



# UniversalRotak 2x18V-37-550

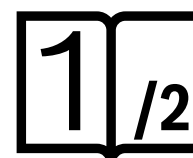
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F 016 L94 515 (2022.12) 0 / 19



F 016 L94 515



en Original instructions





# English

## Safety Notes

### Explanation of symbols – lawnmower



General hazard safety alert.



Read instruction manual.



Make sure that bystanders are not injured by foreign objects being thrown away.



WARNING: Keep bystanders away.



WARNING: Keep hands and feet away from the blades.



WARNING: Disconnect battery before maintenance.



WARNING: Remove the disabling device before maintenance.



Not applicable.



Wait until all machine components have completely stopped before touching them. The blades continue to rotate after the machine is switched off, a rotating blade can cause injury.



Do not expose to rain.



Not applicable.



Not applicable.



Battery charger contains a safety transformer.



Only use the battery charger indoors.



Do not use a high-pressure washer or a garden hose to clean the machine.



Carefully check the area where the tool is to be used for wildlife and pets. Wildlife and pets may be injured while the machine is in operation. Thoroughly check the working area and remove any stones, sticks, wires, bones and foreign objects. When using the machine, ensure that no wildlife, pets or small tree stumps are hidden in the dense grass.

### General Power Tool Safety Warnings

**WARNING** Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

**Save all warnings and instructions for future reference.**

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

#### Work area safety

- ▶ **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- ▶ **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- ▶ **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

#### Electrical safety

- ▶ **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- ▶ **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.
- ▶ **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- ▶ **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- ▶ **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- ▶ **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protec-**

**ted supply.** Use of an RCD reduces the risk of electric shock.

#### Personal safety

- ▶ **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- ▶ **Use personal protective equipment. Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- ▶ **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- ▶ **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- ▶ **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- ▶ **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- ▶ **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- ▶ **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

#### Power tool use and care

- ▶ **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- ▶ **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- ▶ **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- ▶ **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or**

**these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.

- ▶ **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- ▶ **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- ▶ **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- ▶ **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

#### Battery tool use and care

- ▶ **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- ▶ **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- ▶ **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- ▶ **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.
- ▶ **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- ▶ **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130°C may cause explosion.
- ▶ **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

#### Service

- ▶ **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

- ▶ **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorized service providers.

### Lawnmower safety warnings

- ▶ **Do not use the lawnmower in bad weather conditions, especially when there is a risk of lightning.** This decreases the risk of being struck by lightning.
- ▶ **Thoroughly inspect the area for wildlife where the lawnmower is to be used.** Wildlife may be injured by the lawnmower during operation.
- ▶ **Thoroughly inspect the area where the lawnmower is to be used and remove all stones, sticks, wires, bones, and other foreign objects.** Thrown objects can cause personal injury.
- ▶ **Before using the lawnmower, always visually inspect to see that the blade and the blade assembly are not worn or damaged.** Worn or damaged parts increase the risk of injury.
- ▶ **Check the grass catcher frequently for wear or deterioration.** A worn or damaged grass catcher may increase the risk of personal injury.
- ▶ **Keep guards in place. Guards must be in working order and be properly mounted.** A guard that is loose, damaged, or is not functioning correctly may result in personal injury.
- ▶ **Keep all cooling air inlets clear of debris.** Blocked air inlets and debris may result in overheating or risk of fire.
- ▶ **While operating the lawnmower, always wear non-slip and protective footwear. Do not operate the lawnmower when barefoot or wearing open sandals.** This reduces the chance of injury to the feet from contact with the moving blade.
- ▶ **While operating the lawnmower, always wear long trousers.** Exposed skin increases the likelihood of injury from thrown objects.
- ▶ **Do not operate the lawnmower in wet grass. Walk, never run.** This reduces the risk of slipping and falling which may result in personal injury.
- ▶ **Do not operate the lawnmower on excessively steep slopes.** This reduces the risk of loss of control, slipping and falling which may result in personal injury.
- ▶ **When working on slopes, always be sure of your footing, always work across the face of slopes, never up or down and exercise extreme caution when changing direction.** This reduces the risk of loss of control, slipping and falling which may result in personal injury.
- ▶ **Use extreme caution when reversing or pulling the lawnmower towards you. Always be aware of your surroundings.** This reduces the risk of tripping during operation.
- ▶ **Do not touch blades and other hazardous moving parts while they are still in motion.** This reduces the risk of injury from moving parts.
- ▶ **When clearing jammed material or cleaning the lawnmower, make sure all power switches are off and the**

**battery pack is disconnected.** Unexpected operation of the lawnmower may result in serious personal injury.

- ▶ Always allow the product to cool down before storing.
- ▶ Empty the grassbox before storing.
- ▶ When adjusting the machine, make sure not to pinch your fingers between the moving blades and fixed parts of the machine.

### Operation

- ▶ We would advise you to wear ear protection for your own convenience.
- ▶ Wait until the blades stop if the machine has to be tilted for transportation when crossing surfaces other than grass and when transporting the machine to and from the area to be mowed.
- ▶ Do not tilt the machine when starting or switching on the motor.
- ▶ Switch on the motor according to the instructions with feet well away from rotating parts.
- ▶ Do not put hands or feet near or under rotating parts.
- ▶ Always stand clear of the discharge zone when operating the machine.
- ▶ Never pick up or carry the machine while the motor is running.
- ▶ When storing, make sure that all 4 wheels of the garden tool stand on the ground/floor.
- ▶ Only lift the garden tool with the carrying handle. Use the carrying handle with care.
- ▶ **Do not modify the product.** Unauthorized modifications may impair the safety of your product and may result in increased noise and vibration.

### Remove Isolator key:

- Whenever you leave the machine.
- Before clearing a blockage.
- Before checking, cleaning or working on the machine.
- After striking a foreign object. Inspect the machine for damage and change the blade as necessary.
- If the machine starts to vibrate abnormally (check immediately).

### Maintenance

- ▶ **Always wear gardening gloves when handling or working near the sharp blades.**
- ▶ Keep all nuts, bolts and screws tight to ensure safe working with the product.
- ▶ Check the grass bag frequently for wear or deterioration.
- ▶ Inspect the product and replace worn or damaged parts for safety.
- ▶ Ensure replacement cutting means of the right type are used.
- ▶ Ensure replacement parts fitted are Bosch-approved.
- ▶ Before storing, make sure that the product is clean and free of residue. If necessary, clean with a soft dry brush.

## Recommendations for Optimal Handling of the Battery Pack

- ▶ **Do not open the battery.** There is a risk of short-circuiting.



**Protect the battery against heat (e.g., against continuous intense sunlight), fire, water, and moisture.** There is a risk of explosion.



- ▶ **When not using the machine, keep the battery not in use away from paper clips, coins, keys, nails, screws, or other small metal objects that could cause bridging of the terminals.** Shorting the battery terminals together may cause burns or a fire.
- ▶ **In case of damage and improper use of the battery pack, vapours may be emitted.** Ventilate the area and seek medical help in case of complaints. The vapours can irritate the respiratory system.
- ▶ **Only use the battery with products from the manufacturer.** This is the only way in which you can protect the battery against dangerous overload.
- ▶ **The battery can be damaged by pointed objects such as nails or screwdrivers or by force applied externally.** An internal short circuit may occur, causing the battery to burn, smoke, explode or overheat.
- ▶ **Do not short-circuit the battery.** There is a risk of explosion.
- ▶ Occasionally clean the venting slots of the battery using a soft, clean and dry brush.
- ▶ **Charge the machine only with the supplied battery charger.**

## Symbols

The following symbols are important for reading and understanding the original instructions. Please take note of the symbols and their meaning. The correct interpretation of the symbols will help you to use the product in a better and safer manner.

Symbol	Meaning
	Movement direction
	Reaction direction
	Wear protective gloves
	Weight
	Switching on
	Switching off
	Permitted action
	Prohibited action
CLICK!	Audible noise
	Accessories/Spare Parts

## Product Description and Specifications



**Read all safety warnings and all instructions.** Failure to follow the safety warnings and instructions may result in electric shock, fire and/or serious injury.

Please observe the illustrations at the end of this operating manual.

## Intended Use

The garden product is intended for domestic lawn mowing. The garden product is not intended for hedge cutting, trimming, shredding, etc.

The garden product is intended for lawn mowing at ground level.

## Technical Data

Lawnmower	UniversalRotak 2x18V-37-550	
Article number		<b>3 600 HB9 E..</b>
Rated voltage	V	36 V (2 x 18 V)
Cutting width	cm	37
Height of cut	mm	25–70
Capacity, grass bag	l	40
Weight according to EPTA-Procedure 01:2014 <sup>A)</sup>	kg	14.0
Serial number		see type plate on garden tool
Recommended ambient temperature during charging	°C	0... +35
Permitted ambient temperature during operation <sup>B)</sup> and storage	°C	-20... +50

<b>Lawnmower</b>	<b>UniversalRotak 2x18V-37-550</b>
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Battery type	PBA 18V...W- 4.0 Ah, 6.0 Ah
Recommended chargers <sup>C)</sup>	AL 18..

A) Depends on battery in use

B) Limited performance at temperatures < 0 °C

C) The following chargers are not compatible with the PBA rechargeable battery: AL 1814 CV, AL 1820 CV, AL 1860 CV

The specifications apply to a rated voltage [U] of 230 V. These specifications may vary at different voltages and in country-specific models.

## Noise/Vibration Information

### UniversalRotak 2x18V-37-550

Typically the A-weighted noise levels of the product are:

Noise emission values determined according to **EN IEC 62841-4-3:2021+A11:2021**

– Sound pressure level	dB(A)	<b>79</b>
– Uncertainty K	dB	<b>= 3.0</b>
– Sound power level	dB(A)	<b>87</b>

Vibration total values ah (triax vector sum) and uncertainty K determined according to **EN IEC 62841-4-3:2021+A11:2021**

– Vibration emission value $a_h$	m/s <sup>2</sup>	<b>&lt; 2.5</b>
– Uncertainty K	m/s <sup>2</sup>	<b>=1.5</b>

That the declared vibration total value(s) have been measured in accordance with a standard test method and may be used for comparing one machine with another.

That the declared vibration total value(s) may also be used in a preliminary assessment of exposure.

That the vibration and noise emissions during actual use of the machine can differ from the declared total value depending on the ways in which the machine is used; and of the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the machine is switched off and when it is running idle in addition to the trigger time).

## Mounting and Operation

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Adjusting the working height		
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- Switching on		
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Action	Figure	Page
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A) **Accessories shown or described are not included with the product as standard. You can find the complete selection of accessories in our accessories range.**

## Starting Operation

### For Your Safety

- ▶ **Warning! Switch off, remove the isolator switch and the battery before adjusting or cleaning. The same applies when the cable to the switch in the handle is damaged, cut or entangled.**
- ▶ **The blade continues to rotate for a few seconds after the machine is switched off.**
- ▶ **Caution: Do not touch the rotating blade.**
- ▶ **Use only the chargers listed in the technical data.** Only these chargers are matched to the lithium-ion batteries of your product.

### Charging the Batteries

The batteries are equipped with temperature monitoring that allows charging only in the temperature range between 0 °C and 35 °C. In this manner, high batteries service life are achieved.

**Note:** The batteries are supplied partially charged. To ensure full batteries capacity, completely charge the batteries in the battery charger before using for the first time.

The lithium-ion batteries can be charged at any time without reducing its service life. Interrupting the charging procedure does not cause damage to the batteries.

The "Electronic Cell Protection (ECP)" protects the lithium-ion batteries against deep discharging. When the batteries are empty, the product is switched off by means of a protective circuit: The product no longer operates.

**Do not continue to press the On/Off switch after an automatic shut-off of the product.** The batteries could become damaged.

Observe the notes for disposal of the batteries.

### Inserting/removing both batteries (see figures F and H)

► **This machine is designed to only run with 2 batteries and will also not function if one of the batteries is completely discharged. Always use batteries with the same charge level and never combine full and part-charged batteries as the run time will always be dictated by the least charged battery.**

**Note:** Using unsuitable batteries can lead to malfunctions or damage the machine.

Insert the charged batteries. Ensure that the batteries are fully inserted.

To remove the batteries from the machine, press the battery unlocking button and pull the batteries out.

## Troubleshooting



Problem	Possible Cause	Corrective Measure
Motor refuses to start	Internal wiring of garden tool defective	Contact Bosch customer service agent
	One or both batteries are discharged	Recharge both batteries
	One or both batteries too hot/cold	Allow to cool/warm
	Grass too long	Max. allowed grass height 30 cm on highest height-of-cut setting
	Motor protector has activated	Allow motor to cool and increase height of cut
	Isolator key not inserted correctly/fully	Fit correctly
Machine functions intermittently	Internal wiring of garden tool defective	Contact Bosch customer service agent
	Motor protector has activated	Allow motor to cool and increase height of cut
Machine leaves ragged finish and/or Motor labours	Height of cut too low	Increase height of cut
	Cutting blade blunt	Replace cutting blade (see figure K).
	Possible clogging	Switch garden tool off and disengage isolator key
		Check underneath the garden product and clear out as necessary (always wear protective gloves)
	Blade fitted upside down	Refit blade correctly
Blade not rotating while garden product switched on	Cutting blade obstructed	Switch garden tool off and disengage isolator key
		Clear obstruction (always wear protective gloves)

## Working Advice

### Cutting Capacity (Battery Operating Duration)

The cutting capacity (battery operating duration) depends on lawn properties, such as grass density, moisture content, grass length and height of cut.

Switching the machine on and off frequently during cutting will also reduce the cutting capacity (battery operating duration).

To improve the cutting capacity (battery operating duration), it is recommended to cut more frequently, increase the cutting height and walk at an appropriate pace.

The example below shows the connection between cutting height and cutting capacity with regard to two batteries.

#### Cutting Conditions



Cutting capacity	
2 x 4.0 Ah batteries	up to 500 m <sup>2</sup>
2 x 6.0 Ah batteries	up to 650 m <sup>2</sup>

To increase the run time an additional battery can be purchased from an authorised customer service agent for Bosch garden products.



Problem	Possible Cause	Corrective Measure
	Blade nut/bolt loose	Tighten blade nut/bolt (22 Nm)
Excessive vibrations/ noise	Blade nut/bolt loose	Tighten blade nut/bolt (22 Nm)
	Cutting blade damaged	Replace cutting blade (see figure K).

## Maintenance and Service

### Maintenance, Cleaning and Storage

- ▶ **Before any work on the garden product itself (e. g. maintenance, tool change, etc.) as well as during transport and storage, remove the batteries from the garden product.** There is danger of injury when unintentionally actuating the On/Off switch.
- ▶ **For safe and proper working, always keep the product clean.**

### Maintenance of both batteries

Use the following procedures to enable optimum usage of the batteries:

- Protect the batteries against moisture and water.
- Store the machine and batteries only within a temperature range between  $-20^{\circ}\text{C}$  and  $50^{\circ}\text{C}$ . As an example, do not leave the batteries in the car in summer.
- The batteries must not be stored within the product but stored separately.
- Do not leave the batteries in the product in direct sunlight.
- The ideal storage condition for the batteries is  $5^{\circ}\text{C}$ .
- Occasionally clean the venting slots of the batteries using a soft, clean and dry brush.

A significantly reduced working period after charging indicates that the batteries are used and must be replaced.

### 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. You can find explosion drawings and information on spare parts at: [www.bosch-pt.com](http://www.bosch-pt.com)

The Bosch product use advice team will be happy to help you with any questions about our products and their accessories.

In all correspondence and spare parts orders, please always include the 10-digit article number given on the nameplate of the product.

#### Great Britain

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At [www.bosch-pt.co.uk](http://www.bosch-pt.co.uk) you can order spare parts or arrange the collection of a product in need of servicing or repair.

Tel. Service: (0344) 7360109

E-Mail: [boschservicecentre@bosch.com](mailto:boschservicecentre@bosch.com)

### You can find further service addresses at:

[www.bosch-pt.com/serviceaddresses](http://www.bosch-pt.com/serviceaddresses)

### Transport

The recommended lithium-ion batteries are subject to legislation on the transport of dangerous goods. The user can transport the batteries by road without further requirements.

When shipping by third parties (e.g.: by 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 battery packs 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 the possibility of more detailed national regulations.

### Disposal



The product, batteries, accessories and packaging should be sorted for environmental-friendly recycling.



Do not dispose of the product and batteries/rechargeable batteries into household waste!

### Only for EU countries:

According to the European Guideline 2012/19/EU, products that are no longer usable, and according to the European Guideline 2006/66/EC, defective or used battery packs/batteries, must be collected separately and disposed of in an environmentally correct manner.

If disposed incorrectly, waste electrical and electronic equipment may have harmful effects on the environment and human health, due to the potential presence of hazardous substances.

### Battery packs/batteries:

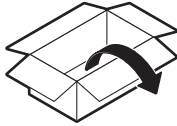
#### Li-ion:

Please observe the notes in the section on transport (see "Transport", page 9).

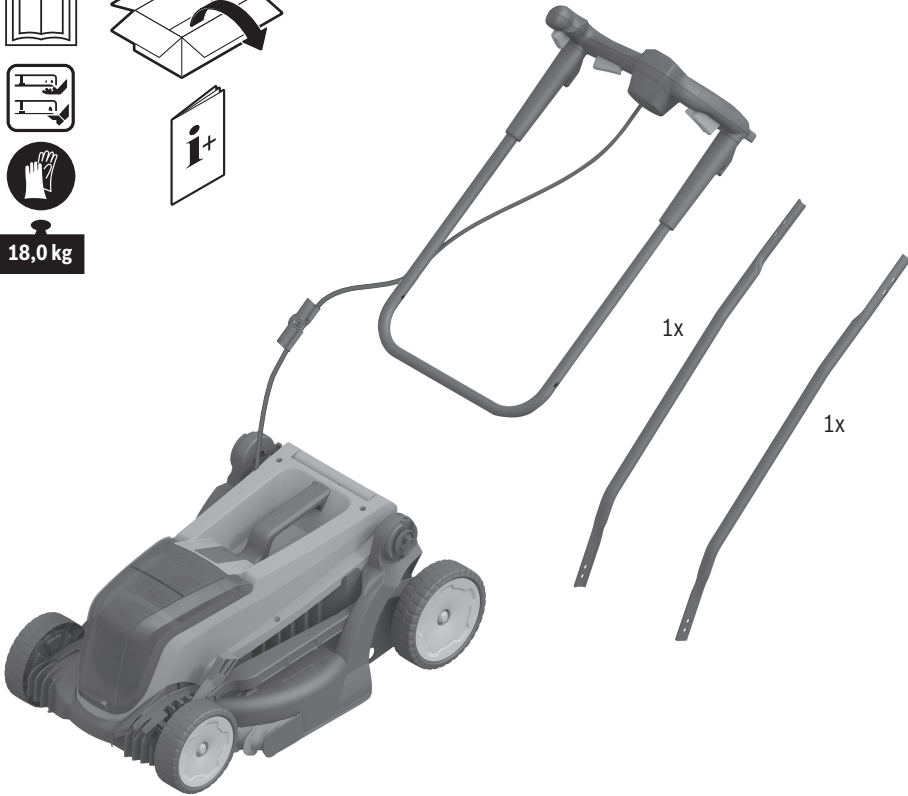
### Only for United Kingdom:

According to The Waste Electrical and Electronic Equipment Regulations 2013 (SI 2013/3113) (as amended) and the Waste Batteries and Accumulators Regulations 2009 (SI 2009/890) (as amended), products that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

**A**



18,0 kg



**A)**

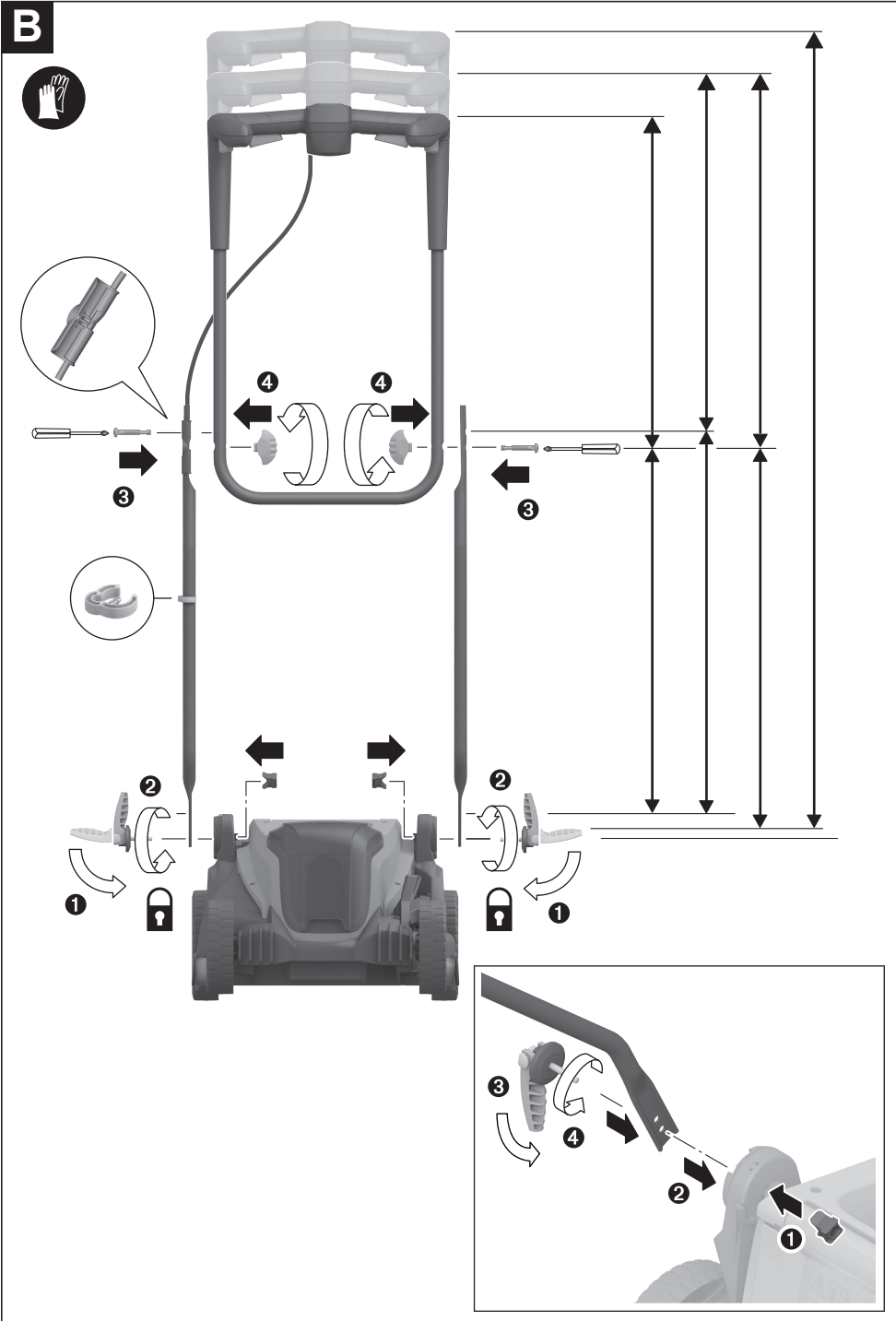


2x 18V 4Ah

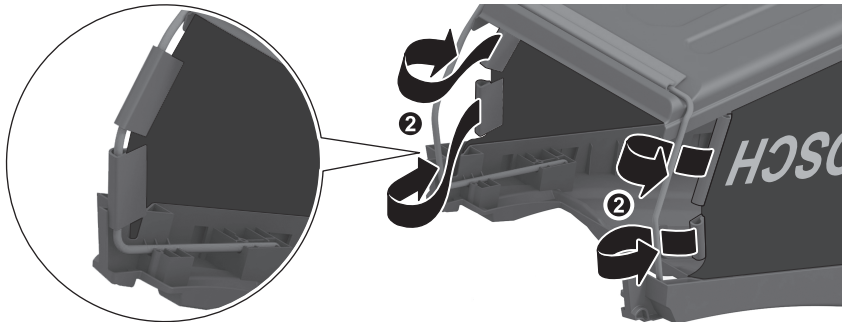
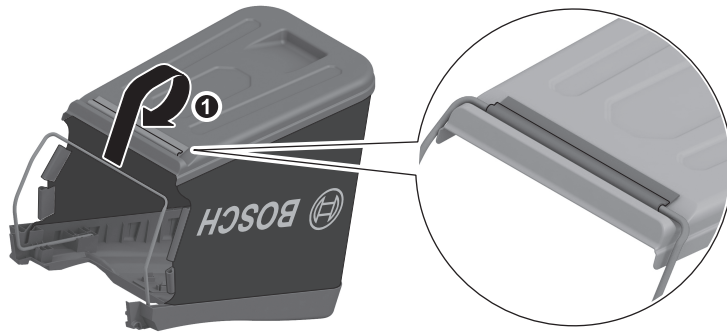


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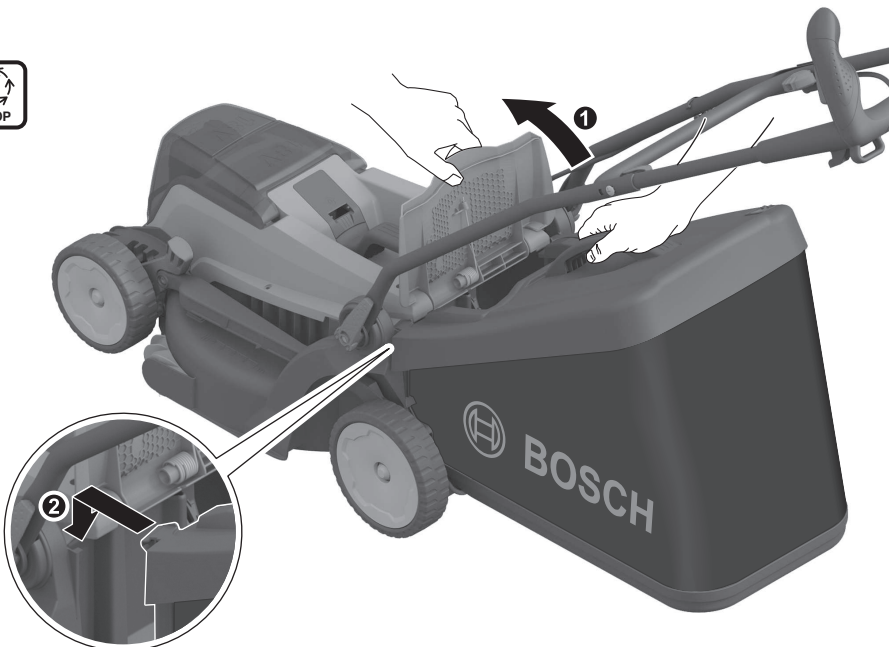
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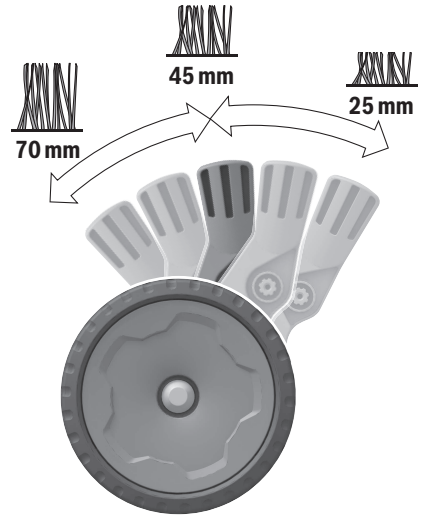
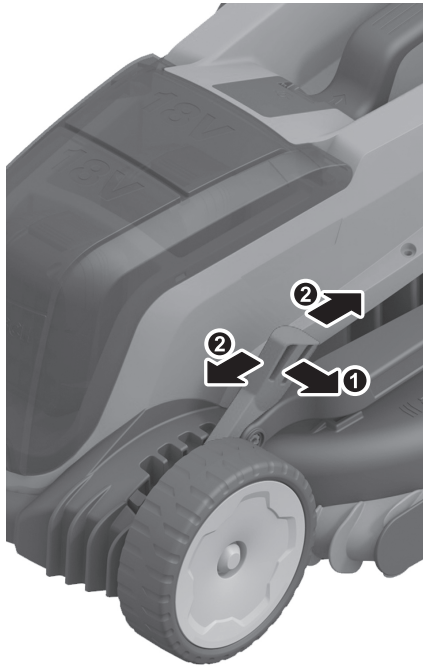
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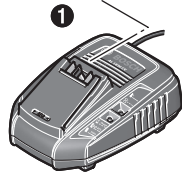
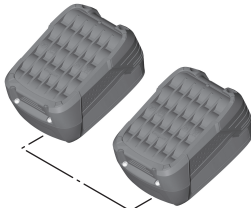
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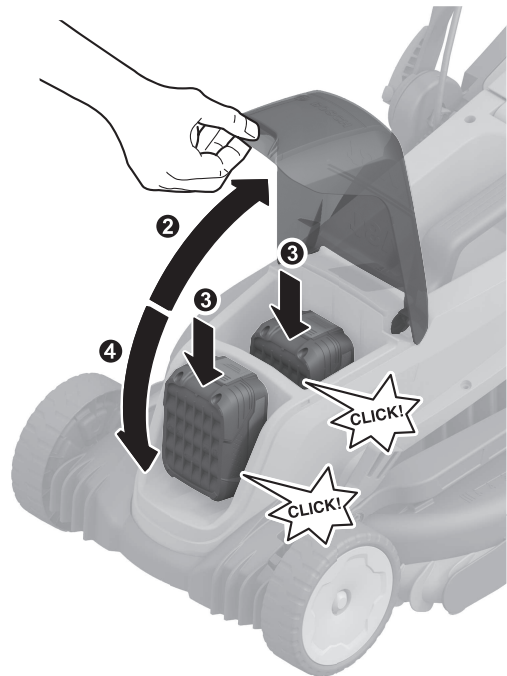
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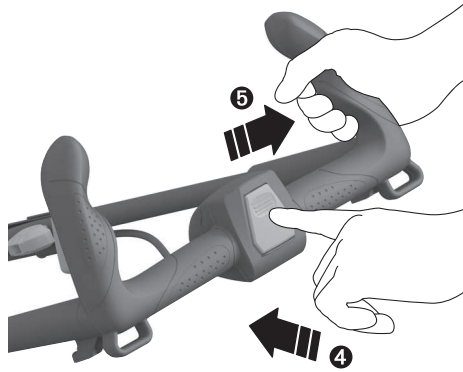
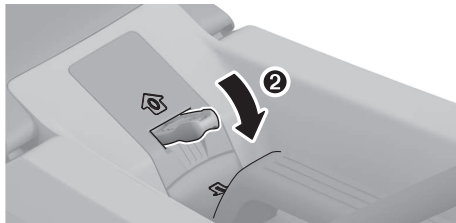
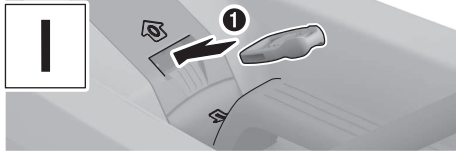
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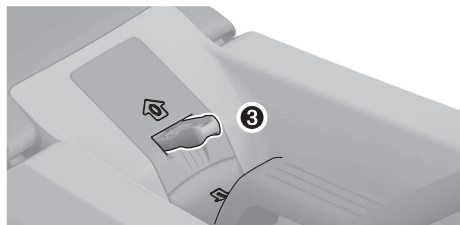
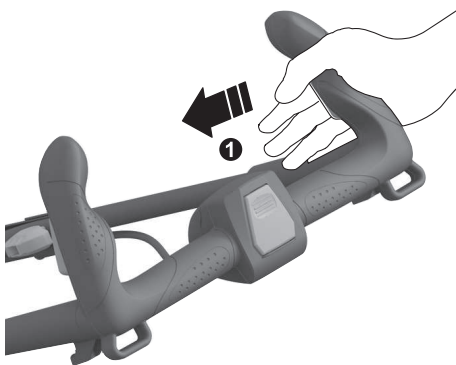
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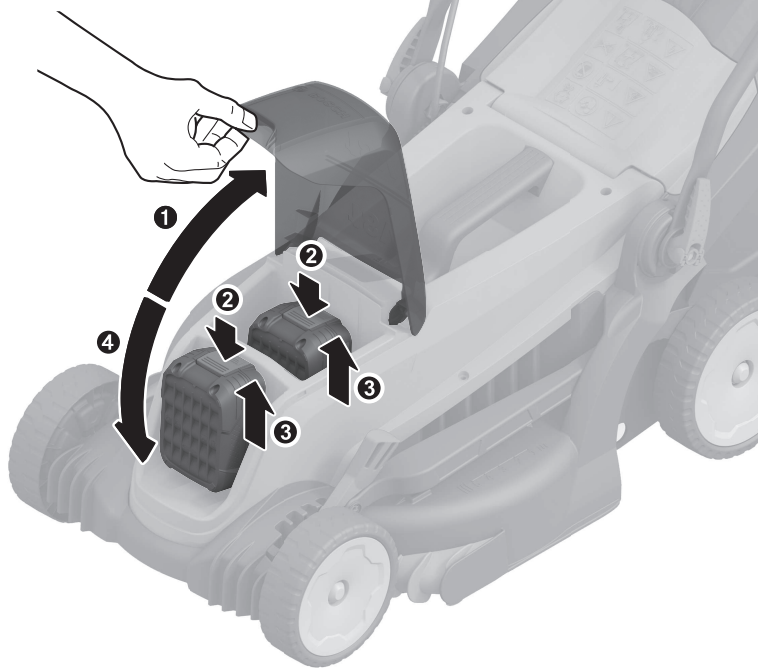
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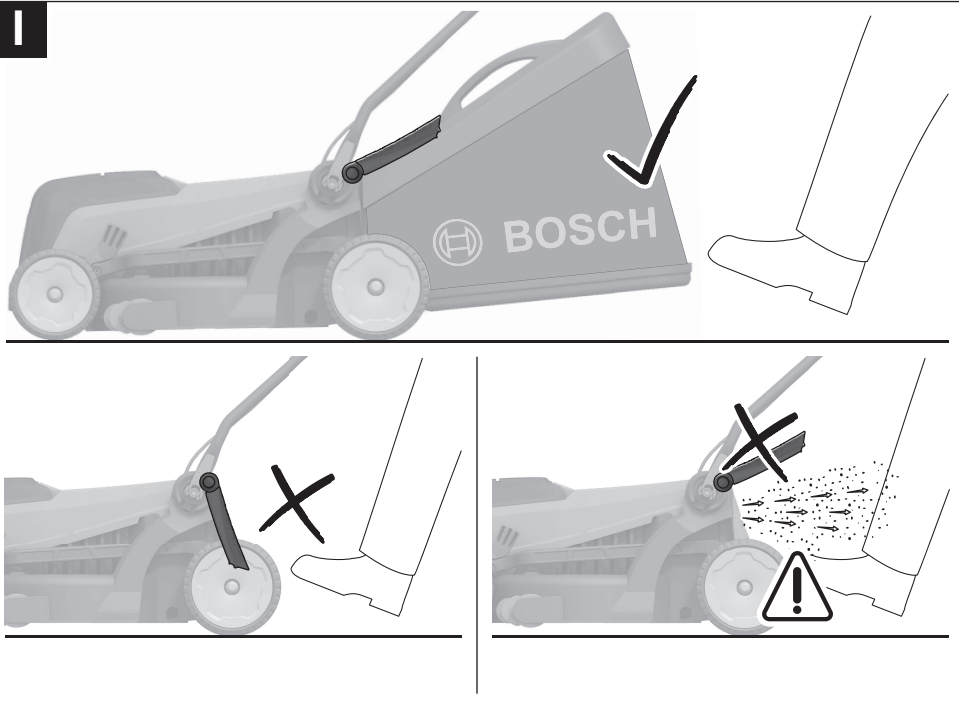
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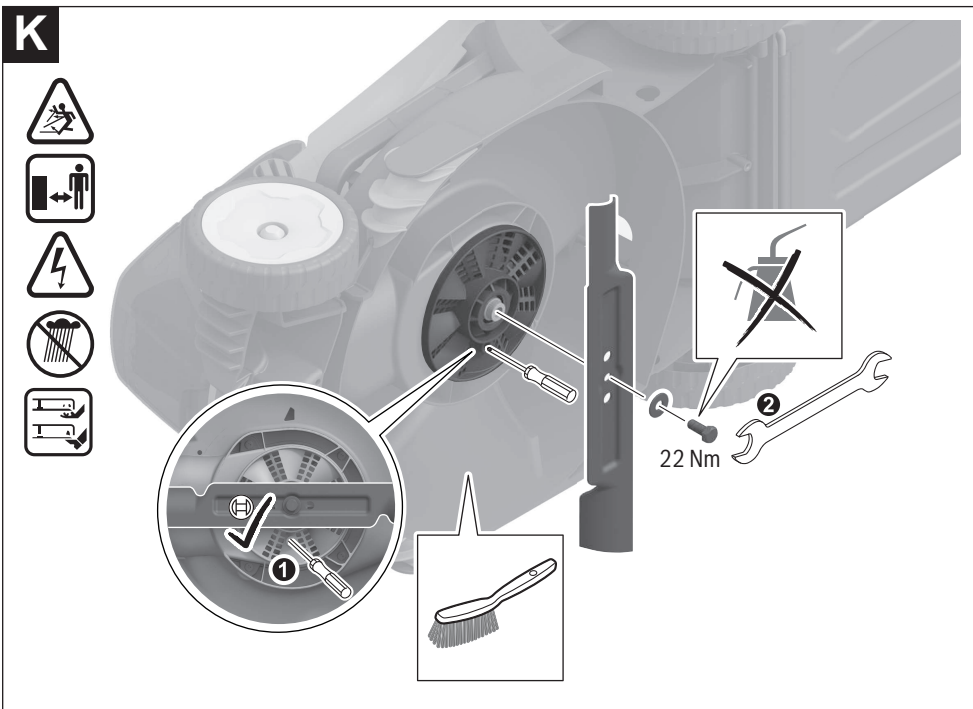
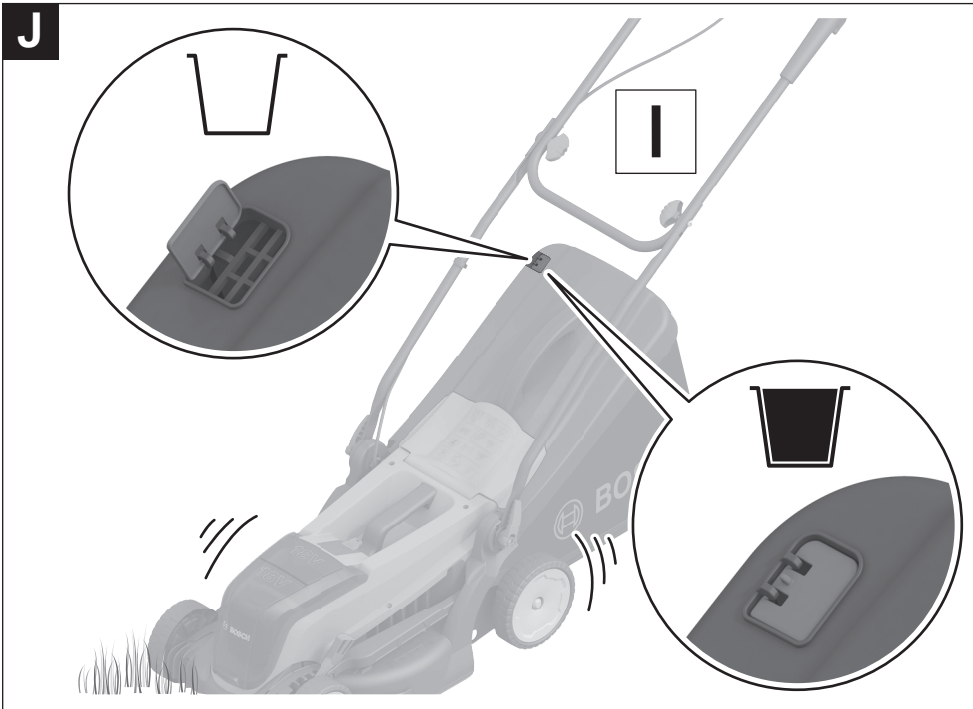


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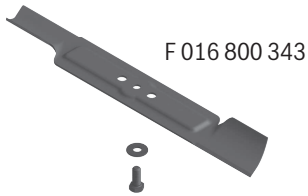
# I







**L**



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**PBA 18V 4Ah**



**PBA 18V 6Ah**



**AL 1830 CV**

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