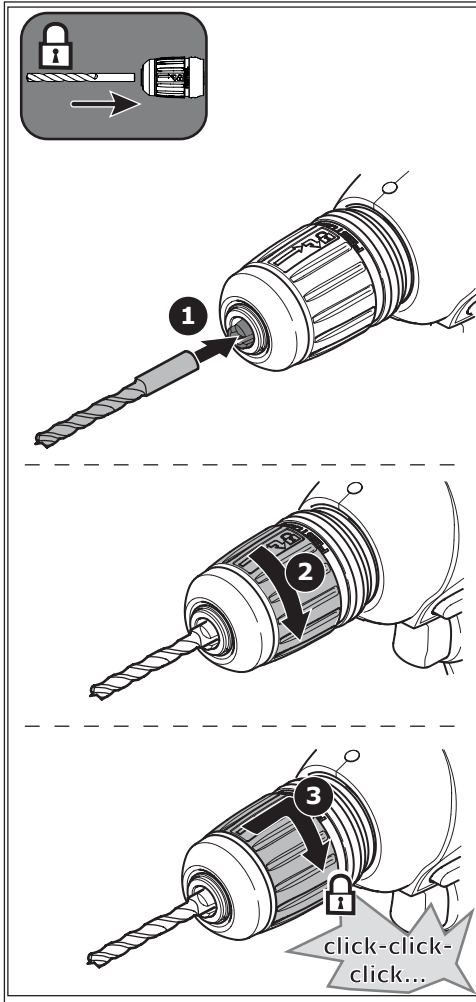
3

**4**  
**WH-CE**  
**CENTROTEC®**



**5A**  
**BF-Ti 13**









## Original operating manual

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The specified illustrations appear at the beginning of the Operating Instructions.

### 1 Symbols

-  Warning of general danger
-  Risk of electric shock
-  Read the Operating Instructions/Notes!
-  Wear ear protection.

### 3 Technical data

<b>Cordless impact screw driver</b>		<b>TI15</b>
Motor voltage		14,4 V
Idling speed		0 - 2600 rpm
Impact rate		2400 - 3600 rpm
Max. torque	Hard material (metal)	100 Nm*
Chuck clamping range		1,5 - 13 mm
Drill diameter max.	Wood	13 mm
	Metal	10 mm
Max. screw diameter in spruce		Up to 8x160 mm
Tool holder in drill spindle		1/4 "
Weight without battery pack with Centrotec		1,2 kg

\* electronically limited



Wear protective gloves.



Do not throw in the household waste.



Operating mode Impact screw driver



Operating mode Screwing/Drilling without impact

### 2 Machine features

- [1-1]** Bit store
- [1-2]** On/Off switch
- [1-3]** Right/left switch
- [1-4]** LED lamp
- [1-5]** CENTROTEC tool chuck
- [1-6]** Thumbwheel Speed/Impact rate
- [1-7]** Capacity display
- [1-8]** Battery pack
- [1-9]** Belt clip
- [1-10]** Buttons for releasing the battery pack
- [1-11]** Adapter for FastFix attachments
- [1-12]** 13 mm chuck
- [1-13]** Elbow adapter
- [3-1]** Charger

Accessories shown or described are sometimes not included in the scope of delivery.

Charger		TRC 3
Mains voltage (input)		220 - 240 V ~
Mains frequency		50/60 Hz
Charging voltage (output)		7.2 - 18 V=
Rapid charging		max. 3 A
Conservation charging current, pulsating (only NiCd, NiHM)		approx. 0.06 A
Charging times for	LiIon 1.5 Ah/ 3.0 Ah, 80 %	approx. 25/ 55 min
	LiIon 1.5 Ah/ 3.0 Ah, 100 %	approx. 35/ 70 min
Permitted charging temperature range		-5 °C to +45 °C
Temperature monitoring		via NTC resistor

Battery pack		BPC 15 Li
Voltage		14,4 V
Capacity		3,0 Ah
Weight		0,58 kg

## 4 Intended use

The cordless impact screw driver is suitable for tightening screw fittings and screwing in screws up to the maximum dimension range stated, as well as drilling into metal, wood, plastics and similar materials.

The device must **not** be used for applications which require a precise/specific torque. When using the device for applications which require a specific torque or for which a maximum torque must not be exceeded, there is the risk of overspeeding or damage to the screw or the workpiece.

The charger TRC 3 is designed for charging the battery packs listed.



The user shall be liable for damage and accidents resulting from non-specified use; this also includes damage and wear caused during industrial continuous operation.

## 5 Safety instructions

### 5.1 General safety instructions



**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.

### 5.2 Machine-related safety instructions

- **Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** *Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.*
- **The charger and power tool are not intended for use by persons (including children) with limited physical, sensory or mental ability or without sufficient experience and/or knowledge, unless they are supervised by a person responsible for their safety or have been instructed on how the charger or power tool is to be used.** Children should always be supervised to ensure that they do not play with the charger or the power tools.
- **Switch of the power tool immediately if the tool is blocked. Always be prepared for high reaction torques that can cause kickback.**  
The tool blocks if:
  - the power tool is overloaded or - it becomes jammed in the workpiece being processed.
- **Wait until the power tool stops completely until placing it down.** The tool can become entangled and lead to a loss of control of the power tool.



- **Avoid unintentional activation. Ensure that the on/off switch is in switched-off position before inserting a battery.** Carrying the power tool with your finger at the on/off switch, or inserting the battery when the power tool is switched on, can result in accidents.
- Take care when drilling into walls as there is a danger of rupturing concealed gas/water pipes or cutting through power cables.
- Do not open the battery pack or the charger. Even after disconnection from the mains, there is still a high capacitor voltage inside the charger.
- Make sure that metal objects (such as metal chips) or fluids do not collect in the battery pack retaining slots or enter the machine through the air vent slits (danger of short circuit).
- Do not charge battery packs from external manufacturers. The charger is designed for charging original battery packs only. Never charge the battery packs in chargers from external manufacturers. Otherwise there is a danger of fire and explosion.
- **Protect the battery pack from excessive heat or constant heat sources such as sunlight or naked flames.** There is a risk of explosion.
- **Never use water to extinguish burning LiIon battery packs,** always use sand or a fire blanket.

### 5.3 Emission levels

Levels determined in accordance with EN 60745 are typically:

#### Screwing with impact

Sound pressure level	$L_{PA} = 93 \text{ dB(A)}$
Noise level	$L_{WA} = 104 \text{ dB(A)}$
Uncertainty	$K = 3 \text{ dB}$

#### Screwing and drilling without impact

Sound pressure level	$L_{PA} = 68 \text{ dB(A)}$
Noise level	$L_{WA} = 79 \text{ dB(A)}$
Uncertainty	$K = 3 \text{ dB}$



### CAUTION

#### When working with noise Damage to hearing

► Always use ear protection.

Vibration emission value  $a_h$  (vector sum for three directions) and uncertainty  $K$  measured in accordance with EN 60745:

Drilling in metal	$a_h < 2.5 \text{ m/s}^2$ $K = 1.5 \text{ m/s}^2$
Screwing	$a_h = 3.0 \text{ m/s}^2$ $K = 1.5 \text{ m/s}^2$

Tightening screws and nuts with maximum size  $a_h = 11.3 \text{ m/s}^2$   
 $K = 3.0 \text{ m/s}^2$

The emission values specified (vibration, noise) were measured in accordance with the test conditions stipulated in EN 60745 and are intended for machine comparisons. They are also used for making preliminary estimates regarding vibration and noise loads during operation.

The emission values specified refer to the main applications for which the power tool is used. If the electric power tool is used for other applications, with other tools or is not maintained sufficiently prior to operation, however, the vibration and noise load may be higher when the tool is used. Take into account any machine idling times and downtimes to estimate these values more accurately for a specified time period. This may significantly reduce the load during the machine operating period.

## 6 Operation

### 6.1 Festool battery packs

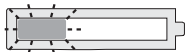
With the Festool cordless impact screw driver TI 15 all Festool battery packs from the BPS and BPC series can be used at the same voltage.

① The battery pack is immediately ready for operation upon delivery and can be charged at any time independently of its charge state without shortening the service life.

#### Changing the battery pack [2]

The capacity display [1-7] automatically displays the charge state of the battery pack [1-2] when the ON/OFF switch is actuated:

	70 - 100 %
	40 - 70 %
	15 - 40 %




< 15 %

**Recommendation:** Charge battery pack before further use.

## 6.2 Festool charger

### Charging the battery pack [3]

 Charge Festool battery packs only using an original Festool charger TRC 3.

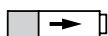
The charger TRC 3 can be used to charge all Festool battery packs of the BPS and BPC series. The charger automatically detects the type of the inserted battery (NiCd, NiMH or LiIon). A microprocessor controls the charging process in line with the charging state, temperature and voltage of the battery pack.

The LED [3-2] on the charger indicates the respective operating status of the charger.



**LED yellow - lit continuously**

Charger is ready to use.



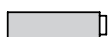
**LED green - flashing quickly**

Battery pack is charged to maximum capacity.



**LED green - flashing slowly**

Battery pack is charged with reduced current. LiIon is charged to 80 %.



**LED green - lit continuously**

Charging is complete or is not restarted as current charge status is greater than 80%.



**LED red - flashing**

General fault display, e.g. incomplete contact, short circuit, defective battery pack, etc.



**LED red - lit continuously**

Battery temperature is outside the permitted range.

### Charger wall mount

The charger TRC 3 has two elongated holes on its back. It can be mounted on a wall using two screws (e.g. round head or flat head screw with shank diameter of 5 mm) (see Fig. [3]).

## 7 Settings

### 7.1 Changing direction of rotation [1-3]

- Switch to the left = clockwise rotation
- Switch to the right = counterclockwise rotation

### 7.2 Adjust speed/impact rate



#### CAUTION

#### Damage to screw and/or workpiece

- ▶ Adjust the speed/impact rate and impact duration to the specific application.
- ▶ Adjust the speed/impact rate at thumb-wheel [1-6]:  
Setting 1 = low speed/impact rate  
Setting 6 = high speed/impact rate

## 8 Tool holder, attachments



#### WARNING

#### Risk of injury, electric shock

- ▶ Always disconnect the battery pack before any type of work on the machine!

Festool offers attachments and tool holders for various applications.

### 8.1 Tool chuck CENTROTEC WH-CE [4]

The tool chuck CENTROTEC WH-CE allows you to change tools with a CENTROTEC shank in a matter of seconds.

- ① Always use a CENTROTEC tool chuck to clamp CENTROTEC tools.



#### CAUTION

#### Tool has sharp edges and can cause cutting injuries during a tool change.

- ▶ Wear protective gloves!

### 8.2 BF-TI 13 chuck [5]

The BF-TI 13 chuck is used for clamping drill bits up to 13 mm and shaft tools.

- ① Impact mode is automatically switched off when the chuck is inserted.



**CAUTION****Risk of injury**

▶ Clamp the tool centrally in the chuck!

- ▶ Pull the sleeve back to clamp the drill bit and turn this in a clockwise direction until it locks in.

**8.3 TI-FX adapter [6]**

The TI-FX adapter (sometimes an accessory) makes possible the fitting of the following attachments on the power tool.

- ① Impact mode is automatically switched off when the adapter is inserted.
- ▶ Place the three white points in a row when positioning the adapter. If necessary, the hexagon socket holder must be turned manually so the adapter can be fixed.
- ▶ Turn the clamping ring as far as the stop to secure the adapter.

**Angle attachment DD-AS [7]**

The angle attachment DD-AS (in part, additional equipment) permits drilling and screw-driving at a right angle to the machine.

**Eccentric attachment DD-ES [8]**

The eccentric attachment (in part, additional equipment) permits screwdriving near edges with bits according to DIN 3126.

**9 Working with the machine****9.1 Operating modes**

Depending on the tool holder / adapter selected, the machine is operated as follows:

**Screwing with impact**

– WH-CE CENTROTEC tool chuck (see Chapter 8.1)

**Screwing and drilling without impact**

- TI-FX adapter (see Chapter 8.3)
  - DD-AS elbow adapter
  - DD-ES eccentric attachment
  - DD-DC screwdriver attachment
- BF-TI 13 chuck (see Chapter 8.2)

**9.2 On/Off switch [1-2]****WARNING****Risk of injury**

- ▶ Only attach the power tool to the screw when switched off.

Press = ON, release = OFF

- ① Depending on the pressure applied to the ON/OFF switch the speed/impact rate can be controlled continuously.

The LED lamp [1-4] lights up when the on/off switch [1-2] is pressed and lights up the working area.

**9.3 Bit store [1-1]**

The magnetic bit store is designed for holding bits or bit holders.

**9.4 Belt clip [1-9]**

The belt clip makes possible short-term fixing of the device to work attire. The belt clip can be moved to the right or left or can also be detached from the battery pack.

**9.5 Acoustic warning signal**

Acoustic warning signals sound and the machine switches off in the following operating states:



peep — —

**Battery flat or machine overloaded.**

- Change the battery.
- Place the machine under reduced stress.



peep peep —

**Machine is overheating.**

- You must allow the machine to cool before using again.



peep peep peep

**LiIon battery pack is faulty or has overheated.**

- Once the battery pack has cooled, perform a functional check using the charger.

## 10 Service and maintenance



### WARNING

#### Risk of injury, electric shock

- ▶ Always disconnect the battery pack from the machine before any maintenance or care work!
- ▶ All maintenance and repair work which requires the motor housing to be opened, must only be carried out by an authorised service workshop.

#### Observe the following instructions:

- Keep the air slits on the machine and the charger free and clean to ensure adequate cooling.
- Keep the contacts on the machine, charger and battery pack clean.

#### Information on battery packs

- Where possible, store the battery pack in a cool, dry place at a temperature between 5 °C and 25 °C.
- Battery packs are most efficient at temperatures between 20 °C and 30 °C.
- Protect the battery pack from moisture, water and heat.
- Significantly shorter operating times after each charge indicate that the battery pack is worn and should be replaced with a new one.
- The LiIon battery pack is fully compatible with the charger! Integrated electronics prevent overloading and overheating during the charging process.
- Do not leave flat battery packs in a charger disconnected from the mains power supply for longer than one month. There is a risk of total discharge and the maximum power of the battery pack may decrease.
- Store the battery pack in its packaging to reduce the risk of short circuits..
- If LiIon battery packs are to be stored for long periods without use, they should be charged to 40 % capacity (approx. 15 mins. charging period).

## 11 Accessories

Use only original Festool accessories and Festool consumable material intended for this machine because these components are designed specifically for the machine. Using

accessories and consumable material from other suppliers will most likely affect the quality of your working results and limit any warranty claims. Machine wear or your own personal workload may increase depending on the application. Protect yourself and your machine, and preserve your warranty claims by always using original Festool accessories and Festool consumable material!

The order numbers of the accessories and tools can be found in the Festool catalogue or on the Internet under "[www.festool.com](http://www.festool.com)".

## 12 Disposal

Do not throw the power tool in your household waste! Dispose of machines, accessories and packaging at an environmentally responsible recycling centre. Observe the valid national regulations.

**EU only:** European Directive 2002/96/EC stipulates that used electric power tools must be collected separately and disposed of at an environmentally responsible recycling centre.

Return used or faulty battery packs to your local specialist retailer, Festool after-sales service or a designated public waste management facility. The battery packs will then be recycled. (Observe the regulations applicable in your country). The batteries must be discharged on return.

**EU only:** European Directive 91/157/EEC stipulates that faulty or used battery packs/batteries must be recycled.

## 13 Transport

The equivalent amount of lithium in the LiIon battery pack is less than the applicable limit value and certified as per UN manual ST/SG/AC.10/11/rev. 3 part III, subsection 38.3. The LiIon battery pack is therefore not subject to national and international dangerous goods regulations, neither as an individual component nor as a fitted machine component. However, dangerous goods regulations may apply when several battery packs are transported, in which case you may have to fulfil special conditions. Refer to ADR special regulation 230 for more information relevant for the EU.

## 14 Warranty

We offer a warranty for material and production defects for all our tools in accordance with the locally applicable legal provisions, but for a minimum of 12 months. Within the EU member states, the warranty period is 24 months (verification through invoice or delivery note). Damage caused by the operator, natural wear, overloading, incorrect handling or through the use of the equipment not specified in the operating manual, or damage which was known at the time of purchase, is not covered by the warranty. Furthermore, damage caused by the use of non-original accessories and consumable materials (e.g. sanding pads) is also excluded.

Complaints can only be accepted if the tool is returned while still assembled to the supplier or an authorised Festool Customer Service workshop. Keep the operating manual, safety instructions, spare parts list and purchase receipt in a safe place. Otherwise the current warranty conditions of the manufacturer shall apply.

### Note

Due to continuous research and development work, we reserve the right to make changes to the technical content of this documentation.

## 15 EU Declaration of Conformity

### Cordless impact screw driver

Cordless impact screw driver	Serial no.
TI 15	496651

Year of CE mark: 2011

We declare under sole responsibility that this product complies with the following directives and standards:

2006/42/EC, 2004/108/EC, 2011/65/EU (from 03.01.2013), EN 60745-1, EN 60745-2-1, EN 60745-2-2, EN 55014-1, EN 55014-2.

### Charger

Charger	Serial no.
TRC 3	494635, 494636, 494637

Year of CE mark: 2007

We declare under sole responsibility that this product complies with the following directives and standards:

2004/108/EC, 2006/95/EC, 2011/65/EU (from 03.01.2013), EN 60335-1, EN EN 60335-2-29, EN 61000-3-2, EN 61000-3-3, EN 61204-3.

### Festool GmbH

Wertstr. 20, D-73240 Wendlingen, Germany

*ppa. Dr. Johannes Steimel*

Dr. Johannes Steimel

Head of Research, Development and Technical Documentation

07.04.2011

### REACH for Festool products, its accessories and consumable materials:

REACH is a European Chemical Directive that came into effect in 2007. As "downstream users" and product manufacturers, we are aware of our duty to provide our customers with information. We have set up the following website to keep you updated with all the latest news and provide you with information on all the materials used in our existing products:

[www.festool.com/reach](http://www.festool.com/reach)