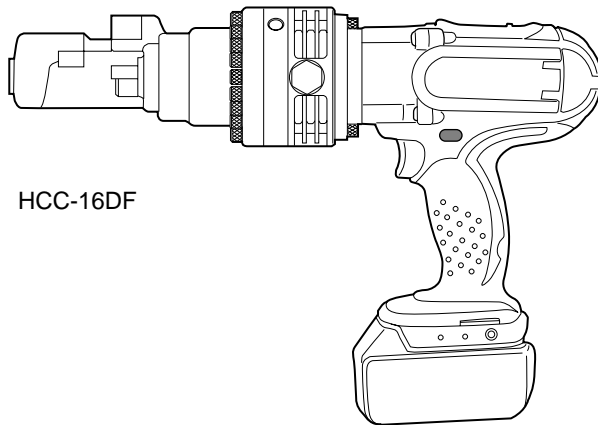


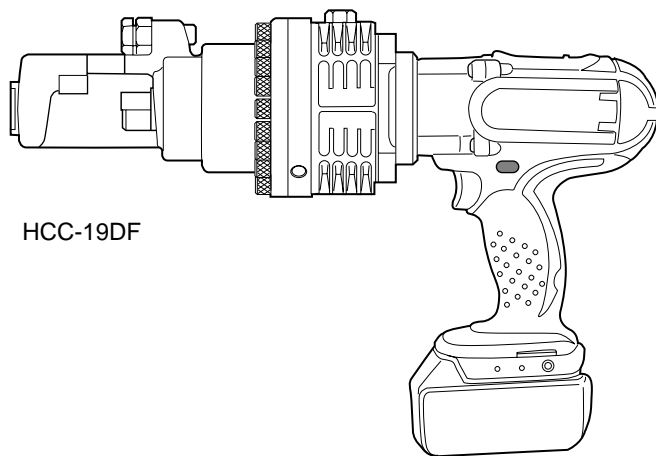
# Ogura® CORDLESS REBAR CUTTER

Model:HCC-19DF  
Model:HCC-16DF

## Instruction Manual



HCC-16DF



HCC-19DF

**Before installing and operating this machine, read, understand and follow all instructions and operating procedures. Keep these instructions with the machine.**

**Read, understand and follow all safety instructions and operating procedures. If you do not understand the instructions, or if conditions are not correct for proper operation, DO NOT OPERATE THE MACHINE. Consult your supervisor or other responsible person.**

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### **⚠ WARNING**

	Read and understand this instruction manual before operating this machine. Failure to follow operation instructions could result in death or serious injury.
	Flying debris and loud noise hazards. Wear ear and eye protection.
	Hazardous voltage. Disconnect all power before working on this equipment. Failure to observe this instruction will result in death or serious injury.
	Moving blade. Keep hands clear while machine is operating. Turn power off before servicing.

#### SAVE THESE INSTRUCTIONS

### Meaning of "caution" and "warning" indications

**Caution:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. This is also used to alert against unsafe practices associated with events that could lead to personal injury.

**Warning:** Indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.

**\*\*\* Ogura & Co., Ltd. shall not be responsible for any incidental damages or personal injuries resulting from negligence of Warnings and Safety Instructions contained in the Instruction Manual.**

## IMPORTANT SAFETY INSTRUCTIONS

# WARNING

### 1. Before use, read this Instruction Manual thoroughly.

- Do not expose the charger and battery to rain or use them in damp or wet locations, as this may cause overheating or electric shock.

### 2. Keep Work Area Clean.

- Cluttered areas and benches invite injuries.

### 3. Keep the work area well lighted.

- Working where there is insufficient light may cause an accident.

### 4. Keep Children Away.

- Do not allow children or unauthorised personnel to handle tool.
- All visitors should be kept away from work area.

### 5. Store Idle Tools.

- When not in use, tools should be stored in a dry and secure place - out of reach of children.

### 6. Do Not Force Tool.

- It will do the job better and safer at the rate for which it was intended.
- Do not force tool to work beyond its ability. Excessive load will cause seizure of the motor, overheating, smoke and fire.

### 7. Use Right Tool.

- Do not force small tool or attachment to do the job of a heavy-duty tool.
- Do not use tool for purpose not intended.

### 8. Wear Safety Glasses and Protective Clothing.

- Always wear safety glasses, safety footwear, safety gloves, and any other mandated or necessary protective clothing while using this equipment. Failure to do so may result in injury.

### 9. Dress Properly.

- Do not wear loose clothing or jewellery as they can be caught in moving parts.
- Rubber gloves and non-skid footwear are recommended when working outdoors.
- Wear protective hair covering to contain long hair.

### 10. Hold Tool Securely.

- A tool that is not held securely may injure you.
- Use clamps or a vice to hold the work. This frees both hands to properly hold, control, and operate the tool. Failure to properly secure the work may result in injury.

### 11. Disconnect the tools power supply, by removing the Battery and engaging the Trigger Switch Lock, whenever one of the following situations occur.

- The tool is not in use or is being serviced.
- Any parts, such as a blade, are being replaced.
- There is a recognised hazard. Failure to do so may result in unexpected operation and damage or injury.

### 12. Avoid unexpected operation.

- Do not carry the tool by the Trigger Switch as this may cause unexpected operation and damage or injury.

### 13. Do Not Abuse Power Cord.

- Never carry battery charger by its power cord or pull on the cord to disconnect it.
- Keep cord away from heat, oil and sharp edges.
- Place cord so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- If the tool is dropped or struck check carefully that body is not damaged, cracked, or deformed.

### 14. Do Not Overreach.

- Keep proper footing and balance at all times.

### 15. Maintain Tools Carefully.

- Keep tools sharp and clean for better and safer performance.
- Follow instructions for lubricating and changing accessories.
- Inspect battery charger power cord periodically and, if damaged, have them repaired by authorized service facility.
- Keep handles dry, clean, and free from oil and grease.

### 16. Remove Keys and Wrenches.

- Form habit of checking to see that keys and wrenches are removed from tool before starting operation.

### 17. Stay Alert When using electric tools.

- Consider safety of others.
- Operate tool with care.
- Watch what you are doing.
- Use common sense.
- Do not operate tool when you are tired.

### 18. Check For Damaged Parts.

- Before using the tool, carefully check all parts for damage, including guards, to ensure that they will operate properly and perform their intended function.
- Check for any misalignment or binding of moving parts; damaged or broken parts and mountings; and any other conditions that may affect its operation.
- Do not use battery charger if electric plug or cord is damaged or if it was dropped or damaged in any way
- A guard or other part that is damaged should be properly repaired or replaced by an authorized service centre unless otherwise indicated in this instruction manual.
- Do not use tool if switch does not turn it on and off. Have damaged or defective switch replaced by an authorised service centre.

### 19. Service at Factory Authorized Repair Centre Only.

- Service this electric appliance in accordance with the relevant safety regulations.
- Repairs to electric appliances should only be done by a qualified person. Repairs by others may endanger the user.
- Contact your dealer to arrange servicing.

### 20. Only use the specified accessories or attachment.

- Use only the accessories or attachment described in this Instruction Manual and the Ogura catalog. Use of any other accessories or attachments may result in an accident or injury.

## SAFETY INSTRUCTIONS FOR REBER CUTTER

### **WARNING**

1. Attach blades securely and according to the Instruction Manual. Loose or wrongly fitted blades may cause injury.
2. Check for the presence of persons below you when working in an elevated position. Any material or tools dropped may cause an accident.
3. Do not operate or store tool in explosive atmosphere (where flammable liquids, gases or fire are present).
4. Keep hands and face away from blades and cutting area.
5. Release trigger switch immediately to stop operation when tool is out of order or makes abnormal sound. Have it inspected and repaired by authorized service centre.
6. Metal cutting blades have sharp edges. Handle them carefully to avoid being cut.
7. Place the rebar so that it is fully between the blades, when cutting.
8. Never cut off pieces of rebar which are less than 200 mm in length, as flying fragments can cause serious injury.
9. Do not use the tool in damp area or where it may become wet.
10. Use only Ogura genuine blades.
11. Damaged, deformed or cracked blades may cause serious accidents as well as impair operation. Replace with new genuine blades immediately.

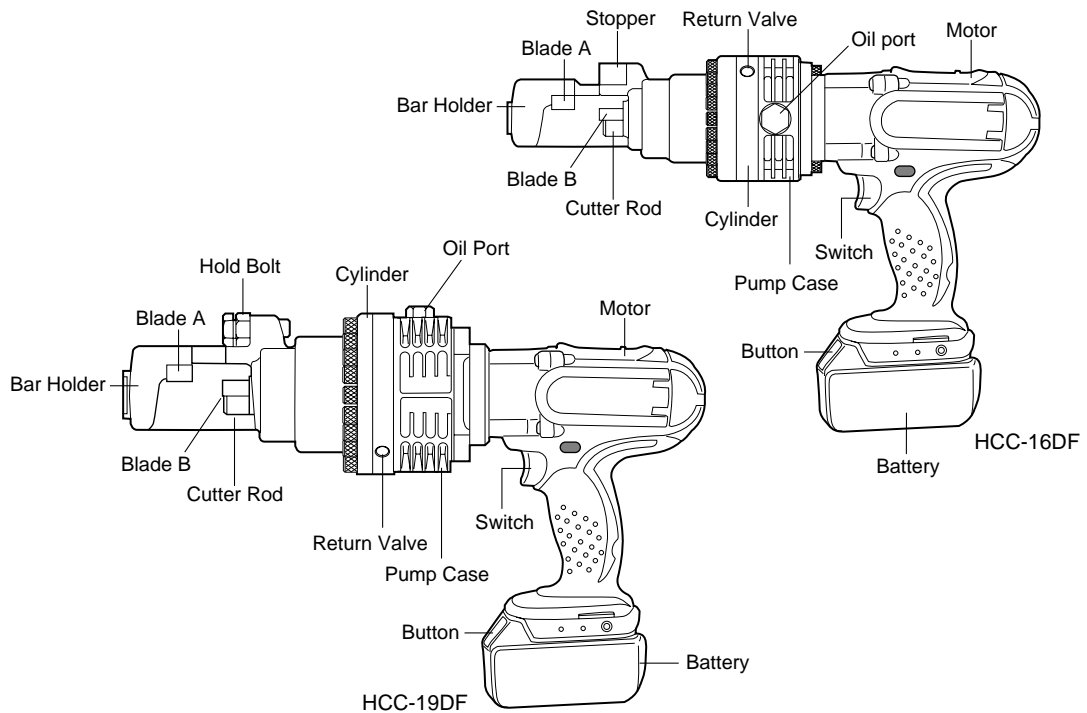
### **CAUTION**

1. Do not cover or clog the motor air vents as this may cause the motor to overheat, resulting in smoke, fire and explosion.
2. This tool is a hydraulic tool powered by electricity. When the temperature is low, hydraulic oil may become solid and tool cannot perform well. Idle tool for a few minutes before use.
3. As the oil reservoir was filled before delivery, do not add oil unless the tool works abnormally.
4. When using an extension cord with the charger, it is recommended to use a cord with the cross section below and with a length as short as possible. For charging outdoors, use a cab tyre extension cord.

Relation between usable cord thickness and maximum length

Cord size (Nominal cross sectional area of conductor)	Maximum cord length
0.75mm <sup>2</sup>	20m
1.25mm <sup>2</sup>	30m

# NAME OF THE PARTS



## ■ Specifications

Model	HCC-16DF		HCC-19DF	
Motor	DC magnet motor			
Battery	Lithium-ion battery (BL1830) 3.0 Ah, 22-minutes charge			
Voltage	18V DC			
Max. Cutting Capacity (Dia.mm)				
Grade 40 ~ Grade 60				
Grade 40: Tensile Strength 490 N / mm <sup>2</sup> 70,000 PSI	16 mm	5/8"	20 mm	3/4"
Grade 60: Tensile Strength 620 N / mm <sup>2</sup> 90,000 PSI				
Cutting Speed	3.5 seconds		5.5 seconds	
Dimensions	380 mm(L)X265 mm(W)X108 mm(H)		412 mm(L)X289 mm(W)X234 mm(H) (including the holding handle)	
Weight	6.5 kg (including a battery)		10.5 kg (including a battery)	
Battery Charger	DC18RA			
Input Voltage	110-115 V / 220-240 V			
Input Frequency	50-60 Hz			
Input Capacity	490 VA / 75 W			
Output Voltage	7.2~18 V DC			
Output Current	9A DC			

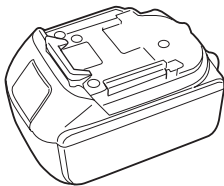
● Specifications and design may be subject to change without prior notice.

■ **Standard accessories (HCC-16DF)**

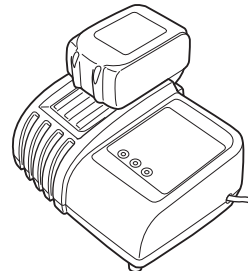
- Battery charger (DC18RA) ----- 1
- Battery (BL1830) ----- 1
- Battery cover ----- 1
- Hex wrenches (M3,M4,M5,M6) ----- One each
- Spanner (14 mm X 17 mm) ----- 1
- Hydraulic oil #46 (35 cm<sup>3</sup>) ----- 1
- Carrying case ----- 1

■ **Standard accessories (HCC-19DF)**

- Battery charger (DC18RA) ----- 1
- Battery (BL1830) ----- 1
- Battery cover ----- 1
- Hex wrenches (M3,M4,M5,M6) ----- One each
- Spanner (17 mm X 19 mm) ----- 1
- Hydraulic oil #46 (150 cm<sup>3</sup>) ----- 1
- Carrying case ----- 1

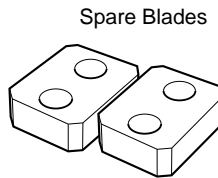
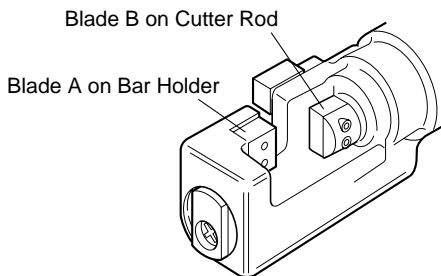


Battery (BL1830)



Charger (DC18RA)

**Type of spare blade and detachment**



Securing bolts should be firmly tightened.  
Confirm periodically that the blade is tightened properly.

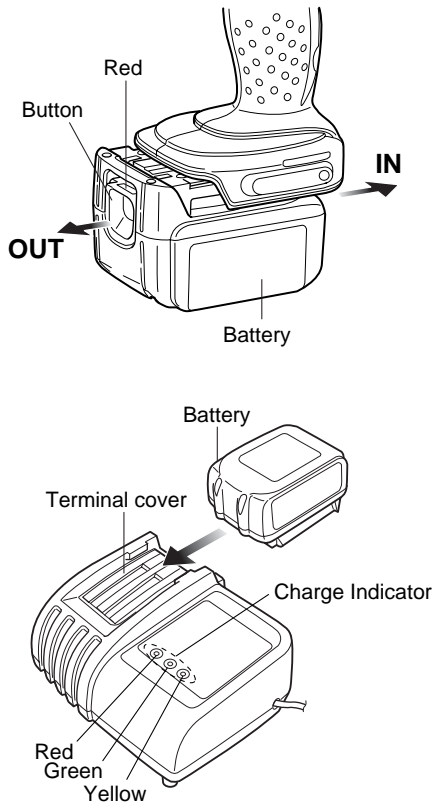
Spare blade size

※Attach the blade corresponding to the model correctly.

Model	A (attached on the Bar Holder side.)	B (attached on the Cutter Rod side.)
HCC-16DF (Ø 3 ~ 16)	22 X 17 X 9 mm , two holes M5	22 X 17 X 8 mm, two holes M5
HCC-19DF (Ø 3 ~ 20)	28 X 20 X 11.5 mm , two holes M6	26 X 20 X 10 mm, two holes M5

Note: Use only genuine Ogura blades.

# BATTERY CHARGE

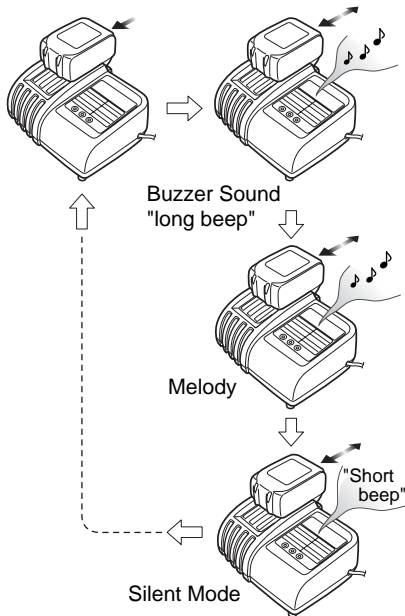


1. Plug the battery charger into the proper AC voltage source. Charging light will flash in green color repeatedly.
2. Insert the battery cartridge into charger until stops adjusting to the guide of charger. Terminal cover of charger can be opened with inserting and closed with pulling out the battery cartridge.
3. When the battery cartridge is inserted, the red charging light will light up and charging will begin with a preset brief melody sound coming out for assurance as to which sound will come out to notify the completion of charging.
4. With finish of charge, the charging light will change from red one to green one and the melody sound or buzzer sound (a long deep) comes out to notify completion of charge.
5. If you leave the battery cartridge in the charger after the charging cycle is complete, the charger will switch into its "trickle charge (maintenance charge)" mode which will last approximately 24 hours.
6. Charging time varies by temperature (10°C (50°F) - 40°C (104°F)) that battery cartridge is charged at and conditions of the battery cartridge, such as a battery cartridge which is new or has not been used for a long period of time.
7. After charging, remove the battery cartridge from the charger and unplug the charger from the power source.

## Notes

- The battery charger is for charging OGURA-battery cartridge. Never use it for other purposes or for other manufacturer's batteries.
- If you charge a battery cartridge from a just-operated tool or battery cartridge which has been left in a location exposed to direct sunlight for a long time, the charging light may flash in red color. If this occurs, wait for a while. Charging will begin after the battery cartridge is cooled by the cooling fan installed in the charger.
- If the charging light flashes alternately in green and red color, charging is not possible. The terminals on the charger or battery cartridge are clogged with dust or the battery cartridge is worn out or damaged.

### Changing melody of completed charging



1. Inserting the battery cartridge into charger brings out last preset brief melody sound of completed charging.
2. Removing and re-inserting it within five seconds after this action makes the melody sound change/
3. Every time removing and re-inserting it within another five seconds after this, the melody sound changes in order.
4. When the desired melody sound comes out, leave the battery cartridge being inserted and the charge will begin. When a "short deep" mode is selected, no completed charging signals come out. (Silent mode)
5. With finish of charge, the green light remains lit with the red light going out and the melody sound preset at the insertion of battery cartridge or buzzer sound (a long deep) comes out to notify completion of charge. (In selected silent mode, no sounds come out.)
6. Preset melody sound remains stored even when the charger is unplugged.

### Trickle charge (Maintenance charge)

If you leave the battery cartridge in the charger to prevent spontaneous discharging after full charge, the charger will switch into its "trickle charge (maintenance charge)" mode and keep the battery cartridge fresh and fully charged.

To maintain product SAFTY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by a OGURA Authorized Service Centers, always using OGURA replacement parts.

### Cooling system

- This charger is equipped with cooling fan heated battery in order to enable the battery to prove its own performance. Sound of cooling air comes out during, which means no trouble on the charger.
- Yellow light will flash for warning in the following cases.
  - Trouble on cooling fan
  - Incomplete cool down of battery, such as, being clogged with dustThe battery can be charged in spite of the yellow warning light. But the charging time will be longer than usual in this case.  
Check the sound of cooling fan, vent on the charger and battery, which can be sometime clogged with dust.
- The cooling system is in order although no sound of cooling fan comes out, if the yellow warning light will not flash.
- Always keep clean the vent on charger and battery for cooling.
- The products should be sent to repair or maintenance, if the yellow warning light will frequently flush.



### Conditioning charge

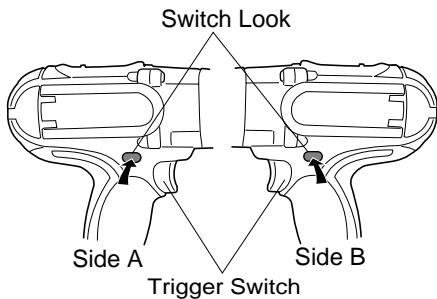
Conditioning charge can extend the life of battery by automatically searching the optimum charging condition for the batteries in every situation. The battery employed in the following conditions repeatedly requires "conditioning charge" to prevent fast wear out. In that case, yellow light lights up.

1. Recharge of battery with its high temperature
2. Recharge of battery with its low temperature
3. Recharge of full charged battery
4. Over-discharge of battery (continue to discharge battery in spite of down of power.)  
The charging time of such battery is longer than usual.

### CAUTION

1. Do not short battery.
2. Do not destroy battery by fire.
3. Do not expose battery to water or rain.
4. CAUTION - To reduce risk of injury, charge only OGURA rechargeable batteries. Other types of batteries may burst causing personal injury and damage.
5. Non-rechargeable batteries cannot be charged with this battery charger.
6. Use a power source with the voltage specified on the nameplate of the charger.
7. Do not charge the battery cartridge in presence of flammable liquids or gases.
8. Do not expose charger to rain or snow.
9. Never carry charger by cord or yank it to disconnect from receptacle.
10. After charging or before attempting any maintenance or cleaning, unplug the charger from the power source. Pull by plug rather than cord whenever disconnecting charger.
11. Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
12. Do not operate charger with damaged cord or plug - replace them immediately.
13. Do not operate or disassemble charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified serviceman. Incorrect use or reassembly may result in a risk of electric shock or fire.
14. The battery charger is not intended for use by young children or infirm persons without supervision.
15. Young children should be supervised to ensure that they do not play with the battery charger.
16. Do not charger battery cartridge when temperature is BELOW 10°C (50°F) or ABOVE 40°C (104°F).
17. Do not attempt to use a step-up transformer, an engine generator or DC power receptacle.
18. Do not allow anything to cover or clog the charger vents.

# OPERATING PROCEDURE



Read, understand and follow all safety instructions and operating procedures. If you do not understand the instructions, or if conditions are not correct for proper operation, do not operate this tool. Consult your supervisor or other responsible person.

## ⚠ WARNING

Before the Battery is inserted into the tool, pull and release the Trigger Switch to ensure that it returns when released.

- The motor is on when the Trigger Switch is pulled and off when the Trigger Switch is released.

## Switch Lock Operation

- Push in the Switch Lock on side A. The Switch is un-locked and the Trigger can be operated.
- Push in the Switch Lock on side B. The Switch is locked and the Trigger cannot be operated.

## ⚠ CAUTION

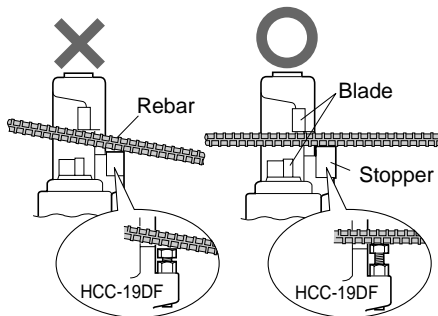
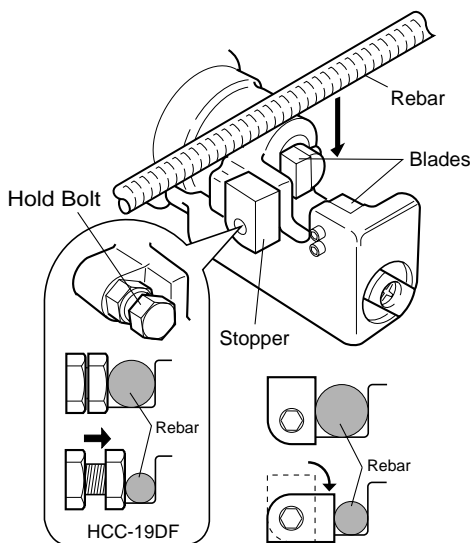
The Trigger Switch should be locked at all times when not in use.

## ⚠ WARNING

1. Before operation, confirm that the position of the operator, relative to the tool, and the surrounding area is safe for operation. Put on safety glasses and wear protective clothing.
2. Refer to the tool specifications in this manual and do not cut rebar of size or hardness that exceeds the cutting capacity of the tool.
3. Do not cut material other than rebar. Please ask the manufacturer if you want to cut other materials.

## ⚠ WARNING

Replace damaged (chipped, broken, cracked) or deformed blades immediately. The blade will not cut true and may fracture or break causing serious personal injury.

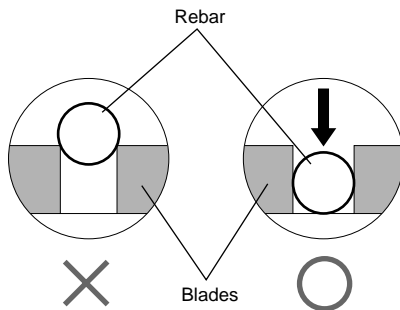


## Cutting Procedure

1. Position the rebar to be cut between the blades. Adjust the Stopper (HCC-16DF) or the Hold Bolt (HCC-19DF) according to the diameter of the rebar to be cut so that the rebar is at 90 degrees to the blades as shown in the figure on the left. The Stopper (HCC-16DF) or the Hold Bolt (HCC-19DF) supports the rebar and keeps it perpendicular to the blades when cutting.

### **WARNING**

When cutting rebar, adjust the Stopper (HCC-16DF) or the Hold Bolt (HCC-19DF) according to the diameter of the rebar to be cut so that the rebar is at 90 degrees to the blades as shown in the figure on the left. Without this adjustment, the cut piece may fly off and cause serious injury to the operator or bystanders. Never fail to check the position of the operator relative to the tool and confirm the safety of the operator and surrounding area.



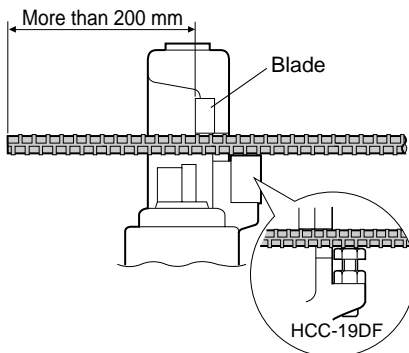
2. Position the rebar to be cut so that it is fully between the blades as shown in the figure on the left.

### **WARNING**

If the rebar to be cut is not positioned fully between the blades, the blades will be damaged; the rebar will be ejected violently and may cause serious personal injury.

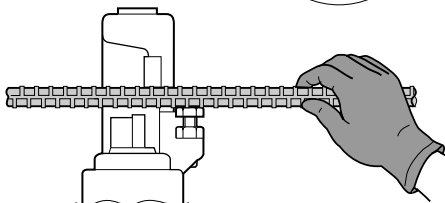
### **WARNING**

Do not cut rebar when the piece to be cut off is less than 200 mm in length. Cutting shorter length may cause the rebar to fly off during cut and may result in serious personal injury.



### **WARNING**

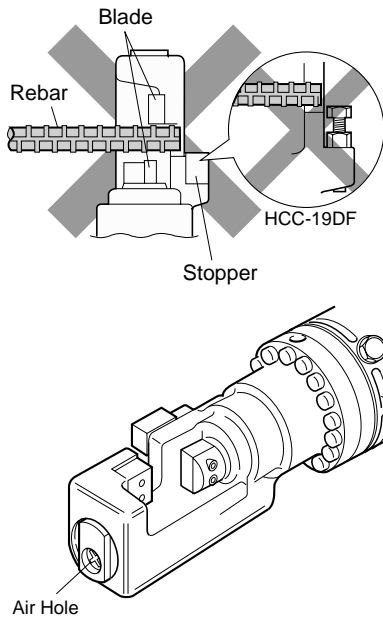
Do not cut rebar when it is not properly supported by the Stopper (HCC-16DF) or the Hold Bolt (HCC-19DF). When cutting, hold the rebar on the Stopper (HCC-16DF) or Hold Bolt (HCC-19DF) side, as shown in the figure on the left. If not, the cut piece may fly off and cause serious injury to the operator or bystanders.



3. Push in the Switch Lock on Side A. The switch is unlocked and the trigger can be operated.
4. Press the Trigger Switch to start cutting operation. The Cutter Rod will move forward to cut the rebar. Keep the Switch depressed until the Cutter Rod stops at the end of its stroke.
5. Release the Trigger Switch when the cut is completed and the Cutter Rod has reached the end of its stroke. The Cutter Rod will then return automatically to its starting position. The Cutter Rod will not return if the stroke is not completed. Similarly the Cutter Rod will not be able to move forward again until after it returns completely to its starting position. Press the switch to start the next cut, only after the Cutter Rod completely returns to its starting position and stops.

**Note:** If the machine temperature reaches to 70 deg. C or higher, cutting operation should be stopped to allow the machine to cool down.

## Operating procedure



### **! WARNING**

When cutting rebar of a high tensile strength the cut piece may fly off and cause serious injury to the operator. Wear safety glasses and confirm that the surrounding area is safe before starting operation.

### **! WARNING**

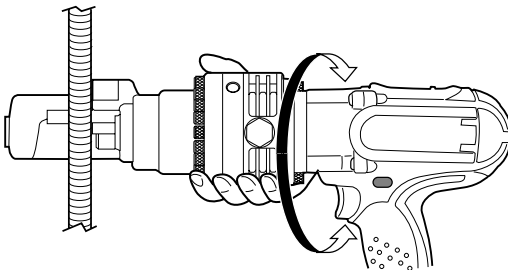


Keep your hands and face away from the blades, the moving parts and the cutting area, during operation.  
Remove the Battery from the tool immediately after use.



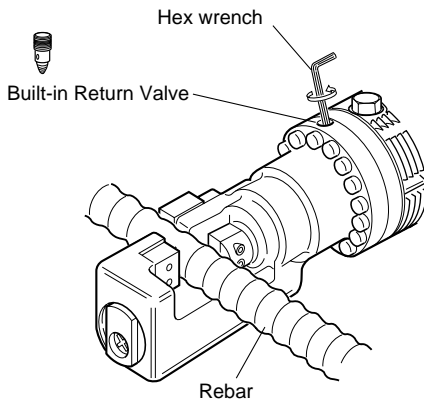
**Note:** Keep the air hole in the end of the Bar Holder clear of dirt and debris. The air hole controls the internal pressure and should not be obstructed.

## Rotating Function of Motor (HCC-16DF & HCC-19DF)



The Motor Body can be rotated through 360 degrees, in either direction, during operation. This feature is particularly useful when working in awkward or narrow areas as it allows the operator to position the tool in the best position for easy operation.

## Return Valve Operation (HCC-16DF & HCC-19DF)

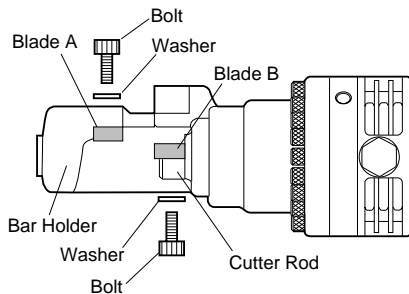


The function of the Return Valve is to allow the Cutter Rod to return to the starting position if it is unable to complete a cut or becomes jammed. Using the supplied hex wrench, loosen the Return valve about half a turn in the anticlockwise direction. This will release the oil pressure and allow the Cutter Rod to return. Retighten the Return Valve once the Cutter Rod is fully returned and before starting the next operation.

\* Loosen the Return valve screw anticlockwise by 1/2 turn (HCC-16DF)

# BLADES REPLACEMENT PROCEDURE

If the cutting edges of the blades are chipped, cracked, deformed, or damaged in any way, their cutting ability will be reduced. Cutting under such conditions may cause further damage and result in personal injury. The blades should be replaced as a set immediately if any damage is found.



## **!** WARNING

When replacing the blades, ensure that the Battery is removed from the tool to prevent accidental operation.

Ensure that Blade A, on the Bar Holder and Blade B, on the Cutter Rod are fitted in their correct respective positions.

1. Undo the bolts and the washers that hold Blade A and Blade B.
2. Remove dirt and clean the surfaces where the new blades are to be fitted.
3. Fit Blade A to the Bar Holder and Blade B to the Cutter Rod. Replace bolts and washers and tighten firmly.

## **!** WARNING

The bolts that hold Blade A and Blade B should be tightened regularly. If the bolts become loose the Blades may be damaged and may cause personal injury.

# ADDING OIL

This cordless rebar cutter is electro-hydraulic. When shipped from the factory, it was filled with oil. Do not attempt to add oil as long as the tool performs well. Over a period of time the oil level will gradually go down. Eventually this will cause a noticeable dropping off in performance. When this happens add oil as follows.

1. Place some rebar between the blades and pull the Trigger Switch.
2. Release the Trigger Switch just before the cut is completed to stop the tool.
3. Remove the Battery from the tool, so that the Blades cannot be moved accidentally.
4. Remove the Bolt (SB10X15) which caps the oil filler hole. Add the oil, being careful not to allow any oil to spill into the motor.
5. Replace the Bolt (SB10X15) and tighten securely.
6. Reinsert the Battery into the tool and complete the cutting operation.
7. Repeat the above procedure several times until the oil level remains correct.

## CAUTION

**Only pure hydraulic oil as recommended by Ogura & Company Ltd., should be used in this tool. Recommended oils include the Ogura supplied hydraulic oil, Super Hyrando #46 (Nippon Oil Corporation); Shell Tellus Plus #46 (U.S. Shell); or equivalent spec anti-wear hydraulic oil, ISO Viscosity Grade 46. Do not use other oils as these may cause damage to the seals and other internal machine parts.**

# TROUBLE SHOOTING

**▲ WARNING: Remove battery before working on machine.**

PROBLEM	CAUSE	SOLUTION
Cutter Rod will not extend.	Insufficient oil	Top up oil. (Refer to "Adding Oil")
	Cutter Rod has not returned completely due to build up of debris between Cutter Rod and Bar Holder.	Manually push back Cutter Rod. Remove debris and clean
	Cutter Rod has not returned completely due to damage to the Cutter Rod.	Replace Cutter Rod.
	Cutter Rod has not returned completely due to loose or damaged Blades.	Tighten Blade bolts. Replace Blades
	Cutter Rod has not returned completely due to weak Return spring.	Replace Return spring.
Insufficient power to cut rebar.	Insufficient oil.	Top up oil. (Refer to "Adding Oil")
	Return Valve not properly seated or seating damaged.	Clean tip of Return Valve and Seating. Remove any scratched from seating.
	Return Valve, damaged.	Replace.
	Incorrect clearance between Cylinder and Piston.	Replace Piston (Note: different size pistons available)
	Check Valve, not properly seated or seating damaged.	Clean Check Valve and seating. Replace.
Urethane packing, damaged or broken.	Replace.	
Oil leaks.	Oil leveller Bladder, damaged or broken.	Replace.
	Cutter Rod/ Bar Holder, O-Ring damaged; Rod/Bar Holder, surface scratched or grooved.	Replace Back-Up Ring and O-ring. Replace Cutter Rod/Bar Holder
	Cylinder/Bar Holder, O-Ring damaged	Replace O-ring G70.
	Cylinder/Pump Case, Gasket damaged.	Replace liner B.
	Bar Cutter/Cylinder/Pump Case, flange bolts loose.	Tighten bolts.
Motor not moving. Motor slow or erratic.	Voltage incorrect.	Charge Battery.
	Battery at end of working life.	Replace Battery.
	DC Motor damaged by over-heating.	Replace DC Motor.
	DC Motor bearings or gear damaged or broken.	Replace bearings or gear.

**NOTE:** The internal components of the pump and piston area have very close tolerances and are sensitive to damage from dust, dirt, contamination of the hydraulic fluid or improper handling. The disassembly of the pump housing requires special tools and training, and should only be attempted by qualified repair personnel that have been properly trained and have the right tools. The improper servicing of electrical components can lead to conditions that could cause serious injury. The pump, piston components and all electrical parts should be serviced only by authorized repair shop, dealer or distributor.

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