

SFC 7/18



USA

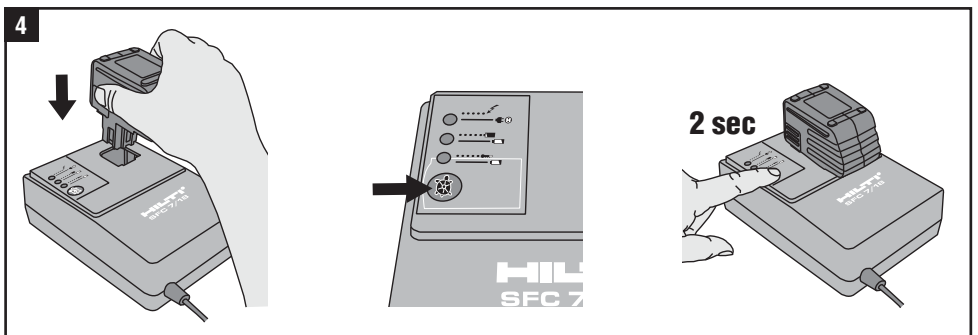
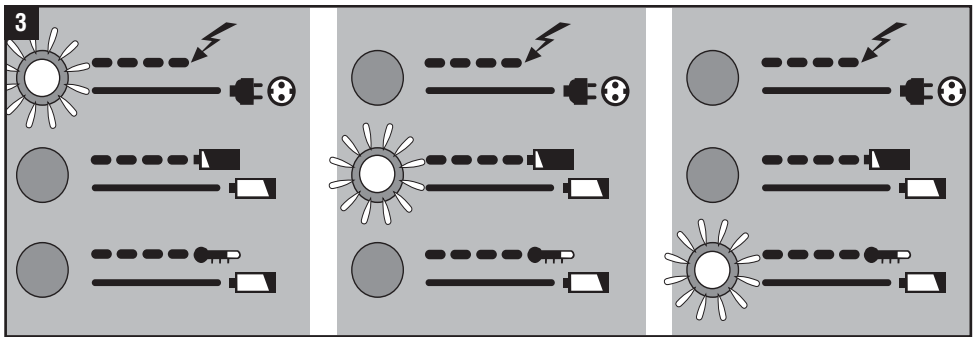
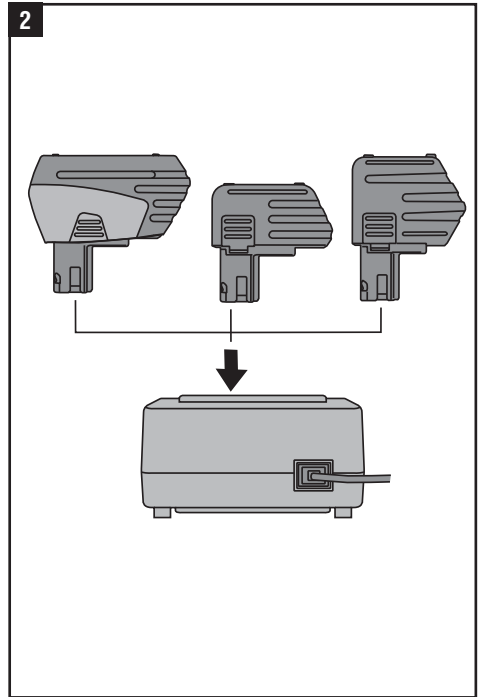
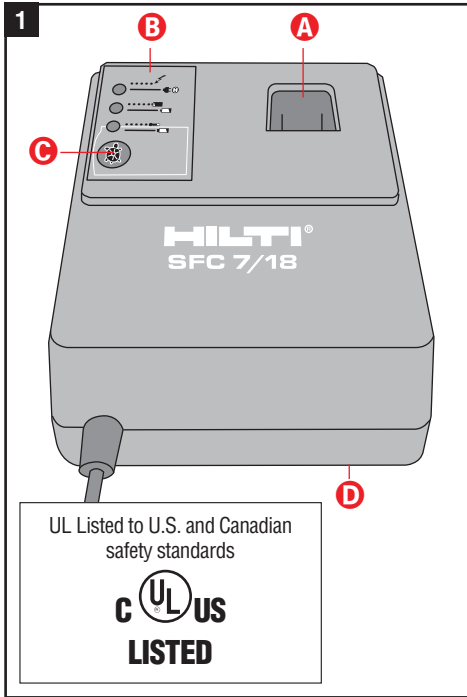
Operating instructions

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HILTI



SFC 7/18 Charger

IMPORTANT SAFETY INSTRUCTIONS

1. SAVE THESE INSTRUCTIONS –

this manual contains important safety and operating instructions for battery charger SFC 7/18.

2. Before using battery charger, read all instructions and cautionary markings on battery charger, battery and product using battery.

3. CAUTION!

To reduce the risk of injury, charge only SFB 105, SFB 125 (NiMH type), SBP 10, SBP 12 (NiCd type), rechargeable Hilti batteries. Other types of batteries may burst causing personal injury and damage.

4. Always keep these operating instructions together with the charger.
5. Ensure that the operating instructions are with the charger when it is given to other persons.

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.

Electrical or chemical (CAUTION)

This symbol warns of hazards as a result of the electrical current when using the tool. It marks a dangerous situation. The illustrated behavior following this symbol must always be observed in order to avoid serious injury or damages to property.

1 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 SFC 7/18 battery charger, to which these operating instructions apply is referred to as “charger”.

Operating controls and component parts **1**

- A** Battery compartment for the SFB 105, SBP 10, SFB 125, SBP 12 batteries
- B** LED indicator
- C** Switch for conditioning charge mode
- D** Provision for wall mounting


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Description

The SFC 7/18 charger is designed for charging Hilti batteries with a nominal voltage of 7 to 18 volts. The batteries, which the charger can charge, are:

SFB105	NiMH battery	For the SF 100-A, SB 10 battery screwdrivers and
SBP 10	NiCd battery	for the Hilti HIT-BD 2000 dispenser
SFB125	NiMH battery	For the SF 120-A and SB 12 battery screwdrivers
SBP 12	NiCd battery	

Technical data

Mains voltage	110–120 Volt				
Frequency (Versions)	50/60 Hz				
Output voltage	7.2–18.0 V				
Output current for voltage range	NiCd	NiCd	NiCd	NiMH	NiMH
Charging current	7.2–12.0 V	13.3–15.6 V	16.8–18.0 V	7.2–15.6 V	16.8–18.0 V
Trickle charging current	5 A	4 A	3 A	4 A	3 A
Charging time	100–250 mA	100–250 mA	100–250 mA	100–250 mA	100–250 mA
Weight	24 min.	30 min.	40 min.	50 min.	60 min.
Supply cord length	0.85 kg				
Dimensions	approx. 2 m				
Provision for wall mounting	194×75×134 mm				
Electronic, microprocessor control of charging functions					
Battery cell temperature monitoring	NiCd by diode, NiMH by NTC				
Insulation class	Electrical insulation class II (double insulated) 				

Right of technical changes reserved

Safety precautions

When using electric appliances, the following fundamental safety precautions must always be observed in order to avoid the risk of injury, electric shock and fire hazards. Please read and observe the instructions below before using the appliance.

1. Avoid short circuits.

Short circuiting the contacts of the charger or battery presents a risk of fire and explosion.

2. Take the influences of the surrounding area into account.

Do not expose the charger to rain and do not use it in damp or wet surroundings or in the vicinity of flammable liquids or gases.

3. Check the charger each time before use.

Check the condition of the charger, supply cord and plug before use. Do not use the charger if it is found to be damaged, incomplete or if the controls cannot be operated correctly.

4. Use the charger only for the purpose for which it is intended.

5. Handle the supply cord carefully.

Never carry the charger by the supply cord. Do not unplug the charger by pulling out the supply cord. Do not expose the supply cord to heat, oil or sharp edges. If the supply cord becomes damaged while working, do not touch it – unplug the mains plug immediately.

6. Keep the charger and batteries in good condition.

Follow the instructions on care and maintenance. Never operate the charger when it is dirty or wet. Under unfavourable conditions, dampness or dirt adhering to the surface of the charger may present a risk of electric shock.

Repairs of the charger including, in particular, replacement of the supply cord may be carried out only by the manufacturer or authorised service centre using original Hilti spare parts. Failure to observe this point may result in damage or present a risk of accident. Consequently, let only repair work of the charger be made at a Hilti service centre or authorised Hilti repair centres.

7. Keep the charger and battery pack out of the reach of children

Knowledge of the operating instructions is a must if the tool is to be used without injury or damage to persons and / or product respectively.

8. Keep your work area clean and well lit.

9. Keep other persons away from the charger during the operation.

Before use



It is essential that the safety precautions printed in these operating instructions are read and observed.



Connect the charger to the mains supply.

- The mains voltage must correspond to the information given on the rating plate.

The green LED must light constantly. If it does not light, proceed as follows:

- Check the mains supply voltage and the connection of the mains plug to the mains supply.
- If the connection to the mains supply or the mains supply itself is not the cause of the fault, bring the charger to a Hilti service centre for repair.

Operate the charger only at a suitable location.

- The location for operation of the charger should be dry, clean and cool, but not exposed to frost.
- The charger must be able to give off heat during the charging procedure. Accordingly, the ventilation slots must always be unobstructed.

Wall mount

- The mounting holes provided on the base of the housing should be used if the charger is to be mounted in a wall.
- To prevent the battery pack falling out of the charger, the charger must not be mounted on an overhanging wall.
- Check regularly that the charger is securely mounted.

Operation

Insert the battery (SFB 105, SBP 10, SFB 125, SBP 12) in the charging compartment. Push the battery into the compartment as far as it will go, until it engages. Take care to ensure that the battery fits correctly in the charging compartment **2**.

The battery will not suffer damage even when left in the charger over a long period of time. The trickle charging current is regulated to two levels for both NiCd and NiMH battery packs in a different way.

NiCd battery pack: When the charged battery pack is left

in the charger longer than 24 hours, the charging current is greatly reduced.

NiMH battery pack: When the charged battery pack is left in the charger longer than 4 hours, the charging current is greatly reduced. This prevents damage to the battery while maintaining its capacity.

The charger is only designed for charging the battery types listed. It may not be used for charging other batteries. With other batteries, the temperature monitoring function cannot operate correctly as the necessary contacts have different positions. A chemical liquid may leak from the battery if it is overheated.



When the battery pack is damaged, liquid may leak from the battery. Do not touch this caustic chemical liquid!

Indicators **3**

Green LED

- Lights constantly when the charger is connected to the mains supply. The charger is ready for operation.
- When the LED blinks, the battery is not ready to be charged. (Re-insert the battery. If charging does not then begin, please refer to the "Care and maintenance" section of the SF 100-A or SF 120-A operating instructions.)

Red LED

- Lights constantly: The battery is being charged.
- Blinks: The battery is charged.

Yellow LED

- Lights constantly: The battery is being charged in conditioning charge mode.
- Blinks: The battery is too cold [approx. 0°C] or too hot [approx. 60°C]. Charging does not take place. The charger begins charging automatically as soon as the battery reaches the required temperature.

Conditioning charge mode **4**

Battery cells are subject to self-discharge. With older batteries, the rate of self-discharge of some of the cells may be higher than that of others. As conventional chargers switch off when the first cells have reached full charge, the other partly charged cells do not receive the full charge. The user becomes aware of this effect in the form of inadequate battery capacity.

This effect can be eliminated by applying a conditioning charge. During this procedure, the charger supplies a small current over several hours and monitors the temperature of the battery in order to avoid overheating the battery. Depending on its condition, the battery will take 6 (fully charged batteries) to 12 hours (empty batteries) to reach full charge.

The conditioning charge begins when the battery pack is inserted in the charger and secondly, the conditioning mode button **3** is pressed for approx. 2 seconds. The yellow LED lights while the battery is being charged in conditioning mode.

Conditioning charge mode should not be used more than once per month as battery capacity may otherwise be negatively affected.

Battery (accessory)

Before a battery is used for the first time, it must be charged for 24 hours in normal mode or for up to 12 hours in conditioning mode in order to permit “forming” of the battery cells.

- At low temperatures: Battery performance drops at low temperatures. Store batteries at room temperature when not in use.
- At high temperatures: Do not store batteries where they may be subjected to high temperatures (e.g. exposed to the sun, at a window, behind a car windscreen or on a radiator).
- Never fully discharge a battery. Recharge the battery as soon as its performance drops noticeably. When approaching total discharge, the cells, which reach a state of complete discharge first (due to slight differences in their condition), will be damaged by the current still being drawn from the other cells.

Care and maintenance



When conducting care and maintenance work always pull out the mains plug.

Care of the charger

The outer housing of the charger is made from impact-resistant plastic.



Clean the outside of the charger at regular intervals using 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 charger. Do not use cleaning agents which contain silicone.

Never operate the charger 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 charger.

Take care of your batteries. If necessary, use a dry cloth to clean the contacts.

Maintenance

Check all external parts of the charger for damage at regular intervals and check that all controls operate faultlessly. Do not operate the charger when parts are damaged or when the controls do not function faultlessly. When necessary, your electric tool should be repaired at a Hilti service centre.

Warranty

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, all warranty claims are made within 12 months from the date of the sale (invoice date), 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. Parts requiring repair or replacement as a result of normal wear and tear are not covered by this warranty.

Under no circumstances will Hilti be 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. Hilti specifically excludes the implied warranties of merchantability and fitness for a particular purpose.

For repair or replacement, send tool and/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

Batteries

Hilti batteries contain nickel, cadmium and nickel-metal hydrid. Disposal of batteries in accordance with national regulations or return used batteries to Hilti for disposal.



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