

# **PUA 80**

Bedienungsanleitung

de

en

fr

it

es

pt

nl

da

SV

no

fi

el

hu

p

ľU

CS

sk

hr Si

bq

ľO

tr

ar

V

lt

et

ja

ko

zh

cn

**Operating instructions** 

Mode d'emploi

Istruzioni d'uso

Manual de instrucciones

Manual de instruções

Gebruiksaanwijzing

**Brugsanvisning** 

Bruksanvisning

Bruksanvisning

Käyttöohje

Οδηγιες χρησεως

Használati utasítás

Instrukcja obsługi

Инструкция по зксплуатации

Návod k obsluze

Návod na obsluhu

Upute za uporabu

Navodila za uporabo

Ръководство за обслужване

Instrucțiuni de utilizare

Kulllanma Talimatı

دليل الاستعمال

Lietošanas pamācība

Instrukcija

Kasutusiuhend

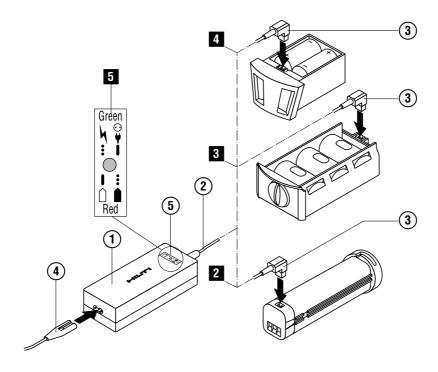
取扱説明書

사용설명서

操作說明書

操作说明书





#### ORIGINAL OPERATING INSTRUCTIONS

# **PUA 80 charger**

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

Always keep these operating instructions together with the appliance.

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

Contents	Page
1 General information	7
2 Description	8
3 Technical data	8
4 Safety instructions	9
5 Before use	10
6 Operation	10
7 Care and maintenance	11
8 Disposal	11
9 Manufacturer's warranty - tools	12
10 EC declaration of conformity (original)	12

■ These numbers refer to the illustrations. You can find the illustrations at the beginning of the operating instructions.

In these operating instructions, the designation "appliance" always refers to the PUA 80 charger.

#### Components, operating controls and indicators

- 1 PUA 80 charger
- (2) Charging cord
- ③ Plug
- (4) Supply cord
- (5) LED display

#### 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







Warning: electricity



Warning: caustic substances



Warning: explosive substances

#### Symbols



Read the operating instructions before use.



The disposal of batteries with household waste is not permissible.



Return waste material for recycling.

en

#### Location of identification data on the appliance

The type designation and serial number can be found on the type identification plate on the appliance. Make a note of this data in your operating instructions and always refer to it when contacting your Hilti representative or service center.

Type:

Serial no .:

## 2 Description

#### 2.1 Use of the product as directed

The appliance is designed to charge Hilti batteries of the types PSA 80, PRA 82 and PRA 801 indoors, in dry conditions.

The appliance is designed for use with the batteries specified in these operating instructions. Use of this appliance to charge batteries of other types is thus not permissible.

Do not use the appliance where there is a risk of fire or explosion.

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

The appliance 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 appliance and its ancillary equipment may present hazards when used incorrectly by untrained personnel or when used not as directed.

Tampering with or modification of the appliance is not permissible.

#### 2.2 Items supplied

- 1 PUA 80 charger
- Supply cord
- 1 Operating instructions

#### 3 Technical data

Right of technical changes reserved.

#### PUA 80 charger

Mains voltage	100240 V
Mains frequency	5060 Hz
Weight	0.36 kg (0.8 lb)
Length of charger supply cord	1.5 m (5 ft)
Dimensions (LXWxH)	120 mm (4.7 in) x 58 mm (2.3 in) x 30 mm (1.2 in)
Control	Electronic charging control (microcontroller)
Protection class	Electrical protection class II (double insulated)
Operating temperature range	+0+40°C (+32°F to +104°F)
Storage temperature	-30+60°C (-22°F to +140°F)

Technical data for the charger with the specified batteries	PRA 801	PSA 80	PRA 82
Max. output voltage	5.6 V	14 V	3.8 V
Max. output current	4.4 A	1.7 A	4.4 A
Charging times	Approx. 2.5 h	Approx. 1.5 h	Approx. 2.5 h
Battery	PRA 801	PSA 80	PRA 82
Dattery	FILA GOT		FILA 02
Max. output voltage	3.6 V	9.6 V	2.4 V
Capacity	8.5 Ah	2 Ah	8 Ah

Battery	PRA 801	PSA 80	PRA 82
Number of cells	3	8	2

#### 4 Safety instructions

In addition to the information relevant to safety given in each of the sections of these operating instructions, the following points must be strictly observed at all times.

#### 4.1 General safety instructions

- a) Do not render safety devices ineffective and do not remove information and warning notices.
- Use of the appliance is not permissible if the plug pins are bent or damaged (do not use force when plugging in).
- c) Take the influences of the surrounding area into account. Do not expose the appliance to rain or snow and do not use it in damp or wet conditions. Do not use the appliance where there is a risk of fire or explosion.
- d) Use the supply cord only for connecting to the mains supply.
- e) Store appliances, when not in use, in a secure place.
  When not in use, appliances must be stored in a dry, high place or locked away out of reach of children.
- f) Use the right appliance for the job. Do not use the appliance for purposes for which it was not intended. Use it only as directed and when in faultless condition.
- g) Paper clips, coins, keys, nails, screws and other small metal objects that could short-circuit the electrical contacts must be kept away from batteries that are not in use and away from battery chargers. Short-circuiting the contacts on a battery or charger may cause burning injuries or start a fire.
- h) This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- i) Children must be instructed not to play with the appliance.
- Make sure that the batteries suffer no mechanical damage.
- bo not charge or continue to use damaged batteries (e.g. batteries with cracks, broken parts, bent or pushed-in and/or pulled-out contacts).

#### 4.2 Proper organization of the work area

- a) Ensure that the workplace is well lit.
- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- c) Check to ensure that the appliance and supply cord do not present an obstacle that could lead to a risk of tripping and personal injury.

d) Put the appliance in a secure place before beginning charging.

#### 4.3 Electrical









- a) 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.
- b) Check the appliance's supply cord at regular intervals and have it replaced by a qualified specialist if found to be damaged. Check extension cords at regular intervals and replace them if damage is found. Do not touch the supply cord or extension cord if they are damaged while working. Disconnect the supply cord plug from the power outlet. Damaged supply cords present a risk of electric shock.
- c) Check to ensure that the appliance and all cords are in good condition. Do not operate the appliance or its accessories if damage is found, if the appliance is incomplete or if its controls cannot be operated faultlessly.
- d) Have the appliance repaired only at a Hilti service center.
- e) Do not use the supply cord for purposes for which it is not intended. Never carry the appliance by the supply cord. Never pull the plug out of the power outlet by pulling the supply cord.
- f) Do not expose the supply cord to heat, oil or sharp edges.
- g) Never operate the appliance when it is dirty or wet. Dust (especially dust from conductive materials) or dampness adhering to the surface of the appliance may, under unfavorable conditions, lead to electric shock. Dirty or dusty appliances should thus be checked at a Hilti service center at regular intervals, especially if used frequently for working on conductive materials.
- h) Avoid short circuiting the battery terminals. A short circuit may present a fire hazard.
- Avoid touching the contacts.
- j) Do not use batteries other than those approved for use with the applicable tool or appliance. Use of other batteries or use of the battery for purposes for which it is not intended presents a risk of fire and explosion.

k) Batteries that have reached the end of their life must be disposed of safely and correctly to avoid environmental pollution.

#### 4.4 Electromagnetic compatibility

Although the appliance complies with the strict requirements of the applicable directives, Hilti cannot entirely rule out the possibility of interference to the appliance caused by powerful electromagnetic radiation, leading to incorrect operation. Check the accuracy of the appliance by taking measurements by other means when working

under such conditions or if you are unsure. Likewise, Hilti cannot rule out the possibility of interference with other devices (e.g. aircraft navigation equipment).

#### 4.5 Liquids

Under abusive conditions, liquid may leak from the battery. Avoid contact. If contact accidentally occurs, flush with water. In the event of the liquid coming into contact with the eyes, rinse the eyes with plenty of water and consult a doctor. Liquid ejected from the battery may cause irritation or burns.

#### 5 Before use



#### 5.1 Connecting 1

Connect the supply cord to the appliance.

- Plug the supply cord into the power outlet.
- Connect the charging cable to the PSA 80, PRA 82 or PRA 801 battery.

#### 6 Operation



#### CAUTION

The appliance becomes warm while charging the battery. The appliance must therefore not be built-in, covered over or used in a location where the air cannot circulate freely. Do not operate the charger inside a closed container.

#### CAUTION

Never store or charge the battery in direct sunlight, on a radiator at a window or behind a pane of glass. The battery will suffer damage at high temperatures.

#### 6.1 LED indicators

#### NOTE

- Charge the battery only within the temperature range 0 to 40°C (+32°F to +104°F).
- Maximum charging efficiency is achieved at an ambient temperature of 0 to 30°C (+32°F to +86°F).

LED indicators	Green LED lights constantly	The appliance is connected to the electric supply and is in operation.
	Green LED blinks	The battery cannot be charged. The battery is either faulty or its temperature is outside the limits for successful charging. Disconnect the battery from the charger and allow it to cool down or warm up accordingly. Subsequently reconnect the battery to the charger. If the green LED continues to blink, the battery is faulty. Contact Hilti.
	Red LED lights constantly	The battery is being charged.
	Red LED blinks	Battery charging is complete.

#### 7 Care and maintenance

#### CAUTION

Disconnect the supply cord plug from the power outlet.

#### 7.1 Care of the appliance

The outer casing of the appliance is made from impactresistant plastic.

Clean the exterior of the appliance at regular intervals with a slightly damp cloth or a dry brush. Do not use a spray, steam pressure cleaning equipment or running water for cleaning. This may negatively affect the electrical safety of the appliance. Always keep the appliance free from oil and grease. Do not use cleaning agents which contain silicone.

#### 7.2 Maintenance

#### WARNING

Repairs to electrical parts and replacement of the supply cord may be carried out only by trained electrical specialists.

Check all external parts of the appliance for damage at regular intervals and check that all controls operate faultlessly. Do not operate the appliance when parts are damaged or when the controls do not function correctly. If necessary, the appliance should be repaired by Hilti Service.

#### 7.3 Care of the battery

Keep the electrical contacts free from dust, oil and grease.

If necessary, use a clean cloth to clean the contact

If battery capacity drops below an acceptable level after many periods of use and recharging, we recommend having it checked by Hilti.

#### 8 Disposal

#### DANGER

Improper disposal of the equipment may have serious 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.



Most of the materials from which Hilti 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 old tools and appliances for recycling. Ask Hilti customer service or your Hilti representative for further information.



For EC countries only

Disposal of electric appliances together with household waste is not permissible.

In observance of European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in accordance with national law, electric appliances that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.



Dispose of the batteries in accordance with national regulations.

### 9 Manufacturer's warranty - tools

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

en

### 10 EC declaration of conformity (original)

Designation:	Charger
Type:	PUA 80
Year of design:	2006

We declare, on our sole responsibility, that this product complies with the following directives and standards: until 19th April 2016: 2004/108/EC, from 20th April 2016: 2014/30/EU, until 19th April 2016: 2006/95/EC, as of 20th April 2016: 2014/35/EU, 2011/65/EU, EN ISO 12100, EN 60335-1, EN 60335-2-29.

Hilti Corporation, Feldkircherstrasse 100, FL-9494 Schaan

Paolo Luccini Head of BA Quality and Process Man-

agement Business Area Electric Tools & Ac-

Business Area Electric Tools & Accessories 08/2015

Edward Przybylowicz Head of BU Measuring Systems

BU Measuring Systems

08/2015

#### Technical documentation filed at:

Hilti Entwicklungsgesellschaft mbH Zulassung Elektrowerkzeuge Hiltistrasse 6 86916 Kaufering Deutschland



# Hilti Corporation

LI-9494 Schaan Tel.: +423/234 21 11 Fax: +423/234 29 65 www.hilti.com

377461