

# SECRA-2

## OPERATING MANUAL

### ELECTRICALLY INSULATING HELMETS WITH INTEGRATED FACE SHIELD TYPE SECRA-2



**hubix**  
SAFETY IN POWER

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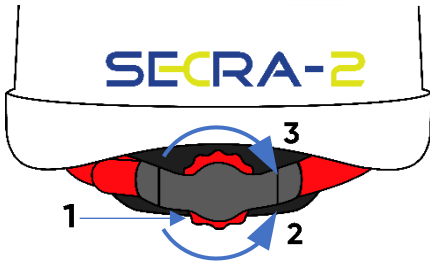


Fig. 1

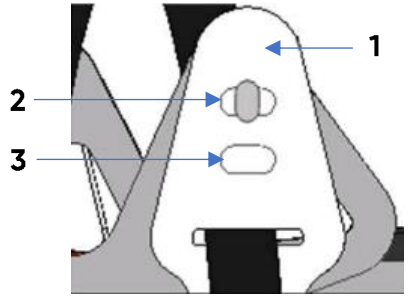


Fig. 2

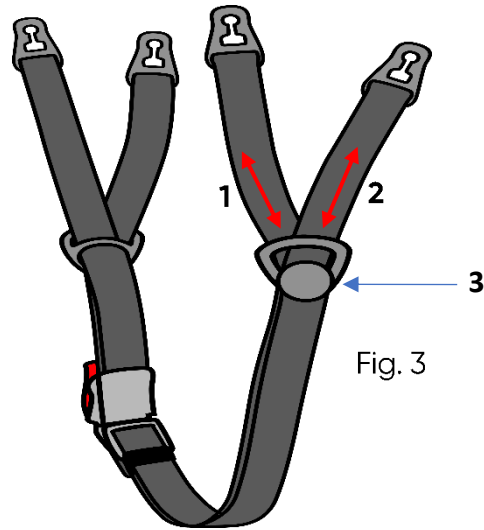


Fig. 3

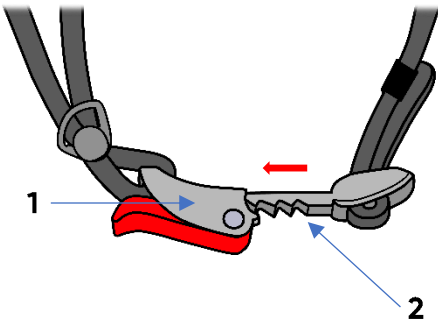


Fig. 4

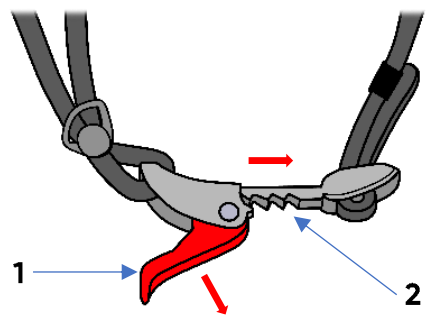


Fig. 5

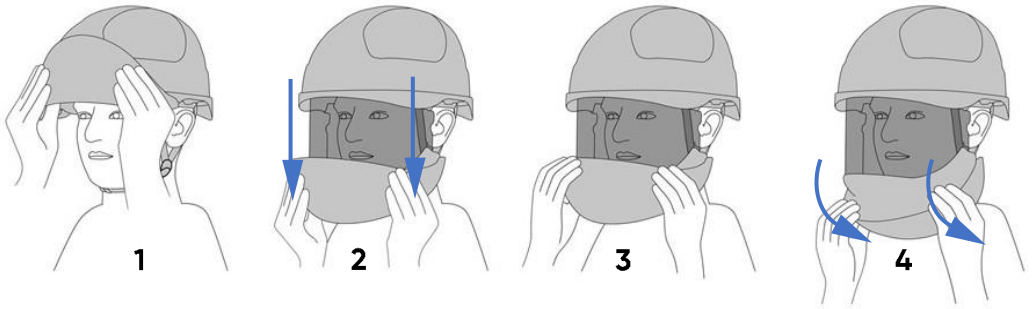


Fig. 6

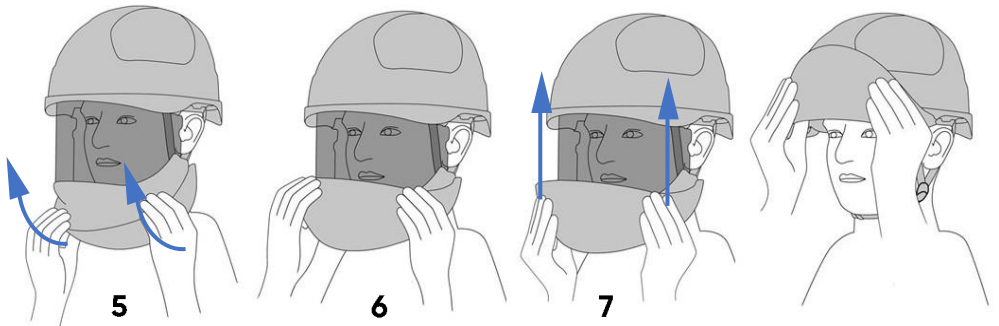


Fig. 7



Fig. 8

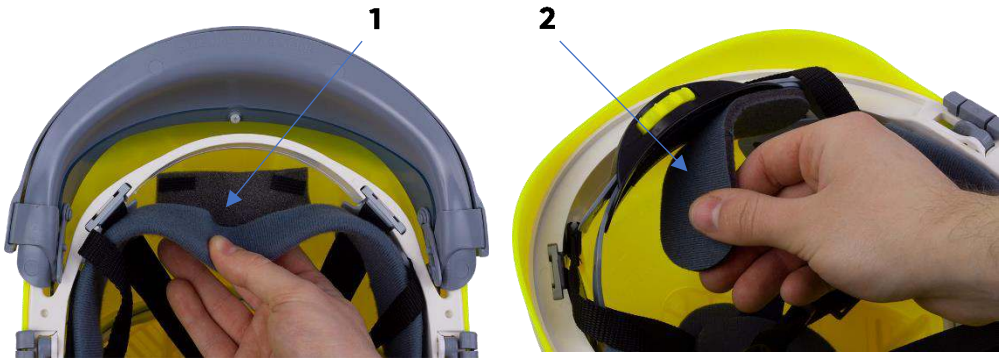


Fig. 9

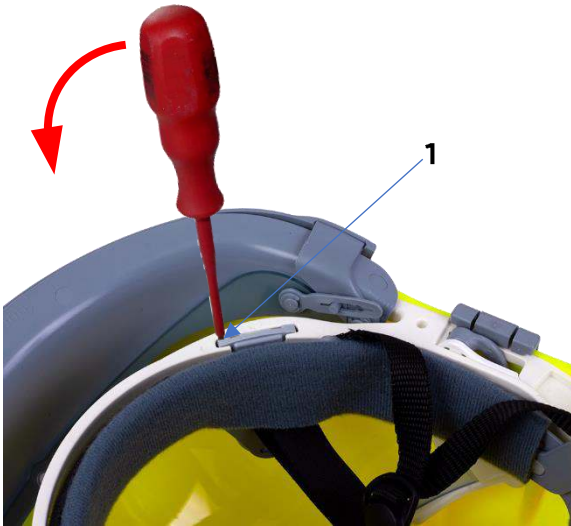


Fig. 10



Fig. 11



Fig. 12

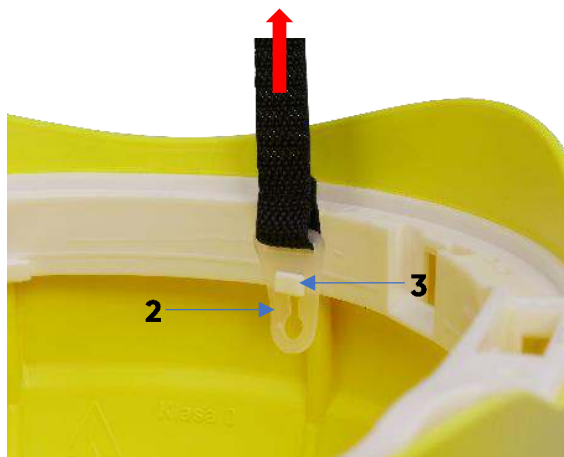


Fig. 13



Fig. 14

Type:

## SECRA-2

Variant:

### H058S-2 ARC-E40HT

Product code:

### H114.xSEx

**Class 0 (1 000 V), Box Test – class 2**

**EN 397:2012 + A1:2012, EN 50365:2002, EN 166:2001, GS-ET 29:2019-06**

**Class E (20 kV), ATPV = 36 Cal/cm<sup>2</sup>**

**ANSI/ISEA Z89.1:2014, ASTM F2178/F2178M-20**

Manufacturer:

**HUBIX Sp. z o.o.**

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**tel.: +48 46 857 84 40, hubix@hubix.pl, www.hubix.pl**

The notified body that carried out the EU-type examination:

**Helmet – CIOP-PIB, (No 1437), ul. Czerniakowska 16, 00-701 Warszawa.**

**Face shield – CIOP-PIB, (No 1437), ul. Czerniakowska 16, 00-701 Warszawa.**

Notified / Approved Body carrying out the conformity assessment procedure to type based on internal production control plus supervised product checks at random intervals (Module C2):

**– CIOP-PIB, (No 1437), ul. Czerniakowska 16, 00-701 Warszawa.**

**– BSI Assurance UK Ltd – AB 0086, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes, MK5 8PP.**

#### 1. INTENDENT USE

SECRA-2 type helmets in the H058S-2 ARC-E40HT variation are intended to protect the head against injuries caused by falling objects and at the same time, against electric shock class 0 (1000 V) EN 50365:2002 and class E (20 kV) ANSI/ISEA Z89.1:2014 caused by flow of electric current through the head, against electric arc, and against projected droplets of molten metal. It is recommended as a personal protection equipment to be used during work on live equipment, work at heights, and work on electrical connections. Working temperature in the range -40 °C do +60 °C.

The face shield has an external scratch-resistant surface and an internal anti-fog surface. The face shields protect the user against short-circuit electric arc (class 2 – Box Test and ATPV = 36 Cal/cm<sup>2</sup> – open arc). They also protect against the impact of particles with high speed and medium energy,

the risk of projected solid objects and liquids and projected molten metal. The shields also have filters to protect against UV radiation.

## 2. MARKING

### marking stamped on the helmet shell:



Klasa 0 indicates a product intended for work on live equipment  
Class 0 - electrical class for use up to rated mains voltage of 1 000V AC and 1 500V DC

EN 50365:2002 applicable standard "*Electrically insulating helmets for use on low voltage installations*"

**hubix** identification of the manufacturer

SECRA H058S model name (hard hat)

ABS material of helmet shell

53-63cm range of head circumference adjustment

207/8-245/8-inch range of head circumference adjustment

EN 397:2012+A1:2012 applicable standard "*Industrial safety helmets*"

-40°C resistance to very low temperatures (down to -40°C)

LD resistance to lateral deformation

MM resistance to projected droplets of molten metal

440Vac electric insulation (according to the EN 397 standard)

ANSI/ISEA Z89.1-2014 applicable standard "*American National Standard for Industrial Head Protection*"

Type I protection against shocks at the top of the head, according to the standard ANSI/ISEA Z89.1

Class E electrical class, according to ANSI/ISEA Z89.1

LT lower temperature (according to the ANSI/ISEA Z89.1 standard)

HT higher temperature (according to the ANSI/ISEA Z89.1 standard)

CE 1437 marking of conformity with the Regulation 2016/425 on personal protective equipment, as amended to apply in GB and the number of the Notified/Approved Body carrying out supervised product checks at random intervals (module C2)

UK 0086 of the Notified/Approved Body carrying out supervised product

CA checks at random intervals (module C2)

### marking stamped on the rear, outer part of shell:

LOT NO: XXX serial number


www.secra.pl website address where a declaration of conformity is available.

### marking on the rear, outer part of shell:

PROD MM/YY production date (month / year)

UTIL MM/YY expiry date (month / year).

### marking on the visor:

 1000V indicates a product intended for work on live equipment (according to the RFU no 03-025/2012).

2C-2 protection level of the UV filter

**hubix** identification of the manufacturer

2 optical class

B resistance to medium-energy impacts

8-2-2 protection against short-circuit electric arc

- 8 protection against electric arc according to EN 166:2001
- 2 protection against thermal effects associated with electrical arc – class 2 (7kA/0,5s) according to z GS-ET 29:2019-06 *“Principles of testing and certification of face shields for electrical work”*
- 2 coefficient VLT < 50% class 2, according to GS-ET 29:2019-06
- 9 protection against projected molten metal and hot solid objects
- N resistance to fogging
- CE conformity with the Regulation 2016/425
- ATPV=36Cal/cm<sup>2</sup> parameter that determines the maximum arc energy against which the shield protects, in accordance with ASTM F2178/F2178M-20,

**marking stamped on the lower part of the shield – the chin protection:**

- HUBIX identification of the manufacturer
- EN 166:2001 applicable standard *“Personal eye protection. Specifications”*
- 3 protection against projected liquid
- 8 protection against electric arc
- 9 protection against projected molten metal and hot solid objects
- B resistance to medium-energy impacts.

**ADJUSTMENT**

Before use, the helmet must be properly adjusted to provide effective protection. The user should adjust the hard hat to the circumference of the head, changing the wearing height and the length of the chin strap in such a way that the hard hat fits well, does not move or tilt.

**HEAD CIRCUIT ADJUSTMENT**

The hard hat is equipment with a ratchet mechanism to adjust to the circumference of the head with the precision of 1mm over a range of 53 to 63 cm. After putting the helmet on the head, adjust it to the head circumference by turning the knob of the headband (1) located on the back of the helmet (Fig.1). Turning to the left (2) allows you to loosen and turn to the right (3) to tighten the headband.

**ADJUSTMENT OF WEARING HEIGHT**

The hart hat has two adjustment positions for the wearing height (Fig.2). After putting the helmet on the head, make sure that the cradle is properly adjusted to the height of the head. As standard, the attachment of the headband (1) is mounted in the low position (2). To change the wearing height, attach the attachment of the headband to the high position (3).

**ADJUSTMENT OF THE CHIN STRAP**

The chinstrap (Fig. 3) has a length adjustment, individually for the left and right of the strap. For each part, the length of the front (1) and rear (2) sections can be changed by sliding the strip through the splitter (3).

**FASTENING OF THE CHIN STRAP**

To fasten the strap, insert the strap element (1) into the clip (2) (Fig.4) To unfasten the strap, pull the clip (1) and release the strap element (2) from the clip. (Fig.5)

**OPENING/CLOSING OF THE FACE SHIELD**



1. To lower (open) the face shield (Fig.6), gently grab it with both hands, with thumbs on the inside (1), pull it down (2), until it fully extends to the outside of the helmet (3), and then turn the chin cover by pulling it towards you (4), until you hear a click of the hinges of the chin cover.

2. To lift (close) the face shield (Fig.7), first turn the chin cover (5), until you hear a click of the chin cover hinges (6), and then slide the face shield into the helmet, by pushing it upward (7).

**Caution! Incorrect (not according to the instruction) use/opening/closing of the face shield may cause its damage. Do not press on parts of the face shield too hard and do not close/open it too fast.**

#### **4. CHECKS BEFORE EACH USE**

The hard hat and the face shield must be checked each time before work is resumed. During the visual inspection, the following items must be checked:

- no visible defects on hard hat
- proper operation of the head circumference adjustment mechanism
- proper operation of the chin strap fastener
- no visible defects on the face shield
- proper operation of the shield's mechanisms
- the period of use or expiry date.

In the event of a mechanical damage of the shell (cracks, deep scratches, etc.) or chemical (discoloration, fading, etc.), improper operation of the head circumference adjustment or of the chin strap fastener and mechanical (cracks, deep scratches, perforations), or chemical (discoloration, tarnishing etc.) damage to the face shield or its malfunction and if there is any doubt as to the optimal level of protection, the helmet must not be used for work on live equipment and it should be withdrawn from use

If the expiry date has passed, the helmet must be disposed of.

If the helmet is wet, it must be completely dried before use.

**WARNING! Before starting work, the user should check whether the electrical limits for helmets correspond to the voltage rating and the category or class of hazards that they are likely to encounter during use.**

#### **5. PRECAUTION IN USE**

The helmets should not be used in situations where there is a risk which could partially reduce its insulating properties. Follow the requirements of the live work organization instructions.

#### **6. PRECAUTION AFTER USE**

If the helmet or face shield becomes dirty or contaminated, particularly their external surfaces, they should be thoroughly cleaned in accordance with the manufacturer's recommendations (see 8.)

#### **7. STORAGE AND TRANSPORT**

The helmet must be stored and transported in a special transport bag or other protective packaging. During storage or transport, the face shield

should be hidden inside the helmet. Keep the helmet away from any sources of heat. Protect the helmet against mechanical damage, compression, sunlight (UV), humidity, exhaust gases, etc. Do not place the helmet in direct vicinity of windows or car windows. The recommended storage temperature is (20±15) °C.

## **8. CLEANING AND DISINFECTION:**

The hard hat and face shield should be cleaned after each use, which enables precise control and prevents skin irritation of the user. The hard hat should be cleaned only with soap and water. Do not use any solvents, detergents and abrasives for cleaning. The sweatbands must be regularly replaced.

The face shield should be cleaned only with soap and water. After washing, dry the shield properly. To clean the surface of shield visor, use a microfiber cloth, attached to each helmet.

**CAUTION! The face shield can be damaged by certain aggressive chemical substances. Do not use any solvents or detergents and abrasives to clean the face shield.**

## **9. SPARE PARTS**

Parts of the helmet that are very worn or damaged must be replaced with new ones. The manufacturer provides full service of the product it offers and its dedicated accessories. The users can replace damaged elements of the helmet by themselves or send the helmet with a damaged part to the manufacturer.

List of spare parts to be replaced by the user himself

G113.1112	front sweatband
G113.1114	rear sweatband
G113.1111	head harness, complete
G113.1115	chinstrap with safety catches, complete
G113.1122	face shield ARC-E40HT, complete
G113.1117	set of reflective stickers
G114.1111	visor cleaning cloth
G114.1112	storage and transport bag.

The latest instructions are available at [www.secra.pl](http://www.secra.pl)

## **10. REPLACEMENT OF SPARE PARTS**

### ***SWEATBAND***

The sweatbands (Fig. 9) are fixed to the main strap – front sweatband (1) and the back strap – back sweatband (2) using Velcro fasteners. To replace the front sweatband, remove the six Velcro, which fasten it around the headband. To replace the back sweatband, grab it and separate them from the regulator by gently pulling them. In place of worn sweatband attach new ones.

### ***HARNES***

To change the harness (Fig. 10), put a flat screwdriver (~3 mm wide) between the rim and the attachment of the harness. Then lightly pull the screwdriver until the attachment of the harness becomes opened (1). Perform the same

procedure on all the attachments. After releasing all four attachments, grasp them and pull gently (2) to separate the harness from the rim of the helmet (Fig. 11).

To replace a damaged harness with a new one, insert the attachments of the harness in the openings of the rim, push them one after another until a clicking sound can be heard, and then check if they have been fastened properly.

#### **CHIN STRAP**

To change the chinstrap (Fig.12), grasp the attachment of the chinstrap (1) and separate it from the anchorage on the rim of hard hat by pulling it with force. Perform the same procedure on the remaining attachments. Replace the new one in place of the damaged chinstrap.

Insert the attachments of chin strap (2) on the anchorage of the rim (3) and then pull them up (Fig. 13) until securing the attachments (Fig. 14).

#### **FACE SHIELD**

The replacement of face shields is included in a separate manual.

### **11. ADDITIONAL ACCESSORIES**

**Optionally, additional accessories can be attached to the helmet:**

- G113.1116 two adapters for mounting on the helmet of earmuff, mounted by the manufacturer or for self-assembly
- G111.1112 flashlight, for self-assembly
- G112.1111 arc flash ear protectors, for self-assembly
- G114.1113 multifunctional tubular BUFF FIRE RESISTANCE
- F331.0102 balaclava BUFF ARC PROTECT+FR BALACLAVA

The latest instructions are available at [www.secra.pl](http://www.secra.pl)

### **12. LIFETIME**

The lifetime of the helmet with face shield is 60 months from the date of manufacture. The production date month/year (1) and the date of utilization month/year (2) are pressed on the back of the outer shell of the helmet (Fig. 8).

**AFTER THE DATE MARKED "UTIL MM/YY" ON THE BACK OF THE SHELL [see Fig.8 (2)] THE HELMET MUST BE WITHDRAWN FROM USE AND DISPOSED OF.**

**IN THE EVENT OF AN IMPACT, FALL, APPEARANCE OF CRACKS OR PERFORATIONS, THE HARD HAT MUST BE DISPOSED OF.**

**IN THE EVENT OF CRACKS, SCRATCHES, PERFORATIONS AND DISCOLORATION OR TARNISHING, THE FACE SHIELD MUST BE WITHDRAWN FROM USE OF OR REPLACED.**

### **13. WARRANTY**

This product is covered with a 24-month warranty, starting from the date of purchase. The warranty does not cover the elements of the helmet showing signs of normal wear, remanufactured and modified, improperly stored, damaged as a result of accidents, negligence and use contrary to the intended use.

### **WARNING!**

- In the event of an impact, fall, appearance of cracks or perforations, the hard hat must be disposed of.
- Do not modify or remove any of the original helmet components.
- The electrically insulating helmet cannot be used as the only personal protective equipment during live work.
- Depending on the risk involved in a particular type of work, it is necessary to use additional protective equipment in addition to the helmet.
- Artificial lighting can clash with the shade of the face shield and impair color perception, especially when fluorescent or LED lamps are used as light sources. Make sure that all cable color codes used in the workplace can be safely distinguished under actual lighting conditions.
- Check your color perception before starting work,
- The manufacturer accepts no responsibility in the event of any modifications of the equipment performed without its permission and in the event of any additions or replacement of accessories that have not been approved by the manufacturer or do not constitute a part of the original hard hat and not adapted to live work.
- Do not apply paint, varnishes, etc. to the hard hat or visor of face shield.
- Do not stick self-adhesive labels on the helmet or face shield without the consent of the manufacturer.
- Do not use solvents, detergents and abrasives to clean the helmet or face shield.
- The helmet must not be thrown, dropped or used as a support.
- Before starting work, check that the electrical limits for helmets correspond to the voltage rating and category or class of hazards that may occur during use.
- The ARC-E40HT face shields can only be used with the SECRA H058S helmet.
- The face shield protects against hazards only when it is completely lowered.
- Do not use headgear, warmers, etc. under the helmet, which have not been tested in combination with the helmet. Using the wrong headgear can significantly reduce the level of protection.
- With the helmet use only balaclavas recommended by the manufacturer.
- Keep the face shield, in particular the transparent visor, clean.



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