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Rebar Cutter Instructions & Parts Lists DC SERIES PORTABLE REBAR CUTTERS

CORDLESS MODELS
• **DCC-1636BHL** • **DCC-2036BHL**



**IMPORTANT: READ THESE INSTRUCTIONS CAREFULLY
BEFORE ATTEMPTING TO USE YOUR TOOL**

SERVICE NOTE

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. For a Service Repair Center nearest you please call (800) 992-3833 or go visit us online:

www.bnproducts.com

GENERAL SAFETY PRECAUTIONS

Use rebar cutters on maximum Grade 60 steel reinforcing bars only. These tools are not to be used in cutting other kinds of metal or materials. Do not cut ungraded rebar.

IMPORTANT:

Do not attempt to cut rebar by locking the off/on switch to the on position. This locking procedure is to be used only to warm the tool in cold climates or used with our hands free electrical box and foot operated switch. This is a safety issue and may cause damage to your rebar cutter. Always pull the on/off switch by hand for each individual cut. A foot operated switch and special electrical box are available if you want to use these cutters as production tools. Contact your local distributor or BN Products

RESTRICT USE TO DESIGNATED MATERIALS

There is always a chance that the cut end may shoot out, especially if less than 30cm (1 foot) in length. Exceeding designated material specifications greatly increases this risk and will also damage the tool. Do not attempt to cut rebars harder, thicker or thinner than specified.

USE EYE PROTECTION

Wear safety goggles, safety glasses with side shields or a face shield when using cutter.

PROVIDE SAFETY BARRIERS

Erect safety screens to protect coworkers from possible flying ends. Place a safety screen under the rebar when working in high places.

EXERCISE PROPER CONTROL

Hold cutter firmly and maintain proper footing and balance. Do not overreach. When working in a high place, secure cutter to scaffolding with a safety rope. Check that power cord is not fouled and keep cord away from sharp edges and heat. Check that all adjusting wrenches have been removed before using cutter.

GUARD AGAINST ELECTRIC SHOCK

To avoid possible shock, do not handle cutter with wet hands or use cutter in the rain or damp places. Be aware of all power lines, electric circuits and other hazards that may be contacted, especially those that are below the surface or otherwise hidden from view.

MAINTAIN CUTTER WITH CARE

Inspect cutter before each application. Faulty or loose cutter blocks could result in personal injury. Keep handle dry, clean and free from oil and/or grease. Keep housing and piston free of dirt and iron filings. Check that no screws or bolts are loose or missing. Follow instructions for maintenance. Inspect switch, cord, plug and any extension cable at regular intervals. It is a good idea to inspect the housing for any cracks before operating.

DO NOT EXCEED MAXIMUM CUTTING PRESSURE BY ADDING TO OR MODIFYING THE HYDRAULIC PUMP.

BLEEDING YOUR PORTABLE REBAR CUTTER

You may have to bleed the hydraulics on your cutter if the tool runs unusually slow or doesn't have the pressure to cut normally. Do not run tool with low or no oil. For best results please follow these directions:

1. If piston is still moving, run the tool for 2 minutes to warm the oil inside. If the piston is not moving, add oil before warming up for 2 minutes.
2. When the oil is warm, run the piston out just before it returns and stop.
3. Remove the oil plug and top it off with oil.
4. Make a seal with your thumb over the oil plug opening.
5. Run the tool so that it makes a complete cycle.
6. When the piston is completely retracted in the open position, gently roll your thumb to let the unwanted air escape.
7. Repeat step #5 and #6 at least three times.
8. Add oil only when the piston is at least halfway out.
9. If you have to add additional oil, repeat #5 and #6.
10. Replace the oil plug and tighten it.
11. Make three or four cuts with rebar. The machine should now be working properly. Make sure that you observe exactly at what point the rebar is actually breaking.
12. Pinch a piece of rebar stopping just before it actually breaks.
13. Remove the oil plug again and top off the reserve one more time.
14. Replace the oil plug and tighten
15. The operation is now complete.

We recommend the following; 20-weight Non-Detergent Hydraulic Oils for use with our tools (anti-foam anti-abrasion): Tel-lus 68 (Shell), Rando HD 68 (Texaco) or Chevron AW 68 (Chevron). Hydraulic oil can also be ordered in quart containers from your Diamond Tool Distributor.

OPERATING INSTRUCTIONS

CAUTION: Indicates hazard that could result in minor personal injury and/or product damage.

CARE: Indicates hazard that will result in product damage.

PRE-USE CHECKS

1. Check oil level. (See Maintenance)
2. Check condition of cutter blocks and tightness of cutter block bolts. (See Maintenance) - CHECK FOR CRACKS IN HOUSING

CAUTION: Using loose or cracked cutter blocks may result in injury to operator as well as damage to the tool.

3. Check that the power source is appropriate to the cutter.
CARE: If voltage is too high, the motor will burn out. If voltage is too low, insufficient power will be generated. Never use DC current.
4. Check that power supply is properly grounded.
CAUTION: Failure to ground power supply may result in electric shock to operator (DC-16LZ, DC-16W and DC-32WH have double-insulated motors and do not require grounding.)
5. Check that cord is undamaged and that plug is not loose.
CAUTION: Cut or abraded covering could result in a short and Electric shock to operator.
6. If an extensions cable is to be used, make sure that it is undamaged and that it is the proper wire gauge thickness for the length. See table below.
7. Before plugging in the tool, make sure that the switch lock is OFF.
CAUTION: If switch lock is ON, cutter will start as soon as it is plugged in. To disengage lock, pull trigger-switch and press lock-button, which will pop out.

Length	110/115 50/60 Hz Cable Size (AWG)
Up to 15mm (50 ft.)	14
Up to 30mm (100 ft.)	12
Up to 45mm (150 ft.)	10

WARM-UP

In cold weather you should warm up the tool unit for 30-60 seconds so that the hydraulic oil reaches the proper viscosity. Pull trigger-switch to extend piston and release when it has reached its full stroke. Repeat 15-20 times.

STOPPER BOLT ADJUSTMENT

THE STOPPER BOLT IS PROBABLY THE MOST IMPORTANT PART OF YOUR PORTABLE CUTTER.

The adjustable stopper functions to maintain the rebar in the correct position during cutting and must be properly set for each size of rebar before use.

1. Screw in stopper to provide sufficient clearance for rebar.
2. Insert rebar fully into U-shaped support. Make sure that rebar is resting on the base of the support.
3. Keeping rebar at right angles (90 degrees) to front cutter block, screw out stopper until it is just touching the rebar. Once set, the stopper needs no further adjustment while cutting rebar of the same diameter, but must be reset for a different size rebar.

CAUTION: Failure to correctly set the stopper bolt will result in excessive wear of cutter blocks and may cause cut end to fly out. This will also lead to piston and cylinder damage.

CUTTING

1. Insert rebar between stopper and front cutter block, making sure that it is properly seated in U-shaped support.
2. Pull trigger-switch and keep depressed while piston advances and rebar is cut. (If switch is released at an intermediate point, piston will stop.)
3. When cut is completed, release switch. Piston retracts automatically (Note that switch cannot be reactivated until piston has fully retracted.)

POINTS OF ATTENTION

1. Be especially careful when cutting off short lengths (30cm/12" or less) as the cut end tends to fly out.
CAUTION: Flying ends are a hazard to all personnel in the vicinity. Erect safety screens.
2. Do not cover air vents or operate the tool on dirt – use a plywood base under the rebar cutter to keep armature and fan clean
CARE: If the vents are covered, the motor will overheat and may burn out.
3. If hydraulic oil exceeds 70 degrees C (158 degrees F) in temperature, power will drop. Allow unit to cool before resuming operation. (Be particularly careful in summer, when the aluminum pump case heats up quicker.)
4. If a drop in power is observed and motor is unusually hot, check carbon-brushes. (See maintenance)
5. If piston should ever fail to retract completely, push rear cutter block backwards to manually retract piston or check under piston to remove any debris keeping the piston from retracting.
CAUTION: Use a rebar or flat metal bar for this purpose. Never push cutter block with any part of the hand, even if gloved.

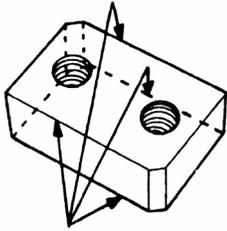
NOTE: Rebar cutters manufactured in after 2007 have a safety release valve for retracting the piston if it doesn't return to the start position. This is usually caused by cutting improperly seated rebar that becomes jammed between the cutting blocks. On these newer models simply rotate the Allen set screw a quarter turn to retract the piston. On the DC-20WH, see parts breakdown part #64 for location of this release valve.

Once piston has been retracted, pull trigger-switch long enough to partially advance piston. Unplug unit. Check piston and housing for accumulated dirt and iron filings that may be jamming the piston. (See Maintenance) If, after cleaning, piston still does not automatically retract when fully extended, the piston itself may be damaged. Return the unit to an authorized repair center or BN Products for repair.

MAINTENANCE ON CUTTER BLOCKS

Before using, always check that the two bolts on each cutter block are properly tightened. Using a loose block will result in damage to block and housing. Also check condition of cutter

blocks. If either cutting edge is dull or chipped, remove retaining bolts and rotate both blocks so that two new edges come into use. Replace and tighten bolts. (Each block has four cutting edges.) When all four cutting edges have been used or if either block is cracked or otherwise damaged, replace both blocks.



CAUTION: A loose or cracked block may result in injury to operator.

CLEANING

Clean your tool every day, preferably immediately after use.

CAUTION: Wear gloves to protect hands from metal splinters.

Do not use an air gun: blasting with air can cause metal filings and/or dust to get into eyes and respiratory system.

Disconnect the unit. Wipe or brush away all dirt and metal filings. Pay particular attention to the lower half of the piston, where dirt is more easily accumulated.

NEVER USE YOUR CUTTER TO CUT REBAR IN WET CONCRETE.

OIL-LEVEL CHECK

As the cutters are hydraulically operated, the oil-level must be checked at frequent intervals, preferably every day. Failure to maintain the oil at the proper level results in a drop in pressure and loss of cutting power.

CAUTION: Hydraulic oil is highly flammable. Keep away from sparks and naked flame. Do not smoke.

CAUTION: Hydraulic oil may cause inflammation of the eyes and skin. If ingested, it will cause diarrhea and vomiting. In case of eye contact, rinse in clean water for at least 15 minutes and consult a physician. In case of skin contact, wash thoroughly with soap and water. In case of ingestion, consult a physician immediately. Do not induce vomiting.

1. Oil should be warm but not hot. Warm up unit if cold.
2. Adjust stopper and make three or four cuts, noting exactly at what point the rebar is actually breaking.
3. Pinch a short piece of rebar, stopping just before it breaks off. Unplug unit from power source.
4. With partially severed rebar in place, oil-plug should be straight up. (If unit is hot, allow cooling down.)
5. Remove oil-plug and seal-washer (packing).

CAUTION: Never remove oil-plug when unit is hot or oil will spurt out.

6. Check that oil is level with bottom of plug hole (i.e. that pump case is full to the brim). If oil level is too low, top up with 20-weight hydraulic oil with anti-foam and anti-abrasion properties (ISO viscosity grade VG46, e.g. Shell oil Tellus 68, Mobil oil DTE-25 or Esso Uni power SQ46).
7. After topping off, extract air from system. Gently tilt cutter lengthwise and return it to a level position. Top off again and tilt in the opposite direction. Repeat this process until all air has been extracted.

CARE: Cutter cannot function properly if oil contains air bubbles.

8. Replace seal washer (packing) and oil plug. Connect cutter to power source and completely sever rebar.

OIL-CHANGE

The hydraulic oil should be changed at least once a year, sooner if it appears dirty.

NOTE: Hydraulic oil should be warm before draining

1. Unplug unit from power source. Remove oil-plug and packing. Turn cutter over and drain oil into a suitable receptacle. When oil ceases to drain out, tilt unit to rear so that oil trapped in the piston housing can run out. When housing is empty, tilt unit in the opposite direction to empty the residue in the pump case.
2. With drain-hole uppermost, slowly fill the unit with fresh oil. Replace plug and lightly tighten. Connect unit to power source and advance piston two or three times. Unplug unit and remove oil-plug. Top off oil-level and replace plug.
3. Finally, follow procedure for oil-level check. (Steps 2-8)

NOTE: Dispose of hydraulic oil in accordance with local regulations. Do not pour into the sea, a river, a lake or drains.

BOLT TIGHTNESS

Once a week, or after every 500 cuts, check the tightness of all bolts; especially those bolts securing the housing to the cylinder. Loose bolts will result in a loss of power. Make sure that the bolts holding both cutter blocks are also tight

CARBON BRUSHES

Inspect the two carbon brushes at least once every two months. (Nominal brush life is 200 hours).

CARE: Worn brushes will result in power loss, cause the motor to run hot and irreparably damage the armature.

1. Disconnect unit.
2. Unscrew both brush caps and pull out carbon brushes.
3. Replace brushes if less than 6mm or 1/4" in length.

OVERHAUL

Return the unit to an authorized agent for overhaul at least once every two years, sooner if subjected to heavy use. Call (800) 992-3833

GENERAL SAFETY RULES

WARNING: Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term “power tool” in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

WORK AREA SAFETY

Keep work area clean and well lit. Cluttered or dark areas invite accidents.

Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.

Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

ELECTRICAL SAFETY

Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock. Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.

Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

When operating a power tool outdoors, use an extension cord suitable to outdoor use. Use a cord suitable for outdoor use reduces the risk of electric shock.

PERSONAL SAFETY

Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in 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, clothing and gloves 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 these devices can reduce dust-related hazards.

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 the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventative 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 tools or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

Maintain power tools. Check for misalignment or binding or moving parts, breakage of parts and any other condition that may affect the power tools 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 and in the manner intended for the particular type of power tool, 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.



Type	DCC-1636BHL	DCC-2036BHL
Cutting ability	#5, 5/8" (16mm) Grade 60 or less	#6, 3/4" (20mm) Grade 60 or less
Minimum cutting diameter	.157" (4mm)	
Cutting Speed	2 seconds / 500 pieces per charge	4.2 seconds / 320 pieces per charge
Power Source	<ul style="list-style-type: none"> Battery Powered 36V Battery: Metabo HPT BSL36B18: DC36V-4.0Ah / 18V-8.0Ah (Lithium Ion) Charger: Metabo HPT UC18YSL3 14.4-18V Rapid Charger Charging time: 64 min (BSL36B18, when using UC18YSL3) 	
Electric Flow	36V DC	36V DC
External dimensions	(L) 13.4" (340mm) x (W) 3.5" (88mm) x (H) 10.3" (262mm)	(L) 15.3" (387mm) x (W) 4.1" (103mm) x (H) 10.8" (274mm)
Weight	12.5 lbs. (5.65 kg) (with BSL36B18)	20.5 lbs. (9.3 kg) (with BSL36B18)
Standard accessory tool set	Hex wrench 4, 6 mm Oil Pot (hydraulic oil 70cc) Side Handle Plastic Storage Case Charger (UC18YSL3) Battery (BSL36B18)	Hex wrench 4, 6 mm Oil Pot (hydraulic oil 70cc) Side Handle Plastic Storage Case Charger (UC18YSL3) Battery (BSL36B18)

Charger Specifications	
Battery Charger	Metabo HPT UC18YSL3
Power Input	Single Phase AC 120V 60HZ
Power Output	DC 14.4V-18V
USB terminal	5V @ 2.0A
Charging time	52 min minimum for Multivolt

Battery Specifications	
Manufacturer and part number	Metabo HPT BSL36B18 (372121M)
Type of Battery	Lithium-Ion Battery
Battery Voltage	36V / 18V (Automatic switching)
Battery Amperage	4.0Ah / 8.0Ah (automatic switching)
Power Output	1,440W

PLEASE NOTE: that this battery exceeds 100Wh and is a fully regulated Dangerous Goods Item UN3480

POWER STORAGE BATTERY

When installing or removing the storage battery, make sure that the switch is turned off on the tool. Do not put your finger on the switch while attaching or removing it. After installing the storage battery, make sure that there is no gap between the main unit and the storage battery. Please use the specified charger or storage battery as described in this instruction manual or our catalog. If you use a storage battery other than the one specified, it could explode and cause injury or damage. It may cause harm.

CHARGING YOUR BATTERY

Please use the charger that came with the tool. Do not use with any other transformers, or DC power supplies. There is a risk of fire due to over heating. Do not charge the battery when the temperature is below 32°F or above 104°F. Not only will it not be charged properly, but the life of the battery can be shortened. It may also cause a fire. Charge the storage battery in a well-ventilated place, and do not cover it with a cloth while charging. It will generate heat and there will be a risk of explosion and fire. Unplug it from the power supply when not in use. There is a risk of electric shock or fire.

Do not short the terminals of this battery. Be sure to use the attached battery terminal cover when storing to prevent short circuit. Please cover and store when not in use. There is a risk of smoke, fire, and explosion. Be careful of electric shock. Moisture reduces the insulation of the motor and may cause electric shock. Do not use the product in a place where water or oil can easily get inside the workings of the battery or charger. Do not touch the power plug of the charger with wet hands. There is a risk of electric shock. Do not put the battery in a fire. It may explode or emit harmful substances.

Switch off the power tool body and remove the rechargeable battery from the power tool when not in use or when moving, inspecting, servicing, or repairing this tool.

Thoroughly check the battery and protective parts for damage before operating this tool.

A charger with a damaged power plug or cord, or a charger that has been dropped or damaged should be considered unsafe.

When using two or more batteries in succession, be sure to let it rest and allow it to cool before use. Do not use batteries other than those specified. Make sure to install the battery securely. Do not throw the battery together with general trash or put it in a fire. Keep the batteries out of the reach of children. Use the battery correctly according to the specifications displayed. Please take precautions when connecting to a USB device. This charger comes standard with this product charges a lithium-ion battery for power tools.

Observe the following when charging USB devices. In the event of an unexpected problem, the data stored inside the connected USB device is at risk. When connecting to a USB device, the data stored inside the USB device could be damaged. In any event, BN Products will not be responsible for any loss or failure of any connected equipment.

PRECAUTIONS WHEN USING LITHIUM-ION BATTERIES

This product comes standard with a lithium-ion battery. It has an internal protection function to stop the output for the purpose of extending the life of the battery. While using this product, the motor will stop in the following cases even if the switch is pulled.

- The motor stops when the battery level is low. In this case, charge the battery immediately.
- If the tool body is overloaded, the motor may stop. In this case, turn off the switch once and remove the cause of the overload.
- The motor may stop if the storage battery becomes overheated. In this case, stop using the storage battery, remove it from the tool body, and have a well-ventilated day. Allow the storage battery to cool sufficiently to reset.

WARNING

Be sure to observe the following in order to prevent leakage, heat generation, smoke emission and ignition of the battery.

- Make sure that the battery does not collect chips and dust.
- Be careful not to let the chips touch the battery while working.
- Do not leave the battery in a place where the chips and dust can be expected to fall.
- Do not use batteries that are significantly damaged or deformed.

Do not connect the battery directly to an outlet or a car cigarette outlet. Do not use the battery for any purpose other than the designated equipment. Don't heat the battery in a microwave oven or put it in a high-pressure container. If the battery leaks or smells bad, keep it away from fire immediately. Do not use in places where strong static electricity is generated. When using, charging, or storing the battery, it emits an unusual odor, generates heat, discolors, or deforms, it should be considered unsafe. If you notice any of the above, stop using it immediately and consult the store where you purchased it.

PLEASE NOTE

If the battery leaks and the liquid gets into your eyes, do not rub it and immediately wash it off with tap water. Rinse thoroughly with clean water and seek medical attention immediately. If left untreated, the liquid may damage your eyes. If the battery leaks and the liquid gets on your skin or clothes, immediately wash it off with clean tap water. It may cause skin irritation.

Old batteries used for cordless tools are valuable and recyclable. It is a resource. When discarding batteries and similar products, please cooperate with recycling centers. Please bring it to the store where you purchased it.

Use, disassembly, or modification other than the storage of power for this tool as specified by in this manual is not allowed.

HOW TO INSTALL YOU BATTERY

Firmly support the machine body and of the storage battery
Pay attention to the mounting direction and click into place.

HOW TO REMOVE YOUR BATTERY

Firmly support the machine body, storage battery. Slide while pressing the latches on both sides and pull out the battery.

CHARGING METHOD

Before use, when it is new, or when it has not been used for a long period of time, and when the remaining amount is low, charge in the following manner.

When you plug your charger into a power outlet, it may hear a rattle or it may not come on immediately. If so, discontinue use and send it for repair. If the fan does not come on this will cause overheating of the unit. After charging, remove the battery from the charger. If the battery usage time has dropped significantly even after the battery is correctly charged, consider that the battery has reached the end of its life, and replace it with a new battery.

1. Check the power supply - This charger is for AC 120V.
2. Check the outlet - If the outlet, or the power plug is loose, or if the plug comes off, do not connect it. This is dangerous and can cause a fire hazard.
3. Plug the power plug into an outlet - The charging lamp keeps blinking red. (Refer to “Charge lamp display”)
4. Insert the battery into the charger - Insert the battery until it seats firmly. When charging starts, the charging lamp lights up continuously in blue to notify you that charging has started. During charging, the battery capacity lamp displays the charging capacity.
5. When charging is finished - When charging is completed, the charging lamp lights continuously in green and the buzzer sounds for 6 seconds. Unplug the power plug from the outlet and remove the storage battery from the charger.

*Charging time may be longer depending on the ambient temperature and storage battery status.

CHARGING LAMP DISPLAY

The charger has a “charging lamp” that displays the charging status. The display contents of each lamp are as follows.

Lamp	Lamp Display			Power State
Charging Light (Red/Blue/Green/Purple)	Before Charging	Flashing Red	0.5 seconds on / 0.5 seconds off	Plugged in to power supply
	Charging	Light Blue	Continuous Light	
	Fully Charged	Solid Green	Continuous Light Buzzer will sound for 6 seconds	
	High Temperature Standby	Flashes Red	0.3 seconds on / 0.3 seconds off	Temperature of the battery is too hot to charge will automatically start when battery has cooled down.
	Can not be charged	Fast Flashing Purple	0.1 seconds on / 0.1 seconds off	Charger or battery terminal might have foreign matter interfering with charge

*After charging is completed, please it rest for about 5 minutes until the next charging. If you use the same charger continuously, the charger will overheat and may cause a malfunction.

BATTERY LAMP DISPLAY

You can check the remaining power capacity by viewing the visual display on the battery. The lamp display is divided into four levels: 25%, 50% 75% and full charge. The battery level display may vary slightly depending on the ambient temperature, and battery characteristics. The battery capacity lamp will turn off after a while after charging is completed.

HOW TO USE THE USB PORT

In addition to charging lithium-ion batteries for tools, this charger can also be used for general USB devices. You can charge USB devices such as mobile phones from the connected lithium-ion batteries in places where there is no power supply. Before use, make sure that the USB cable to connect is not damaged. Using a damaged USB cable may cause smoke or fire. When not in use, cover the USB terminal with a rubber cover. If dust adheres to the USB terminal, it may cause smoke or fire.

1. Select charging method. Depending on the charging method, insert the storage battery into the charger or plug the power plug into an outlet.
2. Look for and turn on the USB power switch. When the USB power switch is turned on, the USB power lamp lights up.
3. Connect the USB cable. Remove the rubber cover and use the commercially available USB cable that matches your product. Insert it all the way in. If the power plug is not plugged into an outlet and the storage battery runs out of capacity, the USB power lamp goes off and output stops. When the USB power lamp goes off, insert the power plug or replace the storage battery.
4. When charging is complete the USB power lamp does not go off even after charging the USB device. Check the charging status with a USB device. Turn off the USB power switch and disconnect the power plug from the outlet. Remove the storage battery from the charger and cover the USB terminal with a rubber cover.

- * If you charge the USB device and the storage battery at the same time, the charging time will be longer.
 - *Charging of USB devices may be suspended midway.
 - *When not charging the USB device, turn off the USB power switch and charge the USB device.
- Please remove it from the electric appliance. (Reducing the battery life of USB devices, unexpected accidents it may cause)
- *Some USB devices may not be charged.

ABOUT BASIC FUNCTIONS

Gear switch

The switch contains an electronic circuit that changes the rotation speed of the motor steplessly according to the amount of pulling in. Although it is stored, please use it in the fully retracted state when cutting the material.

- *If the material is cut when the switch pull-in amount is small (low motor rotation)

The temperature of the built-in electronic circuit components will rise, which may cause a malfunction.

How to use LED light

The tool LED light automatically turns on while the switch is pulled. Release your finger from the switch, and about 10 seconds later, the LED light will turn off automatically. The LED light also has the function of emitting a warning signal during use.

- * Wipe off the dust on the lens with a soft cloth to prevent it from being scratched.

LED WARNING SIGNALS

This product has a function to protect the tool and the storage battery, when the protection function is activated, while the switch is pulled, the LED light will turn on. When the protective function is activated (flashing light), immediately remove your finger from the switch and follow the action.

- *1: For RFC, refer to “About RFC” below.

- *2: For temperature protection, refer to “Temperature protection” below.

ABOUT RFC

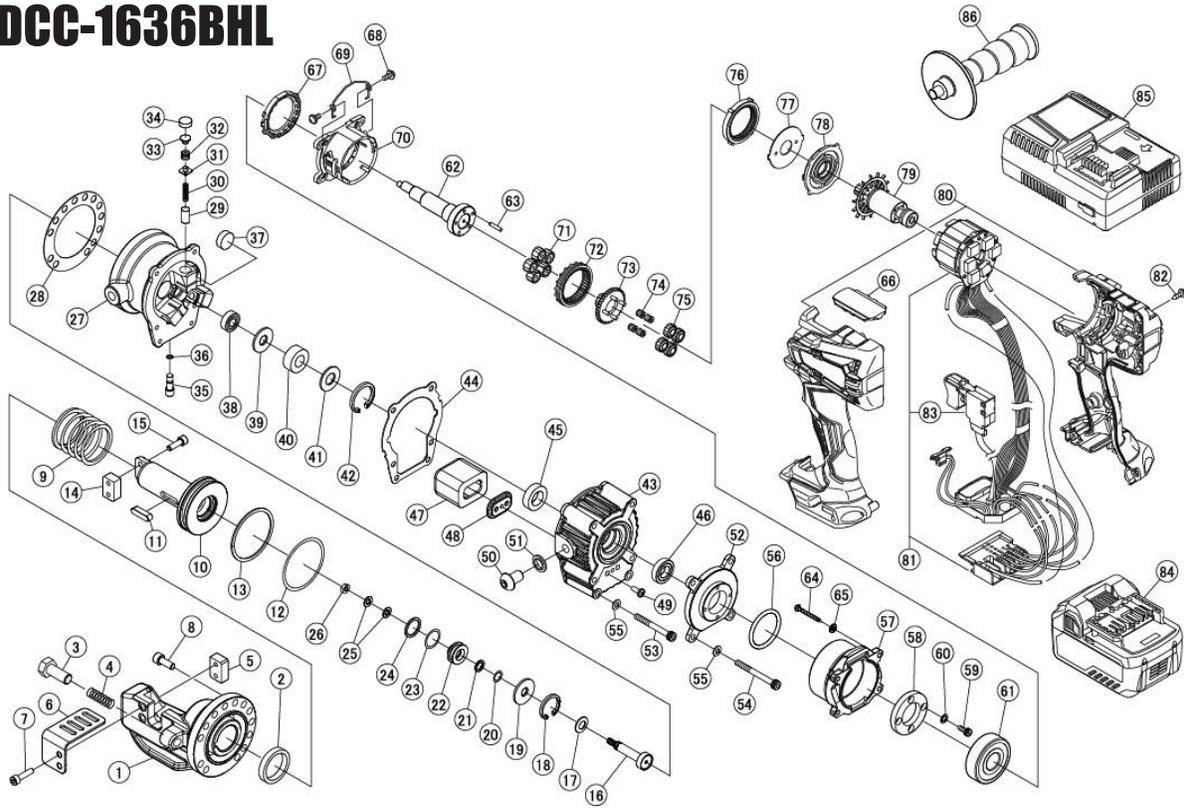
This product includes RFC (Reactive Filter) that reduces the phenomenon of the tool body shaking during work. When a load is applied suddenly and the rotation speed of the motor drops rapidly, the tool body shakes. The output is stopped before it is turned off, reducing the load on the operator.

ABOUT TEMPERATURE PROTECTION

This product protects the motor and electronic components that control the drive of the motor. Therefore, a temperature protection circuit is installed. When continuous work is performed, the temperature of the main body rises, so the temperature protection circuit operates and automatically stops. In that case, cool the main body sufficiently. Can be used again when the temperature drops. In addition, when working continuously, replace the storage battery and perform tool cooling every 100 times of continuous cutting. Please rest your tool for about 15 minutes before using.

- *During continuous operation, do not touch the metal parts of the pump case etc.

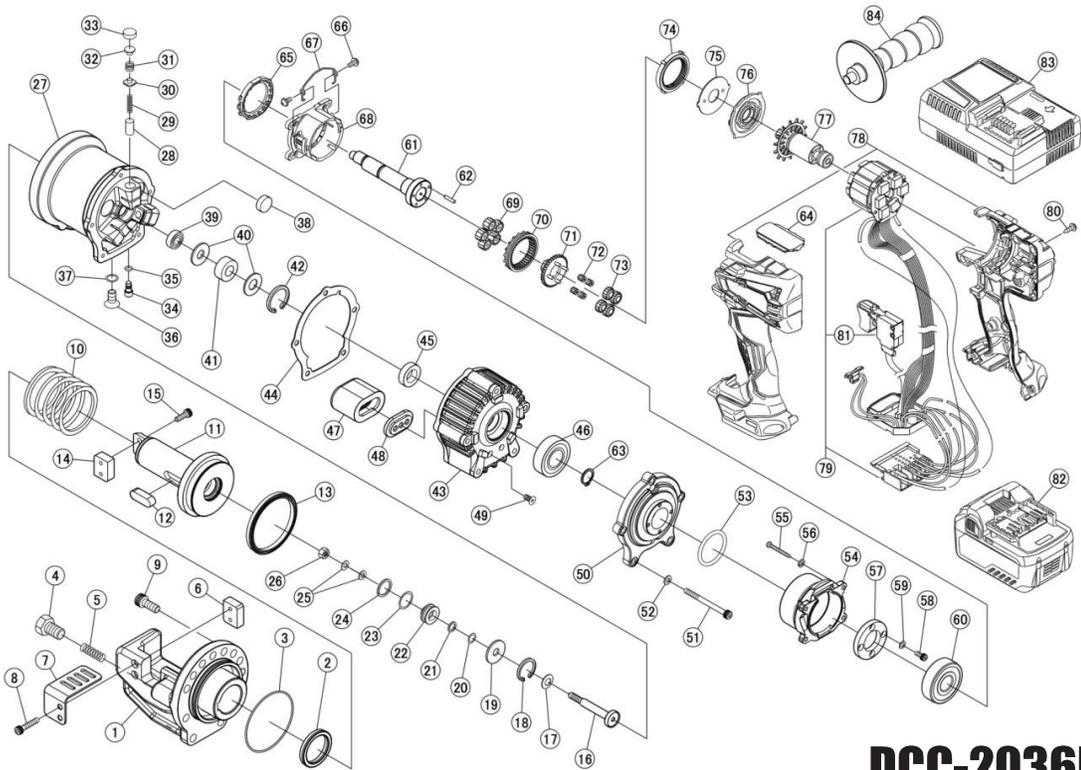
DCC-1636BHL



DCC-1636BHL		
1	1C2071000	HOUSING
2	7USI26	USI PACKING
3	7B10030T11	STOPPER BOLT 10X30
4	1C16031	LOCK SPRING
5	1CL003	CUTTER BLOCK NO. 13L
6	1C4199500	CUTTER GUARD
7	7CB205022	CAP BOLT WITH WASHER M5X22
8	7CB06018	CAP BOLT M6X18
9	1C4139602	RETURN SPRING
10	1C3097800	PISTON
11	7K0606023R2H	PISTON KEY
12	7ORP49RF	O RING P49RF
13	7BRP49B	BACK UP RING P49
14	1CL003	CUTTER BLOCK NO. 13L
15	7CB205015	CAP BOLT WITH WASHER M5X15
16	1C4138501	RETURN VALVE
17	7BW008	DISK SPRING 8
18	7SRH026	SNAP RING H26
19	1CB4104002	GUIDE CLAMP
20	7SPNC8	SPNC PACKING SPNC8
21	7BRP8B	BACK UP RING P8T2
22	1C4152300	RETURN VALVE GUIDE
23	7ORP16	O RING P16
24	7BRP16B	BACK UP RING P16T2
25	7SPW005	PLATE WASHER S5
26	7NU005	U NUT 5
27	1C2071100	CYLINDER
28	1C4272700	CYLINDER PACKING
29	1C4103200	RAM

30	1C4273700	RAM RETURN SPRING
31	1C197301	DELIVERY VALVE
32	1C1331	DELIVERY VALVE SPRING
33	1C13352	SPRING GUIDE
34	1C13292	PUMP HEAD SEAL
35	1C4196500	RELEASE VALVE
36	7ORS4	O RING S4
37	3P1044	MAGNET FILTER
38	7635	BALL BEARING
39	1C4137200	BEARING GUIDE (2)
40	7RNAF81510	NEEDLE BEARING
41	1C4103000	BEARING GUIDE
42	7SRH020	SNAP RING H20
43	1C2044700	PUMP CASE
44	1C4143403	PUMP CASE PACKING
45	7SC12257	OIL SEAL
46	1C4137300	AIR BAG
47	1C4137400	AIR BAG NUT
48	7NT04012	TAPPING SCREW 4X12
49	7BB10008	BUTTON BOLT 10X8
50	7WF10	SEAL WASHER WF10
51	76901ZZ	BALL BEARING 6901ZZ
52	3AP3127500	DISTANCE PIECE P
53	7CB05045	CAP BOLT M5X45
54	7CB05050	CAP BOLT M5X50
55	7GW005	WASHER M5
56	7JASO20371ATF	O RING
57	1C3141100	DISTANCE PIECE M
58	3AP4230600	WASHER
59	7CB04010	CAP BOLT M4X10

60	7GW004	WASHER M4
61	76303ZZ	BEARING
62	1C3141000	CAM SHAFT
63	7DP03015	DOWEL PIN 3X15
64	7NT04030	TAPPING SCREW 4X30
65	7SW004	SPRING WASHER M4
66	1C2071300	SHIFT PLATE
67	7HTK372226B	SHIFT DOG
68	7HTK331895B	SCREW SET (2 PCS.)
69	7HTK339755B	SHIFT ARM
70	7HTK372225B	REAR CASE
71	7HTK339774B	PLANET GEAR (B) SET (5 PCS.)
72	7HTK339758B	SLIDE RING GEAR
73	7HTK339759B	PINION (B)
74	7HTK331926B	NEEDLE BEARING SET (4 PCS)
75	7HTK334441B	PLANET GEAR (A) SET(4 PCS)
76	7HTK339760B	FIRST RING GEAR
77	7HTK339761B	WASHER (B)
78	7HTK339762B	MOTOR SPACER
79	7HTK361070B	ROTOR PINION SET
80	7HTK372885B	HOUSING (A) (B) SET
81	7HTK372227B	TERMINAL PIECE SET
82	7HTK313687B	FLANGE TAPPING SCREW D3X16
83	7HTK370151B	SWITCH
84	(BSL36A18)	MULTI-VOLT BATTERY
85	(UC18YSL3)	BATTERY CHARGER
86	1C1627	SIDE HANDLE
--	7CSP100	PLASTIC CARRYING CASE



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