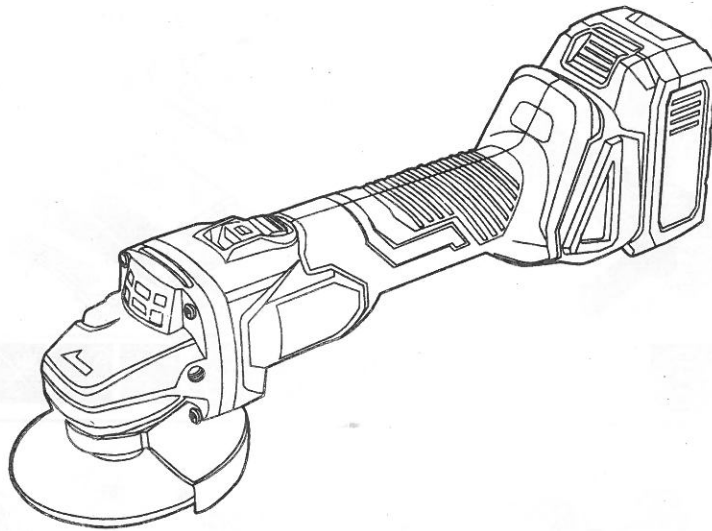
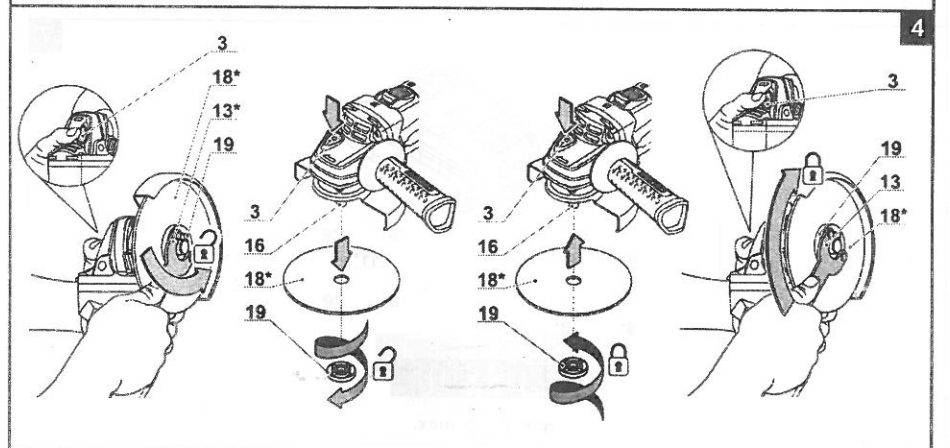
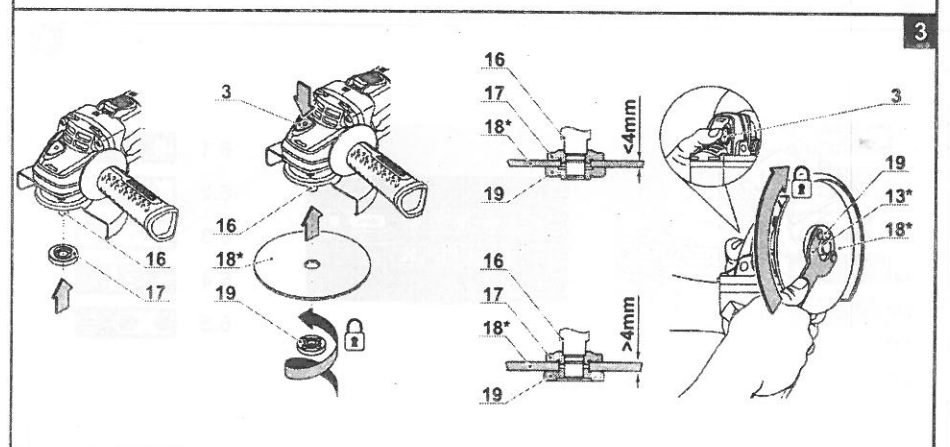
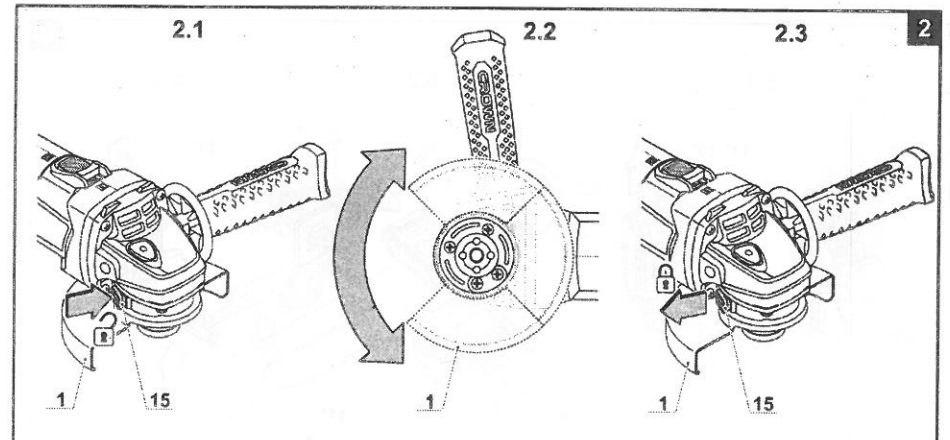
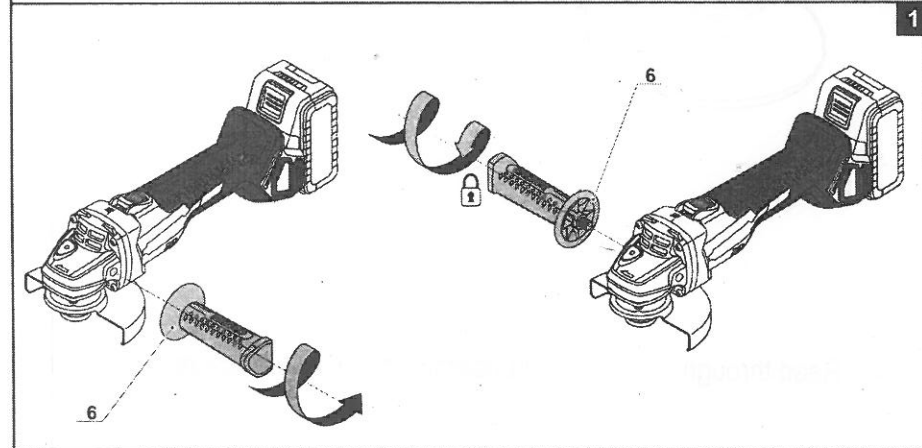
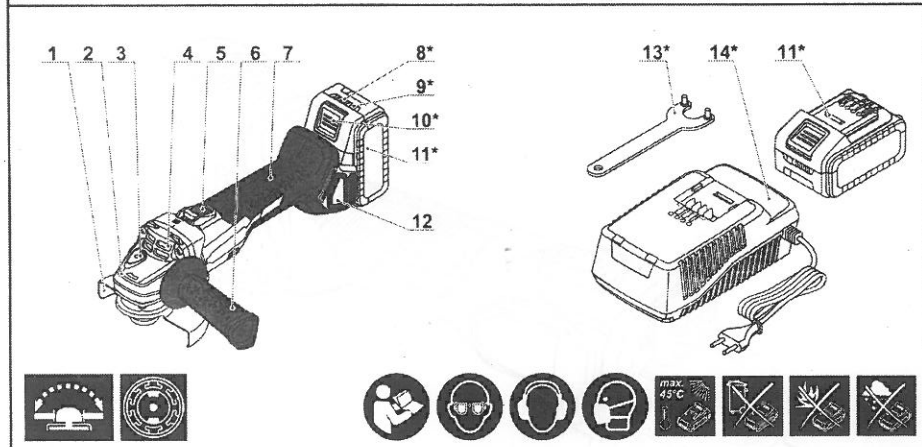
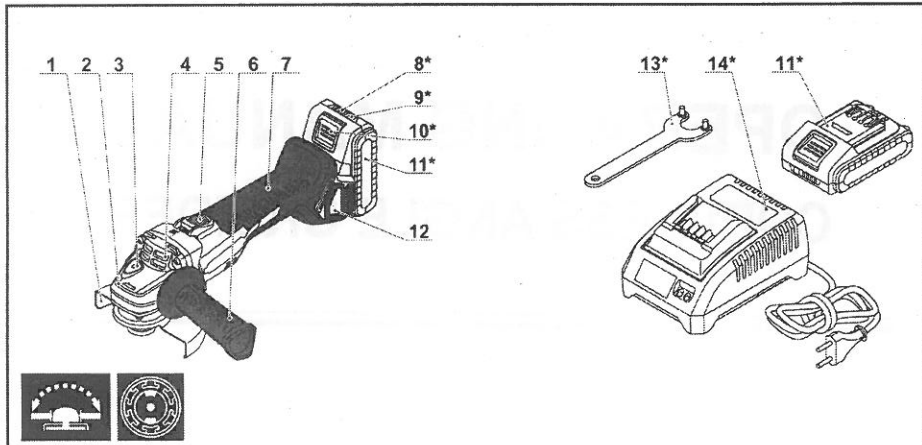


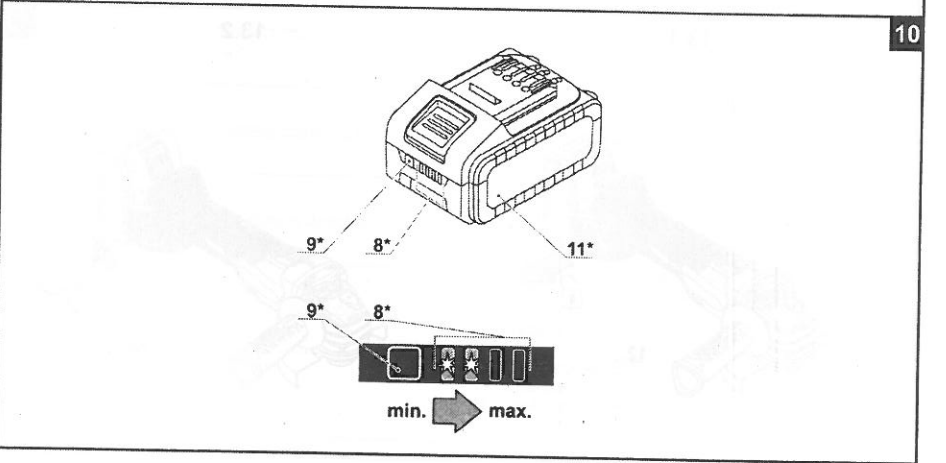
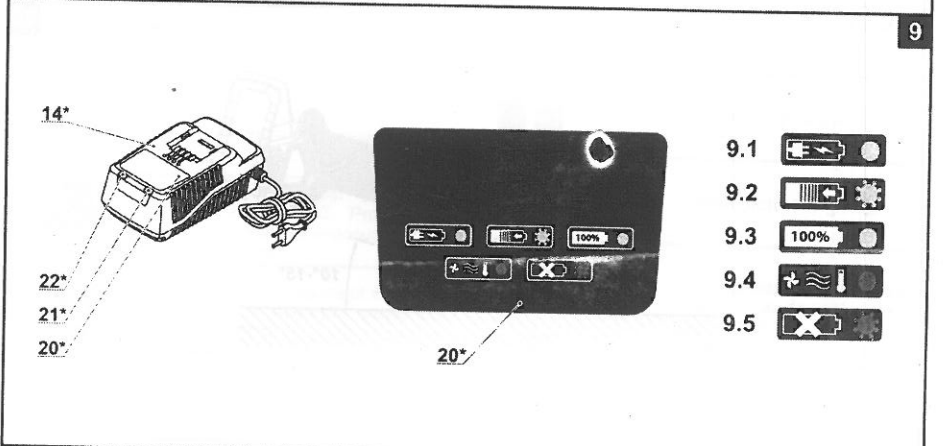
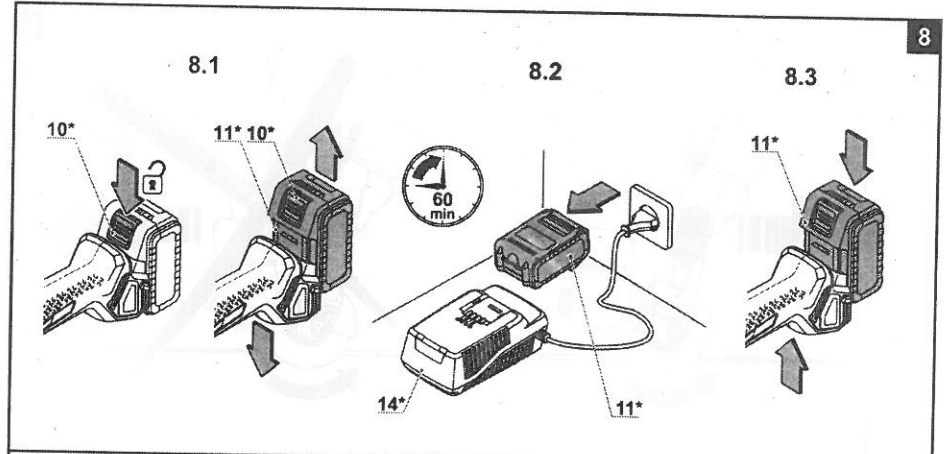
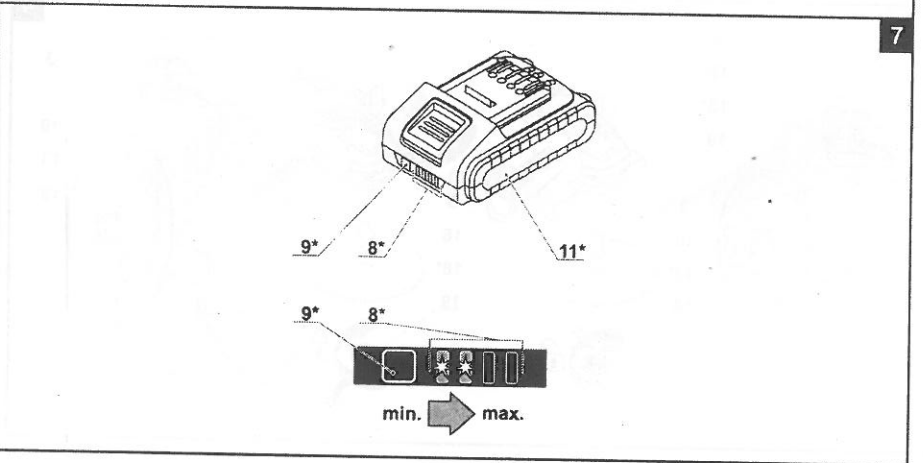
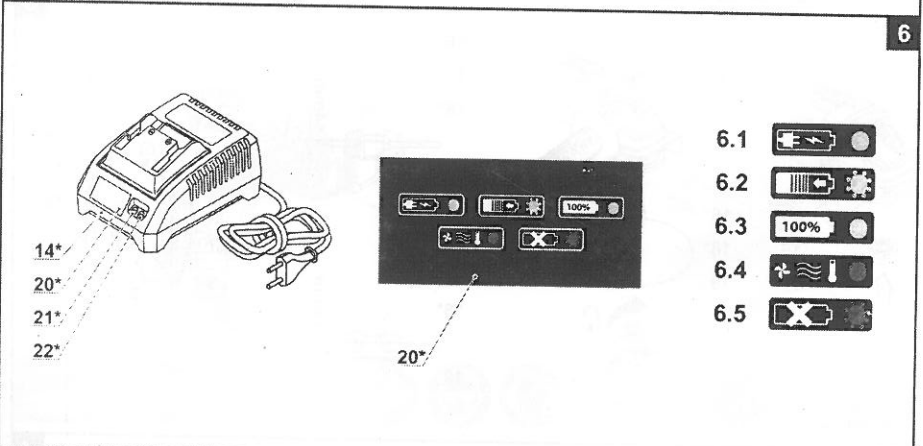
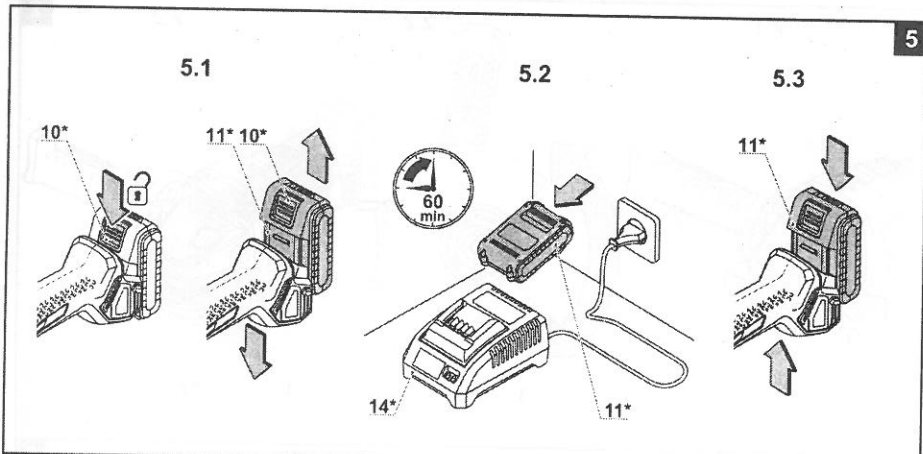
OPERATING MANUAL

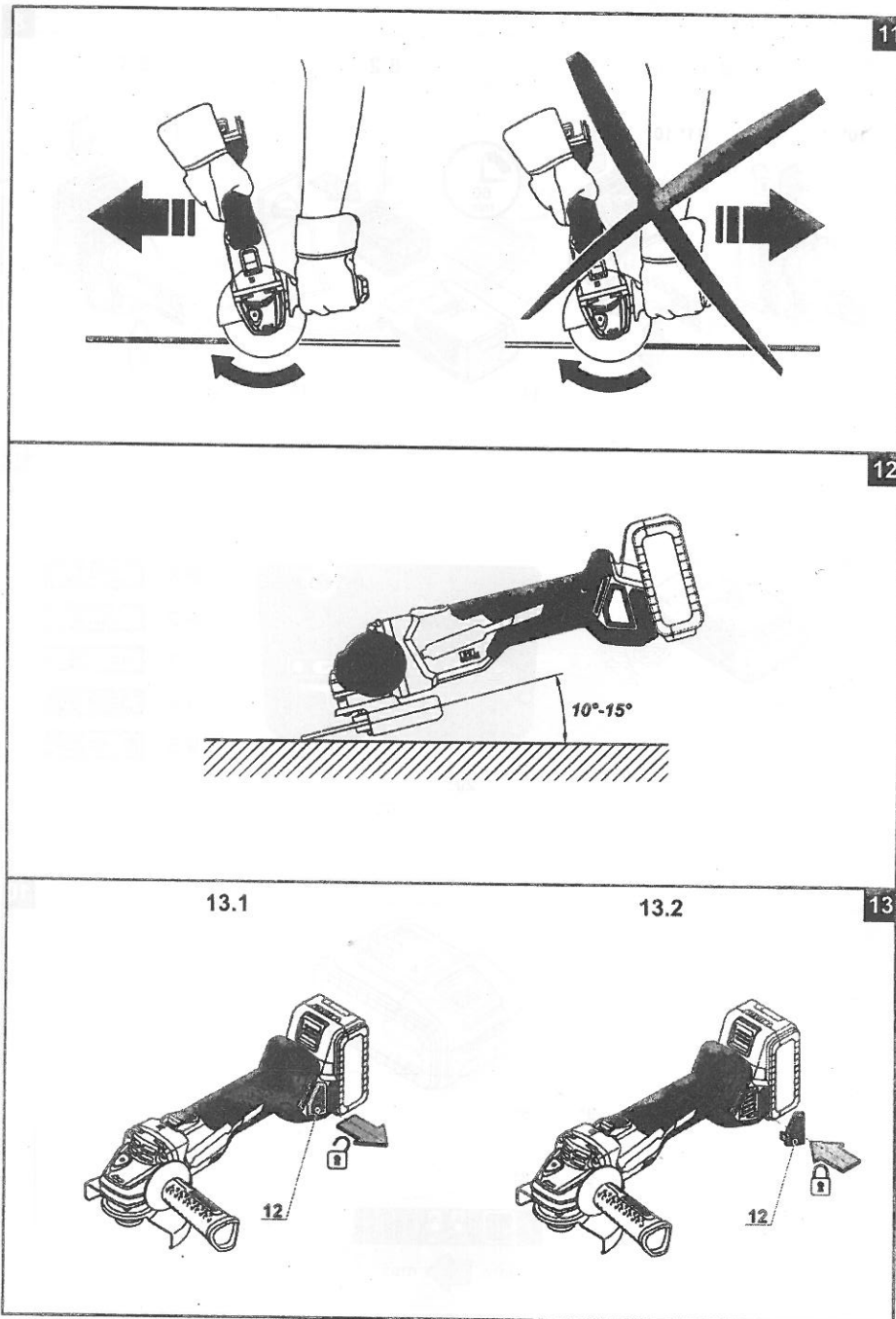
CORDLESS ANGLE GRINDER



Read through carefully and understand these instructions before use.







| Symbol | Meaning | Symbol | Meaning |
|--------|---|--|---|
| | Possibility to select between two positions of additional handle. | | Unlocked. |
| | Brushless motor. | | Prohibited. |
| | Read all safety regulations and instructions. | III | Protection class. |
| | Wear safety goggles. | | Attention. Important. |
| | Wear ear protectors. | | A sign certifying that the product complies with essential requirements of the EU directives and harmonized EU standards. |
| | Wear a dust mask. | | Useful information. |
| | Do not heat the battery above 45°C. Protect from prolonged exposure to direct sunlight. | | Wear protective gloves. |
| | Do not dispose of the battery in a domestic waste container. | | Do not dispose of the power tool in a domestic waste container. |
| | Do not dispose of the battery in the fire. | Power tool designation | |
| | Protect the battery from the rain. | The power tool is intended for dry cutting, grinding and sanding of metals (and other materials). The area of the tool application can be expanded due to use of additional accessories. | |
| | Battery charging time. | Power tool components | |
| | Movement direction. | 1 Protective casing | |
| | Rotation direction. | 2 Reducer | |
| | Locked. | 3 Spindle lock | |
| | | 4 Ventilation slots | |
| | | 5 On / off switch | |
| | | 6 Additional handle | |
| | | 7 Body | |
| | | 8 Indicators of the state of battery charge * | |
| | | 9 Control button of the state of battery charge * | |
| | | 10 Battery lock * | |
| | | 11 Battery * | |
| | | 12 Filter | |
| | | 13 Flange wrench * | |
| | | 14 Charger * | |
| | | 15 Locking button | |
| | | 16 Spindle | |
| | | 17 Flange | |

- 18 Disc *
- 19 Clamping nut
- 20 Label *
- 21 Indicator (red) *
- 22 Indicator (green) *

* Optional extra

Not all of the accessories illustrated or described are included as standard delivery.

Installation and regulation of power tool elements

Before carrying out any works on the power tool remove the battery 11.



Do not draw up the fastening elements too tight to avoid damaging the thread.



Mounting / dismantling / setting-up of some elements is the same for all power tool models, in this case specific models are not indicated in the illustration.

Additional handle (see fig. 1)

Always use the additional handle 6 when operating. Additional handle 6 may be positioned as deemed comfortable by the user.

- Unscrew additional handle 6 as shown on fig. 1.
- Screw additional handle 6 into another threaded opening.

Protective casing



Always use protective casing 1 when applying cutting and grinding discs. Operation of the aforementioned accessories without protective casing 1 is strictly forbidden. Protective casing 1 should always face the operator with its closed part.

Adjusting the protective casing into work position (see fig. 2)

- This power tools are supplied with the mounted protective casing 1. Before proceeding to establish a protective casing 1, so that its closed part facing toward the user.
- Press the locking button 15 and while holding it in this position, turn the protective casing 1 into the required position (see fig. 2.1-2.2).
- Release locking button 15 (see fig. 2.3).

Mounting / replacement of accessories



After mounting accessories of any kind, make a trial run before commencing operation - start the power tool and let it work in idle mode for not less than 30 seconds. The operation of accessories with radial or axial run-out and causing increased vibration of the power tool is strictly forbidden.



Wearing protective gloves is recommended for mounting / replacing accessories.

Mounting of cutting / grinding disc (see fig. 3)

- Install flange 17 onto spindle 16 (see fig. 3).
- Install one of the aforementioned accessories onto spindle 16.
- Press and hold spindle lock 3.
- Screw clamping nut 19 onto spindle 16 and tighten it with flange wrench 13. **Attention: at mounting any accessories over 4 mm thick clamping nut 19 should be turned over (see fig. 3).**
- Release spindle lock 3.

Replacing the cutting / grinding disc (see fig. 3-4)

- Press and hold spindle lock 3.
- Release clamping nut 19 with flange wrench 13 (see fig. 4).
- Replace the accessory.
- Screw clamping nut 19 onto spindle 16 and tighten it with flange wrench 13. **Attention: at mounting any accessories over 4 mm thick clamping nut 19 should be turned over (see fig. 3).**
- Release spindle lock 3.

Charging procedure of the power tool battery

Initial operating of the power tool

The power tool is supplied with a partially charged battery 11. Before the first use, the battery 11 must be fully charged.

Charging process (see fig. 5, 8)

- Press the battery lock 10 and remove the battery 11 (see fig. 5.1, 8.1).
- Connect the charger 14 to the power supply.
- Insert battery 11 into charger 14 (see fig. 5.2, 8.2).
- Disconnect the charger 14 from power supply after charging.
- Remove the battery 11 from the charger 14 and mount battery 11 in the power tool (see fig. 5.3, 8.3).

Charger indicators (see fig. 6, 9)

Charger indicators 21 and 22 inform of the battery 11 charging process. Signals of the indicators 21 and 22 are shown on the label 20 (see fig. 6, 9).

- Fig. 6.1, 9.1 - (the green indicator 22 is on, the battery 11 is not inserted in the charger 14) - the charger 14 is connected to the power network (ready for charging).
- Fig. 6.2, 9.2 - (the green indicator 22 is blinking, the battery 11 is inserted in the charger 14) - the battery 11 is being charged.
- Fig. 6.3, 9.3 - (the green indicator 22 is on, the battery 11 is inserted in the charger 14) - the battery 11 is fully charged.
- Fig. 6.4, 9.4 - (the red indicator 21 is on, the battery 11 is inserted in the charger 14) - the charging process of the battery 11 is terminated due to

inappropriate temperature. When the temperature conditions are normal, the process of charging will resume.

- Fig. 6.5, 9.5 - (the red indicator 21 is blinking, the battery 11 is inserted in the charger 14) - the charging process of the battery 11 is terminated because of its failure. Replace the faulty battery 11, its further use is prohibited.



In the process of charging the battery 11 and the charger 14 become hot, it is a normal process.

Switching the power tool on / off

Switching on:

Press the back part of on / off switch 5 and while holding it in this position, move on / off switch 5 forward. Press the front part of on / off switch 5 to fix it in pressed position.

Switching off:

Push the back part of on / off switch 5.

Design features of the power tool

Brushless motor

Power tool equipped with a brushless motor that provides the following advantages (compared to the power tool having a brush motor):

- high reliability due to the lack of wearing parts (carbon brushes, commutator);
- increased operating time on a single charge;
- compact design and light weight.

Dust-proof motor

The special design of the motor prevents the accumulation of dust and increases motor's service life.

Temperature protection

The temperature protection system enables to automatically deactivate the power tool in case of excess load or when the temperature of the battery 11 is exceeding 70°C. The system guarantees protection of the power tool from damage in case of noncompliance with the operation conditions.

Overdischarge protection

The battery 11 is protected by the safety system against deep discharge. In case of complete discharge, the power tool is automatically switched off. **Attention: do not try to switch on the power tool when the protection system is activated the battery 11 can be damaged.**

Indicators of the state of battery charge (see fig. 7, 10)

With the push of the button 9 the indicators 8 show the state of charge of the battery 11 (see fig. 7, 10).

Kickback protection

Kickback protection shuts down the motor if cutting disc gets into a sudden stuck situation. In this situation,

turn the power tool off and carefully remove the cutting disc from the cut. Then turn the power tool on to restart.

Overheating protection

Overheating protection system of the engine automatically switches off the power tool in case of overheating. In this situation, let the tool cool before turning the power tool on again. To switch on the power tool, first turn it off as described above.

Overload protection

Overload protection system of the engine automatically switches off the power tool when it is operated in a manner that causes it to draw an abnormally high current. In this situation, turn the power tool off and stop the application that caused the tool to become overloaded. To switch on the power tool, first turn it off as described above.

Restart protection

Even if the battery 11 is installed on the power tool when it switched on still, the power tool does not start. To switch on the power tool, first turn it off as described above.

Soft start

Soft start enables smooth start of power tools - the disc is being run up gradually with no jerks and kickbacks; no jump-like load is imposed on the motor upon switching.

Break rundown

Break rundown stops the spindle of the power tool within 2 seconds after the power tool is turned off.

Recommendations on the power tool operation

Cutting (see fig. 11)

- Install cutting disc as described below.
- Start the power tool, wait until the engine gains its maximum speed and only after that, smoothly bring cutting disc to the surface processed.
- Do not apply excessive pressure to the power tool, as it will not bring better results but it will overload the engine and wear out cutting disc faster.
- Move the power tool along the cutting line with moderate feed, not distorting and not making vibrating and bursting movements.
- Cutting should be implemented in the direction shown on fig. 11. When cutting in the reverse direction the danger of uncontrolled throwing of the power tool out to the side of the operator, which can lead to serious injuries appears.

Grinding (see fig. 12)

Grinding is applied for the rough and quick grinding of metals, the processing of welding seams, etc. Select the type of grinding disc depending on the work, which you are going to implement.

- Install grinding disc as described above.
- Start the power tool, wait until the engine gains its maximum speed and only after that smoothly bring grinding disc to the surface processed.
- Holding the power tool at an angle of 10° to 15° relating to the surface processed (see fig. 12) is recommended. If this angle is less than recommended, it will make controlling the power tool more difficult. If this angle is more than recommended, the processing quality will decrease and grooves will be left on the billet surface.
- Make alternate-reciprocal movements applying moderate pressure to the power tool. Excessive pressure will not bring better results but it will overload the engine and create the danger of destruction of grinding disc, which can cause severe injuries.

Power tool maintenance / preventive measures

Before carrying out any works on the power tool remove the battery 11.

Cleaning filter (see fig. 13)

Regularly inspect filter 12 (its contamination depends on the state of the environment). Clean the filter 12 as it gets dirty. **Attention: do not use power tools without a filter 12.**

- Remove filter 12 as shown onto fig. 13.1.
- Clean filter 12 with soft brush or blow it with compressed air.
- Install filter 12 as shown onto fig. 13.2.

Battery maintenance instruction

- Charge timely before the battery 11 is completely exhausted. Stop operation in low power and charge it immediately.
- Do not overcharge when the battery 11 is full, otherwise it will shorten the life time.
- Charge battery 11 in the room temperature of 10°C to 40°C (50°F to 104°F).
- Charge battery 11 every 6 months without operation for a long time.
- Replace worn out batteries in time. Decline of production or a significantly shorter runtime of the power tool after charging indicates aging of the battery 11 and the need for replacement. It should be taken into account that the battery 11 may discharge faster if the works take place in the temperature below 0°C.
- In case of long time storage without use, it is recommended to store the battery 11 at room temperature, it should be charged to 50%.

Cleaning of the power tool

An indispensable condition for a safe long-term exploitation of the power tool is to keep it clean. During the long treatment of metal, current-conducting dust can be accumulated inside the power tool. Regularly flush the power tool with compressed air through the ventilation slots 4.

After-sales service and application service

Our after-sales service responds to your questions concerning maintenance and repair of your product as well as spare parts. Information about service centers, parts diagrams and information about spare parts can also be found under: www.crown-tools.com.

Transportation of the power tools

- Categorically not to drop any mechanical impact on the packaging during transport.
- When unloading / loading is not allowed to use any kind of technology that works on the principle of clamping packaging.

Li-Ion batteries

The contained Li-Ion batteries are subject to the Dangerous Goods Legislation requirements. The user can transport the batteries by road without further requirements. When being transported by third parties (e.g.: air transport or forwarding agency), special requirements on packaging and labelling must be observed. For preparation of the item being shipped, consulting an expert for hazardous material is required. Dispatch batteries only when the housing is undamaged. Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging. Please also observe possibly more detailed national regulations.

Environmental protection



Recycle raw materials instead of disposing as waste.

Power tool, accessories and packaging should be sorted for environment-friendly recycling. The plastic components are labelled for categorized recycling. These instructions are printed on recycled paper manufactured without chlorine.