

PRODUCT NAME.....

## 36 V Cordless Jig Saw

Models 160 mm **CJ 36DA**

160 mm **CJ 36DB**

MARKETING OBJECTIVE .....

The new Models CJ 36DA and CJ 36DB are user-friendly 36 V cordless jig saws developed based on our AC powered jig saws Model CJ 160V and CJ 160VA. Each model delivers higher cutting performance than our AC powered jig saws thanks to the high-efficiency brushless motor and the high-power multi volt battery. We aim to expand our sales and market share with the new models.

APPLICATIONS .....

- Cutting various lumber and pocket cutting
- Cutting mild steel plate, aluminum plate, and copper plate
- Cutting synthetic resins, such as phenol resin and vinyl chloride
- Cutting thin and soft construction materials
- Cutting stainless steel plate

SELLING POINTS .....

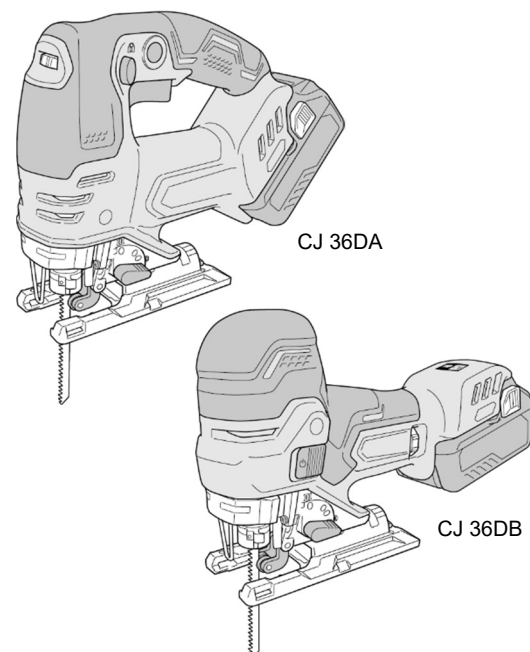
[NEW FEATURES]

- 1 Highest cutting performance in the class
- 2 36 V brushless motor
- 3 New multi volt battery
- 4 Auto mode
- 5 Constant speed control
- 6 On lock function (CJ 36DA)
- 7 Switches on both sides (CJ 36DB)
- 8 LED light on-off mode (CJ 36DB)

[SAME FEATURES AS THE CONVENTIONAL MODELS]

- 9 Tool-less blade changing system
- 10 LED light
- 11 Compatible with a dust extractor
- 12 Dust blower mechanism
- 13 4-stage orbital operation
- 14 Variable speed control

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.



**Koki Holdings Co., Ltd.**

Overseas Sales Management Dept.

**REMARKS:**

- For more information about HANDLING INSTRUCTIONS, visit our website at:

[http://www.hikoki-powertools.com/manual\\_view\\_export/](http://www.hikoki-powertools.com/manual_view_export/)

- This TECHNICAL DATA utilizes symbols to denote the company names and model names of our competitors. The symbols utilized herein are as follows:

Symbol utilized	Competitor	
	Company name	Model name
A	MAKITA	DJV182D
B	MAKITA	DJV181D

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# SELLING POINTS

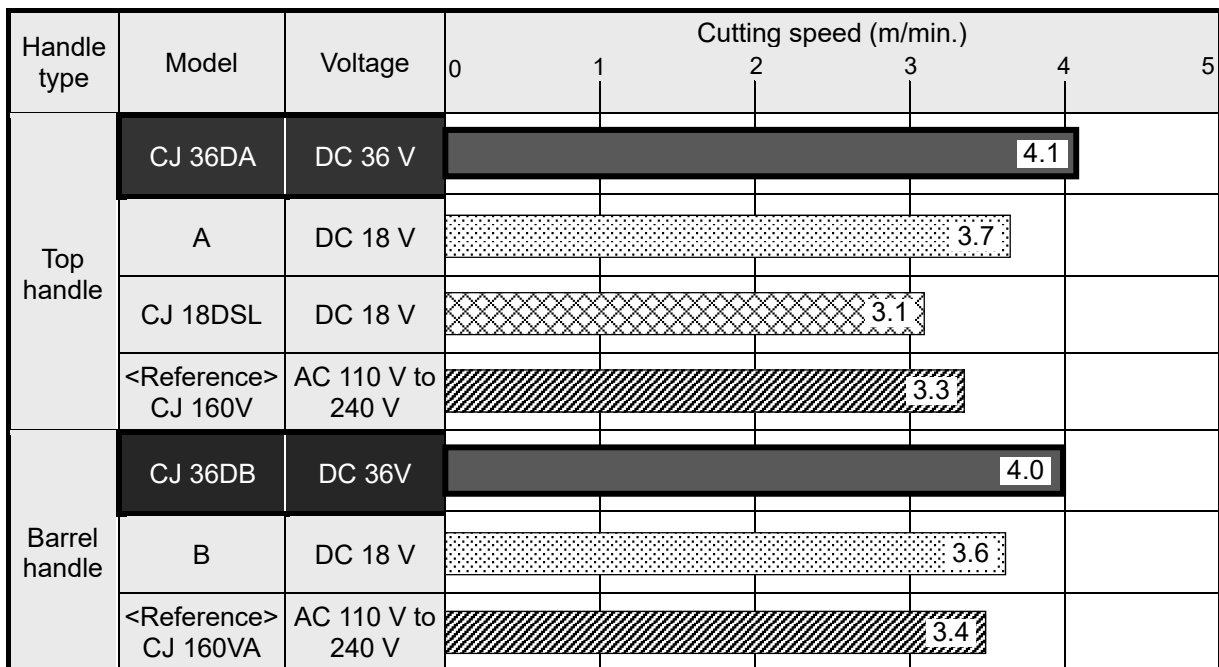
## 1 Highest cutting performance in the class\*

(\*: Surveyed by HIKOKI as of Sep. 2019)

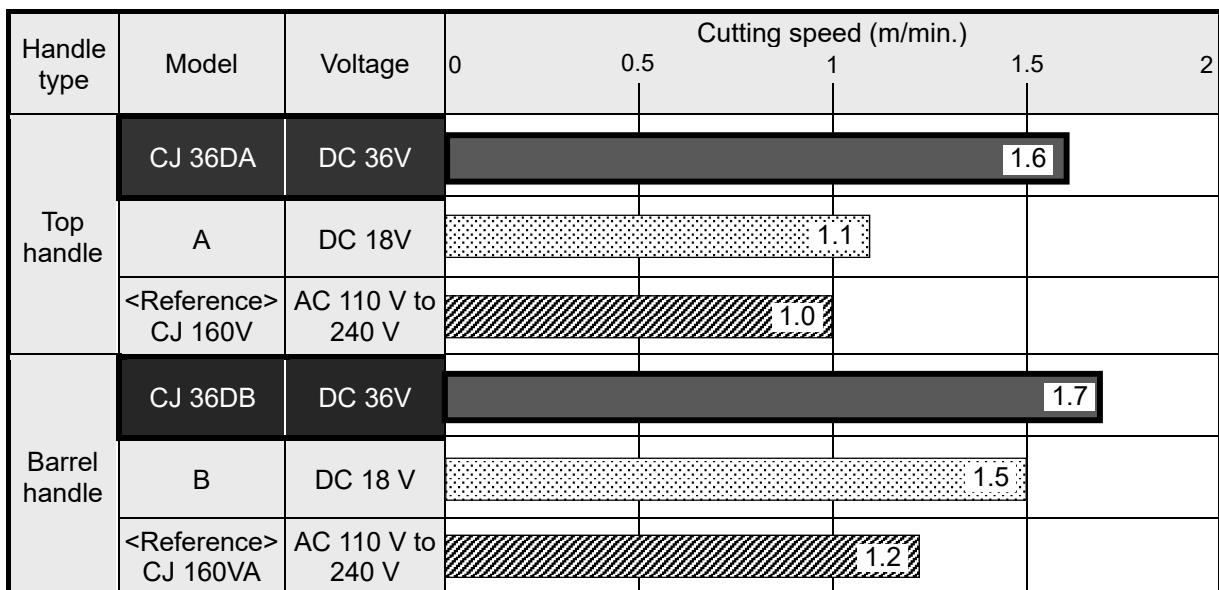
Each model delivers higher cutting performance than our AC powered jig saws thanks to the high-efficiency brushless motor and the high-power, compact, and lightweight multi volt battery.

### (1) Cutting speed

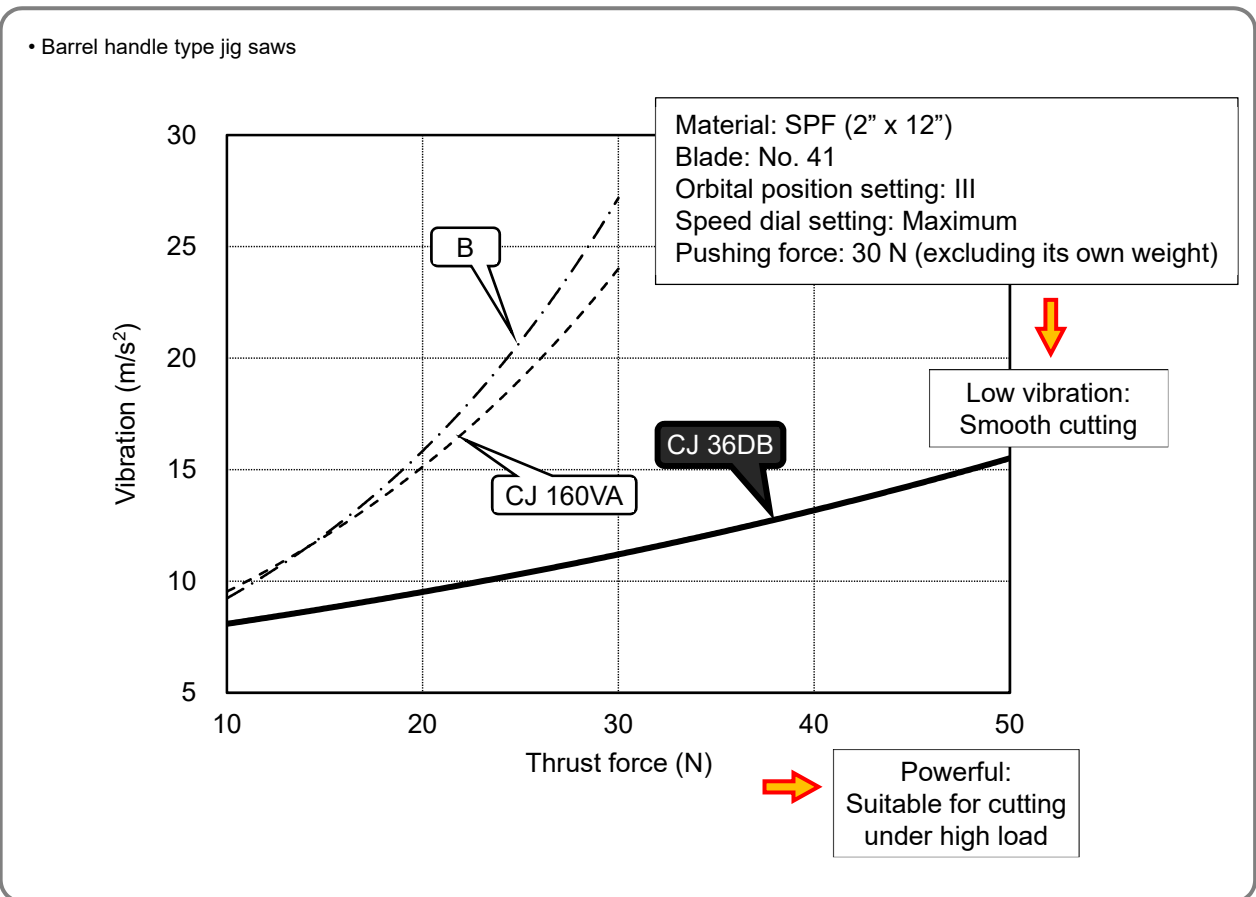
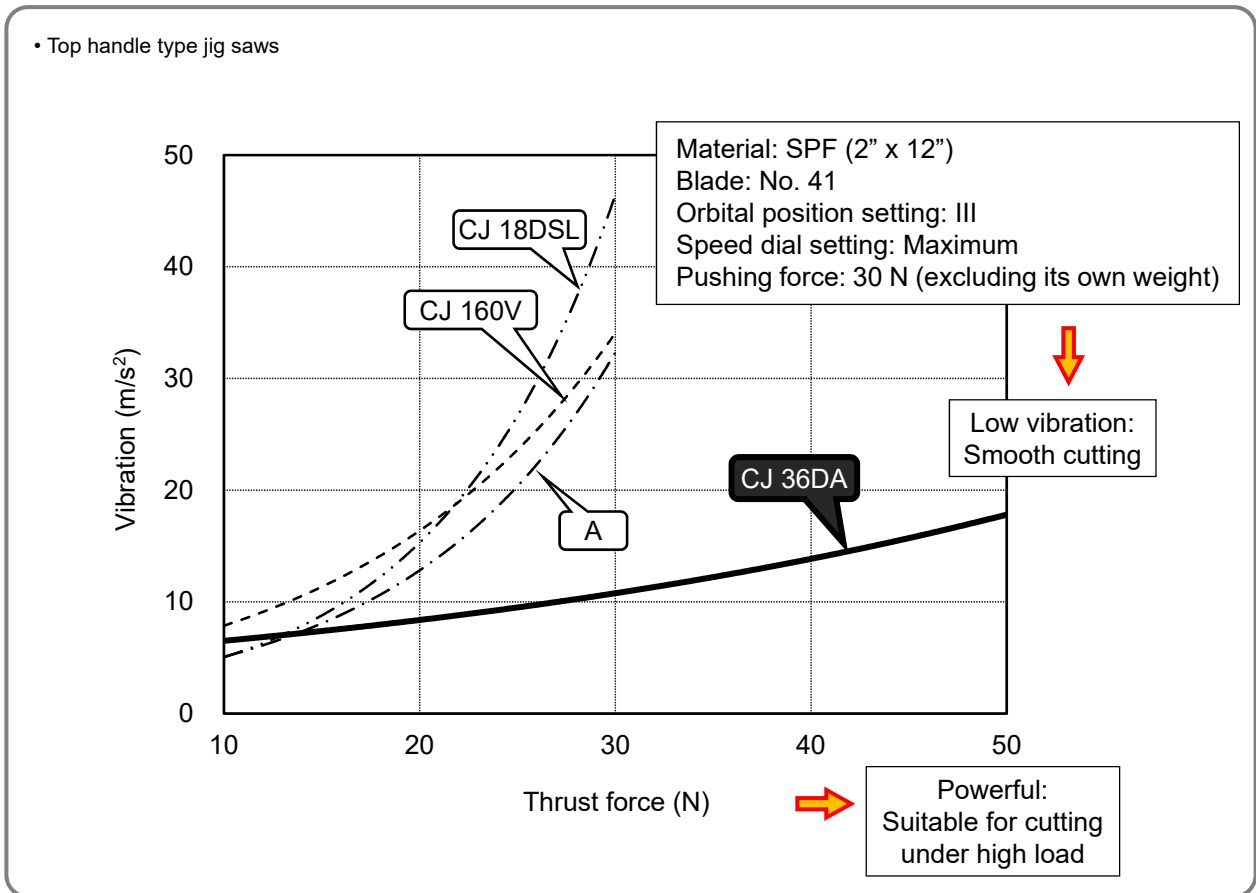
The graph below shows a comparison of cutting speed when cutting an MDF 24 mm thick with the blade No. 41, orbital position set to "III," speed set to maximum at 20 N of thrust force.



The graph below shows a comparison of cutting speed when cutting an SPCC 2 mm thick with the blade No. 123X, orbital position set to "I," speed dial set to "3" at 20 N of thrust force.



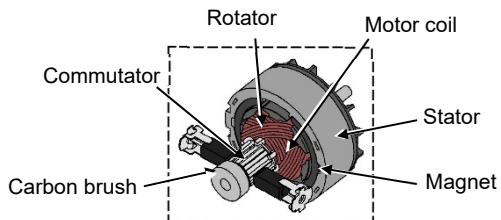
(2) Cutting performance under high load



## 2 36 V brushless motor

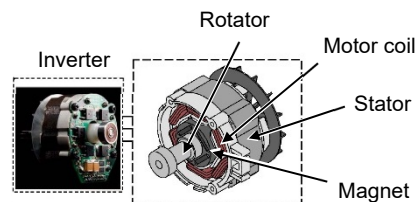
The newly developed brushless motor eliminates the need for conventional carbon brushes and commutators. The Models CJ 36DA and CJ 36DB can thus be operated at a low current without friction and electric loss.

### • Conventional DC motor



Friction is generated between the carbon brush and the commutator. Such electric loss affects the efficiency of the tool.

### • Brushless motor

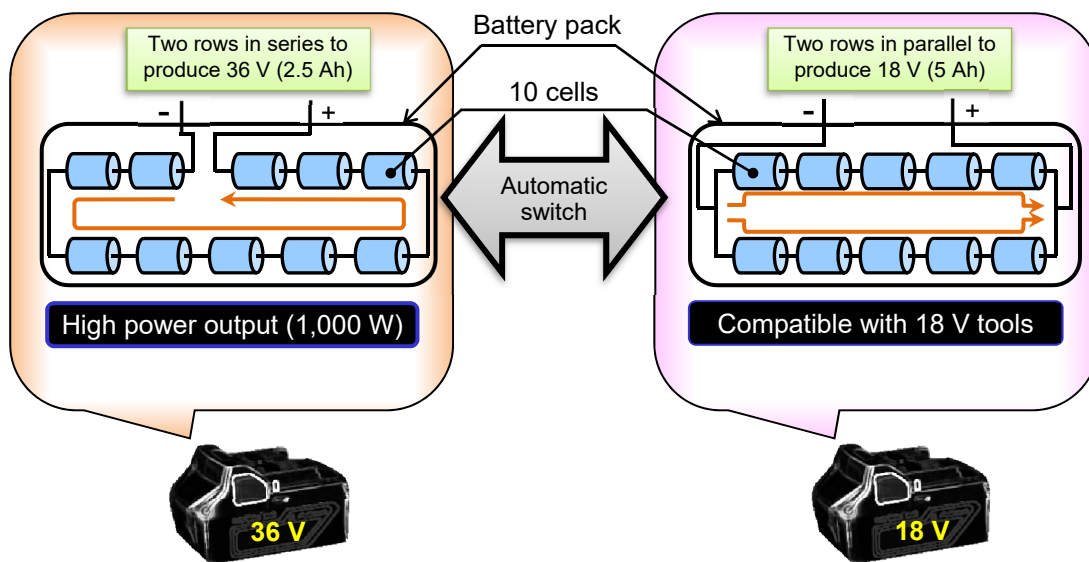


The rotator can be rotated without the use of carbon brushes and commutators because the current applied to the stator coil is sequentially switched in the inverter circuit. Thus, no friction and electric loss are generated.

## 3 New multi volt battery

The new multi volt battery can also be installed to the current 18 V tools because it can switch between 18 V and 36 V automatically. However, the current 18 V batteries cannot be installed to the 36 V tools compatible with the new multi volt battery.

### • Type BSL 36A18 multi volt battery

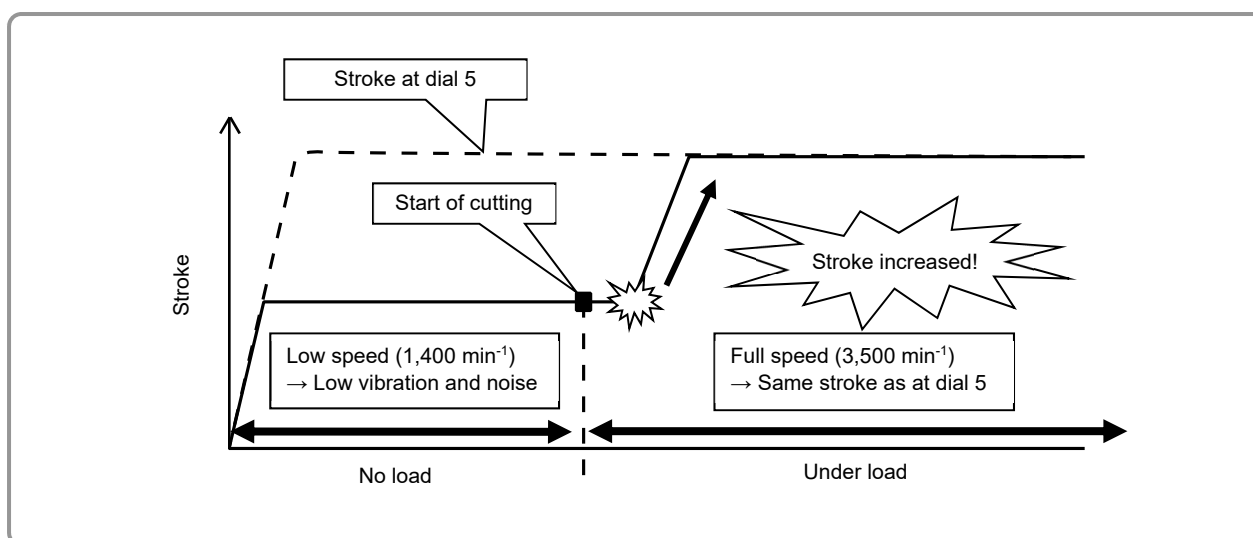
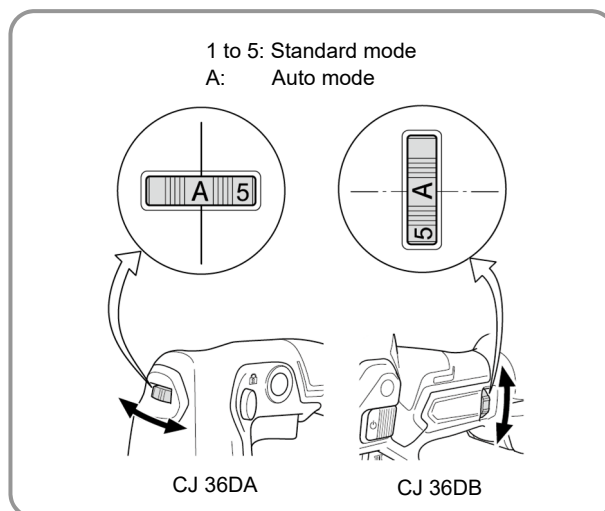


## 4 Auto mode

Under no load, the plunger strokes at low speed (1,400 min<sup>-1</sup>) and low vibration enabling easy matching with the markings.

After the start of cutting, the stroke changes to full speed (3,500 min<sup>-1</sup>) automatically and you can operate the jig saw in the same way as at full speed in the Standard mode.

After changing to full speed, the speed is maintained until you turn off the jig saw. (It does not change to low speed.)



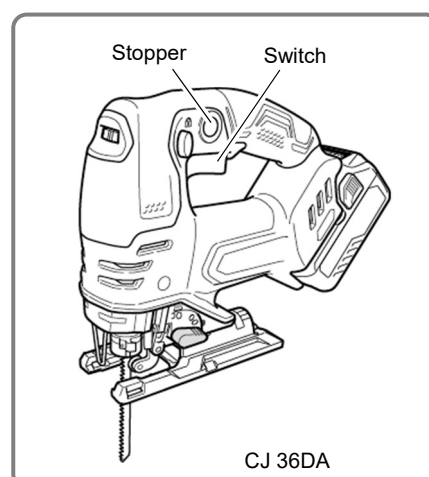
## 5 Constant speed control

Each of the Models CJ 36DA and CJ 36DB comes equipped with constant speed control, which maintains constant plunger strokes. This feature enables a low stroke change during cutting, thus allowing you to cut materials smoothly.

## 6 On-lock function (CJ 36DA)

The Model CJ 36DA is equipped with the on-lock function that is convenient for continuous cutting work.

Pull the switch and then push in the stopper to operate continuously. To stop the tool, pull the switch fully and then release it.



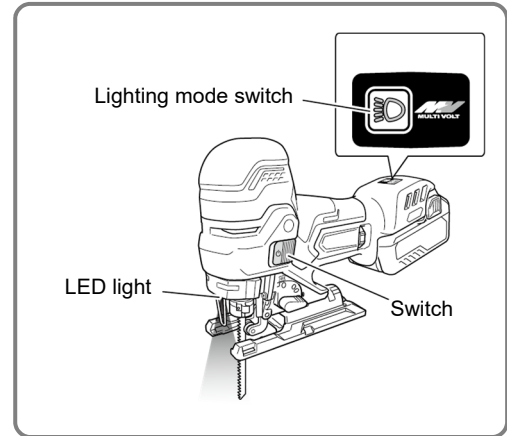
## 7 Switches on both sides (CJ 36DB)

The Model CJ 36DB has switches on both sides so that it can be operated with either left or right hand.

## 8 LED light on-off mode (CJ 36DB)

The Model CJ 36DB has a lighting mode switch to select the LED lighting mode between the SW interlocked mode and the Always-OFF mode. The LED light does not light when the switch is turned on in the Always-OFF mode. It is convenient for cutting in upward direction.

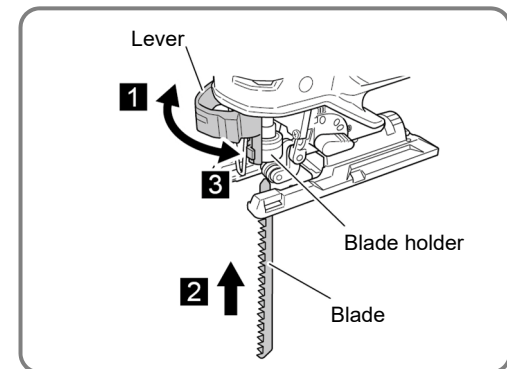
Mode	SW interlocked mode	Always-OFF mode
State	The LED light remains on while the switch is turned on. The light goes out automatically 10 seconds after the switch is turned off.	The LED light remains off.



## 9 Tool-less blade changing system

The blade can be easily changed by opening/closing the lever.

- (1) Open the lever fully. ( **1** )
- (2) Remove the blade from the blade holder.
- (3) Insert the new blade into the blade holder completely until it touches the end of the blade holder. ( **2** )
- (4) Close the lever. ( **3** )

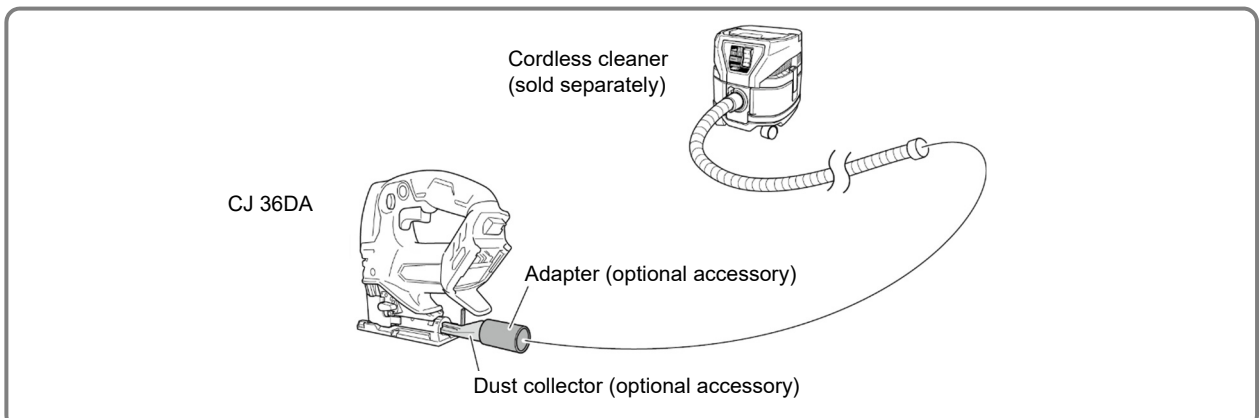


## 10 LED light

An LED light is adopted to light the blade tip so that you can easily see a marking line even in a dark room. The LED light remains on as long as the switch is turned on.

## 11 Compatible with a dust extractor

Each of the Models CJ 36DA and CJ 36DB is connectable to dust extractors or cordless cleaners using the optional dust collectors and adapters.





## 12 Dust blower mechanism

Each of the Models CJ 36DA and CJ 36DB is equipped with a dust blower mechanism that blows off dust by the air from the motor cooling fan.

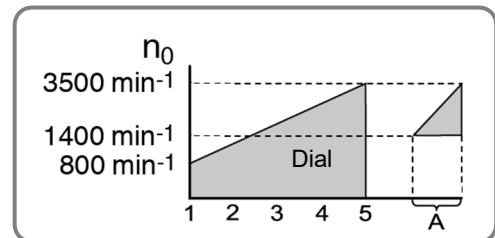
## 13 4-stage orbital operation

Each of the Models CJ 36DA and CJ 36DB is equipped with an orbital mechanism that moves the blade back and forth, as well as up and down. This mechanism allows the blade to cut deeply into wood and other soft materials, and also effectively discharges cutting chips to achieve speedy cutting. For details, see “1. Blade movement” on page 14.

## 14 Variable speed control

Each of the Models CJ 36DA and CJ 36DB is equipped with an electronic control circuit which enables stepless speed control. When the dial set to “1,” the jig saw operates at the minimum speed ( $800 \text{ min}^{-1}$ ). When the dial set to “5,” the jig saw operates at the maximum speed ( $3,500 \text{ min}^{-1}$ ).

Mode	Dial	Blade operating speed
Standard mode	1 to 5	$800 \text{ to } 3,500 \text{ min}^{-1}$
Auto mode	A	No load: $1,400 \text{ min}^{-1}$ Under load: $3,500 \text{ min}^{-1}$



# SPECIFICATIONS

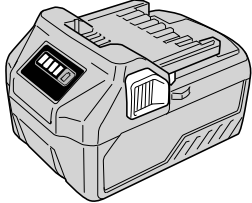






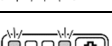






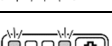






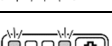
## 1. Specifications of the cordless jig saws

Item		Model	CJ 36DA	CJ 36DB
Cutting capacity	Wood		160 mm (6-5/16")	
	Mild steel		10 mm (13/32")	
	Stainless steel		3.2 mm (1/8")	
No-load speed	Standard mode		800 to 3,500 min <sup>-1</sup>	
	Auto mode		1,400 to 3,500 min <sup>-1</sup>	
Stroke			26 mm (1-1/32")	
Minimum cutting radius			25 mm (1")	
Maximum cutting angle			45° (right and left)	
Type of motor			Fan-cooled DC brushless motor	
Type of switch			Trigger switch (with ON-OFF lock)	Slide switch
LED light			White LED	
Enclosure	Housing		Glassfiber-reinforced nylon resin (green) and thermoplastic elastomer (black)	
	Gear cover Upper cover		Aluminum alloy die casting (painted gun metallic silver)	
	Base Base plate		Aluminum alloy die casting (painted gun metallic silver) Steel plate (painted)	
Available battery*1			Multi volt battery	
Dimensions L x H			277 mm x 206 mm (10-29/32" x 8-1/8") (including BSL 36A18 battery)	298 mm x 175 mm (11-3/4" x 6-29/32") (including BSL 36A18 battery)
Weight	Net*2		2.7 kg (6.0 lbs.) (including BSL 36A18 battery)	2.7 kg (6.0 lbs.) (including BSL 36A18 battery)
			3.0 kg (6.6 lbs.) (including BSL 36B18 battery)	2.9 kg (6.4 lbs.) (including BSL 36B18 battery)
	Gross	(2XCP)	6.3 kg (13.9 lbs.) with plastic case	5.9 kg (13.0 lbs.) with plastic case
(NNP)		4.1 kg (9.0 lbs.) with plastic case	3.8 kg (8.4 lbs.) with plastic case	
(NN)		2.2 kg (4.9 lbs.)		
Packing	Dimensions L x H x W	(2XCP)	295 mm x 395 mm x 215 mm (11-5/8" x 15-9/16" x 8-15/32")	295 mm x 395 mm x 163 mm (11-5/8" x 15-9/16" x 6-7/16")
		(NNP)	225 mm x 273 mm x 91 mm (8-7/8" x 10-3/4" x 3-19/32")	
		(NN)		
Standard accessories	(2XCP)		<ul style="list-style-type: none"> <li>• Charger (UC 18YSL3) ----- 1</li> <li>• Battery (BSL 36A18) ----- 2</li> <li>• Battery cover ----- 2</li> <li>• Jig saw blades No. 41 (for wood) ----- 1</li> <li>• Hex. bar wrench 4 mm ----- 1</li> <li>• Splinter guard ----- 1</li> <li>• Chip cover ----- 1</li> <li>• Dust collector (For Europe) ----- 1</li> <li>• Plastic case ----- 1</li> </ul>	
		(NNP)	Without charger, battery, and battery cover	
		(NN)	Without charger, battery, battery cover, and plastic case	

\*1: Existing batteries (BSL 3660/3626/3620, BSL 18.... series, BSL 14.... series, etc.) cannot be used with this tool.

\*2: According to EPTA-Procedure 01/2014

## 2. Specifications of the multi volt battery

Item	Type	BSL 36A18																				
Battery type	Sealed cylindrical lithium-ion battery with cooling windows																					
Nominal voltage	DC 36 V/18 V (Automatic switching <sup>*1</sup> )																					
Nominal capacity	2.5 Ah/5.0 Ah (Automatic switching <sup>*1</sup> )																					
Continuous maximum discharge current	30 A/60 A (Automatic switching <sup>*1</sup> )																					
Power output	1,080 W																					
Energy	2 x 45 Wh																					
Cooling device	Provided																					
Chargeable battery temperature	0°C to 50°C (32°F to 122°F)																					
Nominal life	About 1,500 times of charging/discharging																					
Enclosure	Polycarbonate resin (black)																					
Dimensions L x H x W	116 x 69 x 76 mm																					
Compatibility with cordless products	18 V tools	Compatible																				
	36 V tools	Compatible with the multi volt series tools only																				
Available charger	Charger for slide type lithium ion batteries																					
Weight <sup>*2</sup>	700 g																					
Charging time at 20°C	About 32 minutes using the charger Model UC 18YSL3																					
Battery level indicator	<table border="1"> <thead> <tr> <th>Indicator lamp</th> <th></th> <th>Remaining battery level</th> </tr> </thead> <tbody> <tr> <td></td> <td rowspan="4">Lights</td> <td>Over 75%</td> </tr> <tr> <td></td> <td>Between 50% and 75%</td> </tr> <tr> <td></td> <td>Between 25% and 50%</td> </tr> <tr> <td></td> <td>Less than 25%</td> </tr> <tr> <td></td> <td rowspan="3">Blinks</td> <td>Nearly empty</td> </tr> <tr> <td></td> <td>Output suspended due to high temperature.<sup>*3</sup></td> </tr> <tr> <td></td> <td>Output suspended due to failure or malfunction.<sup>*4</sup></td> </tr> </tbody> </table>			Indicator lamp		Remaining battery level		Lights	Over 75%		Between 50% and 75%		Between 25% and 50%		Less than 25%		Blinks	Nearly empty		Output suspended due to high temperature. <sup>*3</sup>		Output suspended due to failure or malfunction. <sup>*4</sup>
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		Blinks	Nearly empty																			
			Output suspended due to high temperature. <sup>*3</sup>																			
	Output suspended due to failure or malfunction. <sup>*4</sup>																					

\*1: The tool itself will automatically switch over.

\*2: According to EPTA-Procedure 01/2014

\*3: Remove the battery from the tool and allow it to fully cool down.

\*4: The problem may be the battery so please contact your dealer.

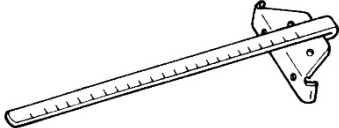


## 4. Optional accessories

### (1) Blades

Application	Blade No.	No. of teeth per inch	Code No.	Pack quantity
Wood	No. 1 (Super long)	6	321878	3
Wood, pulp, synthetic resin	No. 11	8	879336	5
	No. 12	20	879337	5
Steel, pulp, nonferrous metal, synthetic resin	No. 15	8	879338	5
	No. 16	25	879339	5
Wood, pulp, synthetic resin	No. 21	6	879340	5
	No. 22	10	879341	5
Wood	No. 41	8	979357	5
Stainless steel, mild steel	No. 97	21	963400	5

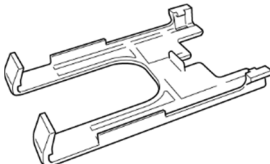
### (2) Guide

	Code No.
	321593

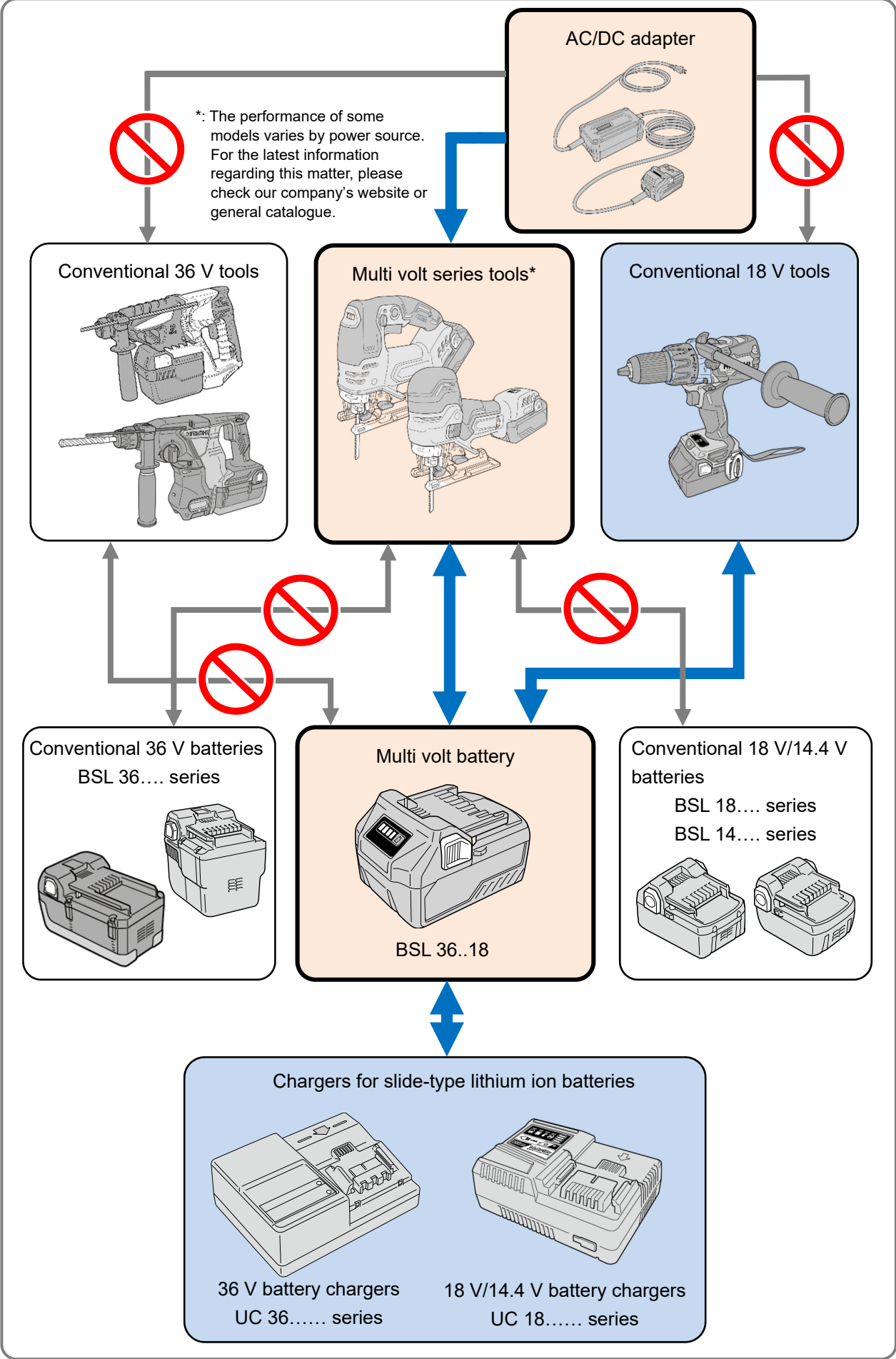
### (3) Dust collector

	Code No.
	370492

### (4) Sub base

	Code No.
	339018

# COMPATIBILITY BETWEEN TOOLS AND BATTERIES



# 1. Comparison of specifications

(1) Top handle type

(Superior specifications:   )

Item		Model	CJ 36DA (2XCP)	A	CJ 18DSL	<Reference> CJ 160V
Cutting capacity	Wood		160 mm (6-5/16")	135 mm (5-5/16")	135 mm (5-5/16")	160 mm (6-5/16")
	Mild steel		10 mm (13/32")	10 mm (13/32")	10 mm (13/32")	10 mm (13/32")
Voltage			DC 36V	DC 18V	DC 18V	AC 110 V – 240 V
Type of motor			Brushless motor	Brushless motor	Brushed motor	Universal motor
No-load speed			800 to 3,500 min <sup>-1</sup>	800 to 3,500 min <sup>-1</sup>	0 to 2,400 min <sup>-1</sup>	800 to 2,800 min <sup>-1</sup>
Stroke			26 mm (1-1/32")	26 mm (1-1/32")	26 mm (1-1/32")	26 mm (1-1/32")
Function	Constant speed control		Provided	Not provided	Not provided	Provided
	Auto mode		Provided	Provided	Not provided	Provided
	2-finger switch* <sup>1</sup>		Provided	Provided	Not provided	Provided
	On-lock switch		Provided	Provided	Not provided	Provided
	Speed control		Dial and switch	Dial	Switch	Dial
Material	Plunger box (Upper cover)		Aluminum	Aluminum	Resin	Aluminum
	Lever		Aluminum	Resin	Resin	Aluminum
Shape of plunger			Cylinder	Square tube	Plate	Cylinder
Cutting speed index* <sup>2</sup>			122 %	110 %	93 %	100 %
Cutting length per charge* <sup>3</sup>			51 m (2.5 Ah)	32 m (3.0 Ah)	49 m (5.0 Ah)	—
Battery	Model		BSL 36A18	BL1850	BSL 36A18	—
	Capacity		2.5 Ah	5.0 Ah	5.0 Ah	—
	Charging time		32 min.	45 min.	32 min.	—
Dimensions W x H			277 mm x 206 mm (10-29/32" x 8-1/8")	266 mm x 208 mm (10-15/32" x 8-3/16")	277 mm x 213 mm (10-29/32" x 8-13/32")	249 mm x 205 mm (9-13/16" x 8-3/32")
Weight* <sup>4</sup>	Measured		2.7 kg (6.0 lbs.)	2.7 kg (6.0 lbs.)	2.5 kg (5.5 lbs.)	2.6 kg (5.7 lbs.)
	Catalog		2.7 kg (6.0 lbs.)	2.6 kg (5.7 lbs.)	2.4 kg (5.3 lbs.)	2.5 kg (5.5 lbs.)

\*1: Two-finger sized large trigger switch

\*2: The Model CJ 160V is indexed at "100%" when cutting MDF 24 mm thick with 20 N of thrust force

\*3: When cutting MDF 24 mm thick

\*4: According to EPTA-Procedure 01/2014

## (2) Barrel handle type

(Superior specifications:  )

Item		Model	CJ 36DB (2XCP)	B	<Reference> CJ 160VA
Cutting capacity	Wood		160 mm (6-5/16")	135 mm (5-5/16")	160 mm (6-5/16")
	Mild steel		10 mm (13/32")	10 mm (13/32")	10 mm (13/32")
Voltage			DC 36V	DC 18V	AC 110 V – 240 V
Type of motor			Brushless motor	Brushless motor	Universal motor
No-load speed			800 to 3,500 min <sup>-1</sup>	800 to 3,500 min <sup>-1</sup>	800 to 2,800 min <sup>-1</sup>
Stroke			26 mm (1-1/32")	26 mm (1-1/32")	26 mm (1-1/32")
Function	Constant speed control		Provided	Not provided	Provided
	Auto mode		Provided	Provided	Provided
	Switches on both sides		Provided	Provided	Not provided
	LED light ON-OFF mode		Provided	Not provided	Not provided
	Speed control		Dial	Dial	Dial
Materials	Plunger box (Upper cover)		Aluminum	Aluminum	Aluminum
	Lever		Aluminum	Resin	Aluminum
Shape of plunger			Cylinder	Square tube	Cylinder
Cutting speed index*1			113 %	100 %	95 %
Cutting length per charge*2			51 m (2.5 Ah)	54 m (5.0 Ah)	—
Battery	Model		BSL 36A18	BL1850	—
	Capacity		2.5 Ah	5.0 Ah	—
	Charging time		32 min.	45 min.	—
Dimensions	W x H		298 mm x 175 mm (11-3/4" x 6-29/32")	298 mm x 189 mm (11-3/4" x 7-7/16")	273 mm x 190 mm (10-3/4" x 7-1/2")
	Handle width		57 mm	63 mm	65 mm
Weight*3	Measured		2.7 kg (6.0 lbs.)	2.6 kg (5.7 lbs.)	2.6 kg (5.7 lbs.)
	Catalog		2.7 kg (6.0 lbs.)	2.5 kg (5.5 lbs.)	2.5 kg (5.5 lbs.)

\*1: B is indexed at "100%" when cutting MDF 24 mm thick with 20 N of thrust force

\*2: When cutting MDF 24 mm thick

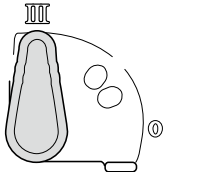
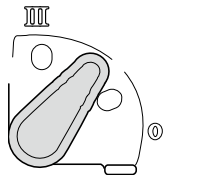
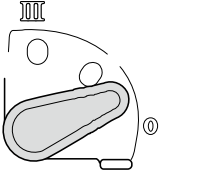
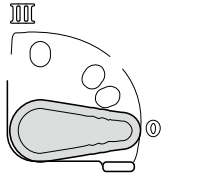

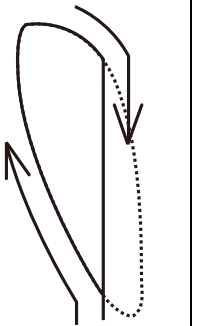

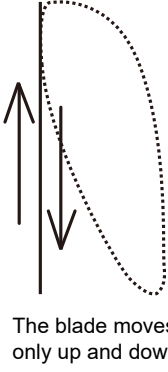
\*3: According to EPTA-Procedure 01/2014



# ORBITAL MECHANISM AND BLADE

## 1. Blade movement

Each of the Models CJ 36DA and CJ 36DB employs an orbital mechanism that moves the blade back and forth, as well as up and down. The amount of back-and-forth blade movement can be adjusted by simply switching the change knob to any of the four settings. The orbits of blade movement at each change knob setting are illustrated in the table below.

	III	II	I	0
Change knob setting				
Orbit of blade edge movement				

## 2. Change knob setting

Selecting the most appropriate change knob setting for each cutting job is essential to achieve the best possible cutting efficiency. Because the most appropriate change knob setting depends on workpiece hardness and thickness, desired finish of the cut surface and other factors, setting a single, simple standard for selecting the most appropriate change knob setting is not practical. Use the table below as a general guide for selecting the most appropriate change knob setting based on various factors.

General guide for selecting the most appropriate change knob setting

Factor	Change knob setting	
	III	0
Material hardness	Soft material	Hard material
Material thickness	Thick	Thin
Cutting speed	Faster cutting	Slower cutting
Straight cutting or curved cutting	Straight cutting	Curved cutting
Surface finish	Rough finish acceptable (Splintering, chipping acceptable)	Fine finish

**NOTE: Set the change knob to "0" independently of the cutting speed when cutting a circle or a circular arc by using the guide (sold separately).**

### 3. Blades

Proper blade selection is very important for achieving maximum performance of the Models CJ 36DA and CJ 36DB. Use the table below as a handy reference for selecting the optimum blade based on the type and thickness of the material to be cut.

Material to be cut	Blade	No. 1 (Super Long)	No. 11	No. 12	No. 15	No. 16	No. 21	No. 22	No. 41	No. 97
	Material quality	Thickness of material (mm)								
Lumber	General lumber	Below 135	10 to 55	Below 20	—	—	10 to 55	5 to 40	10 to 65	—
	Plywood	—	5 to 30	Below 10	—	—	5 to 30	3 to 20	—	—
Iron plate	Mild steel plate	—	—	—	3 to 6	Below 3	—	—	—	2 to 5
	Stainless steel plate	—	—	—	—	—	—	—	—	1.5 to 2.5
Nonferrous metal	Aluminum copper, brass	—	—	—	3 to 12	Below 3	—	—	—	Below 5
	Aluminum sash	—	—	—	Height up to 25	—	—	—	—	Height up to 25
Plastics	Phenol resin, melamine resin, etc.	—	—	—	5 to 20	Below 6	5 to 15	Below 6	—	5 to 15
	Vinyl chloride, acryl resin, etc.	—	5 to 30	Below 10	5 to 20	Below 5	5 to 30	3 to 20	—	5 to 15
	Foamed polyethylene, Styrofoam	—	10 to 55	3 to 25	5 to 25	3 to 25	10 to 55	3 to 40	—	5 to 25
Pulp	Cardboard, corrugated paper	—	10 to 55	3 to 25	—	—	10 to 55	3 to 40	—	—
	Hardboard	—	—	—	3 to 25	Below 6	—	—	—	3 to 25
	Fiberboard	—	—	—	—	Below 6	—	—	—	—

**NOTE: The minimum cutting radius of the No. 1 (Super long), No. 21, No. 22, and No. 41 blades is 100 mm.**

# PRECAUTIONS ON SALES PROMOTION

## 1. Safety instructions

In the interest of promoting the safest and most efficient use of the cordless jig saw Models CJ 36DA and CJ 36DB by all of our customers, it is very important when concluding a sale that the salesperson carefully ensures that the customer seriously recognizes the importance of the handling instructions, and fully understands the precautions listed on the caution plate and name plate attached to each tool.

### A. Handling instructions

Salespersons must be thoroughly familiar with the handling instructions in order to give pertinent advice to the customers. In particular, salespersons must have a thorough understanding of precautions on the use of cordless tools that differ from those of ordinary electric power tools.

#### **(1) Before use, ensure that the battery is fully charged.**

A new battery is not fully charged. Even if the battery was fully charged at the factory, long periods of inactivity, such as during shipping, cause the battery to lose its charge. Customers must be instructed to fully charge the battery prior to use.

#### **(2) Connect the charger to an AC power outlet only.**

Using any other power source (DC outlet, fuel powered generator, etc.) will cause the charger to overheat and burn out.

#### **(3) Do not use any voltage increasing equipment (transformer etc.) between the power source and the charger.**

Using the charger at a voltage higher than that indicated on the unit will result in malfunction.

#### **(4) Charge the battery within the specified ambient temperature range from -10°C (14°F) to 40°C (104°F).**

At ambient temperature below -10°C (14°F), charging is not possible or overcharging occurs because the charging control circuit does not function properly. At ambient temperature above 40°C (104°F), charging will stop before the battery is fully charged due to rising of temperature during charging caused by the small difference between the upper limit of the chargeable battery temperature (55°C)(131°F) and the ambient temperature. The optimum ambient temperature range is from 20°C (68°F) to 25°C (77°F).

#### **(5) Do not use the charger continuously.**

Charging batteries successively will cause the charger to overheat and possibly become defective. After charging one battery, wait at least 15 minutes before charging the next battery.

#### **(6) Do not insert foreign objects into the air vents on the charger.**

The charger case is equipped with air vents to protect internal electronic components from overheating. Caution the customer not to drop or insert such foreign matter as metallic or inflammable objects into the air vents. This could cause electric shock, fire, or other serious hazards.

#### **(7) Do not attempt to disassemble the battery or charger.**

The battery and charger incorporate special parts such as thermostats for rapid charging. Wrong parts replacement and/or wiring will cause device malfunctions and, in extreme cases, cause fire and other hazards. Instruct the customer to bring these units to an authorized service center whenever they need repair or parts replacement.

#### **(8) Disposal of the battery**

Ensure that all customers understand that each battery should be brought to the shop from which it was purchased when it cannot be recharged or repaired any more. Do not dispose of the battery in fire. If the battery is burnt, it may explode.

**(9) Charging time will be longer depending on the battery temperature.**

The charger Model UC 18YSL3 can charge a low-temperature battery (up to -10°C (14°F)) according to the charging characteristics of lithium-ion batteries. However, the time required for charging such a low-temperature battery will be longer. In contrast, if a hot lithium-ion battery is charged, its internal chemical substance will deteriorate, and the battery life will be shortened. To avoid this problem, the charger Model UC 18YSL3 automatically stops charging with the red LED blinking when the battery temperature exceeds 55°C (131°F) during charging. The Model UC 18YSL3 automatically resumes charging after the battery temperature is lowered.

The relationship between the battery temperature and the charging time is shown in the table below.

Battery temperature	Charging time							
	1.3 Ah 1.5 Ah	2.0 Ah	2.5 Ah	3.0 Ah	4.0 Ah	5.0 Ah	6.0 Ah	8.0 Ah
Under 0°C (32°F)	90 min.	120 min.	150 min.	180 min.	240 min.	300 min.	360 min.	480 min.
0°C (32°F) or higher	15 min.	20 min.	25 min.	20 min.	26 min.	32 min.	38 min.	52 min.

**(10) Do not use the product if the tool or the battery terminals (battery mount) are deformed.**

Installing the battery could cause a short circuit that could result in smoke emission or ignition.

**(11) Keep the tool's terminals (battery mount) free of swarf and dust.**

- Prior to use, make sure that swarf and dust have not collected in the area of the terminals.
- During use, try to avoid swarf or dust on the tool from falling on the battery.
- When suspending operation or after use, do not leave the tool in an area where it may be exposed to falling swarf or dust. Doing so could cause a short circuit that could result in smoke emission or ignition.

**(12) Keep the battery free of dust.**

- Protect the battery from being covered with dust during operation.
- Protect the battery from being covered with dust accumulated on the tool during operation.
- Do not leave the battery in a dusty area when not in use.
- Remove dust from the battery and store it separately from such metallic parts as screws and nails.

## B. Cautions listed on labels

- (1) The following cautions are listed on the name plate attached to the cordless jig saw Models CJ 36DA and CJ 36DB.

[For Europe and China]



- To reduce the risk of injury, user must read instruction manual.

[For the USA and Canada]

**WARNING** -To reduce the risk of injury, user must read instruction manual.

**AVERTISSEMENT** -Afin de réduire le risque de blessures, l'utilisateur doit lire le mode d'emploi.

[For Taiwan]

注意

- 使用前請詳讀使用說明書

[Other regions]

**WARNING**  
-To reduce the risk of injury,  
user must read instruction manual.

(2) The following cautions are listed on the name plate attached to the battery Type BSL 36A18.

[For the USA and Canada]

**WARNING** ● To reduce the risk of injury, user must read instruction manual.

**AVERTISSEMENT** ● Afin de réduire le risque de blessures, l'utilisateur doit lire le mode d'emploi.

[For Taiwan]

注意

●使用前請詳讀使用說明書 ●嚴禁分解或投入火中

[For Thailand]

**CAUTION**

●Do not disassemble nor throw into fire.  
●Use specified charger only.  
●Charging current / voltage 8.0A/21.0V

[Other regions]



• To reduce the risk of injury, user must read instruction manual.

**CAUTION**

●Do not disassemble nor throw into fire.

(3) The following cautions are listed on the name plate attached to the charger Model UC 18YSL3.

[For the USA and Canada]

**CAUTION** ● For safe operation, see instruction manual.  
●Charge metabo HPT rechargeable batteries types BSL14, BSL18 series. Other types of batteries may burst causing personal injury and damage.  
●Charge between 14°F and 104°F. Rest 15 minutes between the charging of batteries. ● Indoor use only. ● Replace defective cord immediately.  
●Do not install on or over combustible surfaces.  
**AVERTISSEMENT** ● Pour utilisation à l'intérieur seulement.  
**ATTENTION** ● Utiliser pour charger uniquement les accumulateurs metabo HPT du types BSL14, BSL18 séries. D'autres types D'accumulateurs pourraient éclater et causer des blessures ou dommages. ● Ne pas installer sur ou par-dessus des surfaces combustibles.

[For Taiwan]



• Read thoroughly handling instructions before use.



• Indoor use only.

[Other regions]



• Read thoroughly handling instructions before use.



• Indoor use only.

## 2. Inherent drawbacks of cordless jig saw requiring particular attention during sales promotion

The cordless jig saw offers many advantages, such as use in places where no power source is available, and affords easy use since there is no cord. However, any cordless tool has certain inherent drawbacks. Salespersons must be thoroughly familiar with these drawbacks in order to properly advise the customer on the most efficient use of the tool.

Refer to the Technical Data of the charger Model UC 18YSL3 for detailed information about the charger.

### A. Suggestions and precautions on efficient use of the tool

#### (1) Avoid continuous heavy-load operation.

Cutting a thick workpiece with strong pressure imposes a heavy load on the motor. If such an operation is performed continuously, the temperature of the motor and housing will rise, causing the motor to overheat. Please instruct the customers to avoid continuous heavy-load operation.

#### (2) Do not insert foreign objects into body vent holes.

The body of this tool has vent holes for improved cooling efficiency. As a fan is built into the motor, a foreign object inserted through a vent hole may cause failure. Please instruct the customers to never insert a foreign object into the vent holes.

#### (3) Avoid “locking” of the motor.

Locking of the motor will generate overload current that could result in the motor overheating and/or rapid battery depletion. Salespersons should advise the customer to immediately release the switch and stop operation in case the motor becomes locked.

#### (4) Avoid continuous use.

Although the Models CJ 36DA and CJ 36DB can withstand continuous operation under certain conditions, the operating conditions differ depending on the workpiece material and sharpness of the blade being used. Please instruct the customers to avoid continuous use of the Models CJ 36DA and CJ 36DB, and generally wait about 15 minutes after a single charge operation.

### B. Variation in amount of work possible per charge

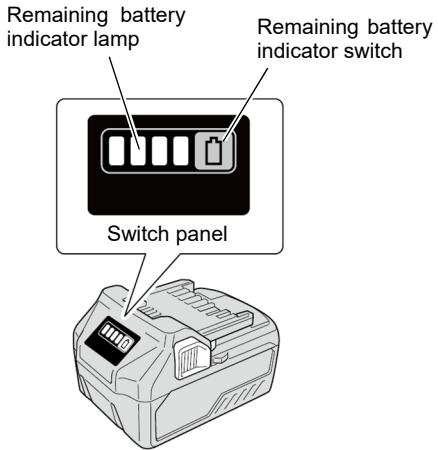
The actual capacity of the lithium-ion battery may vary within 10% depending on the ambient temperature during use and charging, and the number of times the battery has been recharged.

### C. Remaining battery level indicator

The remaining battery level can be checked with the remaining battery indicator provided on the battery. However, pay attention to the following.

- Remaining battery indicator on the battery

Press the remaining battery indicator switch on the battery to check the remaining battery level. The lamp goes out automatically in about 3 seconds. The indication on the remaining battery indicator should be used only as a guide because the remaining battery level may differ according to the environment of use, battery characteristics, etc. Note that the indication on the battery's remaining battery indicator may not be the same as that on the charger's remaining battery indicator.



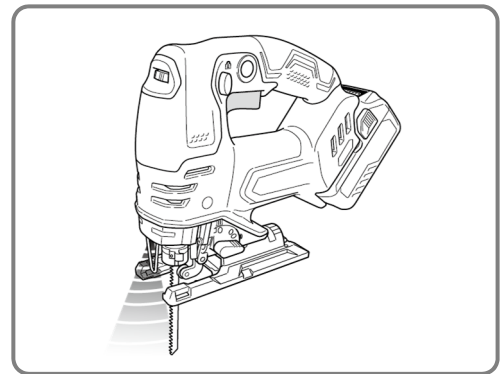
Indicator lamp		Remaining battery level
Lights		Over 75%
		Between 50% and 75%
		Between 25% and 50%
		Less than 25%
Blinks		Nearly empty
		Output suspended due to high temperature. Remove the battery from the tool and allow it to fully cool down.
		Output suspended due to failure or malfunction. The problem may be the battery so please contact your dealer.

### D. Storing the lithium-ion battery

Check that the lithium-ion battery is fully charged before storing for a long period (3 months or longer). If the remaining battery level is low, the battery may not be rechargeable after prolonged storage.

### E. LED light warning signals

This product features functions that are designed to protect the tool itself as well as the battery. If any of the safeguard functions is triggered, the LED light will blink as described in the table below. Take the proper corrective action described below.



Safeguard function	LED light display	Corrective action
Overload protection	On 0.1 second/Off 0.1 second 	Remove the cause of the overloading.
Temperature protection	On 0.5 second/Off 0.5 second 	Allow the tool and battery to thoroughly cool.

### F. Protective function of the lithium-ion battery

The lithium-ion battery has a protective function that automatically stops output to extend its service life. Therefore, the motor may stop automatically in the cases 1 to 3 described below, even if the switch is turned on during operation. This is due to the protective function and is not a fault.

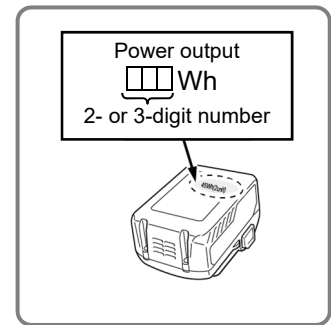
1. When the battery is nearly depleted, the motor stops. Instruct the customer to recharge the battery immediately in such case.
2. When the tool is overloaded, the motor may stop. Instruct the customer to turn off the switch and eliminate the cause of overload in such case.
3. When the battery is overheated, the motor may stop. Instruct the customer to stop using the battery, remove it from the main unit, and allow the battery to fully cool down in a shaded and airy location in such case.

## G. 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 transporting company when arranging transport.**

- Lithium-ion batteries that exceed a power output of 100 Wh 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.
- If the battery Type BSL 36B18 is installed in the power tool, the power output will exceed 100 Wh and the unit will be classified as Dangerous Goods for freight classification.



## H. Precautions on connecting a USB device (Model UC 18YSL3 charger)\*

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, nor for any damage that may occur to a connected device.

\*: Except for Taiwan

## 3. Guide roller and blade

### (1) Periodically lubricate the rotor of the guide roller.

To prevent abrasion, periodically lubricate the contact point between the rotor of the guide roller and the blade with spindle oil or other lubricant.

### (2) Compatible jig saw blades

The Models CJ 36DA and CJ 36DB are compatible only with T-shaped shank type blades whose attaching portion is up to 1.8 mm in thickness as described below. See page 10 for the compatible jig saw blades. Do not use other makers' jig saw blades on the market.

