OPERATION MANUAL

EGRT1 BATTERY POWERED HYDRAULIC PRESS

#EGRT1261113

ERKO sp.j.
PL 11-042 Jonkowo, Hanowskiego 7 +48 89 522 10 22 erko@erko.pl
ERKO sp.j. Oddział w Czeluśnicy
PL 38-204 Tarnowiec, Czeluśnica 80 +48 13 445 55 88 oddzial.czelusnica@erko.pl
www.erko.pl

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Thank you for buying our product.
Before using this equipment, please carefully read the user and the maintenance manuals.

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* Firma ERKO sp.j. zastrzega sobie prawo do wprowadzania zmian konstrukcyjnych wynikających z modernizacji wyrobów.

AIO 89 007 ISO 9001 ISO 14001

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1. APPLICATION

EGRT1 battery powered hydraulic press is compact tool for crimping RT_1 and RT_2 connectors.

2. TECHNICAL DATA

Force	25 kN
Battery voltage	18 V DC
Motor	with permanent magnets in continuous current
Battery capacity	1,5 Ah (optionally 3,0 Ah)
Type of battery	Li-Ion (without memory effect)
Charging time	approx. 30 min.
Noise level	75 dB (medium) at a distance of 1 m
Acceleration	< 2,5 m/s^2 (effective weighed value of acceleration)
Hydraulic oil	type ,,Shell-Naturelle HF-E 15"
Operating temperature	from -10 °C to +40 °C
Weight	3 kg
Dimensions (H x W x T)	436 x 123 x 80 [mm]

3. TOOL CHARACTERISTICS

- The rod body and all parts are made from certified high-strength materials.
- Casing which is insulation against electric shock is made entirely from polyamide reinforced with fiber glass.
- The unit has a light, compact and robust design.
- Technology of two-speed piston rod hydraulic circuit allows the pre-load fast movement of the piston rod at low pressure and slow movement at high pressure under operating load
- Return of the piston rod is controlled by the software.
- Device Control is via a microcontroller.
- Pressure control is via an electronic pressure sensor.
- Power battery is done using the constant power control.
- Maintenance work is carried out with the use of electronic systems.
- A mini USB port allows reading of stored information and update the software.
- Additional LEDs indicate the current status of the device.
- the first technical service should be carried out after 20,000 cycles.

4. EQUIPMENT

EGRT1 battery powered hydraulic press is equipped as standard in SRT1 dies, which are integral part of the head. In addition there are accessories suplied with the unit (Fig 1):

[1] Battery

[2] Battery charger

[3] USB 2.0 cable: A plug with 5 pole mini type B socket

[4] CD-ROM

Fig 1.

All is packed in metal box.

5. OPERATION

Caution:The producer is not responsible for injuries or loss caused by use other than according to operational manual.

The device should only be used for its intended purpose and only by personnel trained in the use of tools. User manual should accompany the tool for the entire period of use.

The tool user is obliged to:

• The facilities instructions to other users;

• Ensure that the person using the tool read and understood the instructions.

5.1. Crimping process

Caution: Before you start operation, turn off all active elements, ie elements live within range of a working installer. If this is not possible, you should take all safety measures during the performance of work on the impact of high voltage.

Before starting work, check the condition of the device and install the battery (Fig. 2). Then place the connector between the dies, where it will lock initially, arrange wires and initiate the process of crimping pressing on the body of battery powered hydraulic press. Crimping process is done automatically when you press" Start / Stop" (Figure 3 [1]) on the handle. For correct crimping, hold the button until it automatic retraction (return to the initial position).

During crimping, we can interrupt the process by releasing the" Start / Stop" (Figure 3 [1]), and thus stop the tool in a position where it was interrupted. However, by pressing ‘reset' button (Figure 3 [2]) dies are manually return to the starting position.

Fig. 2.

Fig. 3.

5.2. Battery and battery charger

Fig. 4.

Battery condition can be recalled by pressing the button on the battery, while the battery may remain in the tool. This tool must be before that switched off for at least 1 minute (otherwise the display will show inaccurate data). Number of lit LEDs reflect the status of the battery charging. A flashing LED indicates the maximum reserve capacity of 10%. This display should only be used for determining the reserve capacity.

Parameters of the charger: 230 V AC 50-60 Hz. New batteries are partially charged, and must be charged before the first use of the tool. To charge the battery, plug has to be plugged in and the battery connected to the charger. 1.5 Ah battery takes approximately 30 minutes to charge. The charging status are indicated by lights.

Caution:

- **If the battery is not in use, keep it away from paper clips, coins, keys, nails, screws or other small metal objects that could cause a short circuit the contacts, which could lead to an explosion or fire.**
- **The battery can not be charged in the near gas or flammable materials. Plug the charger, the charging is completed, remove it from the socket. Do not disassemble the charger.**
- **If the batteries are stored for an extended period of time, its charge status should be checked periodically. The optimum charge level of from 50% to 80%. Charge the batteries at least every 12 months to avoid total discharge, which could damage the battery.**
- **Non charged batteries should not be stored for a period longer than one month in order to avoid total exhaustion, which could damage the battery.**
- **Use only the charger recommended by the manufacturer. Using the charger is designed to charge a specific type of battery to charge another battery sometimes cause fires.**
- **Use only batteries dedicated to this tool. Use of other batteries may cause personal injury and fire.**
- **Misuse of the battery may cause leakage of fluid. Avoid contact with liquid. The fluid that leaked from the battery may cause irritation or skin burns. In case of contact with skin, wash with plenty of water. If the fluid gets into the eyes should immediately consult a doctor.**

6. SOFTWARE INSTALLATION

6.1. System requirements

Operating system	Windows XP, Windows Vista, Windows 7
Processor	Pentium 4; 1,7 GHz minimum
RAM	512 MB or more (1GB recommended)
Hard drive	200 MB (1GB recommended)
Resolution	1024 x 768 or greater, 65.535 colours
Other requirements	CD-ROM-Reader, USB 2.0

6.2. Plug & Play

After successful installation of the program EGRT1 battery powered hydraulic tool is automatically recognised by the computer and the programs or data can thus be updated .
A detailed installation instruction can be found on the CD-ROM provided.

7. SPARE PARTS

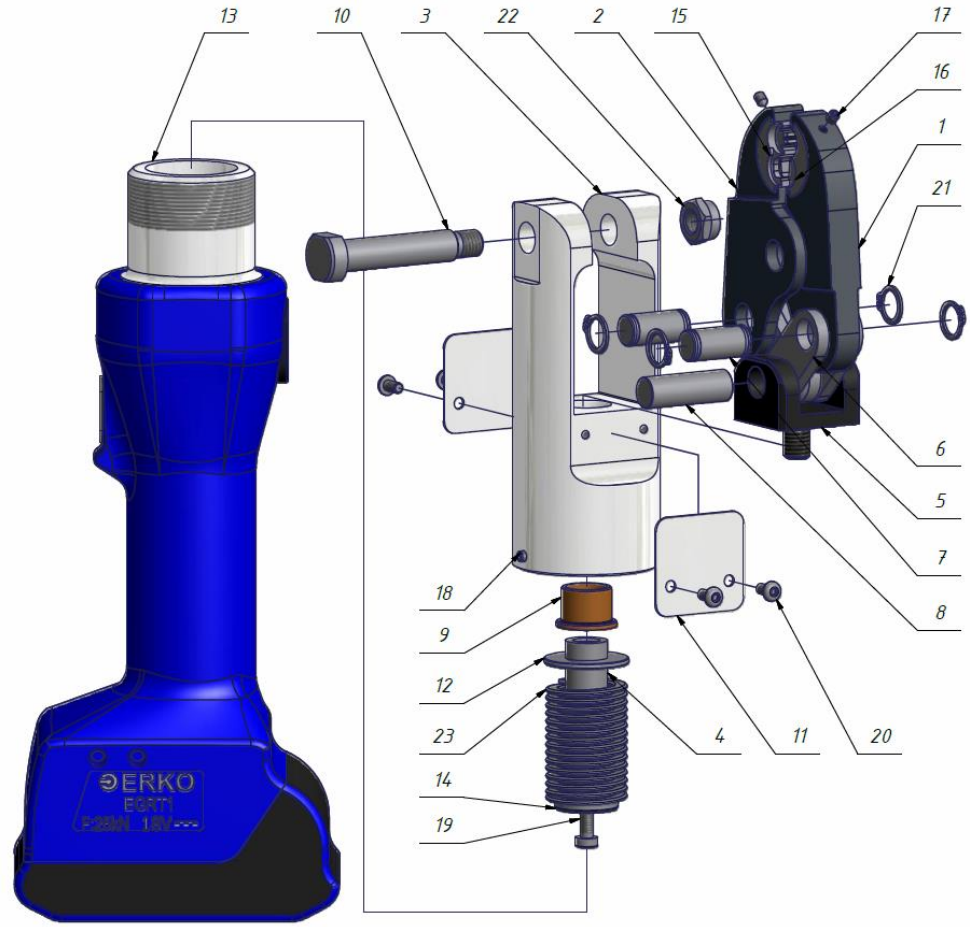

Fig. 5. EGRT1.

Lp. / Item No.	Ilość / No.Used	Nazwa elementu / Description	Nr. zamówieniowy części / Code No.
1	1	Dzwignia lewa głowicy/ Left lever	EGRT1-01
2	1	Dzwignia prawa głowicy/ Right lever	EGRT1-02
3	1	Korpus głowicy EGRT / Head body	EGRT1-03
4	1	Popychacz/ Pusher	EGRT1-04
5	1	Przegub / Joint	EGRT1-05
6	4	Łącznik / connector	EGRT1-06
7*	2	Sworzeń łącznika / Pin of connector	EGRT1-07
8*	1	Sworzeń przegubu/ Pin of joint	EGRT1-08
9	1	Tuleja prowadząca/ Sleeve	EGRT1-09
10*	1	Śruba dźwigni / Lever screw	EGRT1-10
11	2	Osłona/ Cover	EGRT1-11
12	1	Podkładka oporowa / resistance washer	EGRT1-12
13	1	Elektronapęd praski EGRT1 / Electrodrive	EGRT1-13
14	1	Podstawa trzpienia prowadzącego / Leading rod basis	EGRM1-03
15	1	Matryca dolna / Lower die	SRT-01
16	1	Matryca górna / Upper die	SRT-02.A
17	2	Wkręt / Screw	NEZS_BI-M4-6V-CZ
18	1	Wkręt / Screw	NEZS_BI-M5-6W-CZ
19	1	Śruba / Screw	NEZS_WNI-M5-16-8.8-OC
20	4	Śruba / Screw	NEZS_WKI-M4-8-10.9-OC
21	4	Pierścień / ring	NEZO_PAS-12
22	1	Nakrętka / Nut	NEZN_HNB-M10-OC
23	1	Sprężyna powrotna / Back spring	NRSN_ZKT_01279

*** - grease every 10 000 cycles with CPSM_805 grease (available at ERKO).**

Chart. 1. EGRT1 spare parts list.

8. MAINTENANCE INSTRUCTIONS

1. Before starting work, check the condition of the tool.
2. Do not eject push button (Fig. 5 [4]) in the absence of connector between the crimping dies of the head.
3. Push start button until the automatic retraction of the drive.
4. Protect the device against weather, corrosion, dirt and mechanical damage.
5. The work should be done in an appropriate work clothes using personal protection, personal.

6. During operation, do not put in the work space objects other than the connector to which the head is intended.
7. The work should be done with caution.
8. After finishing the work, pay attention to whether the head back to the starting position. Do not leave the unit with the oil in the hydraulic system.
9. It is unacceptable to use a defective tool,or if there is a suspicion of disability until you fix it.
10. Battery powered hydraulic press should not be used under current. The tool is not electrically insulated.
11. Battery powered hydraulic press cancan only be used on workstations equipped with lighting a min. 400 lux or in daylight.
12. Battery powered hydraulic press can be operated by one person. Before use, the pump should be instructed all nearby persons to leave the danger area.
13. EGRT1 Battery powered hydraulic press can only be operated manually, and should provide access to the " start" and" reset" button in case of an emergency**.**
14. Stationary use is prohibited EGRT1 Battery powered hydraulic press can not be set on the ground or mounted on any grounds mounting.
15. EGRT1 Battery powered hydraulic press opening can be done only by authorized service.
16. Non-compliance with safety instructions can lead to life-threatening situation or a person's health, damage the tool or other property in the work environment.
17. The tool should be kept inaccessible to unauthorized persons, while working with a tool to protect away from unauthorized persons.
18. If during operation a situation danger to persons or equipment accures, disable battery powered hydraulic press by pressing the" reset"button.
19. EGRT1 Battery powered hydraulic press is not intended for continuous operation.
20. Secure access to the working area of the piston rod is permissible only when the piston is released and the battery is removed.
21. The work area should be checked before turning on the tool. The device can be started only when there is no danger to the user or bystanders.
22. The battery can be removed after a safe tool is switched off (at the end of cycle and release the pressure from the piston rod).
23. " Reset" button, which is located on the device, can be used only in emergency situations.
24. Do not open the device! All warranty rights are subject to loss in the event of breaking the seal of casing. The tool can not operate without protecting case.
25. The tool must be sent to the manufacturer after the service light comes on. The customer is not entitled to maintenance operations, because it would void the warranty and could result in a hazardous situation.
26. Typical average noise levels can not exceed 70 dB (average value) during operation. Use hearing protection.

27. The tool can be operated only original batteries.
28. The tool can not be used in potentially explosive atmospheres.
29. The total switch off of the tool is only after removing the battery.
30. Tools must not be used in heavy rain or under water.
31. In the case of oil leakage from battery powered hydraulic press send it to the service center.
32. Hydraulic oils pose a threat to groundwater. Uncontrolled leakage or disposal of oil in a manner inconsistent with applicable regulations can be prosecuted ex officio under the Environmental Protection Law.
33. Make sure that the components used meet the temperature requirements.
34. In order to protect against battery powered hydraulic press damage, it should be cleaned after each use. When work is finished, battery powered hydraulic press must be placed in a dedicated storage box and make sure it is properly closed.
35. After completing 20,000 cycles technical review should be carried out by an authorized service.

9. WHAT TO DO IN CASE OF BREAKDOWN

In case of failure of the tool is automatically switched off and locked. The service LED lights up red or orange. Further work is possible only, respectively, after changing or momentary disconnect the battery. If failure persists despite crimping "reset" of the tool, please contact customer service.

9.1. Information signals – tool operation

Failure		Cause / trouble shooting
after crimping/cutting process		
	green light	Operating data OK
	green/red flashing	Operating data OK and service interval exceeded / service needed
	red flashing	Operating data marginal / please contact service center
	red light	Operating data false service needed
	orange light	Temperature failure / tool has to be heated up or cooled down
after inserting the battery		
	green ligth	No failure
	orange light	Temperature failure / tool has to be heated up or cooled down

9.2. Information signals - battery

Failure		Cause / trouble shooting
after crimping process		
	off	No malfunction
	red flashing	Charge/change battery (approx. 10% capacity)
	red light	Battery flat
after inserting the battery		
	green light	No malfunction
	red light	Charge/change battery

9.3. Information signals – battery charger

Failure		Cause / trouble shooting
	red light	Charging process starts
	red flashing	Battery to hot or too cold
	green light	Battery charged
	green/red flashing	Battery defect

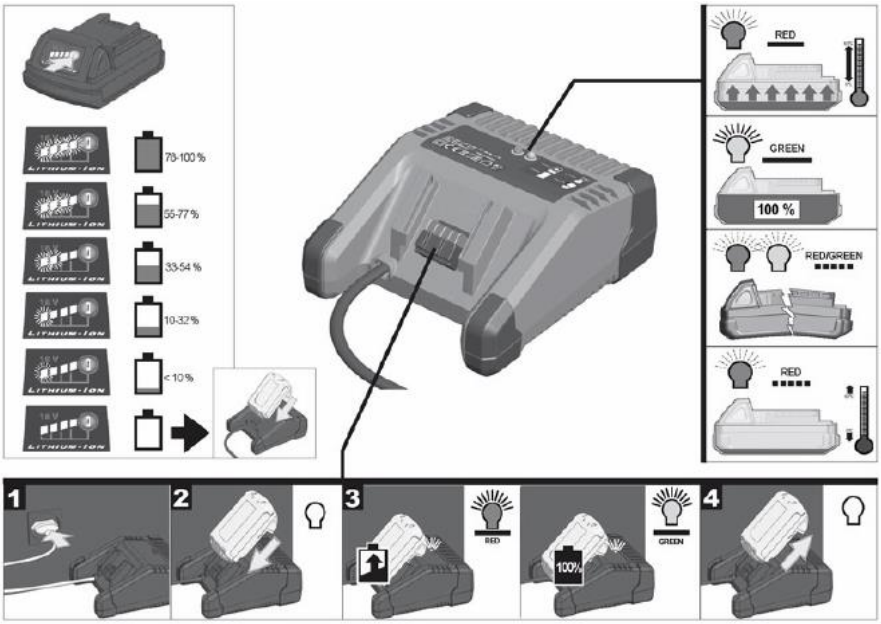

Fig. 6.

10. SERVICE

ERKO provides warranty and post warranty service.

11. DISPOSAL

Disposal of individual components of the tool must be held as a separate process. To do this, first drain the oil and dispose of it in a special collection points. Then dispose of the battery with regard to special regulation on the battery. When disposing of the remaining parts of the tool should keep in mind environmental standards, approved by the European Community and in force in the country. Because of possible contamination of the environment, we recommend that you carry out disposal by professional companies. If necessary, you should also consult our technical service.

Directives 2002/96/EC (WEEE) and 2006/66/EC
This product complies with EU Directives 2002/96/EC and 2006/66/EC. Crossed out wheelie bin (Fig 7)on the appliance indicates that the product, requiring separate treatment to household waste after its normal working life, must be taken to a waste-sorting centre for electrical and electronic appliances or returned to the retailer at the time of purchasing a new equivalent appliance.The user is responsible for taking the appliance to the appropriate waste collection centre at the end of its working life. Correct waste sorting, with the discarded appliance being sent for recycling, treatment and compatible environmental disposal helps prevent any negative effects on the environment and health, and encourages the recycling of product materials. For further detailed information regarding available collection systems, please contact your local waste disposal service or the shop where you made your purchase. If under the bin there is a chemical symbol (HG, Cd, Pb) – Fig 8 – this indicates that the batteries have a concentration of that heavy metal higher than the following limits: Hg: mercury (0,0005%), Cd: cadmium (0,002%), Pb: lead (0,004%).

Directive 2002/95 EC (RoHS). k is product complies with EU Directive 2002/95/CE RoHS.

Fig. 7.

Fig. 8.