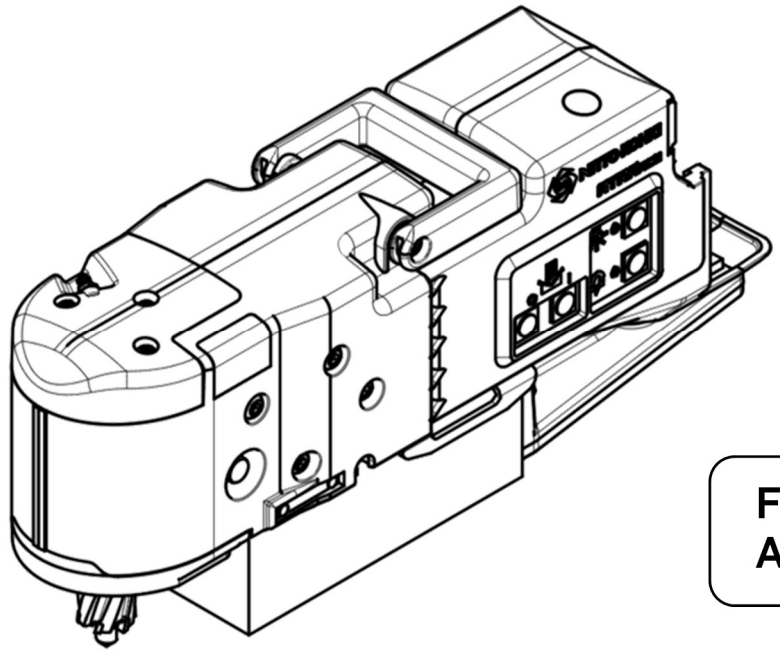
Professional tool **Portable Magnetic Base Drilling Machine**

INSTRUCTION MANUAL

ATRA ACE

Atra Ace

Model: CLO-2725 (NN)



Rechargeable

For One-touch Type Annular Cutter 25L Only

[Specifications]

Main unit

Model	CLO-2725	
Voltage	36 V ⎓	
No-load Speed	820 min^{-1}	
MAX. Magnet Magnetic Power	5500 N (561 kgf *1)	
Magnet Dimensions	65×145 mm	
Adjustment Range	Front/back travel: 10 mm, left/right travel: 10 mm	
Mass (weight)	9.0 kg (When equipped with battery and feed handle)	
Cutter	Plate Thickness	Hole Diameter
JETBROACH one-touch type	6 to 25 mm	12 to 27 mm dia.

*1 The value in kgf is for reference only.

Use the battery and charger manufactured by Koki Holdings Co., Ltd.

Battery	BSL36A18
	BSL36B18
Charger	UC18YSL3

Read the instruction manual of Koki Holdings Co., Ltd., on how to use the battery and charger.
For further information about the battery and charger, contact Koki Holdings Co., Ltd.

- Please read the manual carefully before you attempt to use your tool so that you may use it properly and safely.
- Keep the manual handy - so you can use it whenever necessary.

• Due to continuous product development/improvement, the specifications and configurations in this document are subject to change without prior notice.

Manufactured by.
NITTO KOHKI CO., LTD. 9-4, Nakaikegami 2-chome, Ohta-ku, Tokyo, 146-8555, Japan
Tel : +81-3-3755-1111 Fax : +81-3-3753-8791

Thank you very much for your purchase of this NITTO KOHKI product.
Before using your tool, please read this manual carefully so that you may use it properly to get the most out of it.

(Original Instructions)
TQ16463-0 12/2021

Please keep the manual handy - so you can use it whenever necessary.

- English : Please ask your dealer or distributor for instruction manual in local language(s).
- German : Bitte fragen Sie Ihren Händler nach eine Betriebsanleitung in Landessprache.
- French : S'il vous plait, veuillez demandez á votre foumisseur de manuel instruction en langue locale.
- Spanish : Por favor, cantacte con su distribuidor para el manual de instrucciones en español.
- Portuguese : Por favor pessa ao seo agente ou distribuidor o manual de instrucces ih linguagen local.
- Italian : Per Manuale Istruzioni in lingua locale Vi preghiamo di rivolgervi al rivenditore o distributore.
- Dutch : Vraag uw handelaar om een nederladstalige gebruiksaanwijzing.
- Swedish : Be er lokala Återförsäljare eller distributör om manualer pá svenska.
- Danish : Venligst henvend Dem til den danske distributør for instructions manualer.
- Polish : Prosze pytac swojego dealera lub dystrybutora o instrukcje obslugi w jezyku localnym.
- 中文 :請向當地供應商或經銷商詢問中文使用說明書

The following Safety notations are used throughout the manual to highlight safety precautions for the user and for the tool.

⚠ **WARNING:**	Indicates a potentially hazardous situation which, if not avoided by following the instructions given, could result in death or serious injury.
⚠ **CAUTION:**	Indicates a potentially hazardous situation which, if not avoided by following the instructions given, could result in injury or material damage.

* Please note, however, that failure to observe safety precautions under the " **CAUTION**" category could result in a serious occurrence depending on the situation.
Please observe all safety precautions in the manual.

CAUTION: Important precautions for tool setup, operation and maintenance.

About pictograms

⚠ **WARNING:** It might be dangerous to operate the tool if the instructions supplied are not followed.

Read the instruction manual before use.

Always wear suitable eye protection.

Always wear suitable hearing protection.

Always wear respiratory protective equipment (PPE).

Sound Pressure Level (LPA)	81.7 dB (A) According to EN 62841-1
Sound Power Level (LWA)	92.7 dB (A) According to EN 62841-1
Uncertainty K	1.515 dB (A) Operating Condition: No-load
Vibration Emission Value ah	≦2.5 m/s² According to EN 62841-1 Location: Feed Handle
Storage Temperature	-10°C to 50°C (no freezing)
Storage Humidity	Max. 90% at 25°C (no dewing)
Operating Temperature	0°C to 40°C
Operation Altitude	1000 m Max
Operating Humidity	Max. 90% at 25°C
Pollution Degree	Degree 3 According to IEC60664-1
International Protection	IP20 According to IEC60529

Contents

California Proposition 65

⚠ WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm.
Some examples of these chemicals are:

- Lead from lead-based paints,
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Precautions on Use (Make sure to follow the instructions given)

Before using your tool, to avoid personal injury always take the basic precautions explained in later sections.

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.

(1) 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.

(2) 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 the 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) protected supply.**
  Use of an RCD reduces the risk of electric shock.

(3) 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 energizing 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 jewelry. Keep your hair and clothing away from moving parts.**
  Loose clothes, jewelry 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.
- **Keep handles and grasping 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.

⚠WARNING

(4) 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.

5) 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 the 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 behavior 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.

6) 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.

Drill safety warnings

⚠WARNING

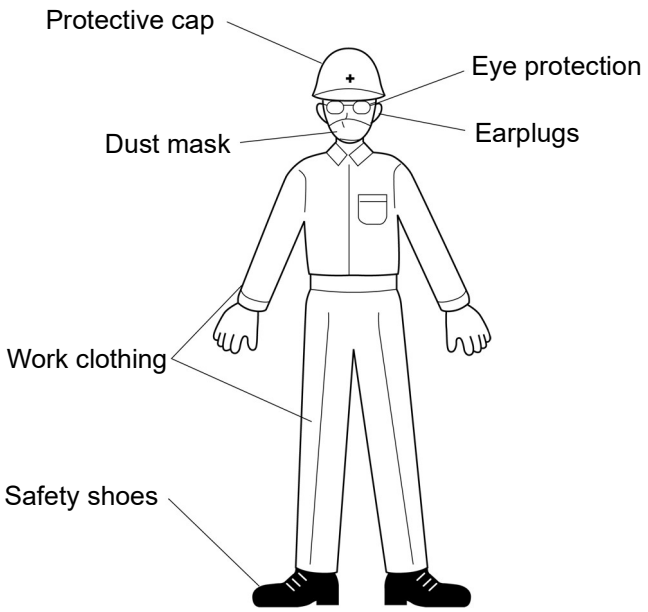
- Do not wear gloves. Gloves may be entangled by the rotating parts or chips leading to personal injury.
- Keep your hands out of the drilling area while the tool is running. Contact with rotating parts or chips may result in personal injury.
- Never remove chips from the drilling area while the tool is running. To remove chips, move the accessory away from the workpiece, switch off the tool and wait for the accessory to stop moving. Use tools such as a brush or hook to remove chips. Contact with rotating parts or chips may result in personal injury.

General safety warnings

Personal safety

⚠ WARNING

- **Dress properly.**
  Do not wear loose clothing or jewelry. There is a danger of being caught in moving parts. Wear a pair of non-slip shoes. If your hair is long, wear a protective hair covering to contain your hair.
- **Always wear eye protection.**
  Corrective glasses are not considered as eye protection. Always wear appropriate eye protection.
- **Wear a dust mask.**
  When dust is generated in the workplace, wear a dust mask.
- **Use a dust collector or dust collection equipment correctly.**
  If a dust collector or dust collection equipment are being used, check that these are connected and used properly. Use of a dust collector can reduce risk caused by dust.
- **When loud noise is generated in the workplace, wear earplugs.**
- **Do not overreach.**
  Keep proper footing and balance at all times.

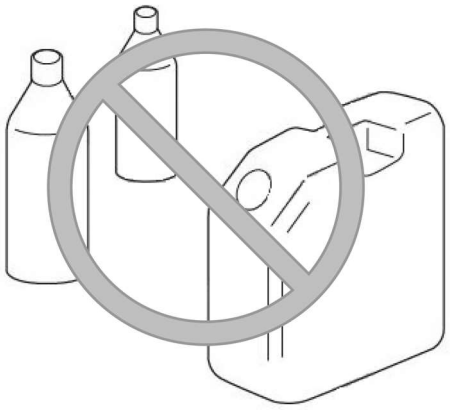


- **Be on your guard when working.**
  Do not use the tool when you are tired.
  When you use the tool, be sure about the handling method, how to work and pay sufficient attention to the surrounding environment.
- **Never touch the tip of moving parts when the tool is running.**
  Also, do not direct the tip of moving parts toward people or animals.
- **Be aware of tool vibration and recoil. Some tools can cause a considerable amount of vibration.**
  Depending on how the product is operated, the type of tool setting, and the length of operation, it could place a tremendous burden on your hands, arms and body. The tool could cause a vibration injury or tendonitis. Avoid long-term use and take appropriate breaks. Consult a doctor if you experience any discomfort or pain while operating the tool.

Work area safety

⚠ WARNING

- **Do not use the tool at home.**
  This is a professional tool (industrial or work tool for business). Do not bring the tool home and use it there.
- **Keep the work area clean.**
  Working in a messy work area or work table could cause an accident.
- **Be cautious about the work area.**
  Do not expose the tool to rain.
  Do not use the tool in a damp or wet place.
  Keep the work area well lit.
- **Do not operate the tool in an explosive atmosphere, such as in the presence of flammable liquids (thinner, lacquer, gasoline, etc.) or gas.**
- **Do not let children come close to the work area.**
  Keep children and bystanders away while operating the tool.
- **Some tools generate loud noise.**
  Check that the noise regulations of each area are complied with.
- **When work must be done in high locations, make sure there is nobody underneath the work area.**
  If the tool or material is dropped, it could cause an accident or injury.
- **Before starting operation, make sure that there is no conduit, water pipe or gas pipe by your work area.**
  If a tool touches a buried object, it could cause electrical shock or leakage, which could cause an accident.



Before starting to work

⚠ WARNING

- **Perform inspection before using the tool.**
  Before using the tool, check for loose screws on the tool and for damage on the protective cover or other parts, and make sure that the tool operates normally and demonstrates prescribed functions.
  Check the position adjustment and tightening status of moving parts, parts damage, attachment status, and all other locations for issues that could affect operation.
  For parts replacement and repair, follow the instructions indicated in the instruction manual.
  If there are no instructions in the instruction manual, contact the retailer where you purchased the tool or the nearest office of Nitto Kohki Group. (see the back cover of this manual).
  Do not use the power tool if the switch does not turn it ON and OFF.
- **Make sure to properly attach the tip tool.**
  If the tip tool is not attached properly, there is a risk of jumping out or damage, which could result in injury.
- **After adjustment, be sure to remove tools such as spanners, wrenches, etc.**
- **Use appropriate tools.**
  Do not force small tools to do the job of a heavy-duty tool. Do not use tools for purposes not intended.
- **Do not use tools in an unreasonable manner.**
  When the specifications are followed, tools can be used efficiently and safely.
- **Secure workpieces.**
  Where possible use clamps or a vise to hold the work. It is safe to hold the workpieces by clamps or a vise since both hands can be used for operation.

Handling tools

⚠ WARNING

- **Storing the tool and battery.**
  When the tool and battery are not used, store the tool and battery in a dry location at a temperature less than 50°C.
  Also, store the tool out of the reach of children.
- **Be cautious about how the tool is carried.**
  Do not carry the tool with your hand touching the operation switch.
  Do not carry the tool by holding any part other than the handle.
- **Do not leave the tool while the tool is still running.**
  Do not leave the work area until you turn off the operation switch, remove the battery and the tool completely stops.
- **Do not allow the following chemicals to come into contact with the tool, as parts could deteriorate.**
  Acetone, benzine, thinner, ketone, ether, trichloroethylene, and other similar chemicals

Maintenance and inspection

⚠ WARNING

- **Do not disassemble or alter the tool.**
  Using the tool after disassembling or remodeling it could cause an accident or injury.
- **Inspect tip tools and accessories.**
  Always inspect tip tools and accessories for damage or deterioration before attaching them to the tool.
  If damage or deterioration is found, request repair from the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.
- **Inspect for damaged sections.**
  Sufficiently check for damage on accessories or other parts, that the tool operates normally, and that work can be performed appropriately.
  If there are accessories or parts that have been damaged or could hinder work, request repair from the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.
- **Request repair from a dedicated store.**
  For repair or replacement of parts, request service from the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.
  Repair requires special knowledge and skills. If repair is performed at a place other than a specialty store, the tool may not demonstrate its full performance, or it could lead to an accident or injury.
  Request repair with the failed status kept intact. When requesting a repair, do not throw away damaged parts. It could be important information for investigating the failure cause so do not change the status.
- **Use genuine parts.**
  If inappropriate parts are used, it could cause an accident or injury.
  Genuine parts are listed in the instruction manual or brochure. Inquire at the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.
- **Do not remove the labels or plates on the tools.**
  If labels or plates are broken or peeling, for a replacement label or plate contact the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.

General cordless power tool safety warnings

⚠ WARNING

- **The operating temperature of the tool and battery is 0 to 40°C. The operating temperature of the charger is -10 to 40°C.**
  Do not use the tool and battery in high temperatures and low temperatures because there is a risk of failure and injury.
- **Use only the battery specified for NITTO KOHKI rechargeable power tool.**
  Use the charger and battery specified by NITTO KOHKI that is listed in the instruction manual and catalog. There is a risk of tool failure, injury, and damage if a battery other than the specified battery is used.
- **Do not use a battery that has degraded.**
  There is a risk of fluid leaking from the battery, heat generation, and battery rupture.
- **Use the charger with a power supply that satisfies the rated voltage.**
  Do not use a DC power supply or engine. There is a risk of failure and fire.
- **Charge the battery in a well-ventilated location.**
  Do not cover the battery or charger with a cloth or any other material during charging. There is a risk of battery rupture, smoke, and fire.
- **When the charger is not being used, disconnect the power plug from the outlet.**
  There is a risk of electric shock, smoke, and fire.
- **Do not use the charger or charge a battery in a location with flammable liquids and gases.**
  There is a risk of smoke, fire, and battery rupture.
- **Do not use the charger or charge a battery in the rain or in a humid or wet location.**
  There is a risk of electric shock and smoke.
- **Do not allow a short-circuit between the battery terminals.**
  There is a risk of smoke, fire, and battery rupture if a short-circuit is caused by moisture, chips, or other conductive materials.
- **Be cautious about electric shock.**
  Do not touch the battery, charger power plug, terminals, or around those parts with wet hands. There is a risk of electric shock.
- **Turn OFF the tool switch and remove the battery from the tool in the following situations:**
  When the tool is not being used and when repairing the tool.
  When changing accessories, such as the cutter.
  When finished working and storing the tool.
  In other situations when danger is expected.
- **Prevent the tool from starting unexpectedly.**
  Confirm that the switch is turned OFF before attaching the battery. Do not touch the rotating parts and cutter when attaching the battery.
- **Use the specified accessories and attachments.**
  Use the specified accessories and attachments that are listed in this instruction manual and the NITTO KOHKI catalog. There is a risk of accident and injury.
- **Do not put the battery in flames.**
  There is a risk of fire and battery rupture.
- **If the battery leaks and fluid gets in the eyes, first wash the eyes well without rubbing using clean water, such as tap water, and then promptly seek medical attention.**
- **There is a risk of skin irritation and injury if the battery leaks and the fluid gets on skin and clothes.**
  Promptly wash the clothes and skin well with clean water and then consult a physician.
- **Ensure that chips and dust do not accumulate on the battery.**
  Ensure that the battery is not exposed to chips during work.
  When the battery is not used, do not leave the battery in a location where it is exposed to chips and dust.
  When storing the battery, clean off chips and dust from the battery and store it separately from metal components.
  Do not stick nails in the battery or expose it to strong shocks.
- **Do not heat the battery or expose it to high pressure, such as by placing the battery in a microwave or high-pressure vessel.**
- **If the battery leaks or produces a foul odor, promptly remove the battery from all sources of fire.**
- **Do not use the battery anywhere other than in the tool.**

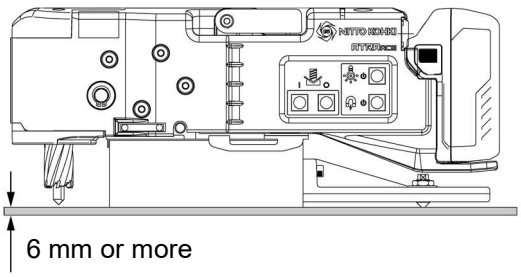
⚠ WARNING

- **Stop charging the battery if charging does not finish even when the specified charging time is greatly exceeded.**
- **Do not use a battery that has significant damage to the exterior or is deformed.**
- **Do not use the tool in locations where powerful static electricity is generated.**
- **Use the appropriate tool for the work.**
  Do not use small tools and attachments for work that should be performed by large tools. There is a risk of injury.
- **Do not handle the charger cord in a rough manner.**
  Do not carry the charger by holding the cord or pull on the cord to disconnect it from the outlet. Do not damage the cord, such as by modifying it, bending it to an excessive degree, using it close to high-temperature objects, placing heavy objects on it, pinching the cord between objects, or hanging the cord on metal objects. Do not pull, twist, or tightly wrap the cord.
- **If the tool has corrosion, an unusual odor, generates heat, or you think there is another problem when the tool is first used after purchase, stop using the tool and contact the retailer where you purchased the tool.**
- **Use the battery (BSL36A18, BSL36B18) and charger (UC18YSL3) manufactured by Koki Holdings Co., Ltd.**
- **If you notice any unusual odor, heat generation, discoloration, deformation, or something out of the ordinary when using, charging, or storing the battery, immediately remove the battery from the tool or charger and stop using it.**
- **Carefully clean and maintain this cordless tool.**
  To work safely and efficiently, maintain the cutter so that it cuts well. There is a risk of injury if a damaged cutter is used.
- **Pay sufficient attention when working.**
  When you use the cordless tool, be sure about the handling method, how to work, and pay sufficient attention to the surrounding environment. Thoughtless actions can cause accidents and injury.
- **Request repair of this cordless tool from a dedicated store. Do not disassemble, repair, or modify the tool, charger, or battery.**
  If the tool, charger, or battery becomes hot or you notice a problem, request inspection and repair. Always inquire about repairs at the retailer where you purchased the tool or the nearest office of Nitto Kohki Group. There is a risk of failure and injury if you repair the tool, charger, or battery yourself.
- **If the tool is dropped or hit, check to ensure there is no breakage, cracking, or deformation.**
  Breakage, cracking, or deformation could cause electric shock or injury.
- **When the tool becomes overheated or you notice anything abnormal, stop using the tool immediately and request that the tool be repaired.**
- **The noise-emission value in this manual is measured in accordance with the ISO standards.**
  The value may be also used for comparing this tool with another and in a preliminary assessment of exposure.
  However, since the real value may change depending on the work condition, perform measurements in the actual usage condition when using the tool. Do not operate the tool beyond the time set by the region where the tool is used.
- **The vibration value in this manual is measured in accordance with the ISO standards.**
  The value may be also used for comparing this tool with another and in a preliminary assessment of exposure.
  However, since the real value may change depending on the work condition, perform measurements in the actual usage condition when using the tool. Do not operate the tool beyond the time set by the region where the tool is used.

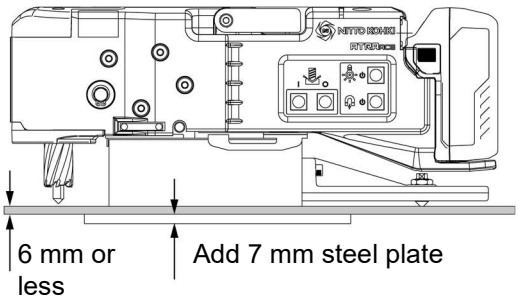
Product specific safety rules

⚠ WARNING

- **Do not wear gloves when working.**
  Gloves can become entangled in the rotating parts and cause injury.
- **Be cautious about chips when drilling.**
  When drilling, chips are also rotating together with the cutter. Keep your fingers and other body parts away from chips and the cutter.
- **When removing chips, release the magnetic force of the magnet.**
  Chips are sharp. Use a tool such as needle-nose pliers to remove the chips. Do not remove chips with your bare hands.
- **Do not touch the cutter under any circumstances when the battery is attached to the tool.**
  Remove the battery when changing the cutter.
- **Do not connect the charger to the power supply output from an engine-driven welder.**
  If the charger is connected to the power supply output from an engine-driven welder, a malfunction may occur, and the electronic circuitry may be damaged.
- **When not working, always release the magnetic force of the magnet and place the tool in a stable location.**
  If the tool is left with the magnet attached, the battery will discharge, and the magnetic force will disappear.
- **Use only on magnetic materials.**
  Your tool cannot be used on non-magnetic materials, such as aluminum, stainless steel, copper, or alloys. The Magnet will not adhere on non-magnetic materials. Attempting to use the Magnet on non-magnetic materials could cause an accident.
- **Use caution during wall operation.**
  When using your tool on a wall, always use caution.
  Never stand under the tool.
  * Never allow anyone to stand under the tool.
  * Never put any part of your body under the tool.
  * If the tool falls, it could result in severe injury or death.
- **Always use a workpiece that is at least 6 mm thick.**
  The workpiece must be at least 6 mm thick. If a workpieceis too thin, the magnetic power of your tool will decrease. This will cause the tool to move during operation. This could result in an accident.



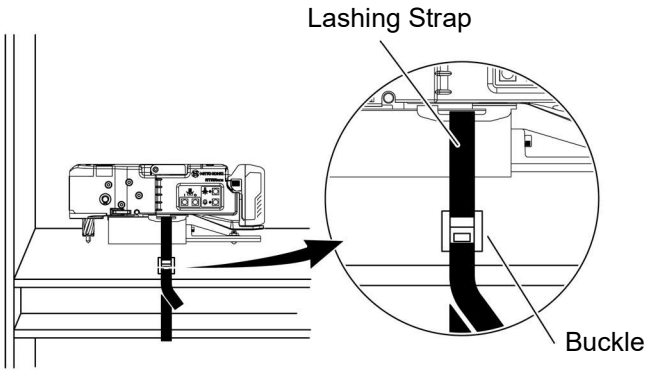
- **Use an iron back-up plate.**
  If the workpiece is less than 6 mm thick, you must use an iron back-up plate that is more than 7 mm in thickness. The surface area of the iron back-up plate must be greater than the surface area of the magnet. An appropriate back-up plate is necessary to boost the holding power of the Magnet. Use of an inappropriate back-up plate can result in an accident. If the back-up plate is not thick enough or big enough,the tool will come loose during operation. This can result in an accident and severe injuries.

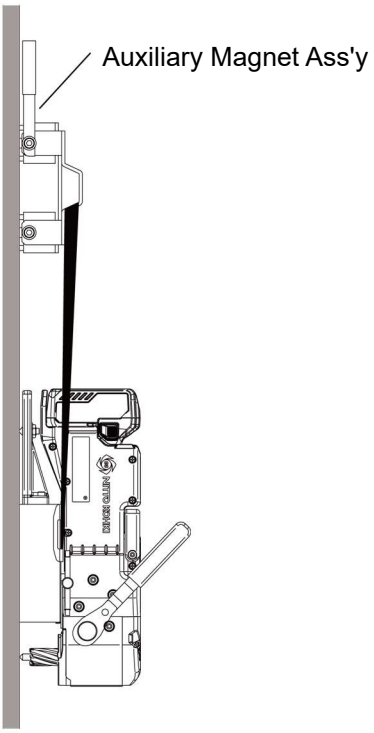


- **Keep the attachment surface of the magnet and the surface of the workpiece clean.**
  If there is a gap between the attachment surface of the magnet and the workpiece, the holding force of the magnet will weaken, and the main unit may twist. Always keep the surfaces clean. Do not allow foreign objects, such as chips, to become stuck between the surfaces, and ensure that surfaces are flat and free from corrosion. Do not place the workpiece on a location with holes. The tool will not operate because a sufficient magnetic force (holding force) cannot be maintained.
- **The holding force of the magnet weakens when the battery level is low.**

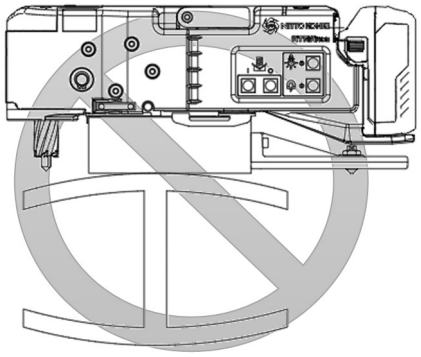
⚠ WARNING

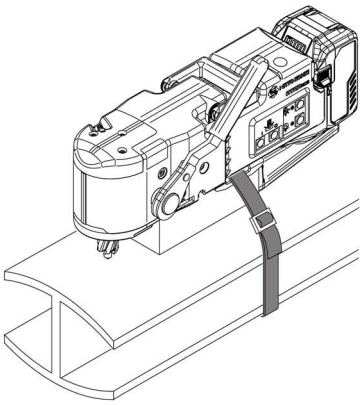
- **Drilling on a workpiece that is not level requires extra attention to safety.**
  When using the tool on a workpiece that is not level, use the lashing strap and auxiliary magnet ass'y.
- **Use the lashing strap to prevent the tool from falling.**
  Use the included lashing strap and secure the main unit to the workpiece when there is a risk that the main unit will fall or tip over due to the surface not being level, working in a high location, power loss, or the magnet lifting up.
  If the lashing strap cannot be wrapped around the workpiece, such as when the workpiece is large, use the optional Auxiliary Magnet Ass'y to prevent the main unit from falling. Secure the lashing strap tightly with the buckle.





- **When finished drilling, be careful of the slug flying out of the cutter. When work must be done in high locations, make sure there is nobody underneath the work area.**
  When finished drilling, the slug will fly out of the cutter with force. Wear protective gear. Do not let unprotected people come close to the work area.
  Especially when working in high locations, check for people underneath the work area and be sufficiently careful about where the slug falls. The slug is also hot. Do not touch it with bare hands.
- **Set the magnet parallel to the longer direction of the workpiece.**
  H-beam steel normally has warping. Set the magnet parallel to the longer direction of the workpiece to firmly attach the magnet and use the tool stably. If the magnet is not firmly attached to the workpiece, the cutter may be damaged, and an unexpected accident may occur.





⚠ WARNING

- **Do not use a pilot pin that is not matched to the cutter.**
  The pilot pin differs according to the type, diameter, and length (depth) of the cutter.
  Making a mistake in the combination of cutter and pilot pin can lead to an accident. Refer to "Combinations of Cutters and Pilot Pin" (p. 20).
- **Use the cutting oil for drilling only.**
  Refer to "Preparation of Cutting Oil" (p. 22).
- **Ensure that the battery is properly attached.**
- **Do not discard the battery as regular garbage and do not throw the battery in fire.**
  For how to dispose of the battery, refer to "Disposal" (p. 35).
- **Store the battery out of reach of children.**
- **Use the battery correctly according to the specifications label.**

⚠ CAUTION

- **This tool is not waterproof.**
  Use sufficient caution regarding the following points:
- **If the electric drill or main unit becomes wet with cutting oil or water, immediately wipe it clean.**
- **Do not use the tool with wet hands.**
- **Do not use the tool in the rain.**
- **Use the CLO-2725 special cutting oil.**
  The battery may be damaged if cutting oil other than the included CLO-2725 special cutting oil gets on the battery. Do not use a damaged battery.
- **Check the battery for damage before use.**

About drilling

⚠ WARNING

- **Do not wear gloves when working.**
  Gloves can become entangled in the rotating part and cause injury.
- **Maintain the cutter so that it cuts well.**
  The tool cannot work smoothly and be operated easily if a worn or damaged cutter is used, or an unexpected accident may occur.
- **Do not feed the handle with force when drilling.**
  There is a risk the tool may twist, or the cutter may break.
  Do not feed the cutter with force when drilling because the JETBROACH teeth are thin and cutting resistance is lower when drilling compared to a twist drill bit. Use caution not to push the cutter into the workpiece more than is necessary because the cutting teeth may be damaged, and the service life of the cutter will be reduced.
  In particular, use caution not to feed the handle with force when drilling thin sheet metal and when the battery is low (red lamp is flashing or only one battery level display lamp is lit). Refer to "Battery Level Display" (p. 15).
- **Be careful at the exit of the through hole.**
  There is a risk the tool may twist, or the cutter may break at the exit of the cutter. Feed the cutter slowly at the exit of the hole.

Other precautions

⚠ WARNING

- **Do not use materials on which electrical welding work is being performed.**
  If the electrical welding is not sufficiently grounded, current can flow through the magnet, causing an irreparable failure in the tool and accident due to malfunction.

⚠ CAUTION

- **The color of the LED changes by the load on the electric drill. Use the tool when the LED is lit in green or yellow.**
  The LED is lit in green or yellow when the load on the electric drill is normal. The LED is lit or flashing in red when there is an overload. Slow down the feeding of the cutter so that drilling can be performed when the LED is lit in green or yellow.
- **When the electric drill is overloaded, the electric drill output is reduced and the LED flashes rapidly in red. If you continue to use the electric drill in this state, the LED flashes in white.**
  If a load is applied to the electric drill when the LED is lit or flashing in red, the output is reduced to protect the electric drill and battery. If you decrease the load before the electric drill fully stops by the overload, the electric drill returns to normal operation. If the electric drill is automatically stopped, you can continue the work by setting the electric drill to the operation standby state by pressing a switch other than the light switch and then pressing the start electric drill switch.

Charger safety precautions

⚠ WARNING

- **Use only the dedicated battery.**
  Use only the specified battery (Koki Holdings Co., Ltd. BSL36A18). There is a risk of the battery rupturing causing injury and damage if a battery other than the specified battery is used.
- **Use the charger with the power supply listed on the ratings label.**
  Do not use a DC power supply, step-up transformer, or other type of transformer. There is a risk of abnormal heat generation and fire.
- **Do not charge the battery outside the operating temperature range of the charger.**
  The battery will not be charged correctly, and the service life of the battery will be reduced. There is also a risk of battery rupture and fire.
- **Charge the battery in a well-ventilated location.**
  Do not cover the battery or charger with a cloth or any other material during charging. There is a risk of battery rupture and fire.
- **When the charger is not being used, disconnect the power plug from the outlet.**
  There is a risk of electric shock and fire.
- **Do not allow a short-circuit between the battery terminals.**
  If you place the battery in a nail pouch, there is a risk of short-circuit that may cause smoke, fire, and battery rupture.
- **Be cautious about electric shock.**
  Do not touch the power plug of the charger with wet hands. There is a risk of electric shock.
- **Do not use the charger or charge a battery in the rain or in a humid or wet location.**
  There is a risk of electric shock and smoke.
- **Keep the work area well lit.**
  There is a risk of accidents when working in dark areas.
- **Do not use the charger or charge a battery in a location with flammable liquids and gases.**
  There is a risk of explosion and fire which can cause accidents.
- **Do not put the battery in flames.**
  There is a risk of battery rupture and the release of hazardous substances.

⚠ CAUTION

- **Keep the work area clean.**
  Working in a messy work area or work table could cause an accident.
- **Do not let children come close to the work area.**
  Do not allow bystanders to touch the cord of the charger. There is a risk of injury.
  Keep bystanders away from the work area. There is a risk of injury.
  Persons who require special aid should not use this tool alone unless supervised or instructed to do so by a person responsible for safety.
- **When the tool is not being used, store it correctly.**
  Store the tool in a dry location that can be locked or is out of reach of children. There is a risk of accidents.
  Do not store the battery in locations that may reach temperatures over 50°C (such as a metal box or inside a vehicle in summer). This causes the battery to degrade and there is a risk of smoke and fire.
- **Do not handle the charger cord in a rough manner.**
  Do not carry the charger by holding the cord or pull on the cord to disconnect it from the outlet.
  Do not allow the cord near locations that are hot, oily, or have sharp corners.
  Pay attention to the location where the battery is charged so that the cord is not damaged by being stepped on, pulled, or exposed to excessive force. There is a risk of electric shock, short-circuit, and fire.
- **Carefully clean and maintain the charger.**
  Before using the charger, inspect the power plug and cord. If the plug or cord is damaged, request repair from the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.
  When using an extension cord for the charger, inspect it in advance. If the extension cord is damaged, replace it. There is a risk of electric shock and fire due to short-circuit.
- **Use an extension cord intended for outdoor use.**
  When charging the battery outdoors, use a flexible cord or flexible cable extension cord.
- **Request repair of the charger from a dedicated store.**
  Only a service technician should disassemble, repair, or modify the charger and battery. There is a risk of injury due to fire and abnormal operation.
  If you notice a problem with the charger or batter, request inspection and repair.
  Do not modify this charger. It is certified to the relevant safety standards.
  Always request repairs at the retailer where you purchased the charger or the nearest office of Nitto Kohki Group. There is a risk of accident and injury if you repair the charger yourself.

Precautions for connecting a USB device

⚠ CAUTION

- **If an unexpected problem occurs, the data stored inside the connected USB device may be damaged or lost.**
  In case of accidents, always make a backup of the data in advance.
  In the connection of a USB device, NITTO KOHKI bears no responsibility for damage to, or the loss of data stored inside the connected USB device or for a failure of the connected device.

Battery specific safety rules

⚠ WARNING

- **Use the dedicated charger.**
  Please use the battery charger (UC18YSL3) manufactured by Koki Holdings Co., Ltd.
  There is a risk of the battery rupturing causing injury and damage if a charger other than the specified charger is used.
- **Do not allow a short-circuit between the battery terminals.**
  If you place the battery in a nail pouch, there is a risk of short-circuit that may cause smoke, fire, and battery rupture.
- **Do not pour any conductive liquid, such as water, inside the battery.**
  There is a risk of heat generation, fire, and battery rupture.
- **Do not expose the battery to rain and water.**
  There is a risk of failure and degradation.
- **Do not put the battery in flames.**
  There is a risk of battery rupture and the release of hazardous substances.
- **Do not use the battery if the terminals have deformed.**
  If the battery is attached to the tool, there is a risk of short-circuit that may cause smoke, and fire.
- **Do not disassemble or modify the battery.**
  There is a risk of battery rupture and the release of hazardous substances.
- **Ensure that chips and dust do not accumulate on the battery.**
  Before using the battery, check for chips and dust accumulated on the terminals.
  Ensure that the battery is not exposed to chips during work. Ensure that the battery attached to the tool is not exposed to chips and dust during work.
  When the battery is not used, do not leave the battery in a location where it is exposed to chips and dust.
  When storing the battery, clean off chips and dust and store the battery separately from metal components.
  There is a risk of short-circuit that may cause smoke, fire, and battery rupture.
- **Do not stick nails in the battery or expose it to strong shocks.**
- **Do not use a battery that has significant damage to the exterior or is deformed.**
- **Do not use the battery by reversing (+) and (-).**
- **Do not directly connect the battery to an output or cigarette lighter socket in a vehicle.**
- **Do not use the battery for any purpose other than for the specified devices.**
- **Do not heat the battery or expose it to high pressure, such as by placing the battery in a microwave or high-pressure vessel.**
- **If the battery leaks or produces a foul odor, promptly remove the battery from all sources of fire.**
- **Do not use the tool in locations where powerful static electricity is generated.**
- **If you notice any unusual odor, heat generation, discoloration, deformation, or something out of the ordinary when using, charging, or storing the battery, immediately stop using the battery and contact the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.**

⚠ CAUTION

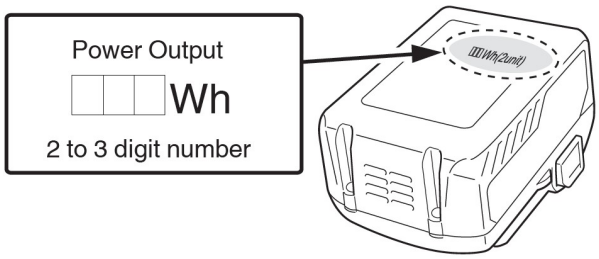
- **The battery contains precision components. Do not expose it to strong shocks, such as by dropping it.**
  There is a risk of malfunction and other problems.
- **Make sure to properly attach the battery to the tool.**
  There is a risk of injury if the battery falls off the tool.
- **Do not expose the switch panel to a strong shock or tear at it.**
- **Do not discard the battery as regular garbage.**
- **If the battery leaks and fluid gets in the eyes, first wash the eyes well without rubbing using clean water, such as tap water, and then promptly seek medical attention.**
  You may receive an eye injury if the fluid is left in the eye.
- **If the battery leaks and the fluid gets on skin and clothes, promptly wash off the fluid with clean water, such as tap water.**
  There is a risk of skin irritation and other problems.
- **When the tool is not being used, store it correctly.**
  Do not store the battery in locations that may reach temperatures over 50°C (such as a metal box or inside a vehicle in summer). This causes the battery to degrade and there is a risk of smoke and fire.

Regarding Lithium-ion Battery Transportation

When transporting a lithium-ion battery, please observe the following precautions.

⚠ WARNING

- **Notify the transporting company that a package contains a lithium-ion battery, inform the company of its power output, and follow the instructions of the transportation company when arranging transport.**
- **Lithium-ion batteries that exceed a power output of 100Wh are considered to be in the freight classification of Dangerous Goods and will require special application procedures.**
- **For transportation abroad, you must comply with international law and the rules and regulations of the destination country.**



1 Application

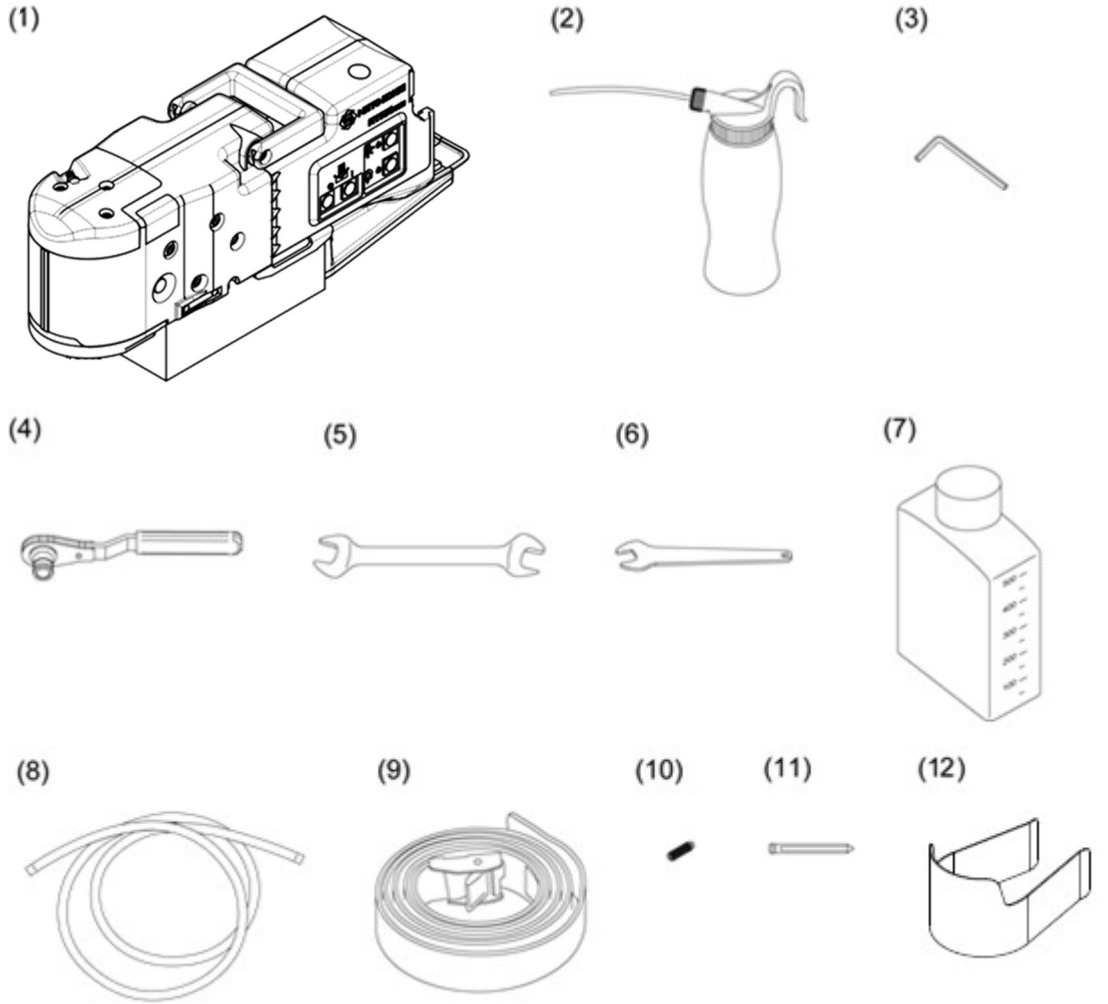
This is a portable drilling machine with a Magnet, geared to drill mild steel (mild steel or equivalent).
The tool will be mounted on the workpiece to be drilled with the Magnet securely fastening the tool to the workpiece while drilling takes place.

2 Checking Inside the Package

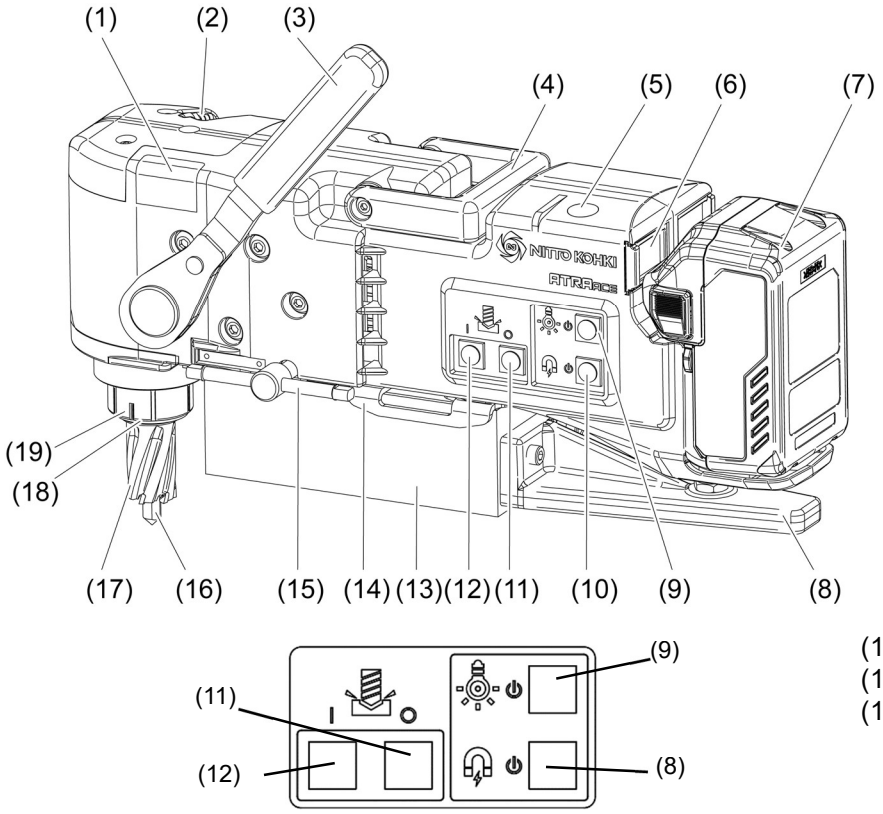
When you open the package box, check the contents of the package and also check for any damage that may have occurred during transportation.
If an abnormality is found, request service from the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.

	Package content and accessories	Quantity	Check
(1)	CLO-2725 (main unit)	1	
(2)	Oiler	1	
(3)	Hex. Socket Screw Key 4	1	
(4)	Feed Handle Ass'y	1	
(5)	Spanner 7×9	1	
(6)	Spanner 14	1	
(7)	Cutting Oil (0.5 l)	1	

	Package content and accessories	Quantity	Check
(8)	Tube 4×7	1	
(9)	Lashing Strap	1	
(10)	Hex. Socket Set Screw with Dog Point 8×28	1	
(11)	Pilot Pin 08025 (A1)	1	
(12)	Guard	1	
(13)	Instruction Manual (this document)	1	



3 Part Names



(1) LED
(2) Hose Nipple
(3) Feed Handle
(4) Grip
(5) Battery Removal Warning LED
(6) Filter
(7) Battery
(8) Stabilizer
( ) Light Switch
( ) Magnet Switch
( ) Stop Electric Drill Switch
( ) Start Electric Drill Switch
(13) Magnet
(14) Strap Attachment Plate
(15) Lock Screw
(16) Pilot Pin
(17) Cutter
(18) Arbor
(19) Sleeve

4 Function of Electronic Control

The electronic control status of the main unit is displayed by the lit and flashing status of the LED.

Load Detection Function

The LED displays the overload status of the electric drill during drilling.

LED display	Overload status
Lit in green	Normal
Lit in yellow	Normal
Lit in red	Overload
Flashing red	During control by the automatic stop function Stop the overload to return to normal control.
Flashing white	Overload automatic stop Press a switch other than the light switch while flashing to return to the operation standby state.

Battery Level Display

⚠ CAUTION

- **The battery level cannot be checked during drilling.**
- **The LED may have failed if it is lit in a color other than white when the battery is attached.**
  Contact the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.

When the battery is attached to the main unit, the LED is lit in white first, and then the battery level is displayed with the following colors.

LED display	Battery level
Flashing green three times	Nearly full
Flashing yellow three times	A little low
Flashing red three times	Low Replace the battery with a charged battery.
Continues flashing red	Empty Replace the battery with a charged battery.
Not lit	Battery excessively discharged

Plate Thickness Detection

⚠ WARNING

- **The detected steel plate thickness is an approximate guide. The LED display changes depending on the state of the steel surface.**
  Regardless of the LED display, use caution when drilling.

This function detects the plate thickness when the magnet is attached and displays whether the electric drill can be used.
When the electric drill is started, the LED display switches to overload detection.

LED display	Status
Lit in green	The electric drill can be used.
Lit in yellow	The electric drill can be used. Caution is required when drilling because the plate thickness is close to the minimum thickness.
Rapid flashing red	The electric drill cannot be used. The plate thickness is not sufficient. Release the magnetic force and attach the magnet to a workpiece with sufficient thickness.

Safety Functions and Alarm Detection

The following table gives the safety functions and alarm detection status.

LED display	Status/corrective action
Yellow flashing	Magnet disconnection detected An error has occurred with the magnet. The electric drill will not operate. Request repairs at the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.
Flashing blue	Main unit lifting detection Main unit lifting or low magnetic force was detected during drilling. The electric drill was stopped. First release the magnetic force, and then reattach the main unit to the location to drill and drill the hole again.
Flashing white	Stopped by electric drill overload The electric drill was stopped because of an overload during drilling. Press a switch other than the light switch to return to the operation standby state.
Flashing red	Low battery level detected The battery level is low. When the magnet is attached to the workpiece, release the magnetic force, and then change the battery or charge the battery with the tool in a stable location. ● The LED flashes red when the battery is not attached correctly. Attach the battery correctly. ● The LED flashes red when the tool has stopped due to a hot battery or when the battery has failed.
Flashing between red and green	Circuit error detected There is a fault in the control circuit. Request repairs at the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.
Flashing green	Unnecessary operation warning The magnet is attached to the workpiece, but no other operation was performed after that. Press a switch other than the light switch to return to the operation standby state.
Rapid flashing green	Unnecessary operation warning The electric drill was started but there was no load after that. This is considered unnecessary operation. The electric drill is stopped and the LED changes to flashing green. This display disappears if a load is applied while the LED is rapidly flashing green.

5 Charging the Battery

⚠ CAUTION

- **After the battery is finished charging, wait about fifteen minutes until charging the next battery.**
  Continuously using the same charger generates heat which may cause a failure.
- The recharging time may vary according to the ambient temperature and power source voltage.

1 **Confirm that the power plug (1) is not inserted into the outlet (2).**

2 **Confirm that the power supply is 220 - 240 V ～ power supply.**

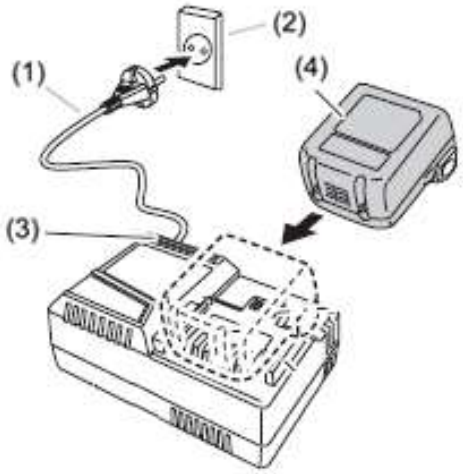
3 **Check the outlet (2).**
Do not use an outlet (2) that is loose or from which the power plug will fall out.

4 **Insert the power plug (1) into the outlet (2).**
The charging lamp (3) blinks red.

5 **Connect the battery (4) to the charger.**
When inserting a battery (4) in the charger, the charge indicator lamp will blink in blue.
When the battery becomes fully recharged, the charge indicator lamp will light in green.

6 **Disconnect the power plug (1) from the outlet (2).**

7 **Hold the charger firmly and remove the battery (4) from the charger.**



(1) Power Plug
(2) Outlet
(3) Charging Lamp
(4) Battery

(1) Charging indicator lamp indication

The indications of the charge indicator lamp will be as shown in Table, according to the condition of the charger or the rechargeable battery.

Indications of the charge indicator lamp				
Charge indicator lamp (RED / BLUE / GREEN / PURPLE)	Before charging	Blinks (RED)	Lights for 0.5 seconds. Does not light for 0.5 seconds. (off for 0.5 seconds) ▬ ▬ ▬	Plugged into power source
	While charging	Blinks (BLUE)	Lights for 0.5 seconds. Does not light for 1 second. (off for 1 second) ▬ ▬	Battery capacity at less than 50%
		Blinks (BLUE)	Lights for 1 second. Does not light for 0.5 seconds. (off for 0.5 seconds) ▬ ▬	Battery capacity at less than 80%
		Lights (BLUE)	Lights continuously ▬	Battery capacity at more than 80%
	Charging complete	Lights (GREEN)	Lights continuously ▬ (Continuous buzzer sound: about 6 seconds)	
	Overheat standby	Blinks (RED)	Lights for 0.3 seconds. Does not light for 0.3 seconds. (off for 0.3 seconds) ▬ ▬ ▬ ▬	Battery overheated. Unable to charge. (Charging will commence when battery cools)
	Charging impossible	Flickers (PURPLE)	Lights for 0.1 seconds. Does not light for 0.1 seconds. (off for 0.1 seconds) ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ (Intermittent buzzer sound: about 2 seconds)	Malfunction in the battery or the charger

(2) Regarding the temperatures and charging time of the rechargeable battery.
The temperatures and charging time will become as shown in Table.

Battery \ Charger		UC18YSL3
Charging voltage [V]		18
Type of battery		Li-ion
Temperatures at which the battery can be recharged		0℃ to 50℃
Charging time [min] (At 20℃)	BSL36A18	32
	BSL36B18	52

Charging a USB Device

⚠ WARNING

- **Check the USB cable to connect to the charger for damage before use.**
  There is a risk of smoke and fire if a damaged USB cable is used.
- **Cover the USB port with the rubber cover when not in use.**
  There is a risk of smoke and fire if dust or other substances are allowed to get in the USB port.

⚠ CAUTION

- **The charging time will increase if you charge the battery and a USB device at the same time.**
- **Charging may also stop temporarily when charging a USB device.**
- **There is a risk of unexpected accidents and a reduction in the service life (number of charging cycles) of the battery in the USB device.**
- **When an unexpected problem occurs, the data in a USB device connected to this product may be corrupted or lost. Always make sure to back up any data contained in the USB device prior to use with this product. Please be aware that our company accepts absolutely no responsibility for any data stored in a USB device that is corrupted or lost, not for any damage that may occur to a connected device.**
- **The charger may not be able to charge the USB device depending on its type.**

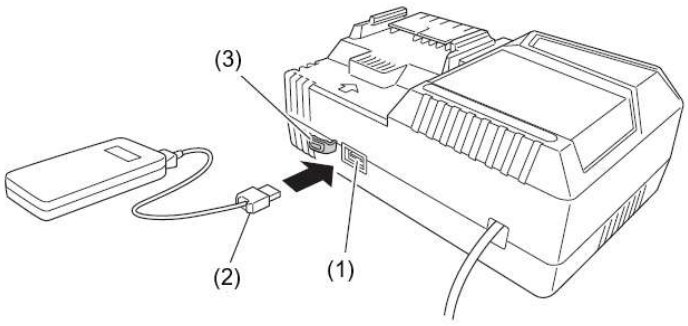
You can charge a USB device, such as a smartphone, with the charger.

1 **Select the charging method.**
To charge the USB device with a battery, connect a battery to the charger.
To charge the USB device from the outlet, insert the power plug into the outlet.
The USB device and battery can also be charged at the same time.

2 **Connect the USB cable (2) of the USB device to the USB port (1) on the charger.**
Peel off the rubber cover (3) on the charger and insert the USB cable (available commercially) fully into the USB port.

3 **Cover the USB port (1) with the rubber cover (3). If the charger was connected to the outlet, disconnect the power plug.**

(1) USB Port
(2) USB Cable
(3) Rubber Cover



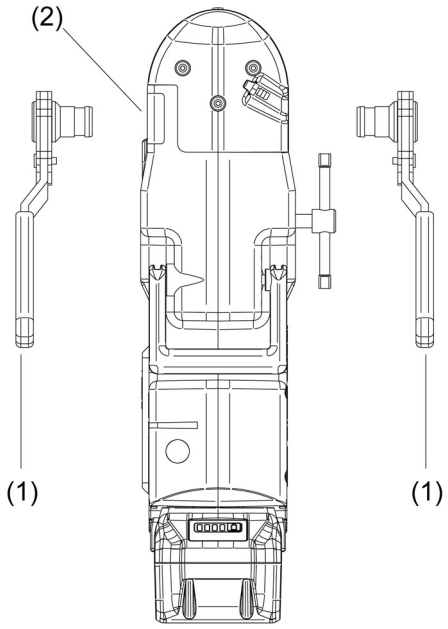
6 Preparation

⚠ WARNING

- **Prepare the tool for operation with the battery removed.**

Attaching the Feed Handle Ass'y

1 **Attach the included feed handle (1) to the pinion shaft (2) on the side of the main unit.**
The feed handle can be attached to either side.



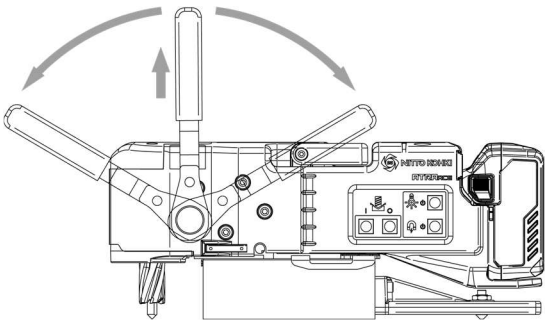
(1) Feed Handle
(2) Pinion Shaft

Adjusting the Position of the Handle

The handle socket section is an index plunger. This allows the position of the handle to be adjusted while attached.

1 **Pull the handle.**
The handle spins freely around the handle shaft.

2 **Turn the handle in the desired direction and adjust the handle to the position at which to lock it.**
The position of the handle can be adjusted without moving the cutter.
The lock position has a pitch of 60°.

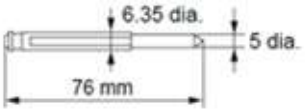
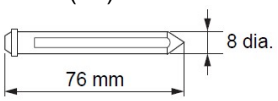


Combinations of Cutters and Pilot Pin

⚠ CAUTION

- **Do not use a cutter other than JETBROACH one-touch type cutters.**
- **This tool is exclusively for JETBROACH 25L cutters. Other cutters cannot be used.**
- **For effective cutting and safety, do not use worn or damaged cutters.**
- **Use only the combinations of cutters and pilot pins given in the following table. Do not use any other combination of cutter and pilot pin.**

Select the pilot pin that matches the cutter to use.
The corresponding pilot pin differs according to the type, diameter, and length (depth) of the cutter. Use caution as it may not be possible to eject the slug after cutting or the cutter may be damaged due to an inability to supply cutting oil if the combination of cutter and pilot pin is incorrect.

Cutter		Pilot pin
Type	Diameter	
25L	12 to 17 mm dia.	06025S  (TK01710)
25L	17.5 to 27 mm dia.	08025 (A1)  (TK01486)

Attaching the Cutter

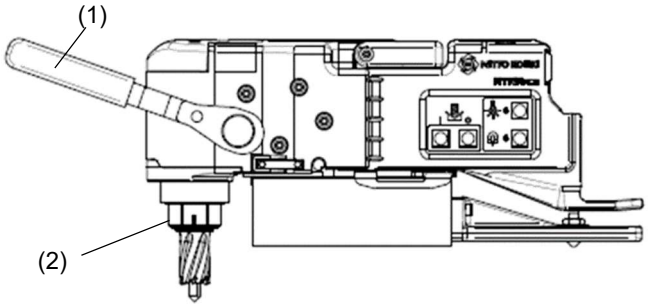
⚠ WARNING

- **Do not touch the cutter under any circumstances when the battery is attached to the tool.**
  Remove the battery when changing the cutter.

⚠ CAUTION

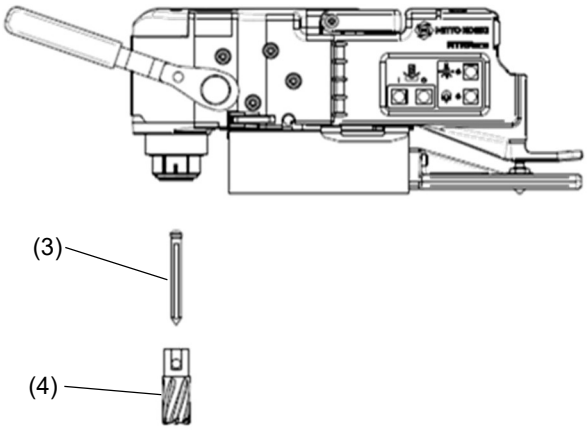
- **Use the correct combination of cutter and pilot pin.**
- **Be careful not to allow chips to get in the insertion point for the cutter. If chips get in the insertion point for the cutter, completely clear those chips before attaching the cutter.**

1 **Turn the feed handle (1) and lower the arbor (2).**



(1) Feed Handle
(2) Arbor

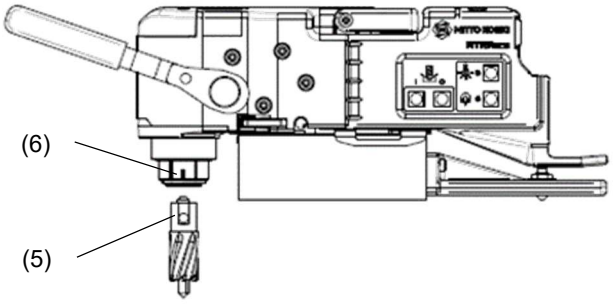
2 **Insert the pilot pin (3) that matches the size of the cutter (4) to use into that cutter.**



(3) Pilot Pin
(4) Cutter

3 **Match the indentation (5) on the cutter to the position of the white line on the sleeve (6) and then insert the cutter.**

When the cutter is fully inserted the tool, the sleeve (6) turns to the right and locks with a click.
If the cutter does not go into the tool, turn the sleeve (6) to the left and then insert the cutter again.



(5) Indentation
(6) Sleeve

Removing the cutter

1 **Turn the sleeve to the left and remove the cutter.**

Preparation of Cutting Oil

Observe the following precautions when using the cutting oil.

⚠ WARNING

- **Always read the instruction manual and labels before use.**
- **Do not use the cutting oil for any purpose other than cutting.**
- **Do not ingest the cutting oil. The cutting oil is toxic if ingested.**
- **The cutting oil may cause irritation if it comes into contact with the eyes and skin.**
  When handling the cutting oil, wear protective gear such as goggles, gloves, and protective clothing.
- **Breathing cutting oil mist and fumes may harm one's health.**
  Always use a breathing apparatus when handling the cutting oil.
- **Store the cutting oil out of the reach of children.**
- **Do not weld, heat, drill, or cut the container of cutting oil because leftover cutting oil may explode or catch fire.**
- **Do not expose the container to positive or negative pressure because there is a risk of rupture.**
- **If there is a fire, cut off the supply of cutting oil to the fire, and extinguish the fire from upwind using a CO2 or dry chemical fire extinguisher.**

⚠ CAUTION

- **Do not use the cutting oil for any model other than the CLO-2725.**
- **Wash your hands carefully after handling the cutting oil.**
- **Do not eat, drink, or smoke when using cutting oil.**
- **If work clothes become soiled, do not take them outside the work area.**
- **Avoid releasing cutting oil into the environment.**
  If cutting oil leaks, use sand, sawdust, or rags, etc. to soak it up and collect it in an empty container. Wear protective gear when working.

First aid

- **If cutting oil is inhaled, move to a location with fresh air, keep warm with blankets, and rest. If there is a problem, seek medical attention.**
- **If cutting oil gets on the skin, wash it off completely with a large amount of water or warm water and soap.**
  If skin irritation or a rash occurs, the appearance of the skin changes, or pain continues, seek medical attention.
  Remove soiled clothing. Wash the clothing if it will be reused.
- **If cutting oil gets in the eyes, immediately wash the eyes for 15 minutes or longer with clean, running water.**
  If wearing contact lenses, remove the contact lenses and immediately seek treatment from an ophthalmologist.
- **If cutting oil is swallowed, rinse out the mouth but do not induce vomiting. Immediately seek medical attention.**
- **If there was exposure to cutting oil or the concern there was exposure, seek medical attention.**

Disposing of cutting oil and containers

- **You are required to use the disposal methods dictated by all laws and regulations. Follow the laws and regulations and dispose of cutting oil and containers in an appropriate manner.**
  If anything regarding disposal is unclear, consult with the retailer where you purchased the tool.

Storage

- **Close the container after use to prevent contamination by dirt and moisture.**
- **Store the container away from flame and heat sources in a location between 0 and 40°C that is not exposed to direct sunlight and rain.**
- **Lock the storage location.**
- **Do not store cutting oil together with oxidizing substances, organic peroxide, or other similar substances.**

Others

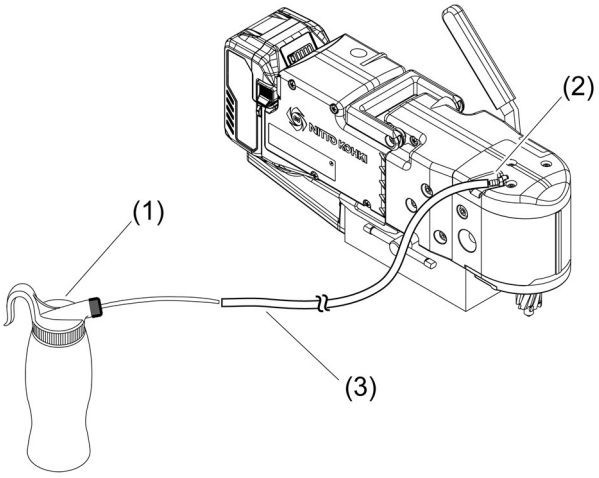
- **When transferring cutting oil to another container, post the names of the chemicals that are used and the label contents at the worksite and store the instruction manual so that it can be accessed at any time.**
  If detailed information is required, request the Material Safety Data Sheet from NITTO KOHKI.
- **The information in this manual was created based on the materials and information available at that time. This information may be revised based on new knowledge.**
  These precautions cover normal handling of cutting oil. For special handling of cutting oil, implement safety measures suited to the application and usage method.
- **This content is provided for informational purposes only. NITTO KOHKI does not guarantee or bear any responsibility for this information.**

⚠ CAUTION

- **Use the CLO-2725 special cutting oil.**
  The battery may be damaged if cutting oil other than the included CLO-2725 special cutting oil gets on the battery.
- **Dilute the cutting oil 10x with tap water.**
  Do not use well water.

1 **Fill the included oiler (1) with cutting oil.**

2 **Connect the tube 4×7 (3) to the hose nipple (2) on the tool.**



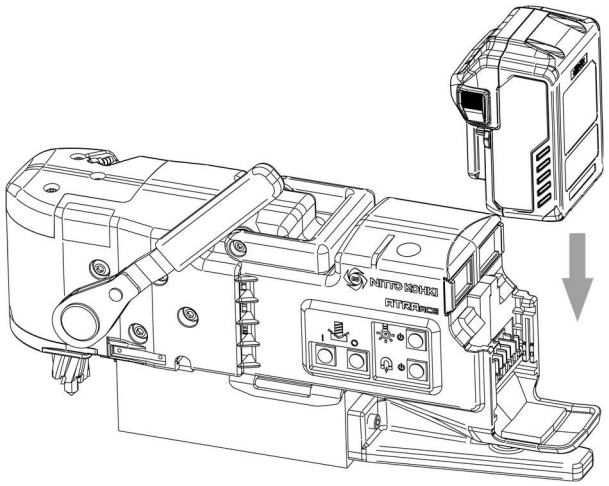
(1) Oiler
(2) Hose Nipple
(3) Tube 4×7

Attaching the Battery

⚠ WARNING

- **Before attaching the battery, check for chips and moisture on the battery and tool.**
- **Please use the battery (BSL36A18, BSL36B18) and charger (UC18YSL3) manufactured by Koki Holdings Co., Ltd.**
  The AC/DC adapter ET36A manufactured by Koki Holdings Co., Ltd., cannot be used.
- **Ensure that the battery is properly attached.**

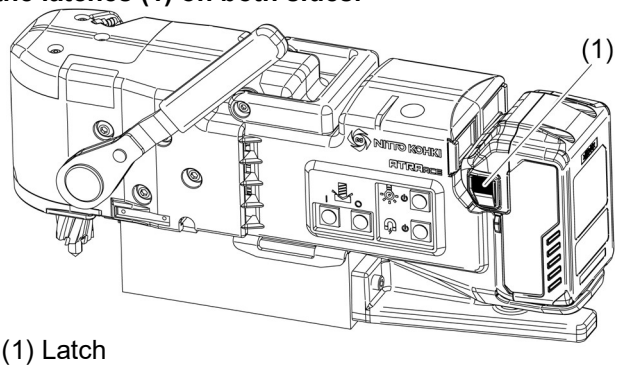
1 **Attach the battery along the grooves in the main unit.**
Push the battery until it clicks and confirm that it does not come off.



Removing the Battery

1 **Release the magnetic force of the magnet in a stable location.**

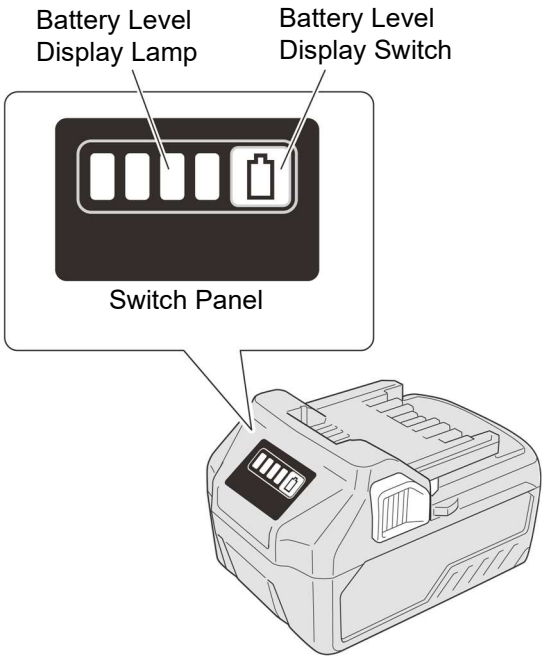
2 **Remove the battery by sliding it up while pressing the latches (1) on both sides.**

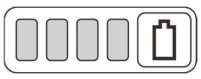
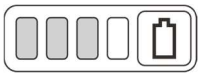
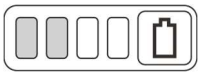
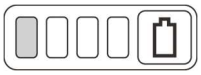
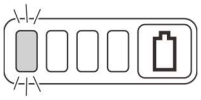
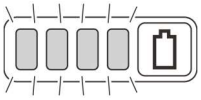
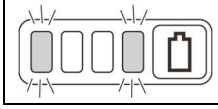


(1) Latch

Checking the Battery Level

Press the battery level display switch on the battery to light the lamp. You can check the battery level with this lamp.
The lamp goes out three seconds after the battery level display switch is pressed.
The battery level display varies due to the ambient temperature and characteristics of the battery. The battery level display on the battery may differ from the battery level display function on the tool and the battery level display on the charger. Use the battery level display as a rough guide to the battery level.



Lamp status		Guide to battery level
	Lights	More than 75%
	Lights	50 to 75%
	Lights	25 to 50%
	Lights	Less than 25%
	Flashes	0%
	Flashes	Output stopped due to high temperature *1
	Flashes	Output stopped due to failure *2

*1 Remove the battery from the tool and allow it to cool sufficiently.
*2 The battery may have failed. Consult with the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.

7 Basic Operation

⚠ WARNING

- **Do not wear gloves when drilling.**
  There is a risk of hands becoming entangled in the rotating cutter and chips.
- **Always use eye protection while working.**
- **Steam is produced by the heat of cutting when drilling. Wear a mask.**
- **Do not operate the switches on the electric drill with a sharp object, such as a screwdriver.**
  This can break the switches causing a failure.
- **Use the included lashing strap and secure the tool to the workpiece when working on a surface that is not level or when working in a high location.**
- **Set the stabilizer correctly.**
  The role of the stabilizer is to help use the holding power of the magnet effectively. Adjust the tool so that the stabilizer makes contact with the workpiece after the magnet has attached to the workpiece. Use caution so that the stabilizer does not extend too far from the workpiece and the magnet lifts up.
- **The holding force of the magnet weakens when the battery level is low.**

Starting and Stopping

⚠ CAUTION

- **The electric drill turns when the magnet is attached to the workpiece.**
  The electric drill switches cannot be used when the magnet is not attached to the workpiece.

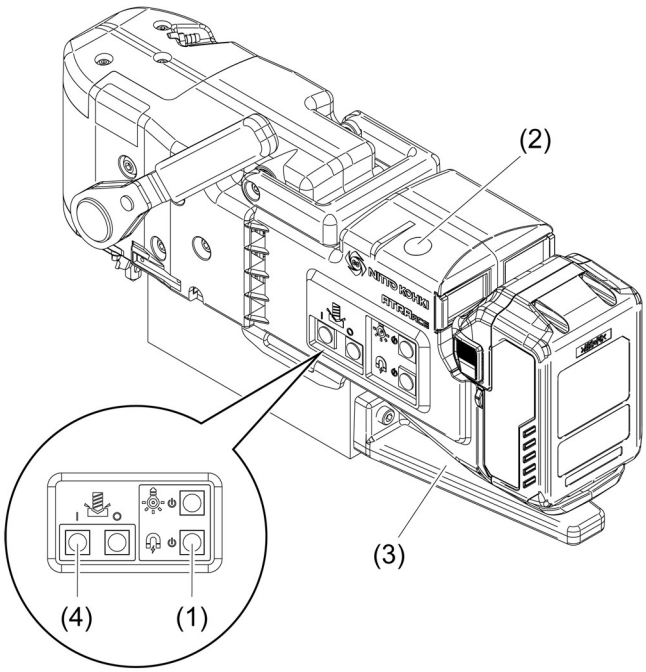
Starting the tool

1 **Attach the battery.**
Refer to "Attaching the Battery" (p. 24).
First the LED is lit in white and then the battery level is displayed. (p. 15)

2 **Press the magnet switch (1).**
The magnet attaches to the workpiece and the battery removal warning LED (2) on the rear of the main unit is lit.
The LED displays whether the electric drill can be used. (p. 16)

3 **Set the stabilizer (3).**
Adjust the tool so that the stabilizer makes contact with the workpiece after the magnet has attached to the workpiece. Use caution because the magnet will lift up if the stabilizer extends too far from the workpiece.

4 **Press the start electric drill switch (4).**
The electric drill turns.
The overload status is displayed on the LED. (p. 15)



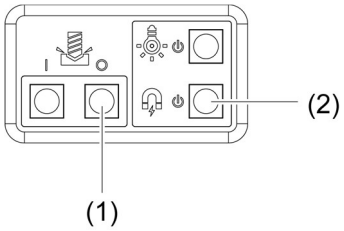
(1) Magnet Switch
(2) Battery Removal Warning LED
(3) Stabilizer
(4) Electric Drill Switch

Stopping the tool

1 **Press the stop electric drill switch (1).**
The electric drill stops.
The electric drill can also be stopped by pressing any switch other than the light switch.

2 **Press and hold the magnet switch (2).**
The LED flashes blue and then goes out.

3 **Release the magnet switch (2).**
The magnetic force of the magnet is released.

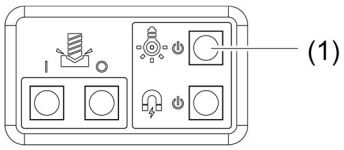


(1) Stop Electric Drill Switch
(2) Magnet Switch

Using the Light

1 **Press the light switch (1).**
The LED at the front of the magnet is lit to illuminate the cutter.

2 **Press the light switch (1).**
The light goes out.



(1) Light Switch

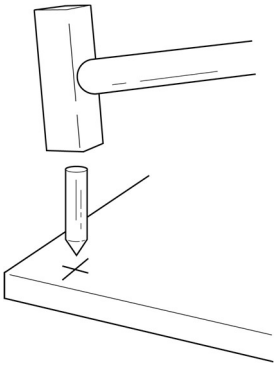
Drilling Procedure

⚠ CAUTION

- **If foreign objects are stuck between the attachment surface of the magnet and the workpiece, the main unit may twist.**
- **The electric drill will not operate if the magnetic force cannot be maintained, due to a reason such as holes in the attachment surface of the magnet or workpiece.**
- **Do not remove the battery during use.**
  The magnetic force will be eliminated which may lead to accidents such as the workpiece falling.

Drilling

1 **Punch a mark into the workpiece.**
Hit the workpiece vertically with force.

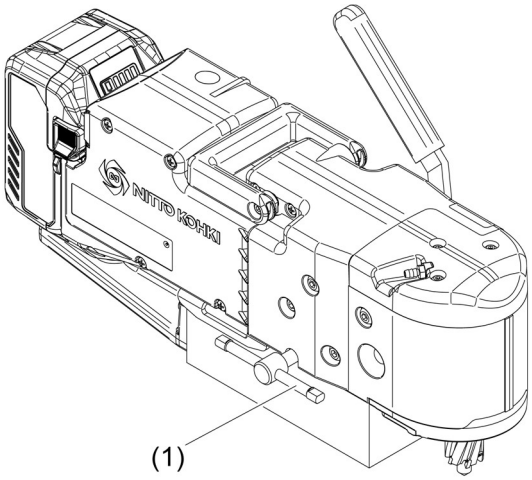


2 **Check attachment surface of the magnet and the surface of the workpiece.**
If there is a gap between the attachment surface of the magnet and the workpiece, the holding force of the magnet will weaken.
Do not allow foreign objects, such as chips, to become stuck between the surfaces, and ensure that surfaces are flat and free from corrosion.

3 **Move the main unit and align the tip of the pilot pin with the punch hole.**

4 **Press the magnet switch.**
The magnet attaches to the workpiece and the LED displays whether the electric drill can be used.

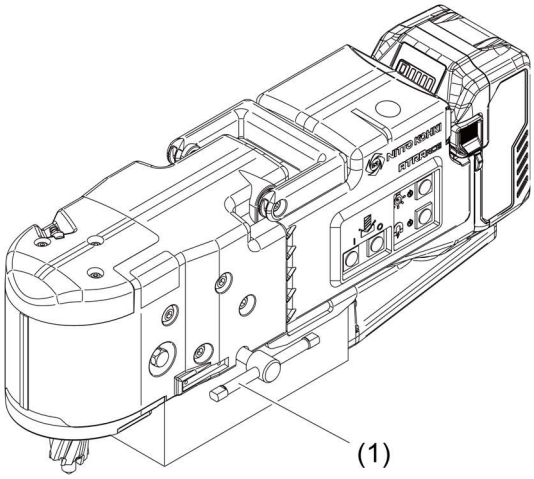
5 **Loosen the lock screw (1) on the sides of the main unit.**
You can make fine adjustments to align the pilot pin with the punch hole by sliding the main unit on the magnet about 10 mm to the front, back, right, and left.



6 **Tighten the lock screw to secure the tool.**
The lock screw is tightened sufficiently by hand. Do not make the lock screw tighter by using a hammer or other tool.
The lock screw can be mounted to either side.

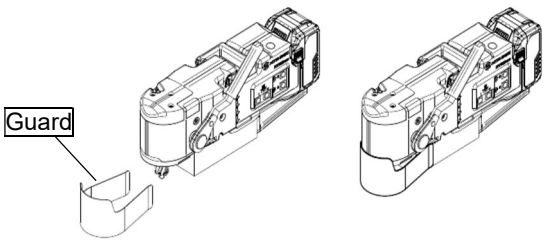
7 **Inject cutting oil from the Oiler.**
Keep the cutter wet to prevent chips from burning.

8 **Press the start electric drill switch.**
The electric drill turns.
The load during drilling is displayed on the LED.
(p. 15)



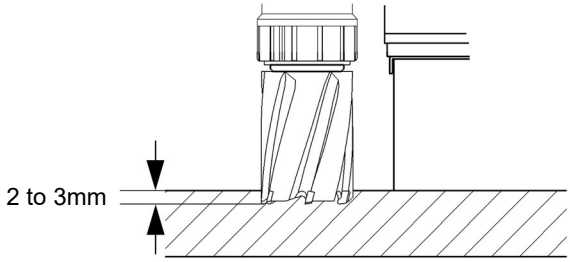
(1) Lock Screw

9 **Mount the Guard as shown in the figure.**

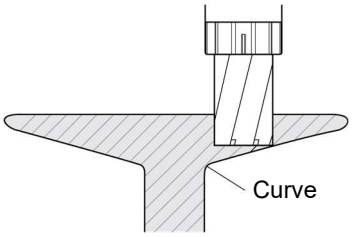


10 **Turn the handle to lower the cutter and make the hole.**

Press the feed handle ass'y lightly for 2 to 3 mm at the start of the hole to drill slowly.



When drilling in angles, channels, H-beam steel, and other materials, the tip of the cutter may break when the hole exits at a diagonal surface or curved surface. Feed the cutter slowly at the start and exit of the hole.



Finishing drilling

⚠ WARNING

- **When finished drilling, be careful of the slug flying out of the cutter.**
  The slug is hot and sharp. Do not touch it with bare hands.
- **When work must be done in high locations, make sure there is nobody underneath the work area.**
  There is a risk of the tool falling and the slug flying out of the cutter. Make sure there are no people in the area under the tool in case the slug falls out.

⚠ CAUTION

- **Press the stop electric drill switch, wait for the electric drill to stop completely, and then release the magnetic force of the magnet.**
- **Release the magnetic force of the magnet after drilling is finished.**
  If the magnet is left activated, the service life of the magnet may be reduced, or the battery may discharge and eliminate the magnetic force.

1 **Turn the handle to raise the cutter.**

2 **Press the stop electric drill switch.**
The electric drill stops if any switch other than the light switch is pressed.

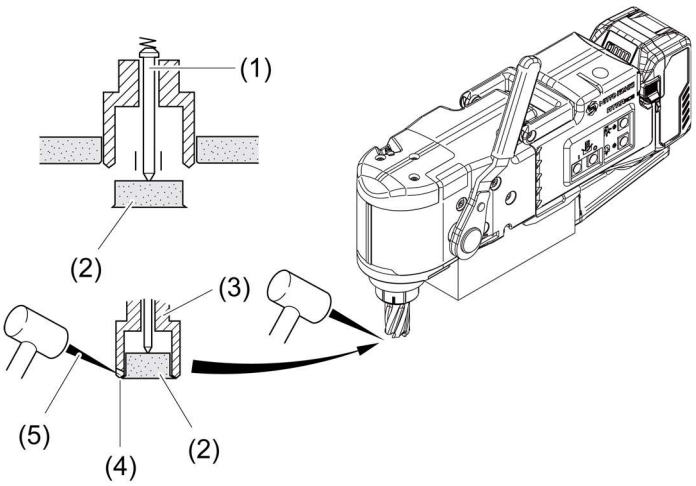
3 **Press and hold the magnet switch, and then release it.**
The magnetic force of the magnet is released.

Removing the slug

⚠ CAUTION

- **Do not drill the next hole if the slug remains in the cutter.**
- **The slug should be ejected when the handle of the tool is turned, but do not force the handle to turn if the slug cannot be ejected.**
  There is a risk of failure.

When finished drilling, the pilot pin (1) is pushed by a spring which causes the slug (2) to fly out.
The next hole cannot be drilled if the slug is stuck inside the cutter (3). Remove the slug by gently tapping the collar (4) of the slug with a needle bar (5) or other tools.



(1) Pilot Pin
(2) Slug
(3) Cutter
(4) Collar
(5) Needle Bar

Removing chips

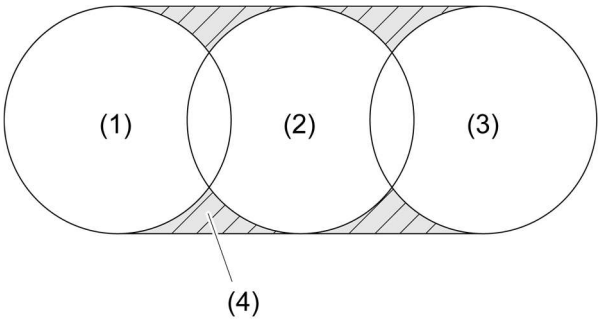
⚠ WARNING

- **Chips are sharp. Do not remove chips with your bare hands.**
  Use a tool such as needle-nose pliers to remove the chips.

Drilling Elongated Holes

1 **Drill the holes in (1)→(2)→(3) order in the diagram.**
Drill (2) and (3) gently without pressing hard.
Drill the next hole by sliding the pilot pin while touching the work material.

2 **Remove the excess (4) with a file or other tool.**

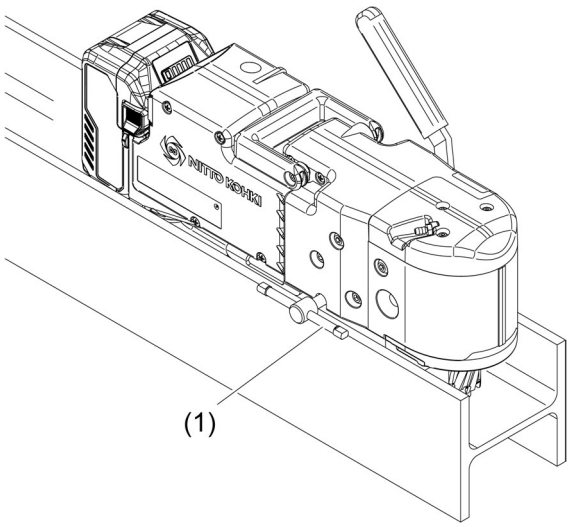


Drilling H-Beam Steel

1 **If the lock screw (1) hits the H-beam, remove the lock screw (1).**

2 **Secure the main unit by attaching the included Hex. Socket Set Screw 8×28.**

3 **When finished drilling, attach the lock screw.**



(1) Lock Screw

8 Troubleshooting

If a problem cannot be resolved by troubleshooting, contact the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.
The battery may also be the cause of the problem, so bring the charger and battery together at that time.

Symptoms	Cause	Solution
The charging lamp on the charger repeats rapidly flashing purple and charging does not start.	The battery has not been completely connected to the charger.	Completely connect the battery to the charger.
	Foreign objects in battery mount or terminals.	Remove the foreign objects.
The charging lamp on the charger flashes red and charging does not start.	The battery has not been completely connected to the charger.	Completely connect the battery to the charger.
	The battery is hot.	Charging starts automatically after a short time when the battery cools, but this may reduce the service life of the battery. We recommend you cool the battery in a shaded location with good ventilation before charging the battery.
Operating time of the battery is short even after a full charge.	Service life of the battery.	Replace the battery with a new battery.
Charging takes a long time.	Temperature of charger and battery or ambient temperature is low.	Charge the battery in a warm location such as indoors.
	The internal temperature of the charger is high because the ventilation holes are blocked.	Do not allow the ventilation holes to be blocked.
	The cooling fan is not operating.	Request repairs at the retailer or the nearest office of Nitto Kohki Group.
The USB power lamp goes out and the USB device stops charging.	The battery became low.	Switch to a charged battery.
		Insert the power plug of the charger into a 100-V outlet.
The USB power lamp does not go out even though the USB device has finished charging.	The USB power lamp is lit in green when a USB device can be charged.	This is not a failure.
The charging status of the USB device is unknown.	The USB power lamp does not go out even when finished charging.	Check the charging status on the USB device.
USB device charging has stopped temporarily.	The power plug of the charger was insert into an outlet while charging the USB device with a battery.	This is not a failure. USB device charging stops for about five seconds while the charger determines the power supply to use.
	A battery was connected to the charger while charging a USB device using the 100-V outlet as the power supply.	
USB device charging has stopped temporarily while charging the battery and USB device simultaneously.	The battery became full.	This is not a failure. USB device charging stops for about five seconds to check if battery charging has finished normally.
Attempted to charge the battery and USB device simultaneously but USB device charging did not start.	Extremely low battery level.	This is not a failure. USB device charging starts when the battery is charged to a certain level.

9 Maintenance and Inspection

⚠ WARNING

- **When performing maintenance and inspections, always turn OFF the switch and remove the battery from the tool.**
- **Disconnect the power plug of the charger from the outlet.**
- **Do not repair the tool yourself. Repairing the tool by yourself may damage the tool and lead to the risk of personal injury.**
- **If you are unclear about how to use the tool, contact the retailer or NITTO KOHKI.**

⚠ CAUTION

- **Periodically inspect the tool to ensure that mounting screws of each section are not loose.**
  There is a risk of accident and injury if the tool is used with loose screws. If an abnormality is found, request service from the retailer where you purchased the tool or the nearest office of Nitto Kohki Group.

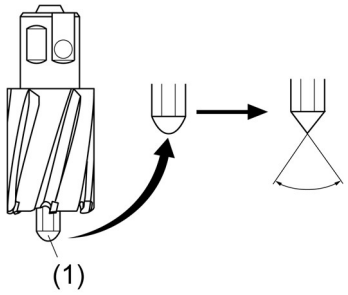
The status of the tool can be identified by the color of the LED. For corrective actions for errors, refer to "Safety Functions and Alarm Detection" (p. 16).

Inspection

Inspection locations	Caution
Cord	Failure to perform inspection could result in fire or electric shock. ● Check if the cord is damaged and if found stop using the tool. ● Do not store the cord by wrapping it around the main unit. If it has been stored with the cable wrapped around the main unit, immediately change the storage method.
Main unit	● Check for damage, cracks, or breaks on the main unit. ● Check the screws on the main unit. If screws are loose, tighten them.
Terminals	Failure to perform inspection could cause a failure. ● If chips and dust have accumulated on the main unit or battery terminals, clean them off. Inspect regularly before, during, and after work.
Maintenance	● If the main unit is stained, use a cloth soaked in soapy water and wrung out well to wipe off the stains. The tool does not have a waterproof structure and if water enters inside it could fail. ● Because the main unit is made of plastic, the following chemicals cannot be used. Acetone, benzene, thinner, ketone, ether, trichloroethylene, and other similar chemicals

Pilot Pin

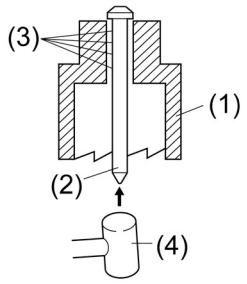
Drill precision will become poorer when the tip of the pilot pin (1) becomes rounded. Inspect the pilot pin before use and replace it if the tip is round.



(1) Pilot Pin

If the Pilot Pin Cannot Be Removed

Remove the pilot pin (2) when changing the cutter (1).
If the pilot pin cannot be removed because the space between the cutter and pilot pin is clogged with chips (3), remove the pilot pin while lightly tapping its tip with a wooden mallet (4) or other tools.



(1) Cutter
(2) Pilot Pin
(3) Chips
(4) Wooden Mallet

Cleaning the Filters

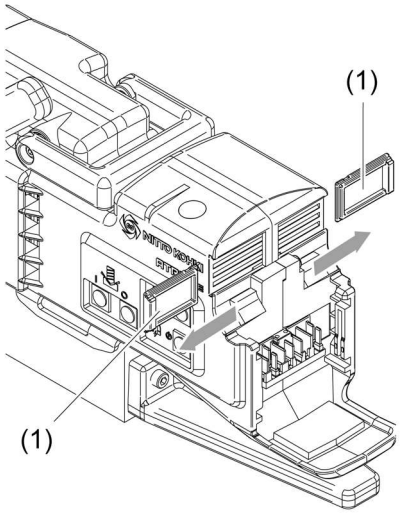
⚠ CAUTION

- **Dust and debris accumulating inside the motor will cause a failure.**

Remove the filters after use and clean off any dust or debris on the mesh.

1 **Remove the filters (1) by sliding them in the directions shown in the figure.**

2 **Attach the filters (1) after cleaning.**



(1) Filter

Storing the Tool

Store the tool according to the warnings and cautions.

⚠ WARNING

Li-ion

- **When the tool is not in use, store out of the reach of children.**

⚠ CAUTION

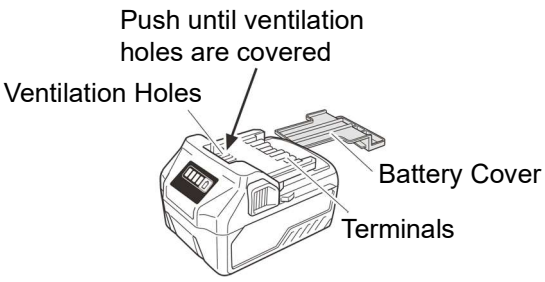
- **When the tool is not in use, store in a place with low humidity.**
- **Do not store the tool in a location where the temperature changes drastically or where exposed to direct sunlight.**
- **Do not store the tool in a location with volatile substances that may catch fire or explode.**

Storing the Battery

Store the battery according to the following warnings and cautions.

⚠ WARNING

- **There is a risk of short-circuit causing heat generation, smoke, and fire if conductive foreign objects get in the terminals of the battery (lithium-ion battery).**
- **Do not store the battery together with conductive chips and wire materials such as nails, wire, and copper wire.**
- **To prevent short-circuits, attach the battery to the tool or store the battery with the battery cover attached.**



⚠ CAUTION

- **When storing the battery, store it with a full charge.**
  If the battery is stored for three months or longer with a low battery level, the battery will degrade which may cause the operating time to shorten and an inability to charge the battery.
  A battery with a shortened operating time may recover its operating time through repeated charging and use. The battery has reached its service life if the operating time is extremely short even when repeatedly charged and used. Please purchase a new battery.
- **If the battery is not used for one year or longer, charge the battery once every six months.**

Disposal

- Separate power tools, accessories, and packing materials for environmentally-friendly recycling.
- Do not dispose of the power tool as household garbage.
- When disposing of electric tools, hand them over to the nearest office of Nitto Kohki Group.
- When disposing of the battery charger, hand them over to the nearest dealer of Koki Holdings Co., Ltd.
- Lithium-ion batteries are required to be recycled; never discard a lithium-ion battery in the trash.
- Please contact the nearest dealer of Koki Holdings Co., Ltd., or the community recycling program for information on properly disposing of lithium-ion batteries.

Li-ion

Optional Parts

NITTO KOHKI Brand Cutting Oil

⚠ CAUTION

- **Use the CLO-2725 special cutting oil.**
  The battery may be damaged if cutting oil other than the included CLO-2725 special cutting oil gets on the battery.
  Do not use a damaged battery.

Part no.	Part name
TB11454	CLO-2725 Special Cutting Oil 0.5L

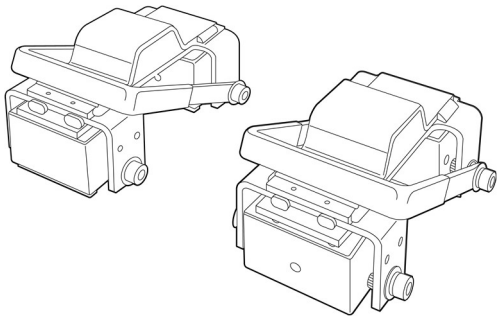
Pilot Pin

Part no.	Part no.	Applicable cutter
TK01710	Pilot Pin 06025S	Jetbroach One-Touch Type 12 to 17 mm dia.
TK01486	Pilot Pin 08025 (A1)	Jetbroach One-Touch Type 17.5 to 27 mm dia.

Auxiliary Magnet Ass'y

Use this part to prevent the tool from falling when working on a surface that is not level or when working in a high location. (p. 6)

Part no.	Part name
TB04374	Auxiliary Magnet Ass'y



Cutter

JETBROACH One-touch Type 25 mm Depth **(metric sizes)**

Part No.	Diameter × Depth	Part No.	Diameter × Depth	Part No.	Diameter × Depth	Part No.	Diameter × Depth
TK01148	12 × 25	TK01712	18 × 25	TK01719	21.5 × 25	TK01726	25 × 25
TK01149	13 × 25	TK01713	18.5 × 25	TK01720	22 × 25	TK01727	25.5 × 25
TK01150	14 × 25	TK01714	19 × 25	TK01721	22.5 × 25	TK01728	26 × 25
TK01151	15 × 25	TK01715	19.5 × 25	TK01722	23 × 25	TK01729	26.5 × 25
TK01152	16 × 25	TK01716	20 × 25	TK01723	23.5 × 25	TK01730	27 × 25
TK01153	17 × 25	TK01717	20.5 × 25	TK01724	24 × 25		
TK01711	17.5 × 25	TK01718	21 × 25	TK01725	24.5 × 25		

⚠ CAUTION

- **If a cutter requires resharpening, contact the retailer where you purchased the cutter or the nearest office of Nitto Kohki Group.**