

**Milwaukee**<sup>®</sup>

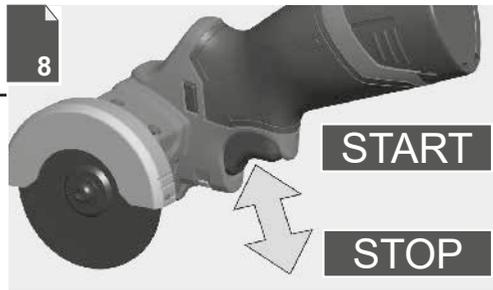
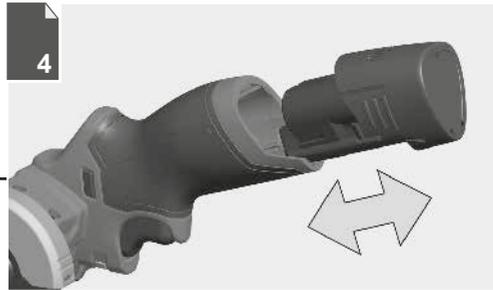
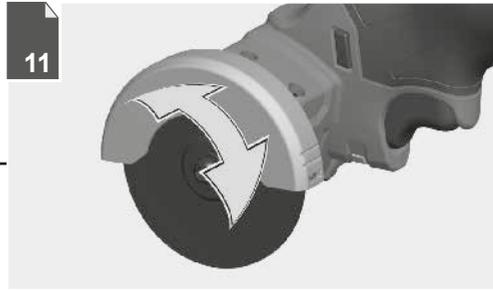
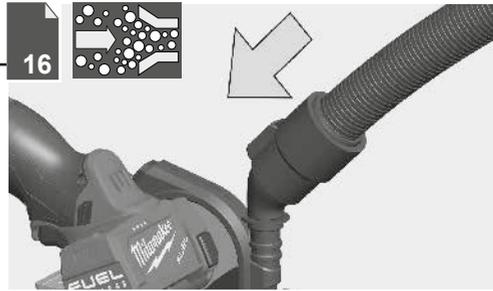
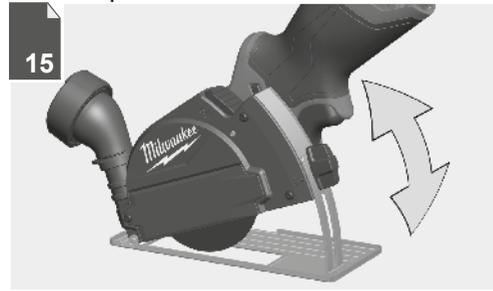
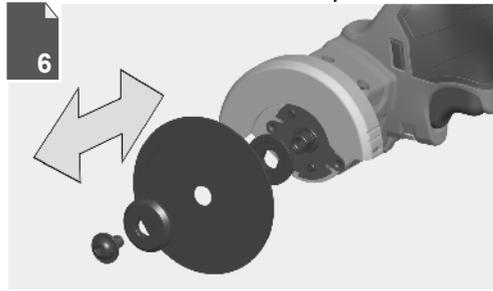
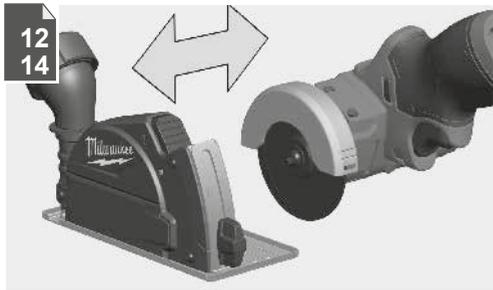
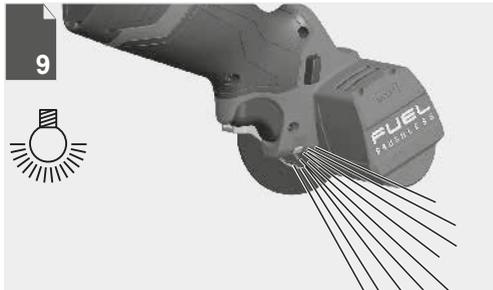
Nothing but **HEAVY DUTY**.<sup>®</sup>



## **M12 FCOT**

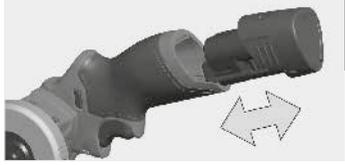
---

Original instructions

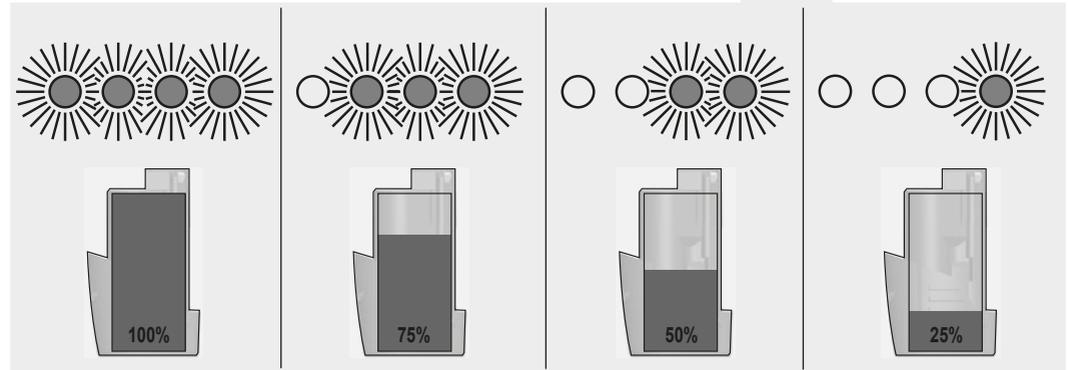
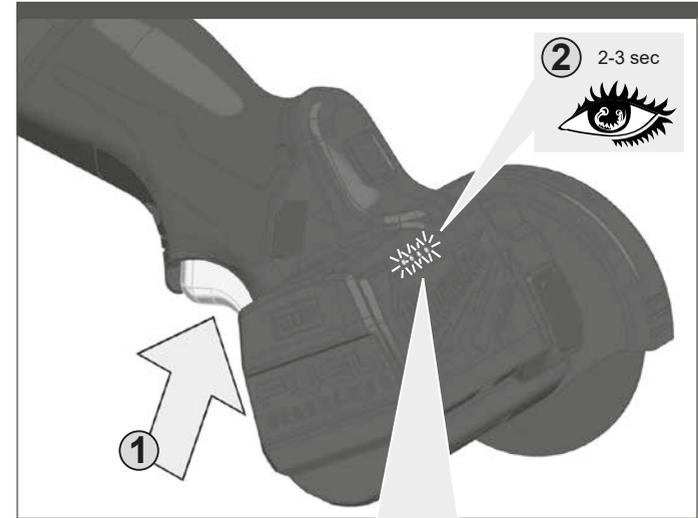
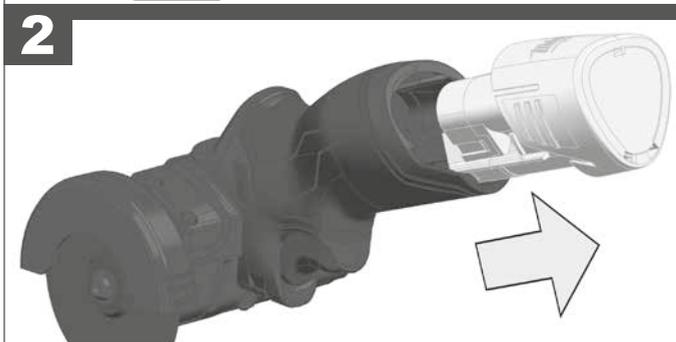
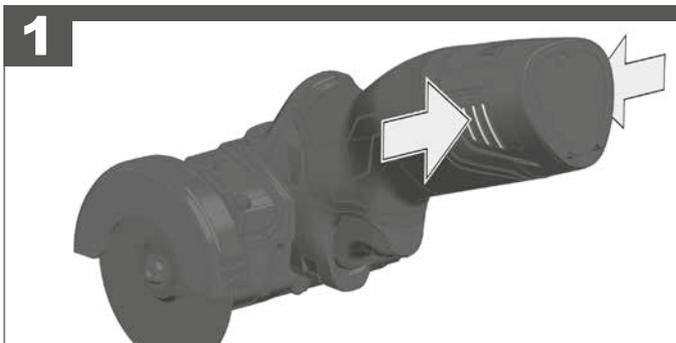
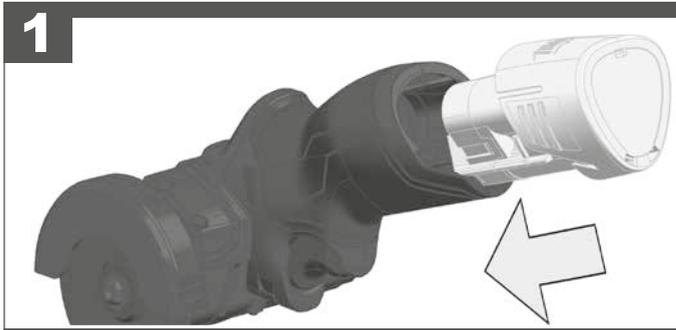


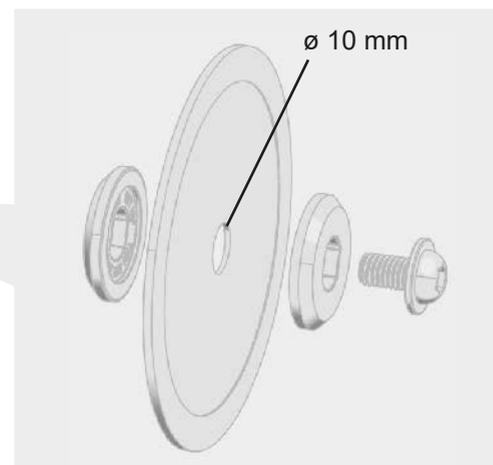
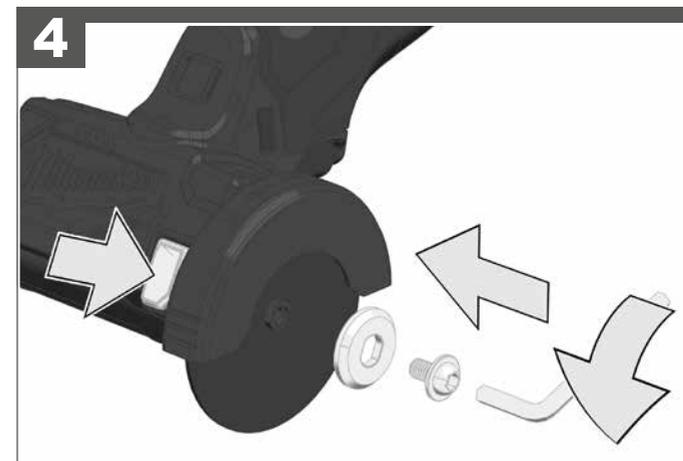
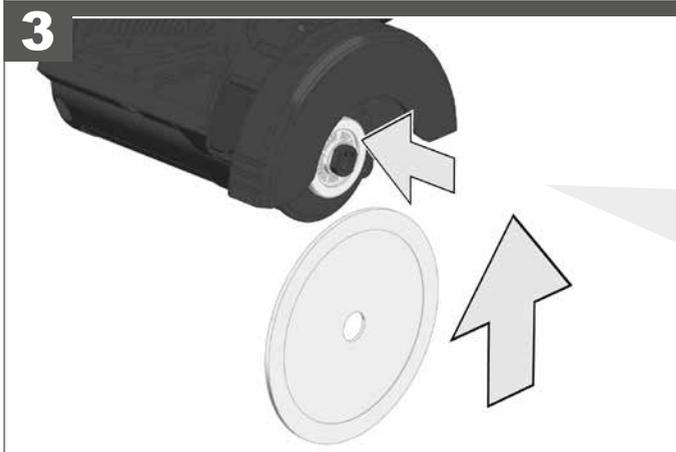
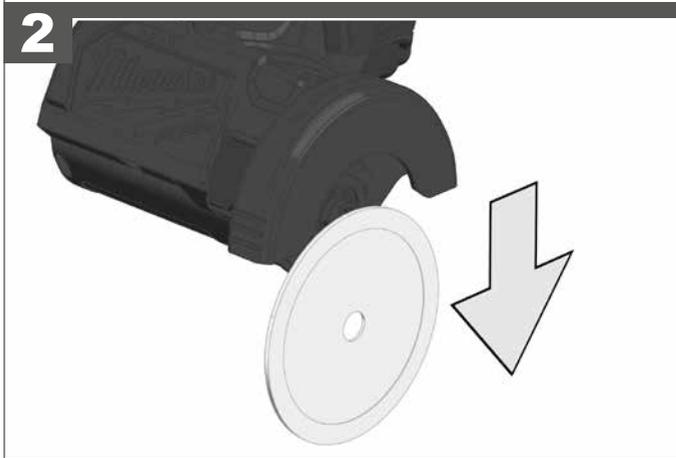
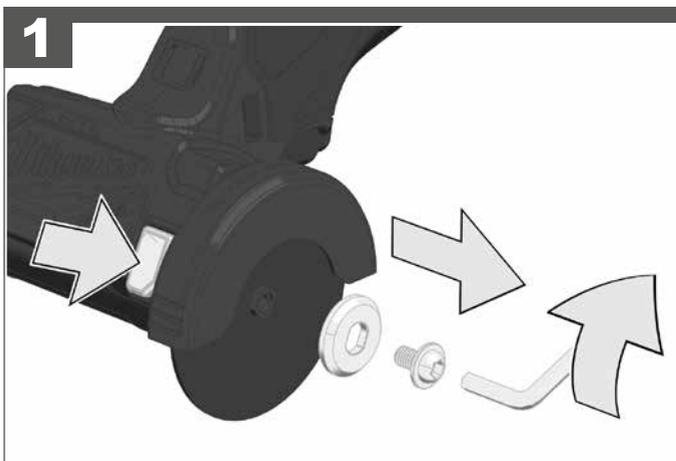
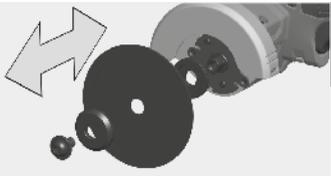
20

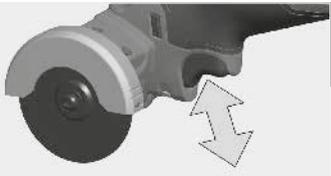
Text section with Technical Data, important Safety and Working Hints and description of Symbols



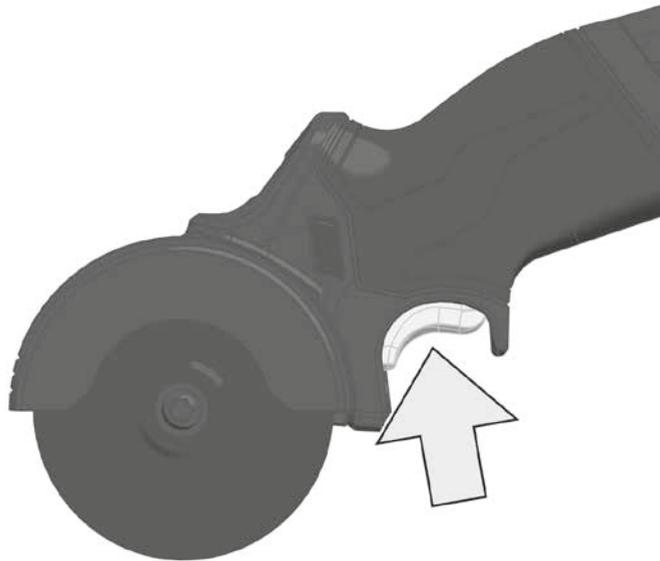
 Remove the battery pack before starting any work on the machine.



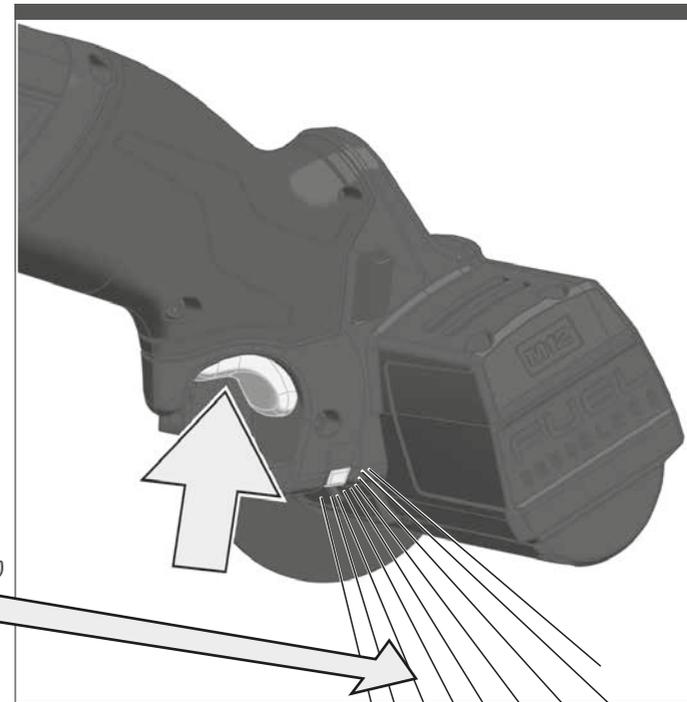
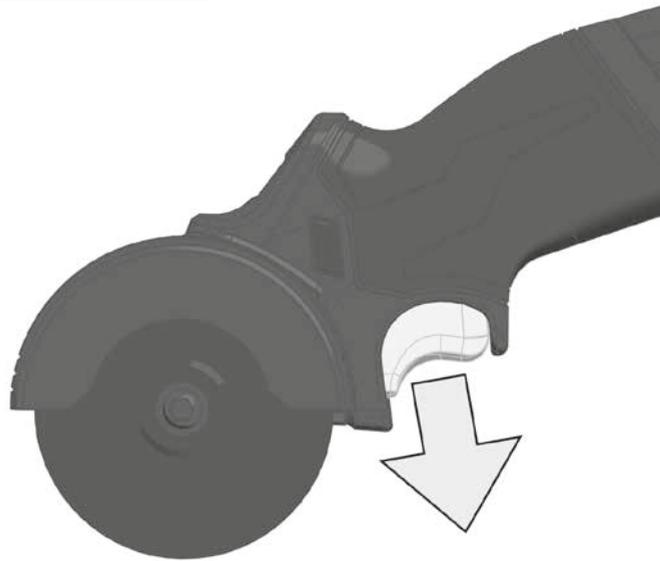


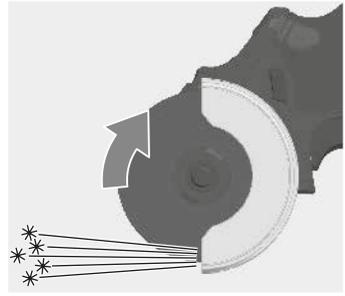
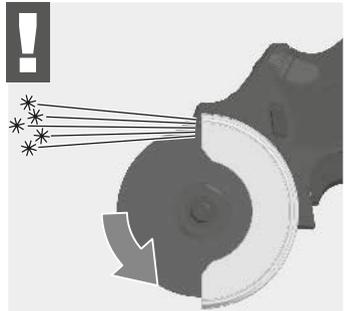
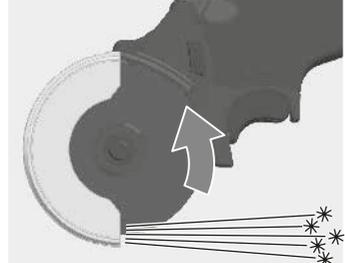
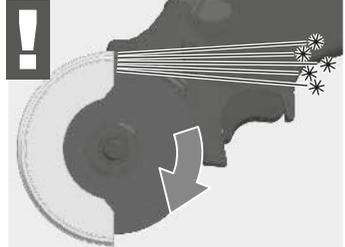
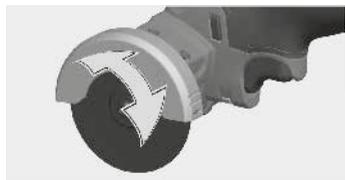
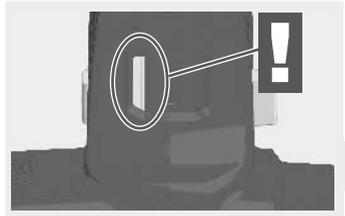
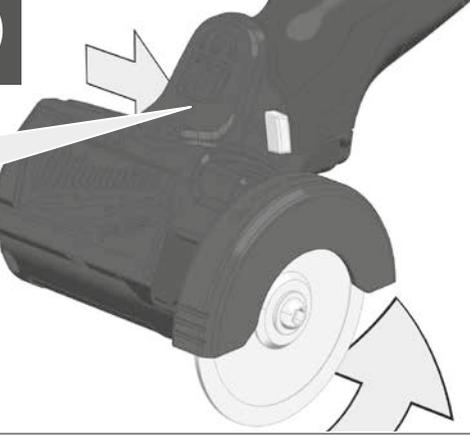
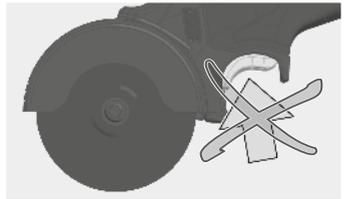
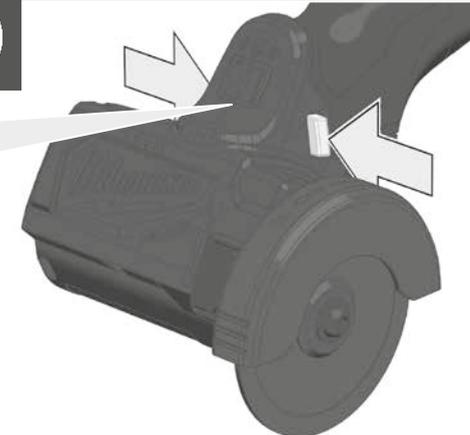
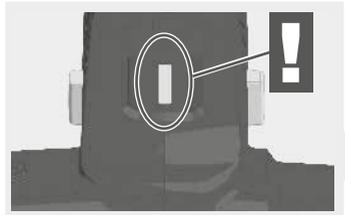
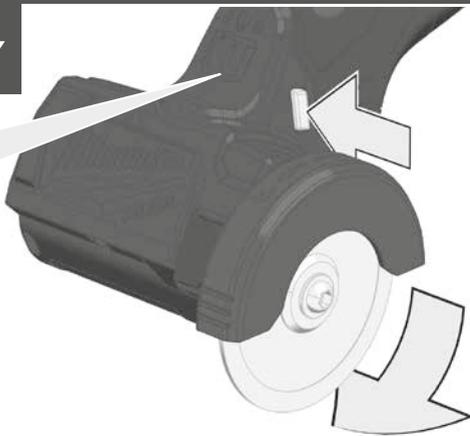
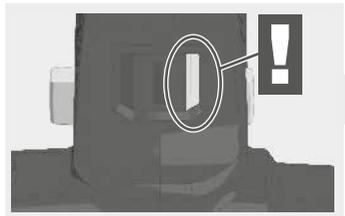
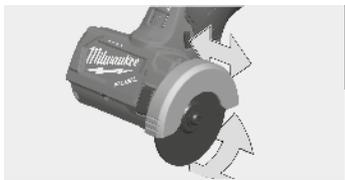


START



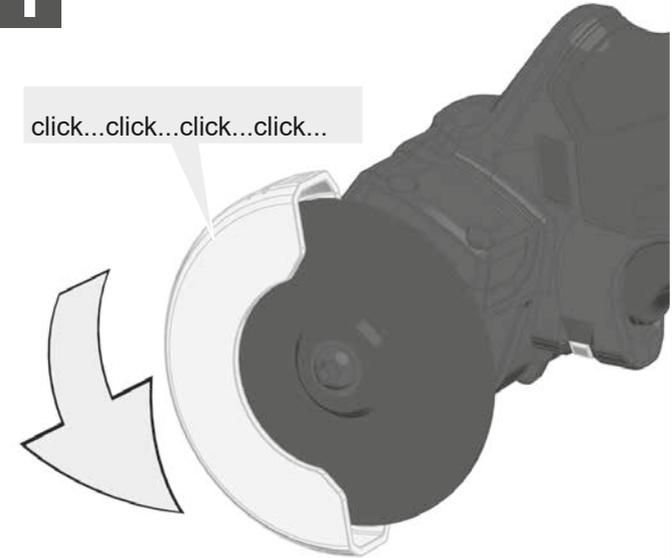
STOP





1

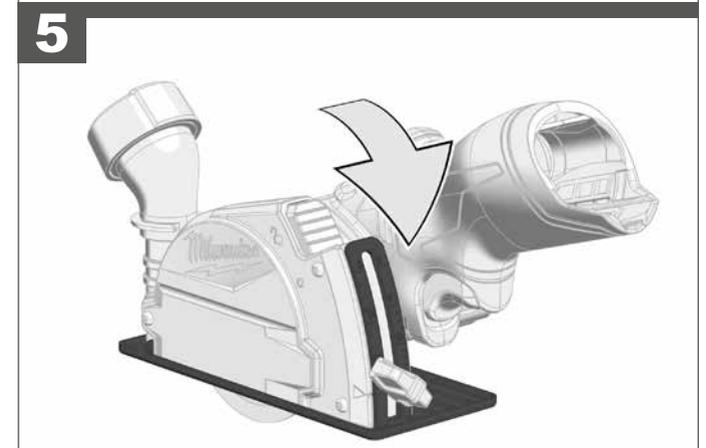
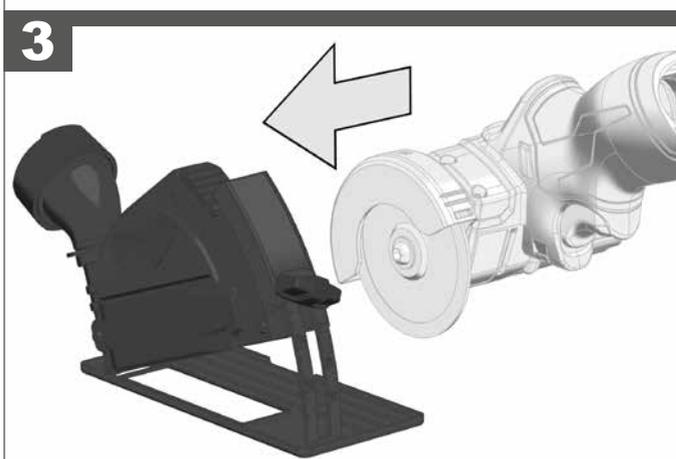
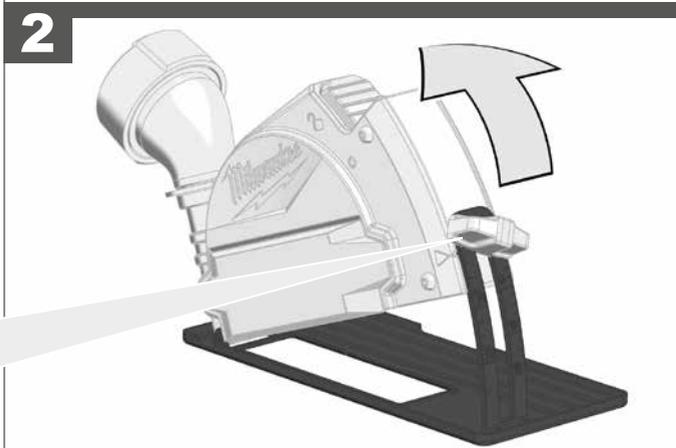
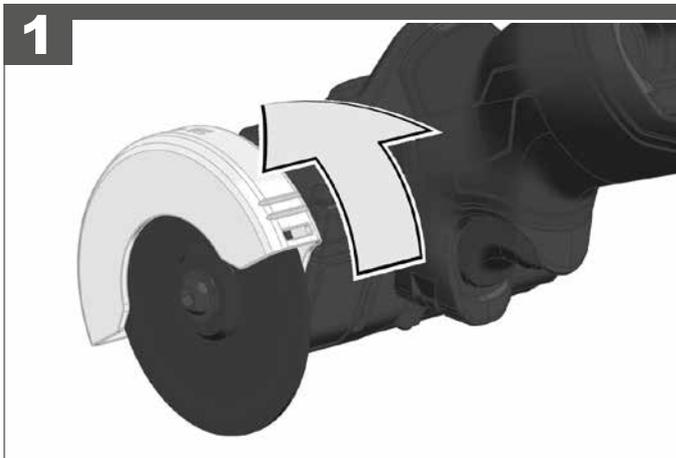
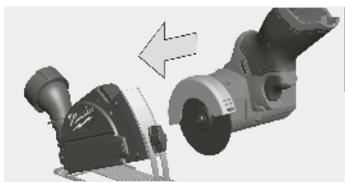
click...click...click...click...

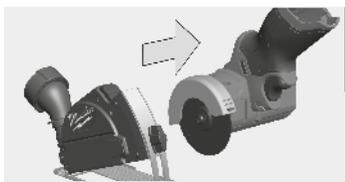


2

click...click...click...click...



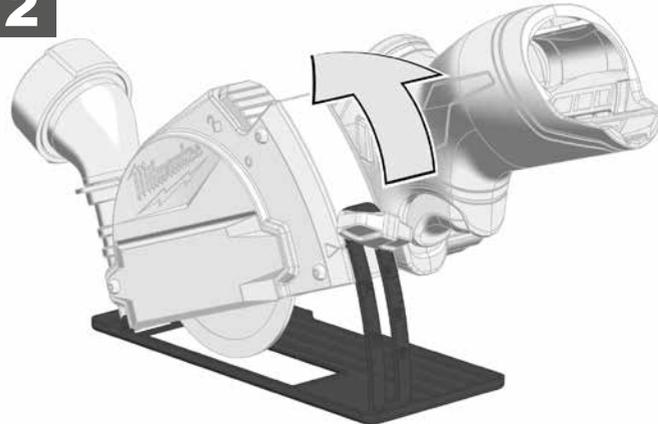




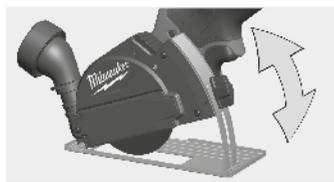
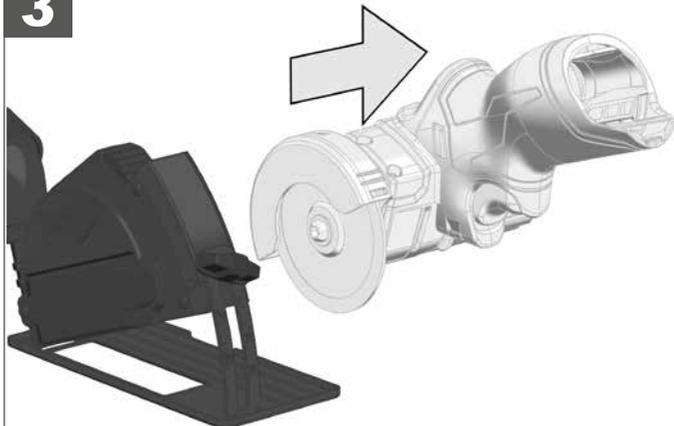
1



2



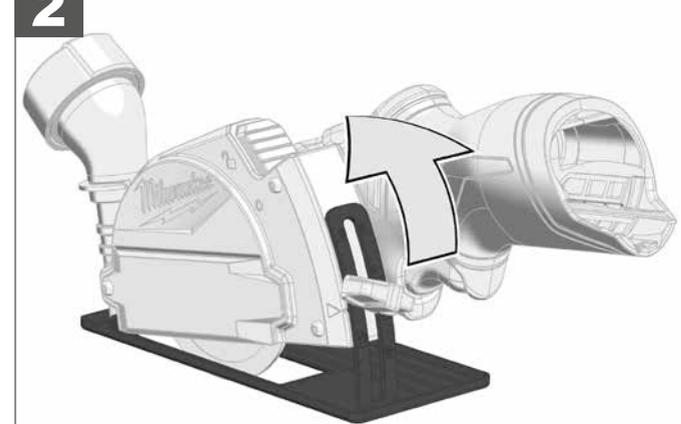
3



1



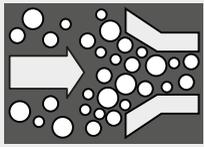
2



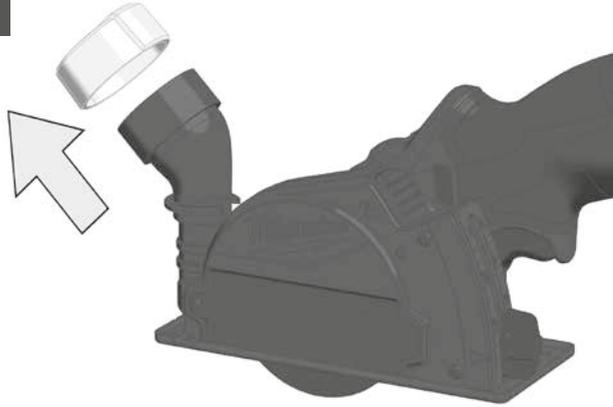
3



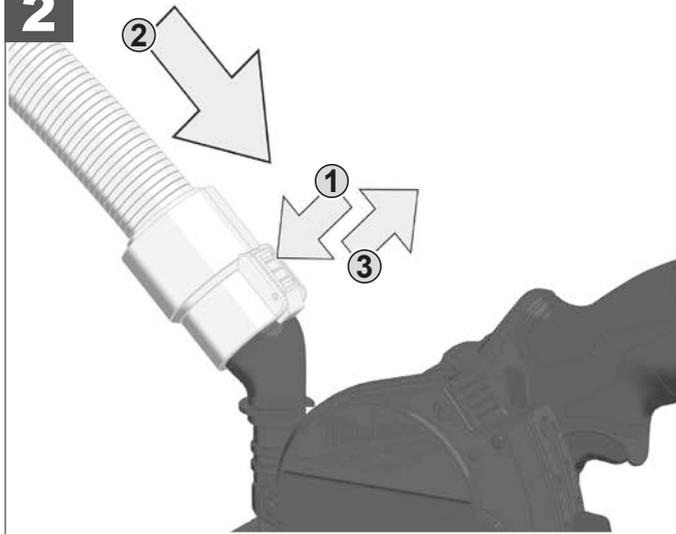
Adjust the cutting depth to the thickness of the workpiece.



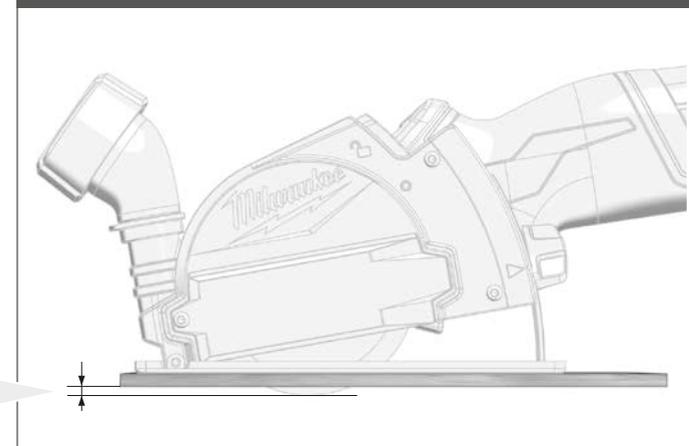
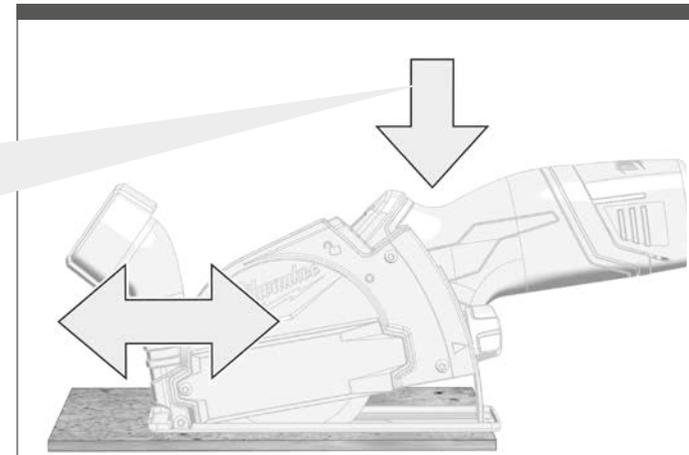
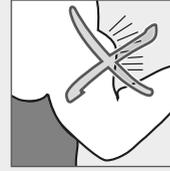
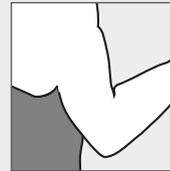
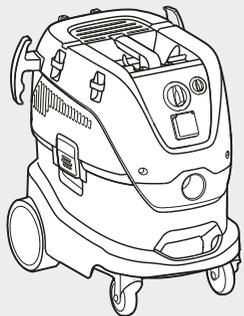
1



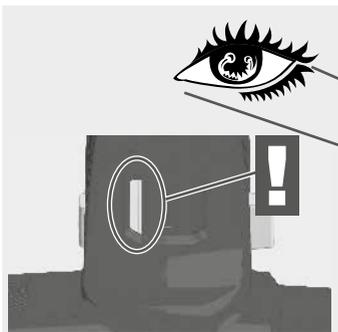
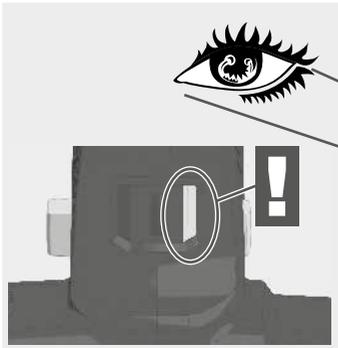
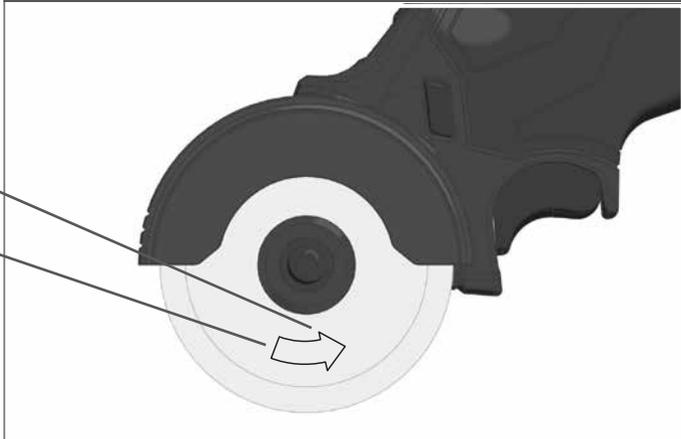
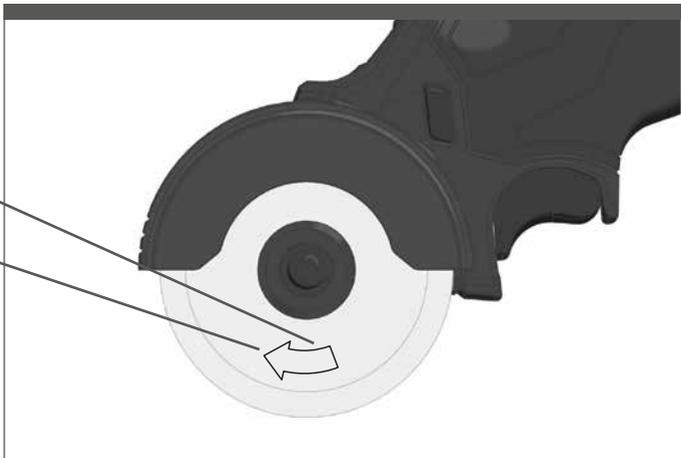
2



Accessory



Adjust the cutting depth to the thickness of the workpiece.



Production code.....	4679 85 02...	...000001-999999
Rated speed .....	20000 min <sup>-1</sup>	
	D=Cutting disk diameter max. ....	76 mm
	d=hole diameter.....	10 mm
	b=Cutting disk thickness min. / max.....	1 mm / 3,2 mm
Cutting depth .....	16,3 mm	
Cutting width .....	min. 1 mm / max. 3,2 mm	
Battery voltage.....	12 V	
Weight according EPTA-Procedure 01/2014 (6.0 Ah) .....	1,3 kg	
Recommended ambient operating temperature .....	-18...+50 °C	
Recommended battery types.....	M12B2...M12B6	
Recommended charger.....	C12C,M12C4, M12-18AC,M12-18C, M12-18C3, M12-18FC,...	

**Noise/vibration information** (cutting concrete)

Measured values determined according to EN 60 745.

Typically, the A-weighted noise levels of the tool are:

Sound power level (Uncertainty K=3dB(A))..... 105 dB (A)

Sound pressure level (Uncertainty K=3dB(A))..... 94 dB (A)

**Wear ear protectors!**

Total vibration values (vector sum in the three axes)

determined according to EN 60745.

Vibration emission value  $a_{h,SG}$ ..... 2,9 m/s<sup>2</sup>

Uncertainty K..... 1,5 m/s<sup>2</sup>

**WARNING**

The vibration emission level given in this information sheet has been measured in accordance with a standardised test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.

The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period.

An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns.

**⚠ WARNING! Read all safety warnings and all instructions.** Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. **Save all warnings and instructions for future reference.**

**⚠ CUT-OFF MACHINE SAFETY WARNINGS**

**a) The guard provided with the tool must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. Position yourself and bystanders away from the plane of the rotating wheel.** The guard helps to protect operator from broken wheel fragments and accidental contact with wheel.

**b) Use only bonded reinforced or diamond cut-off wheels for your power tool.** Just because an accessory can be attached to your power tool, it does not assure safe operation.

**c) The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool.** Accessories running faster than their rated speed can break and fly apart.

**d) Wheels must be used only for recommended applications. For example: do not grind with the side of cut-off wheel.** Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.

**e) Always use undamaged wheel flanges that are of correct diameter for your selected wheel.** Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage.

**f) Do not use worn down reinforced wheels from larger power tools.** Wheels intended for a larger power tool are not suitable for the higher speed of a smaller tool and may burst.

**g) The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool.** Incorrectly sized accessories cannot be adequately guarded or controlled.

**h) The arbour size of wheels and flanges must properly fit the spindle of the power tool.** Wheels and flanges with arbour holes that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.

**i) Do not use damaged wheels. Before each use, inspect the wheels for chips and cracks. If power tool or wheel is dropped, inspect for damage or install an undamaged wheel. After inspecting and installing the wheel, position yourself and bystanders away from the plane of the rotating wheel and run the power tool at maximum no load speed for one minute.** Damaged wheels will normally break apart during this test time.

**j) Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and shop apron capable of stopping small abrasive or workpiece fragments.** The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.

**k) Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment.** Fragments of workpiece or of a broken wheel may fly away and cause injury beyond immediate area of operation.

**l) Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** Cutting accessory contacting a „live“ wire may make exposed metal parts of the power tool „live“ and could give the operator an electric shock.

**m) Position the cord clear of the spinning accessory.** If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.

**n) Never lay the power tool down until the accessory has come to a complete stop.** The spinning wheel may grab the surface and pull the power tool out of your control.

**o) Do not run the power tool while carrying it at your side.** Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.

**p) Regularly clean the power tool's air vents.** The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.

**q) Do not operate the power tool near flammable materials.** Sparks could ignite these materials.

**r) Do not use accessories that require liquid coolants.** Using water or other liquid coolants may result in electrocution or shock.

**Further safety instructions for abrasive cutting-off operations****Kickback and related warnings**

Kickback is a sudden reaction to a pinched or snagged rotating wheel. Pinching or snagging causes rapid stalling of the rotating wheel which in turn causes the uncontrolled power tool to be forced in the direction opposite of the wheel's rotation at the point of the binding.

For example, if an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the wheel's movement at the point of pinching. Abrasive wheels may also break under these conditions.

Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

**a) Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up.** The operator can control torque reactions or kickback forces, if proper precautions are taken.

**b) Never place your hand near the rotating accessory.** Accessory may kickback over your hand.

**c) Do not position your body in line with the rotating wheel.** Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.

**d) Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory.** Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.

**e) Do not attach a saw chain, woodcarving blade, segmented diamond wheel with a peripheral gap greater than 10 mm or toothed saw blade.** Such blades create frequent kickback and loss of control.

**f) Do not "jam" the wheel or apply excessive pressure. Do not attempt to make an excessive depth of cut.** Overstressing the wheel increases the loading and suscep-

tibility to twisting or binding of the wheel in the cut and the possibility of kickback or wheel breakage.

**g) When wheel is binding or when interrupting a cut for any reason, switch off the power tool and hold the power tool motionless until the wheel comes to a complete stop. Never attempt to remove the wheel from the cut while the wheel is in motion otherwise kickback may occur.** Investigate and take corrective action to eliminate the cause of wheel binding.

**h) Do not restart the cutting operation in the workpiece. Let the wheel reach full speed and carefully re-enter the cut.** The wheel may bind, walk up or kickback if the power tool is restarted in the workpiece.

**i) Support panels or any oversized workpiece to minimize the risk of wheel pinching and kickback.** Large workpieces tend to sag under their own weight. Supports must be placed under the workpiece near the line of cut and near the edge of the workpiece on both sides of the wheel.

**j) Use extra caution when making a "pocket cut" into existing walls or other blind areas.** The protruding wheel may cut gas or water pipes, electrical wiring or objects that can cause kickback.

**ADDITIONAL SAFETY AND WORKING INSTRUCTIONS**

The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool.

Accessories running faster than their rated speed can break and fly apart.

Use protective equipment. Always wear safety glasses when working with the machine. The use of protective clothing is recommended, such as dust mask, protective gloves, sturdy non-slip footwear, helmet and ear defenders.

**WARNING** To reduce the risk of injury in applications that produce a considerable amount of dust, use a Milwaukee dust extraction solution in accordance with the solution's operating instructions.

The dust produced when using this tool may be harmful to health. Do not inhale the dust. Wear a suitable dust protection mask.

Do not machine any materials that present a danger to health (e.g. asbestos).

Switch the device off immediately if the insertion tool stalls! Do not switch the device on again while the insertion tool is stalled, as doing so could trigger a sudden recoil with a high reactive force. Determine why the insertion tool stalled and rectify this, paying heed to the safety instructions.

The possible causes may be:

- it is tilted in the workpiece to be machined
- it has pierced through the material to be machined
- the power tool is overloaded

Do not reach into the machine while it is running.

The insertion tool may become hot during use.

- when changing tools
- when setting the device down

When working in walls ceiling, or floor, take care to avoid electric cables and gas or waterpipes.

Remove the battery pack before starting any work on the machine.

Do not dispose of used battery packs in the household refuse or by burning them. Milwaukee Distributors offer to retrieve old batteries to protect our environment.

Do not store the battery pack together with metal objects (short circuit risk).

Use only System M12 chargers for charging System M12 battery packs. Do not use battery packs from other systems.

Never break open battery packs and chargers and store only in dry rooms. Keep dry at all times.

Battery acid may leak from damaged batteries under extreme load or extreme temperatures. In case of contact

with battery acid wash it off immediately with soap and water. In case of eye contact rinse thoroughly for at least 10 minutes and immediately seek medical attention.

**Warning!** To reduce the risk of fire, personal injury, and product damage due to a short circuit, never immerse your tool, battery pack or charger in fluid or allow a fluid to flow inside them. Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach containing products, etc., can cause a short circuit.

#### SPECIFIED CONDITIONS OF USE

This cut-off tool is intended to be used to cut different materials.

Do not use this product in any other way as stated for normal use.

To reduce the risk of and injury, only use Type "1" abrasive and diamond wheels with a maximum 3,2 mm thickness, rated with a maximum safe operating speed at least 20,000 min-1. Type 1 wheels are for side grinding only, not surface grinding. Read all safety information supplied with cut-off wheels.

Use the chart below to choose the correct wheel. Different types of wheels work best for different materials. Follow the use recommendations from the wheel manufacturer.

Wheel Type	Recommended for Cutting
Carbide Abrasive Wheel	Drywall, Fiber Cement, Plastic
Abrasive Cut-off wheel	Steel, Stainless Steel, Non-Ferrous Materials
Diamond Abrasive Wheel	Tile, Concrete, Brick, Ceramics

#### EC-DECLARATION OF CONFORMITY

We declare under our sole responsibility that the product described under "Technical Data" fulfills all the relevant provisions of the directives 2011/65/EU (RoHS), 2014/30/EU, 2006/42/EC and the following harmonized standards have been used:

EN 60745-1:2009+A11:2010  
EN 60745-2-22:2011+A11:2013  
EN 55014-1:2017+A11:2020  
EN 55014-2:2015  
EN IEC 63000:2018

Winnenden, 2020-10-29

  
Alexander Krug  
Managing Director



Authorized to compile the technical file.

Techtronic Industries GmbH  
Max-Eyth-Straße 10  
71364 Winnenden  
Germany

#### GB-DECLARATION OF CONFORMITY

We declare as the manufacturer under our sole responsibility that the product described under "Technical Data" fulfills all the relevant provisions of the following Regulations S.I. 2008/1597 (as amended), S.I. 2016/1091 (as amended), S.I. 2012/3032 (as amended) and that the following designated standards have been used:

BS EN 60745-1:2009+A11:2010  
BS EN 60745-2-22:2011+A11:2013  
BS EN 55014-1:2017+A11:2020  
BS EN 55014-2:2015  
BS EN IEC 63000:2018

Winnenden, 2020-10-29

  
Alexander Krug  
Managing Director

Authorized to compile the technical file.

Techtronic Industries GmbH  
Max-Eyth-Straße 10  
71364 Winnenden  
Germany

#### BATTERIES

Battery packs which have not been used for some time should be recharged before use.

Temperatures in excess of 50°C (122°F) reduce the performance of the battery pack. Avoid extended exposure to heat or sunshine (risk of overheating).

The contacts of chargers and battery packs must be kept clean.

For an optimum life-time, the battery packs have to be fully charged, after used.

To obtain the longest possible battery life remove the battery pack from the charger once it is fully charged.

For battery pack storage longer than 30 days:  
Store the battery pack where the temperature is below 27°C and away from moisture

Store the battery packs in a 30% - 50% charged condition  
Every six months of storage, charge the pack as normal.

#### BATTERY PACK PROTECTION LI-ION BATTERY

The battery pack has overload protection that protects it from being overloaded and helps to ensure long life. Under extreme stress the battery electronics switch off the machine automatically. To restart, switch the machine off and then on again. If the machine does not start up again, the battery pack may have discharged completely. In this case it must be recharged in the battery charger.

#### TRANSPORTING LITHIUM BATTERIES

Lithium-ion batteries are subject to the Dangerous Goods Legislation requirements.

Transportation of those batteries has to be done in accordance with local, national and international provisions and regulations.

- The user can transport the batteries by road without further requirements.
- Commercial transport of Lithium-Ion batteries by third parties is subject to Dangerous Goods regulations. Transport preparation and transport are exclusively to be carried out by appropriately trained persons and the process has to be accompanied by corresponding experts.

When transporting batteries:

- Ensure that battery contact terminals are protected and insulated to prevent short circuit.
- Ensure that battery pack is secured against movement within packaging.
- Do not transport batteries that are cracked or leak.

Check with forwarding company for further advice

#### MAINTENANCE

The ventilation slots of the machine must be kept clear at all times.

Be sure to disconnect the tool from the power supply before attaching or removing the saw blade.

Clean tool and guarding system with dry cloth. Certain cleaning agents and solvents are harmful to plastics and other insulated parts. Keep the apparatus handle clean, dry and free of spill oil or grease. Check the function of guards. Regular maintenance and cleaning provide for a long service life and safe handling.

Use only Milwaukee accessories and Milwaukee spare parts. Should components need to be replaced which have not been described, please contact one of our Milwaukee service agents (see our list of guarantee/service addresses).

If needed, an exploded view of the tool can be ordered. Please state the machine type printed as well as the six-digit No. on the label and order the drawing at your local service agents or directly at: Techtronic Industries GmbH, Max-Eyth-Straße 10, 71364 Winnenden, Germany.

#### SYMBOLS

	CAUTION! WARNING! DANGER!
	Remove the battery pack before starting any work on the machine.
	Please read the instructions carefully before starting the machine.
	Wear gloves!
	Wear ear protectors!
	Always wear goggles when using the machine. Wear a suitable dust protection mask.
	Accessory - Not included in standard equipment, available as an accessory.
	Do not dispose electric tools, batteries/rechargeable batteries together with household waste material. Electric tools and batteries that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility. Check with your local authority or retailer for recycling advice and collection point.
	European Conformity Mark
	British Conformity Mark
	Ukraine Conformity Mark
	EurAsian Conformity Mark

Copyright 2020

Techtronic Industries GmbH  
Max-Eyth-Str. 10  
71364 Winnenden  
Germany

+49 (0) 7195-12-0

[www.milwaukeeetool.eu](http://www.milwaukeeetool.eu)

Techtronic Industries (UK) Ltd  
Fieldhouse Lane  
Marlow Bucks SL7 1HZ  
UK



(12.20)

**4100 4700 32**