

# Power Belt Cutters Safety and Operating Manual

#### For cutting rubber and elastomeric materials only.





IMPROPER OR UNSAFE use of this power tool can result in death or serious bodily injury! This manual contains important information about product function and safety. Please read and understand this manual BEFORE operating the power tool. Please keep this manual available for other users and owners before they use the power tool. This manual should be stored in a safe place.

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#### Main Components (corded model shown)

- 1. Housing
- **2.** Blade Guard and Cutting Guide
- 3. Carriage
- 4. Eye Bolt
- 5. Handle
- 6. Electric Hammer Drill
- 7. Circular Blade
- 8. Power Cord
- 9. Rear Carriage Bolt
- **10.** Carriage Support Bolt



DO NOT carry tool by electric hammer drill handle. It is recommended that you place tool in carrying case for traveling extended distances.

#### **Tool Specifications**

	EBC1 / EBC1-220		CEBC1 / CEBC1-220		EBC2 / EBC2-220		CEBC2 / CEBC2-220	
Specifications	Imperial	Metric	Imperial	Metric	Imperial	Metric	Imperial	Metric
Tool Description								
Weight	30 lbs	13.6 kg	30 lbs	13.6 kg	40 lbs	18.1 kg	40 lbs	18.1 kg
Machine Housing	Stainless Steel							
Blade Material	High Speed Steel							
Blade Size	ø 6.70 x .157, hole ø .787, key way .236 (in)	ø 170 x 4, hole ø 20, key way 6 (mm)	ø 6.70 x .157, hole ø .787, key way .236 (in)	ø 170 x 4, hole ø 20, key way 6 (mm)	ø 8.66 x .236, hole ø .984, key way .315 (in)	ø 220 x 6, hole ø 25, key way 8 (mm)	ø 8.66 x .236, hole ø .984, key way .315 (in)	ø 220 x 6, hole ø 25, key way 8 (mm)
Drill Description								
Drill – Make and Model	HiKOKI DV16V WUZ	Metabo HPT DV16V	Makita DDF458	Makita XPH03MB	Metabo SBE 850-2	Metabo SBE 850-2	Makita DDF458	Makita XFD03M
Power Source / Charger Source	EBC1, CEBC1, EBC2, and CEBC2 use 120V. EBC1-220, CEBC1-220, EBC2-220, AND CEBC2-220 USE 230V							
Battery - Amp Hour	N/A		5.0AH	4.0AH	N/A		5.0AH	5.0AH
Cutting Capacity								
Cutting Capacity – Rubber Belt	Up to 1 inch	Up to 25 mm	Up to 1 inch	Up to 25 mm	Up to 2 inch	Up to 50 mm	Up to 2 inch	Up to 50 mm
Cutting Capacity – PVC Belt	Up to 360 PIW	Up to 630 kN/m	Up to 360 PIW	Up to 630 kN/m	Up to 1140 PIW	Up to 2000 kN/m	Up to 1140 PIW	Up to 2000 kN/m
Material Hardness	25° - 90° Shore A							

	PBC1		PBC	C2		
Specifications	Imperial	Metric	Imperial	Metric		
Tool Description						
Weight	16.3 lbs	7.7 kg	22.7 lbs	10.3 kg		
Machine Housing	Stainless Steel					
Blade Material	High Speed Steel					
Blade Size	ø 6.70 x .157, hole ø .787, key way .236 (in) 6 (mm)		ø 8.66 x .236, hole ø .984, key way .315 (in)	ø 220 x 6, hole ø 25, key way 8 (mm)		
Drill Description						
Drill	Composite					
Max Operation Pressure	6 Bar					
Max Air Consumption	230 L/min					
Cutting Capacity						
Cutting Capacity – Rubber Belt	Up to 1 inch	Up to 25 mm	Up to 2 inches	Up to 50 mm		
Cutting Capacity – PVC Belt	Up to 360 PIW	Up to 630 EP	Up to 1140 PIW	Up to 2000 EP		
Material Hardness	25° - 90° Shore A					



-Save These Instructions-

#### Signal words:

"DANGER" indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. The signal word is limited to the most extreme situations.

"WARNING" indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

"CAUTION" indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

#### Safety Symbol

#### $\triangle$

This international safety symbol is used to identify and call attention to specific safety matters.

#### **Safety Information**

To Avoid Severe Personal Injury or Property Damage, read carefully and understand the following Safety Precautions.

## 1. WORK AREA

Keep your work area clean and well lit. Cluttered benches and 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 of fumes.

#### 

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

#### 

Never leave tool until it comes to a complete stop.

## **A**CAUTION

Operation of gear units is permitted at ambient temperatures between  $-4^{\circ}F$  and  $+104^{\circ}F$  ( $-20^{\circ}C$ and  $+40^{\circ}C$ ). However, for temperatures between  $-4^{\circ}F$  and  $+14^{\circ}F$  ( $-20^{\circ}C$  and  $-10^{\circ}C$ ) unit may only start up after it has been progressively and evenly pre-heated, or otherwise initially operated unloaded. Load may then be connected to the output shaft when the gear unit has reached the temperature of  $14^{\circ}F$  ( $-10^{\circ}C$ ) or higher.

## 2. ELECTRICAL SAFETY

Double Insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double Insulation eliminates the need for the three wire grounded power cord and grounded power supply system.

## 

Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock.

## AWARNING

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 cords. Never use cords to carry the tool or pull the plug from a receptacle. Keep cord away from heat, oil, sharp edges, or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

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When operating a power tool outdoors, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

#### 

#### CEBC1/CEBC2 Battery Tool Use and Care

Ensure the switch is in the off position before inserting battery pack. Inserting the battery pack into power tools that have the switch on invites accidents.

Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire. When battery pack is not in use, keep it away from other metal objects like paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.

Under abusive conditions, liquid may be ejected from the battery, avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

## 3. PNEUMATIC SAFETY

AIR SUPPLY SOURCE: Use only clean regulated compressed air as a power source for this tool. NEVER USE OXYGEN, COMBUSTIBLE GASES, OR BOTTLED GASES, AS A POWER SOURCE FOR THIS TOOL AS TOOL MAY EXPLODE.

#### 

**FITTINGS:** Install a male plug on the tool which is free flowing and which will release air pressure from the tool when disconnected from the supply source.

## AWARNING

Always disconnect air supply: 1.) Before making adjustments; 2.) When servicing the tool; 3.) When clearing a jam; 4.) When tool is not in use; 5.) When moving to a different work area, as accidental actuation may occur, possibly causing injury.

## 

Do not exceed Max Operating Pressure.

## 4. PERSONAL SAFETY

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

### AWARNING

Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.

## AWARNING

Avoid accidental starting. Be sure switch is off before plugging in or before battery is inserted. Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.

## AWARNING

Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.



### **A**CAUTION

Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

#### AWARNING

Never alter or remove safety devices.

#### AWARNING

Keep your hands and fingers away from all moving parts, e.g. the blade, at all times.

## **A**CAUTION

HEARING PROTECTION will be required in some environments. For example, the working area may include exposure to noise level which can lead to hearing damage. The employer and user must ensure that any necessary hearing protection is provided and used by the operator and others in the work area.

## 5. TOOL USE AND CARE

Always use belt cutter on a level, firm surface. Cutting is only allowed when operating the machine with one hand on the handle and the other on the drill. Before starting the machine, the handle must be installed on either the right or left side.

## **A**CAUTION

Do not force tool.

## 

Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.

### 

Disconnect the plug from the power source or remove battery before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

## 

Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

#### **A**CAUTION

Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.

## **A**CAUTION

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

## 6. SERVICE AND MAINTENANCE

Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.

## ACAUTION

When servicing a tool, use only identical replacement parts. Use of unauthorized parts or failure to follow Maintenance Instruction may create a risk of electric shock or injury.

## 

Do not use power tools if the plastic housing or handle is cracked. Cracks in the tool's housing or handle can lead to electric shock. Such tools should not be used until repaired.

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Do not wipe plastic parts with solvent. Solvents such as gasoline, thinner, benzene, carbon tetrachloride, and alcohol may damage and crack plastic parts. Do not wipe them with such solvents. Wipe plastic parts with a soft cloth lightly dampened with soapy water and dry thoroughly.

### 

NEVER use a tool which is defective or operating abnormally. If the tool appears to be operating unusually, making strange noises, or otherwise appears defective, stop using it immediately and arrange for repairs.

#### 

Before performing any belt cutter maintenance, remove the plug from the socket or remove battery from tool and follow all procedures noted in manual.

## 7. CIRCULAR CUTTER SAFETY

Make sure that any power cable is not located between circular blade and lower carriage.

## AWARNING

Keep your body positioned to either side of the cutter blade, but not in line with the cutter blade.

## 

Check blade guard for proper closing before each use. Do not operate cutter if blade guard does not move freely and close instantly. Never clamp or tie blade guard into the open position.

## 

Never hold piece being cut in your hands or across your leg. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.

### 

Hold tool by the insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring. Contact with a "live" wire will also make exposed metal parts of the tool "live" and shock the operator.

## AWARNING

Do not run the cutter while carrying it. Lower guard may be opened by contact with your clothing. Accidental contact with the spinning cutter blade could result in serious personal injury.

## 

Do not use dull or damaged blade.

#### 8. REPLACING THE CIRCULAR BLADE

### 

Do not attempt to resharpen blades. This will affect cutting completely through belt.

## AWARNING

Always wear cut-proof safety gloves and safety glasses when replacing blade. Blade is razor sharp, treat it accordingly.

## 

Before performing a blade replacement, remove the plug from the socket or remove battery from tool and follow all procedures noted in manual.

#### 

Only authorized and trained technicians should work on the cutter.

## **WARNING**

Test the cutter after blade replacement to make sure that it can be used safely.



#### **Instructions for Pneumatic Belt Cutter**

To reduce the risk of any, damage to people, before using or repairing the tool, doing any maintenance jobs or replacing any accessories,

#### Read All The Sections Of The Instruction Manual Carefully.

#### Safety Instructions For Air Drills

- It is our aim to supply air tools which allow you to work efficiently and SAFELY.
- It is however understood that YOU are the most important 'safety device' for any tool, as taking meticulous care is the best way of preventing injury.
- Although we cannot enumerate all types of risks here, we tried to lay stress on some of the most significant ones.
- Let us remind you that this tool must be used only by skilled workers and that the machine must never be forced; do not overload the tool.

#### **Risks Due To Connection To Compressed Air**

- Compressed air may harm people severely.
- Do not direct air towards you or any other people.
- The air coming out of the hoses may harm people severely; periodically check whether the hoses and/or fittings are loose and/ or have been damaged.
- Whipping hoses may cause severe damage.
- Before handling the tool, close the main plant, release residual pressure and disconnect the tool only when it is not working.
- Pressure must not exceed 6.2 bar, as measured at the air inlet while the tool is working, or the value shown on the tool plate.

#### **Risks Of Various Kinds**

- Stay at a safety distance from the rotating parts of the tool. Do not wear any accessory round your neck, such as chains or necklaces. Do not wear any bracelets or loose clothes.
- Avoid contact of accessories and tools with your hair.
- Avoid contact with any accessories in motion, while the tool is being used or after it has been used.
- Always wear work gloves to reduce the risk of cutting and burning yourself.

#### **Risks Due To Splinters And Fragments**

- Warning: small splinters and fragments may also harm your eyes and result in blindness.
- Always wear eye protection while using the tool, doing any maintenance jobs and replacing any accessories or spare parts. This measure must also be taken by anyone who works nearby.
- Do not use the tool improperly, as it might work too quickly, thus causing the accessories to be ejected.

#### **Risks Related To Working Conditions**

- Mind too long hoses left at the work station; stumbling and falling is likely to result in severe injury.
- High noise levels may result in permanent loss of hearing; wear ear protection, as recommended by the employer and/or the regulations.
- Stay in a safe, well-balanced position.
- Repetitive movements and awkward positions combined with vibrations may cause your hands and arms to be harmed; special precautions should be taken.
- Do not breathe dust and waste; partially protect yourself with a filtering mask.
- Both the workers and the maintainers must be physically fit for the size, weight and power of this tool.
- This tool was not designed to be used in areas exposed to the risk of explosion and is not so insulated as to come into contact with power sources.

#### **Other Safety Requirements**

- This tool and its parts and accessories must not be modified and/or tampered with.
- The building material of this tool may be subject to wear.
- Working with compressed air tools may result in high vibrations; therefore, take any precautions needed.
- Prevent your hands from being trapped between the tool and any object.

#### **Requirements For Proper Air Connection**

- Feed the tool with clean air, free from water or condensate, at a pressure of 6.0 bar, as measured at the air inlet, while the tool is working.
- An excessively high pressure results in a shorter life for the mechanical parts and may cause people to be severely harmed.
- Connect the tool to the feeding plant, using accessories of the same size as that shown in the enclosed drawing.
- Do not fix any quick couplers directly into the air inlet.
- Consult the instructions to connect the accessories properly.
- Consult the specifications in this manual.

#### Lubrication

- For optimal use, connect the tool to a filter-lubricator unit provided with an air-oil microfog mixer (items 1919F), set at two drops per minute, pouring special oil ISO 32 (item 1919L) in.
- The above-mentioned accessories will translate into a high performing tool and wear-resistant mechanical parts.
- If the line is not supplied with any lubricator, pour oil ISO 32 or SAE #10 into the tool at least once a day.
- Check on a monthly basis whether the gear unit is properly lubricated. Use if need be high-speed bearing grease.
- Do not use kerosene or diesel oil.

#### Maintenance

- We recommend using the enclosed exploded view as a manual to disassemble and assemble the tool as well as to identify any spare parts.
- Keep the tool away from dust, humidity and intense cold.

#### Specifications

CHUCK CAPACITY 1,0÷13 mm SPINDLE THREAD 1/2" 20 UNC FREE SPEED 800 RPM POWER 0,38 KW

AIR INLET 1/4" taper GAS WORKING PRESSURE 6,0 Bars

MAXIMUM WORKING PRESSURE 6,2 Bars MINIMUM INTERNAL HOSE SIZE 10 mm MAXIMUM AIR CONSUMPTION 230 l/min WEIGHT 1,29 Kg

OVERALL LENGTH 226 mm SOUND PRESSURE 86,0 dB (A) (pr EN 50144)

SOUND POWER 93,0 dB (A) (pr EN 50144)

VIBRATION LEVEL 2,12 m/sec2 (ISO 8662-7)



#### **Pneumatic Belt Cutter Installation System**



- 1 Air Compressor
- 2 Air Tank
- 3 Automatic Condensate Drain
- 4 Main Filter
- 5 Main Pipework

- 6 Supply Line
- 7 Condensate Drain
- 8 Filter-Regulator-Lubricator 1/4"
- 9 Coupler 1/4"
- 10 Coupling 1/4"

- 11 Hose 10 Mm
- 12 Coupler 1/4"
- 13 Coupling 1/4"



#### **Tool Preparation**



Fig. 1. Right-Handed Operation

#### Mounting of side handle:

The Flexco Electric Belt Cutter is supplied with a handle that can be mounted on either side of the tool: For right-handed operation, thread the handle into the left side of the tool housing, see Fig. 1. For lefthanded operation, thread the handle into the right side of the housing, see Fig. 2.



Fig. 2. Left-Handed Operation

*Eye bolt use with optional balancer:* The Flexco Electric Belt Cutters are supplied with an eye bolt for mounting the cutters to tool balancers. **NOTE:** Tool balancer must be purchased separately. Be sure to use a balancer that is properly rated for the weight of the belt cutter and has a cable long enough to permit safe operation of the cutter. The EBC1 and CEBC1 weigh 30 lbs. (13.6 kg) and the EBC2 and CEBC2 weigh 40 lbs. (18.1 kg).

#### Operation of Electric Hammer Drill (corded model shown)

#### EBC1/CEBC1/PBC-1







#### EBC2/CEBC2/PBC-2



For normal use, operate in Reverse Direction; press drilling direction button for reverse direction operation.



Operate in Drill Mode only; slide the action mode selector switch to indicate drill mode.



Cutting Speed Adjustment; adjust Electric Hammer Drill to low speed by turning switch to low speed. For best results, always operate cutters in low speed.



#### **Electric Cutter Operation**

For best results: Always elevate belt. • Always use appropriate lubricant. • Always cut in low speed.



Square belt using centerline method



#### Use of Cutting Guide

Make sure belt is clean. Spray area to be cut with silicone lubricant (Flexco # 30932, not included). Lift Blade Guard and insert belt between Carriage and Blade Guard. Position Electric Belt Cutter so that slot in Cutting Guide is directly centered above cut line on belt.

*Producing Square Edge during cutting* In order to produce a square edge during cutting, hold Electric Belt Cutter perpendicular to belt throughout the entire cutting operation. Use two hands for operation.



#### Belt Cutting

Position Electric Belt Cutter on edge of belt at square line. Align Cutting Guide on the Blade Guard with square line on belt. Squeeze drill trigger to start drill.

#### **Tool Maintenance-Bearings**

Unplug drill from power source prior to performing any maintenance.



Clean Belt Support Bearings when dirty. Wipe Bearings with a clean cloth and a solvent such as mineral spirits.



EBC2/CEBC2/PBC-2						
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Support Bearings may be taken apart for a more thorough cleaning. Replace Bearings in the order shown above.

#### Tool Maintenance-Blade Replacement (corded model shown)

If the Belt Cutter is difficult to operate, the blade may be worn and need replacement. Unplug drill from power source. Always wear cut-proof safety gloves and safety glasses when replacing blade.



1. Loosen Rear Carriage Bolt.



**2.** Remove Carriage Support Bolt and Nut. **WARNING:** DO NOT TOUCH BLADE.



3. Rotate Carriage away from Blade.



4. Remove Blade Mount Bolt.



5. Remove Blade Mount Shaft.WARNING: Blade edge is very sharp.DO NOT TOUCH EDGE OF BLADE!Push the Blade Guard into the Cutter Housing just enough to clear the Blade. Remove the Blade and Blade Spacer carefully.



**6.** Carefully replace Blade Spacer and slide new Blade into Housing. Align keyway in Blade, Spacer, and Gearbox and insert Blade Mount Shaft. Secure Blade with Blade Mount Bolt.



**7.** Carefully pivot Carriage back into place. Be careful to not damage Blade as it slides between the Belt Support Bearings.



8. Replace Carriage Support Bolt. Tighten rear Carriage Bolt.



#### **Electric Belt Cutter**

### Logbook

DATE	NOTES	DATE	NOTES

#### Spare Parts (corded model shown)

- 1. Replacement Blade
- 2. Handle
- **3.** Eye Bolt
- 4. Electric Hammer Drill



Spare Parts List						
Description	Ordering Number	Item Code				
Replacement blade for EBC1/PBC-1	EBC1-B	30003				
Replacement blade for EBC2/PBC-2	EBC2-B	30004				
Replacement electric hammer drill for EBC1	EBC1-DR	30005				
Replacement electric hammer drill for EBC2	EBC2-DR	30006				
Replacement electric hammer drill for EBC1-220	EBC1-220-DR	30013				
Replacement electric hammer drill for EBC2-220	EBC2-220-DR	30014				
Replacement eye bolt for EBC1/EBC2/PBC-1/PBC-2	EBC-EB	30007				
Replacement handle for EBC1/EBC2/PBC-1/PBC-2	EBC-H	30008				
Pneumatic Filter Set for PBC-1/PBC-2	PBC-FR	61358				



Visit www.flexco.com for other Flexco locations and products, or to find an authorised distributor.

