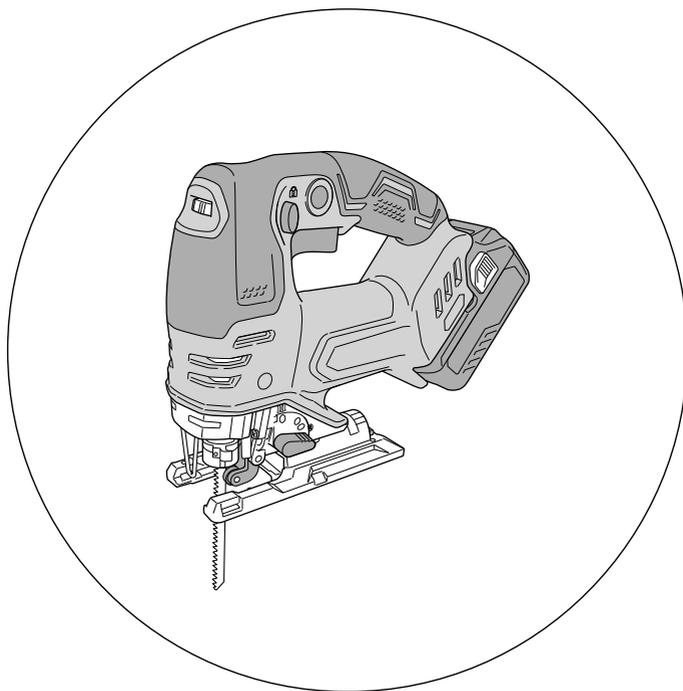


HiKOKI

充电式曲线锯
Cordless Jig Saw

中文
English

CJ 36DA



保留备用
Keep for future reference



使用说明书
Handling instructions

目次

电动工具通用安全警告.....	2
电动曲线锯安全警告.....	5
使用充电式曲线锯时应注意事项.....	5
锂离子电池使用注意事项.....	7
锂离子电池运输.....	8
USB设备连接器使用注意事项.....	8
符号.....	9
零件名称.....	9
规格.....	10
标准附件.....	10
用途.....	11
电池的拆卸 / 安装法.....	11
充电.....	11
作业之前.....	14
操作.....	18
切割.....	21
关于不锈钢板的切割.....	24
锯片的选择.....	25
卡住内六角扳手.....	25
连接到清洁器.....	25
USB设备的充电方法.....	26
维护和检查.....	27
故障排除.....	29
选择附件.....	33

电动工具通用安全警告

警告！

阅读电动工具附带的所有安全警告、说明、插图和规格说明。
不遵照以下说明会导致电击、着火和 / 或严重伤害。

保存所有警告和说明书以备查阅。

在所有下列的警告中术语“电动工具”指市电驱动（有线）电动工具或电池驱动（无线）电动工具。

1) 工作场地的安全

- a) 保持工作场地清洁和明亮。
混乱和黑暗的场地会引发事故。

- b) 不要在易爆环境，如有易燃液体、气体或粉尘的环境下操作电动工具。
电动工具产生的火花会点燃粉尘或气体。
- c) 让儿童和旁观者离开后操作电动工具。
注意力不集中会使操作者失去对工具的控制。

2) 电气安全

- a) 电动工具插头必须与插座相配。绝不能以任何方式改装插头。需接地的电动工具不能使用任何转换插头。
未经改装的插头和相配的插座将减少电击危险。
- b) 避免人体接触接地表面，如管道、散热片和冰箱。
如果你身体接地会增加电击危险。
- c) 不得将电动工具暴露在雨中或潮湿环境中。
水进入电动工具将增加电击危险。
- d) 不得滥用电线。绝不能用电线搬运、拉动电动工具或拔出其插头。使电线远离热源、油、锐边或运动部件。
受损或缠绕的软线会增加电击危险。
- e) 当在户外使用电动工具时，使用适合户外使用的外接软线。
适合户外使用的软线将减少电击危险。
- f) 如果在潮湿环境下操作电动工具是不可避免的，应使用剩余电流动作保护器（RCD）。
使用RCD可减小电击危险。

3) 人身安全

- a) 保持警觉，当操作电动工具时关注所从事的操作并保持清醒。当你感到疲倦，或在有药物、酒精或治疗反应时，不要操作电动工具。
在操作电动工具时瞬间的疏忽会导致严重人身伤害。
- b) 使用个人防护装置。始终佩戴护目镜。
安全装置，诸如适当条件下使用防尘面具、防滑安全鞋、安全帽、听力防护等装置能减少人身伤害。
- c) 防止意外起动。确保开关在连接电源和 / 或电池盒、拿起或搬运工具时处于关断位置。
手指放在已接通电源的开关上或开关处于接通时插入插头可能会导致危险。
- d) 在电动工具接通之前，拿掉所有调节钥匙或扳手。
遗留在电动工具旋转零件上的扳手或钥匙会导致人身伤害。
- e) 手不要伸展得太长。时刻注意立足点和身体平衡。
这样在意外情况下能很好地控制电动工具。
- f) 着装适当。不要穿宽松衣服或佩戴饰品。让衣服、手套和头发远离运动部件。
宽松衣服、佩饰或长发可能会卷入运动部件中。

- g) 如果提供了与排屑、集尘设备连接用的装置，要确保它们连接完好且使用得当。
使用这些装置可减少尘屑引起的危险。
- h) 请勿因频繁使用工具的熟悉感而掉以轻心，忽视工具的安全性原则。
粗心的行为可能会导致瞬间发生严重伤害。

4) 电动工具使用和注意事项

- a) 不要滥用电动工具，根据用途使用适当的电动工具。
选用适当设计的电动工具会使你工作更有效、更安全。
- b) 如果开关不能接通或关断工具电源，则不能使用该电动工具。
不能用开关来控制的电动工具是危险的且必须进行修理。
- c) 在进行任何调整、更换附件或存放电动工具之前，必须从电源上拔掉插头和 / 或取下电池盒（如果可拆卸）。
这种防护性措施将减少工具意外起动的危险。
- d) 将闲置不用的电动工具贮存在儿童所及范围之外，并且不要让不熟悉电动工具或对这些说明不了解的人操作电动工具。
电动工具在未经培训的用户手中是危险的。
- e) 维护电动工具和附件。检查运动件是否调整到位或卡住，检查零件破损情况和影响电动工具运行的其他状况。如有损坏，电动工具应在使用前修理好。
许多事故由维护不良的电动工具引发。
- f) 保持切削刀具锋利和清洁。
保养良好的有锋利切削刃的刀具不易卡住而且容易控制。
- g) 按照使用说明书，考虑作业条件和进行的作业来使用电动工具、附件和工具的刀头等。
将电动工具用于那些与其用途不符的操作可能会导致危险。
- h) 保持手柄和抓握表面干燥、清洁，远离油和油脂。
如果手柄和抓握表面湿滑，可能导致在发生意外情况时，无法安全操作和控制工具。

5) 电池式工具使用和注意事项

- a) 只用制造商规定的充电器充电。
将适用于某种电池盒的充电器用到其他电池盒时会发生着火危险。
- b) 只使用配有特制电池盒的电动工具。
使用其他电池盒会发生损坏和着火危险。
- c) 当电池盒不用时，将它远离其他金属物体，例如回形针、硬币、钥匙、钉子、螺钉或其他小金属物体，以防一端与另一端连接。
电池端部短路会引起然烧或火灾。
- d) 在滥用条件下，液体会从电池中溅出；避免接触。如果无意间碰到了，用水冲洗。如果液体碰到了眼睛，还要寻求医疗帮助。
从电池中溅出的液体会发生腐蚀或燃烧。

- e) 请勿使用损坏或改装的电池盒或工具。
损坏或改装的电池可能会引发突发状况，导致火灾、爆炸或受伤。
 - f) 请勿将电池盒或工具暴露在有火源或高温环境中。
如果暴露在有火源或 130 度以上高温的环境中，可能引起爆炸。
 - g) 请完全按照充电说明进行操作，不要在说明中规定的温度范围外的环境中对电池盒或工具充电。
充电不当或在规定温度范围外的环境中充电可能会导致电池损坏，增加发生火灾的风险。
- 6) 维修
- a) 将你的电动工具送交专业维修人员，使用同样的备件进行修理。
这样将确保所维修的电动工具的安全性。
 - b) 请勿维修已损坏的电池盒。
需由制造商或经授权的服务供应商进行维修。

注意！

不可让儿童和体弱人士靠近工作场所。

应将不使用的工具存放在儿童和体弱人士接触不到的地方。

电动曲线锯安全警告

1. 当在切削附件有可能碰到暗线的场所进行操作时，只能通过绝缘握持面来握住电动工具。
切削附件碰到带电导线可能会使电动工具的外露金属零件带电并使操作者发生电击危险。

使用充电式曲线锯时应注意事项

1. 务请在 0°C ~ 40°C 的温度下进行充电。温度低于 0°C 将会导致充电过度，极其危险。电池不能在高于 40°C 的温度下充电。
最适合于充电的温度是 20 ~ 25°C。
2. 不要连续使用充电器。
一次充电完毕后，在 15 分钟内不要再次使用该充电器对电池充电。
3. 勿让杂质进入充电式电池连结口内。
4. 切勿拆卸充电式电池与充电器。
5. 切勿使充电式电池短路。使电池短路将会造成很大的电流和过热，从而烧坏电池。
6. 请勿将电池丢入火中。
电池受热将会爆炸。
7. 请勿将异物插入充电器的通风口。
若将金属异物或易燃物插入通风口的话，将会引起触电事故或使充电器受损。

8. 充电后电池寿命太短不够使用时，请尽快将电池送往经销店。请勿将用过的电池乱丢。
9. 请勿使用耗竭了的电池，否则会损坏充电器。
10. 如果以低速持续使用本机，则电动机被加载额外负载，这可能会导致电动机卡死。经常对电动工具进行操作以防在作业中锯片被材料卡住。经常调整锯片速度以顺利切割。
11. 长时间连续使用本电钻，可能会导致机体过热，对马达及开关造成损害，因此使用本机请勿连续超过 15 分钟。
12. 为保护您的听力请在工作时带上耳塞。
13. 切勿在工作中或刚刚结束工作时触摸锯条，因为在工作中锯条会变得很热，触摸其将会造成严重的烫伤。
14. 始终牢牢握住电动工具手柄。请务必拿紧该电动工具的把手和前盖，否则产生的反作用力可能会导致不正确的或甚至危险的操作。
15. 务必关闭开关，将锁定按钮推至锁定位置，然后在以下情况下从工具中取出电池：
 - 停止或结束工作时
 - 安装或拆卸刀片时
 - 安装或拆卸附件或选配零件时
 - 调整底座位置时
 - 维护、检验或储存工具时
16. 该曲线锯使用高功率的电动机。如果机器以低速持续使用，则电动机被加载一个额外的负载，并可能导致电动机卡死。经常对该电动工具进行操作以防止在作业中锯片被材料卡住。经常调整锯片速度以进行平滑的切割。
17. 作业中产生的碎屑
在正常作业中所产生的碎屑可能影响作业者的健康。请采取下列任何一种措施。
 - a) 穿带防尘面具
 - b) 使用外部集尘设备当使用外部集尘设备时，将外部集尘设备上的软管连接到附加器。
18. 使用过程中，请勿触碰刀具的金属部分。
19. 请勿使用工具或电池端子（电池安装部位）明显变形的产品。
否则，安装电池后可能会短路，造成冒烟或起火。
20. 请清除工具端子（电池安装部位）上的削屑和灰尘。
 - 使用前请确保电池上没有堆积削屑和灰尘。
 - 在使用过程中，请尽量避免工具上的削屑或灰尘掉落在电池上。
 - 暂时不使用工具时或使用后，应将工具存放在不会掉落削屑或灰尘的地方。
否则可能短路，造成冒烟或起火。

锂离子电池使用注意事项

为延长使用期限，锂离子电池备配停止输出的保护功能。

若是在使用本产品时发生下列 1 和 3 的情况，即使按下开关，马达也可能停止。这并非故障，而是启动保护功能的结果。

1. 在残留的电池电力即将耗尽时，马达会停止。

在这种情况下，请立即予以充电。

2. 若工具超过负荷，马达亦可能停止。在这种情况下，请松开工具的开关，试着消除超过负荷的原因。之后您就可以再度使用。

3. 若电池在过载工作情况下过热，电池电力可能会中止。

在这种情况下，请停止使用电池，让电池冷却。之后您就可以再度使用。

此外，请留心下列的警告及注意事项。

警告！

为防止发生电池漏电、发热、冒烟、爆炸及提前点燃，请确保留意下列事项。

1. 确保电池上没有堆积削屑及灰尘。

○ 在工作时确定削屑及灰尘没有掉落在电池上。

○ 确定所有工作时掉落在电动工具上的削屑和灰尘没有堆积在电池上。

○ 请勿将未使用的电池存放在曝露于削屑和灰尘的位置。

○ 在存放电池之前，请清除任何可能附着在上面的削屑和灰尘，并请切勿将它与金属零件（螺丝、钉子等）存放在一起。

2. 请勿以钉子等利器刺穿电池、以铁锤敲打、踩踏、丢掷电池，或将其剧烈撞击。

3. 切勿使用明显损坏或变形的电池。

4. 使用电池时请勿颠倒电极。

5. 请勿直接连接电源插座或汽车点烟器孔座。

6. 请依规定方式使用电池，切勿移作他用。

7. 如果已过了再充电时间，电池仍无法完成充电，请立即停止继续再充电。

8. 请勿将电池放置于高温或高压处，例如微波炉、烘干机或高压容器内。

9. 在发觉有渗漏或异味时，请勿接近远离火源。

10. 请勿在会产生强烈静电的地方使用。

11. 如有电池渗漏、异味、发热、褪色或变形，或在使用、充电或存放时出现任何异常，请立即将它从装备或电池充电器拆下，并停止使用。

12. 请勿浸泡电池或让任何液体流入电池内部。导电液体进入（如水），可能造成电池损坏，甚至可导致火灾或爆炸。将电池存放在阴凉、干燥的地方，远离易燃物品。必须避免将电池置于腐蚀性气体环境中。

注意！

1. 若电池渗漏出的液体进入您的眼睛，请勿搓揉眼睛，并以自来水等干净清水充分冲洗，立刻送医。

若不加以处理，液体可能会导致眼睛不适。

2. 若液体渗漏至您的皮肤或衣物，请立即以自来水等清水冲洗。
上述情况可能会使皮肤受到刺激。
3. 若初次使用电池时发现生锈、异味、过热、褪色、变形及 / 或其它异常情况时，请勿使用并将该电池退还给供货商或厂商。

警告！

如果有导电异物进入锂电池，可能发生短路，并有发生火灾危险的可能。请在贮存电池时，遵守如下事项。

- 请不要在电池盒内放置导电物体，如钉子、钢丝、铜丝或其他电线。
- 或者将电池装在电动工具中，或者在牢固按入电池盖并挡住通风孔后再存放，以防止短路（参照图 1）。

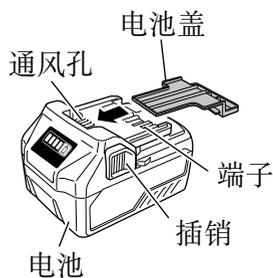


图 1

锂离子运输

当运输一个锂离子电池，请注意以下预防措施。

警告！

告知运输公司，包装内包含一个锂离子电池，告知该公司其功率输出并且要按照运输公司的指引安排运输。

- 功率输出超过 100 Wh 的锂离子电池被视作危险物品运输分类并且需要特别申请程序。
- 对于境外运输，您必须遵守国际法以及输入国的规章和条例。
- 如果电动工具中装有 BSL36B18（另售），功率输出将超过 100 Wh，装置将被归类为危险物品。

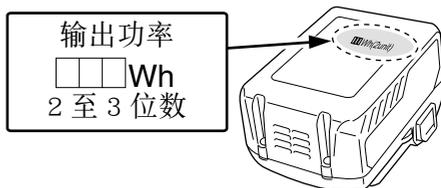


图 2

USB设备连接器使用注意事项

发生意外情况时，本产品连接的 USB 中保存的数据可能发生损坏或丢失。使用本产品前，请务必备份 USB 设备中的数据。

请注意，如 USB 设备中存储的数据发生损坏、丢失或连接的设备发生损坏，本公司概不负责。

符号

警告！

如下所示的符号用于本机。使用前请务必理解其含意。

	为降低伤害风险，用户必须阅读使用说明书	n_0	空载转速
	直流电	/min	每分钟的振动次数
V	额定电压		警告

零件名称

1. 电动工具

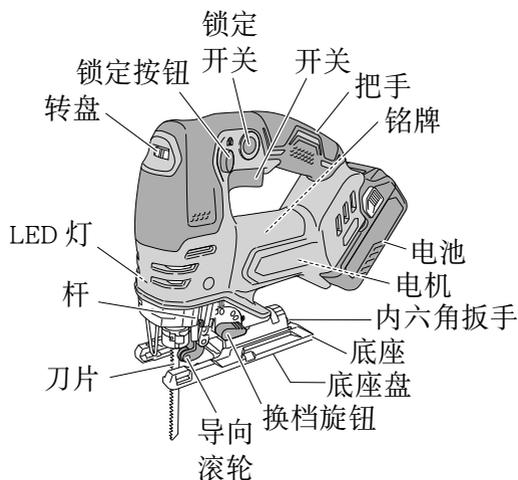
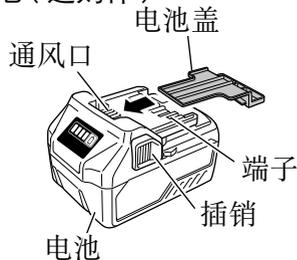


图 3

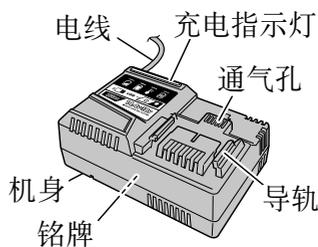
2. 电池（选购件）



<BSL36A18>

图 4

3. 电池充电器（选购件）



<UC18YSL3>

图 5

规格

电动工具

型式	CJ36DA
电压	36 V
最大锯深	木材 160 mm 软钢 10 mm 不锈钢 3.2 mm
空载转速	800 – 3500 /min
冲程	26 mm
最小切割半径	25 mm
电池 *	BSL36A18 : 锂离子 36 V / 18 V (2.5 Ah / 5.0 Ah 10 节)
重量	2.7 kg (安装 BSL36A18)

* 本工具不适用以下电池 (BSL3660/3626/3620、BSL18xx 和 BSL14xx 系列)。

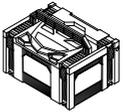
充电器 (单独出售)

型式	UC18YSL3
充电电压	14.4 V – 18 V
重量	0.6 kg

标准附件

CJ36DA 的附件请参见以下列表。

表 1

		CJ36DA (NNP)
锯片 (No. 41) 参照第 32 页的表 6		1
内六角扳手		1
碎屑防护头		1
碎屑盖		1
塑料盒		1

用途

- 切割各类木材及钻孔切割
- 切割软钢板，铝板及铜板
- 切割合成树脂，如酚醛树脂及氯乙烯
- 切割薄而软的建筑材料
- 切割不锈钢板（使用 No. 97 锯片）

电池的拆卸 / 安装法

1. 电池的拆卸法

请先紧抓住把手、然后再推压电池插销以拆下电池（参照图 6）。

注意！

切勿使电池短路。

2. 电池的安装法

插入电池时请注意极性（参照图 6）。

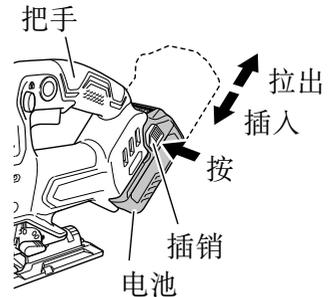


图 6

充电

使用电动工具之前，按下述方法将电池进行充电。

1. 将充电器的电源线连接到插座。

将充电器插头连接到插座时，指示灯闪烁红色（间隔为 1 秒）。

2. 将电池插入充电器。

如图 7 所示，将电池紧紧地插入充电器。

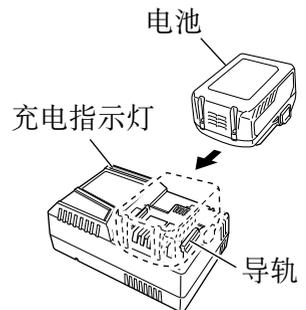


图 7

3. 充电

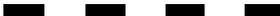
将电池插入充电器后，充电指示灯将呈蓝色闪烁。

电池完全充电后，充电指示灯将持续点亮呈绿色。（参照表 2）

(1) 充电指示灯的指示状态

根据充电器或可充电电池的情况，充电指示灯的显示如表 2 所示。

表 2

充电指示灯的指示状态				
充电指示灯 (红 / 蓝 / 绿 / 紫)	充电前	闪烁 (红)	点亮 0.5 秒钟。不点亮 0.5 秒钟。(熄灭 0.5 秒钟) 	插入电源
	充电时	闪烁 (蓝)	点亮 0.5 秒钟。不点亮 1 秒 钟。(熄灭 1 秒钟) 	电池电量低于 50%
		闪烁 (蓝)	点亮 1 秒钟。不点亮 0.5 秒钟。(熄灭 0.5 秒钟) 	电池电量低于 80%
		点亮 (蓝)	连续点亮 	电池电量高于 80%
	充电完成	点亮 (绿)	连续点亮  (发出持续蜂鸣声：约 6 秒)	
	过热 待机	闪烁 (红)	点亮 0.3 秒钟。不点亮 0.3 秒钟。(熄灭 0.3 秒钟) 	电池过热。无法充 电（电池冷却后将 开始充电）
	无法 充电	闪动 (紫色)	点亮 0.1 秒钟。不点亮 0.1 秒钟。(熄灭 0.1 秒钟)  (发出断续蜂鸣声：约 2 秒)	电池或充电器故障

- (2) 可充电电池温度和充电时间相关资料
温度和充电时间如表 3 所示。

表 3

		充电器		UC18YSL3				
电池	电池类型	锂离子电池						
	电池可充电温度	0°C – 50°C						
	充电电压	V	14.4		18			
	充电时间 (环境温度 20°C)	分钟	BSL14xx 系列		BSL18xx 系列		多电压系列	
			(4 节)	(8 节)	(5 节)	(10 节)	(10 节)	
			BSL1415S : 15		BSL1815S : 15			
		BSL1415 : 15	BSL1430 : 20	BSL1815 : 15	BSL1830 : 20	BSL36A18 : 32		
		BSL1415X : 15	BSL1440 : 26	BSL1815X : 15	BSL1840 : 26	BSL36B18 : 52		
		BSL1420 : 20	BSL1450 : 32	BSL1820 : 20	BSL1850 : 32	BSL36C18 : 20		
		BSL1425 : 25	BSL1460 : 38	BSL1825 : 25	BSL1860 : 38			
		BSL1430C : 30		BSL1830C : 30				
USB	充电电压	V	5					
	充电电流	A	2					

注：

充电时间可能会因环境温度和电源电压而异。

4. 从电源插座拔下充电器的电源线。
5. 握紧充电器并取出电池。

注：

充电后，先将电池从充电器中取出，然后妥善保管。

关于新电池的放电

新电池内部的化学物质未被激活或电池长时间不使用时，初次或第二次使用时需要将其放电至较低电量。这只是暂时现象，将电池充电 2-3 次即可恢复为充电所需的正常时间。

较长时间保持电池性能的方法

- (1) 在电池电力完全耗尽之前进行充电。

感到电动工具的能力变弱时，请停止使用并给电池充电。若您继续使用电动工具并耗尽电力，电池可能会损坏或其使用寿命缩短。

- (2) 避免在高温环境中充电。

使用后可充电电池的温度将迅速升高。若使用后立即对这种电池进行充电，其内部化学物质会劣化，电池使用寿命将缩短。请稍等片刻，待电池冷却后再进行充电。

注意！

- 如果电池长时间放置在阳光直射的地方或者刚刚使用完毕时，电池会变热。如果此时对电池充电，充电器的充电指示灯会点亮 0.3 秒钟，然后熄灭 0.3 秒钟（熄灭 0.3 秒钟）。此时请等待电池冷却后再开始充电。
- 充电指示灯闪动（闪动间隔为 0.2 秒钟）时，请检查充电器的电池连接器内是否有异物并加以清除。如没有异物，则可能是电池或充电器发生了故障。请将其送往当地授权服务中心。
- 因内置的微电脑需要约 3 秒钟才能确认正用 UC18YSL3 充电的电池已被取出，因此请等待 3 秒钟后再重新插入电池继续充电。如果在不到 3 秒内就插入电池，则电池可能充电不正常。

作业之前

注意！

为避免发生严重事故，请确保开关处于关断位置，并取出电池。

1. 检查工作区域环境。
检查工作区域，确保没有杂物且不杂乱。
请勿使无关人员靠近。确保照明和通风充足。
2. 电源开关
确认电源开关是否切断。
3. 作业中产生的碎屑
在正常作业中所产生的碎屑可能影响作业者的健康。请采取下列任何一种措施。
 - a) 穿带防尘面具
 - b) 使用外部集尘设备
当使用外部集尘设备时，将外部集尘设备上的软管连接到附加器。（图 8）

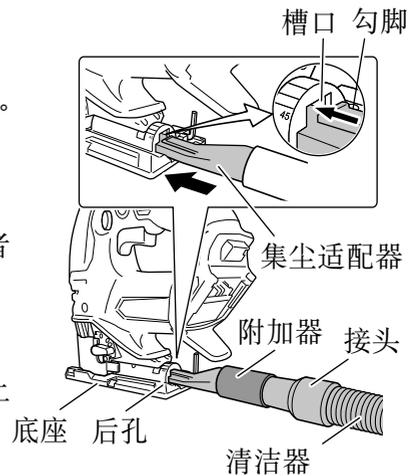


图 8

4. 更换锯片

注意！

- 在更换锯片时，请务必关闭开关，从插座拔出插头。
 - 柱塞移动时请勿触摸该杆。
 - 使用后切勿立即触碰刀片。金属很热，容易烫伤皮肤。
- (1) 按照箭头所指示的方向拉动调校滑块。(图 9-I)
 - (2) 拉动调校滑块的同时，插入锯片直至锯片固定器端部外口卡住。(图 9-II)
 - (3) 松开调校滑块。(图 9-III)

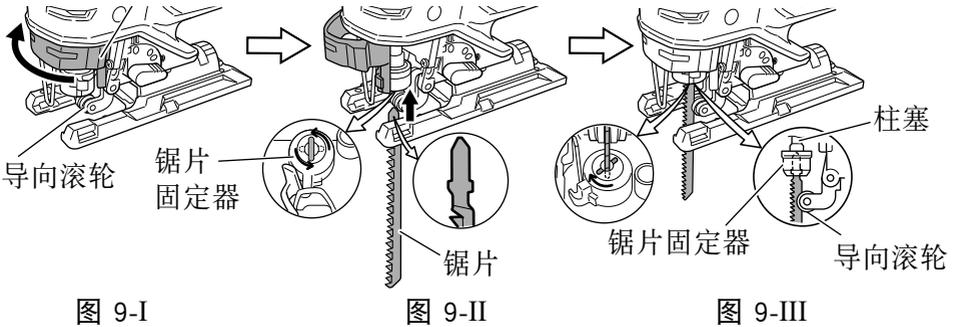


图 9-I

图 9-II

图 9-III

注：

- 确保锯片的伸出部分确实地插入锯片固定器。
- 确保锯片位于辊子的凹槽内。(图 10)

5. 调整锯片作业速度

该曲线锯装备了电子控制电路，可进行实时速度控制。调整速度时，转动图 11 所示的拨盘。当拨盘调至“1”时，曲线锯以最低速度作业（800 /min）。当拨盘调至“5”时，曲线锯以最高速度作业（3500 /min）。根据将要切割的材料及工作效率调整速度。

< 有关操作模式 >

此工具具有两种模式：“标准模式”和“自动模式”。

(1) 标准模式

可以通过将拨盘从“1”调整到“5”将锯片运转速度在 800 至 3500 /min 之间更改。

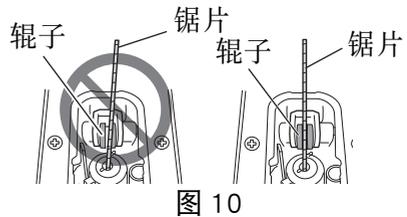


图 10

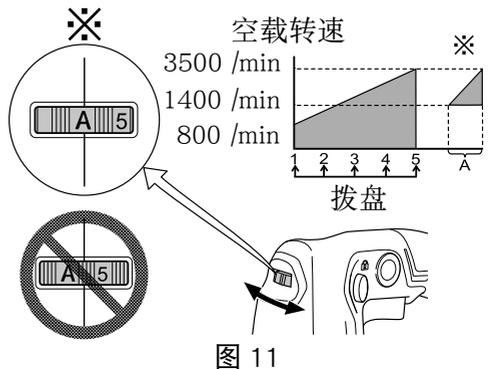


图 11

中文

(2) 自动模式

自动模式自动选择每分钟 1400 至 3500 的速度，以适应工作负载并在关闭开关之前一直保持该速度。根据工作负载不同，自动模式“A”会自动将锯片运转速度更改为 1400 /min 或 3500 /min。这样可以在运转前和运转过程中有效减少振动和噪音。

将拨盘调整为最适合任务条件和材料的模式和速度。

锯片运转速度

模式	拨盘	锯片运转速度
标准模式	1 - 5	800 - 3500 /min
自动模式	A	未负载：1400 /min 负载：3500 /min

使用自动模式时，振动频率可能达不到每分钟 3500，具体视工作类型等变量而定。

注意！

低速（转盘设置：1 或 2）时请勿切割厚度超过 8 毫米的木材或厚度超过 1 毫米的金属。

6. 调整轨道作业

(1) 该曲线锯采用轨道作业，对锯片进行前后及上下移动。将图 12 所示的转换旋钮调至“0”可停止轨道作业（锯片将仅进行上下移动）。轨道作业可在从“0”到“III”4个等级中选择。

(2) 对于硬质材料如钢板等，减少轨道作业；对于软质材料如木材，塑料等，增多轨道作业以提高工作效率。如需对材料进行精密切割，减少轨道作业。

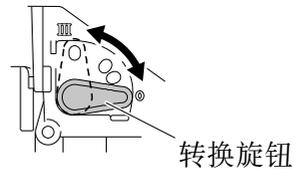


图 12

7. 切割不锈钢板

该曲线锯可使用 No. 97 锯片（单独出售）对不锈钢板进行切割。仔细阅读“关于不锈钢板的切割”，了解正确作业方法。

8. 碎屑防护头

在切割木质材料时使用碎屑防护头可减少切割表面的碎屑。

注意！

务必关机并将电池与机身断开。

在切割木质材料时使用碎屑防护头可减少切割表面的碎屑。

使用附带的内六角扳手拧紧底座下部的螺栓，尽量向前移动底座。（图 13）

将碎片防护头插到底座上的适当位置，并且完全插入。（图 14）

9. 副底座（单独出售）

注意！

务必关机并将电池与机身断开。

用于进行例如弧形和圆形等曲线切割。通过消除在底座后部和材料之间可能出现的钩丝，可以很简单地完成工作。

在将副底座钩在底座端部后，将副底座插入到位。若要拆下，请向上拉。（图 15）

注：

装上副底座后，锯片在被切割材料上的伸出部分会缩短 3mm。将锯片下移至最低点时，请检查并确保其伸出材料。

10. 安装和拆下碎屑盖（图 16）

警告！

在安装或拆下碎屑盖时避免发生意外，请确保设备关闭并且拔下电源线。

注：

当底座倾斜时无法安装碎屑盖。

- (1) 将设备以正确角度朝向表面（0 度倾斜）。
- (2) 用手将碎屑盖导杆部分保持打开状态，推入主机。
- (3) 将碎屑盖的钩爪插入主机的插槽中。
- (4) 当拆卸时，展开碎屑盖的钩爪并从主机插槽中将其拉出。

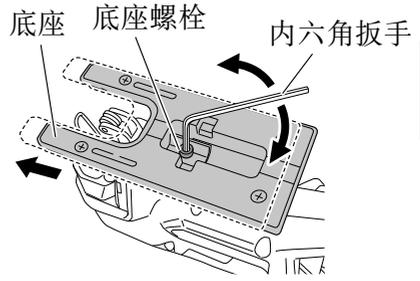


图 13

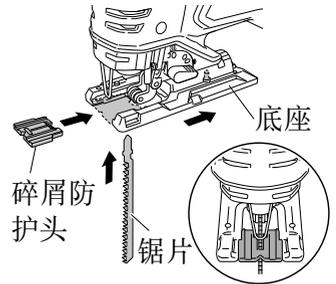


图 14

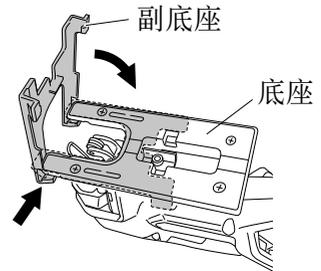


图 15

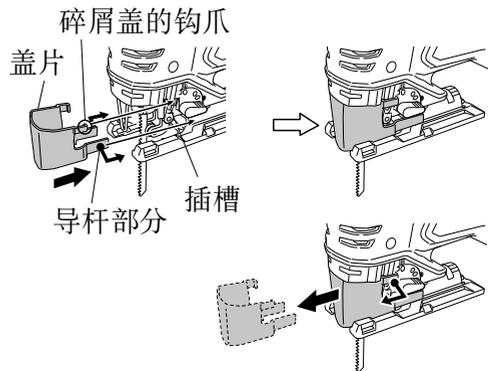


图 16

中文

11. 准备工作台 (图 17)

鉴于刀片会延伸超出材料下表面，因此在切割时应将材料放在工作台上。如果将方块用作工作台，请选择水平地面以确保其确实稳定。不稳定工作台会导致危险操作。

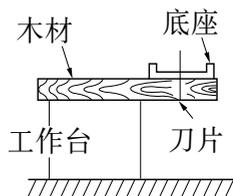


图 17

注意！

为了避免可能发生事故，请始终确保切割后剩余材料部分牢固地固定或保持在原位。

12. 检查电池插入情况

警告！

如果在电源开关处于开 (ON) 位置时插入电池，电动工具会立即开始运行，引发严重事故。

注意！

直至随着咔嚓一声电池锁定到位，否则，电池可能会意外地从工具中掉出，对您或周围人造成伤害。

操作

警告！

- 切勿触摸运动部件。
- 切勿在刀片转向上方或侧面的情况下操作曲线锯。

注意！

- 为了延长使用寿命，锂离子电池配有可停止输出的保护功能。因此，如果工具过载，电机可能会停下来。然而，这并非故障，而是保护功能造成的结果。在这种情况下，请释放工具的开关并消除过载原因。
- 在切割过程中刀片移动时，切勿从工件上取下曲线锯。
- 完成操作后拉出电池。
- 为了防止刀片在柱塞上移动、损坏或过度磨损，请确保在锯切时将底座盘表面贴在工件上。
- 低速时请勿切割厚度超过 10 毫米的木材或厚度超过 1 毫米的金属。

注：

注意不要锁住电机。如果电机锁住，请立即关闭电源。如果电机锁住一段时间，则电机或电池可能会烧毁。

1. 开关的操作

(1) 锁定解除按钮

本工具配有锁定解除按钮。如要启动工具，按下锁定解除按钮，然后按下扳机开关。（图 18）

注意！

请勿固定锁定解除按钮。

此外，携带工具时，使手指远离扳机开关。否则可能会在不经意间按下扳机开关，导致意外事故。

(2) 搬钮开关

本工具配有控制各种速度的搬钮开关。通过按压和松开搬钮可将工具打开或关闭，通过按压搬钮来调整至合适的电锯的速度（从铭牌标注的最小速度至最大速度），向下按时速度加大，松开时速度减小。（图 19）此外，释放开关可激活断开，使刀片立即停下来。

若要进行持续运转，请将开关拉动到位并按下制动器。（图 20）

若要取消持续运转，请再一次将开关拉动到位直至制动器被松开，然后松开开关。

2. LED 灯的使用方法（图 21）

当开关被拔出时，LED 灯将照亮工具的尖部区域。

松开开关约 10 秒后，LED 灯将自动熄灭。

注意！

请勿直视 LED 灯的灯光。连续且直视 LED 灯的灯光可能会对眼睛造成伤害。



图 18

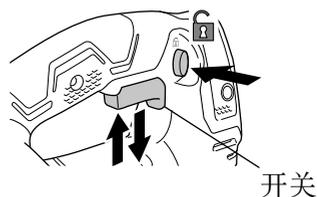


图 19



图 20

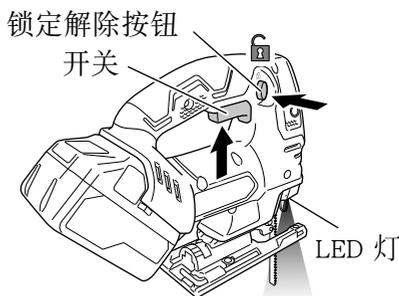
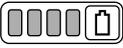
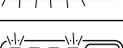


图 21

表 5

指示灯状态	电池剩余电量
	点亮； 电池剩余电量超过 75%
	点亮； 电池剩余电量为 50% - 75%
	点亮； 电池剩余电量为 25% - 50%
	点亮； 电池剩余电量不到 25%
	闪烁； 电池剩余电量即将耗尽。请尽快对电池进行充电。
	闪烁； 因高温暂停输出从电动工具中取下电池，让电池完全冷却。
	闪烁； 因失败或故障暂停输出。电池可能出现故障，请与经销商联系。

环境温度和电池特性不同，则所显示的电池剩余电量也会有些许不同，以上内容仅供参考。

注：

请勿强烈撞击或破坏开关面板。否则可能会导致故障。

切割

注意！

为防止锯片撞出，损坏或对柱塞造成额外的磨损，锯时请确保将底座板贴住工作材料。

1. 直线切割

当以直线切割时，首先划一条标准线，并顺著线锯。使用导架（单独出售）可帮助您精确地以直线切割。

- (1) 使用内六角扳手松开附在底座上的底座螺栓。（图 24）
- (2) 将底座充分向前移动（图 24）再次上紧底座螺栓。

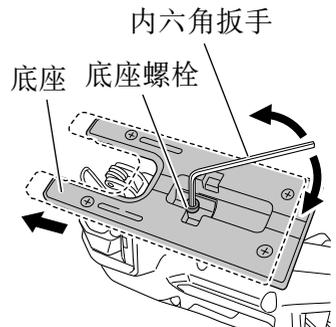


图 24

中文

(3) 将导架穿过导底座上的导架孔，上紧 M5 螺栓。(图 25)

(4) 将轨道位置设为“0”。

注：

为在使用导架时确保精确地切割(图 26)，总是将轨道位置设为“0”。

2. 曲线切割

当切割一个小的弧形时，降低机器的喂料速度。如向机器的喂料速度过快，可能导致锯片损坏。

将轨道位置设为“0”。

3. 圆形或圆弧切割

导架同样可用于圆形切割。

在同样以上述方式安装导架后，将螺钉或螺栓从导架上的孔旋入材料内并用作切割的轴心。(图 27)。

将轨道位置设为“0”。

注：

圆形切割时必须保证锯片大致与底座的下表面垂直。

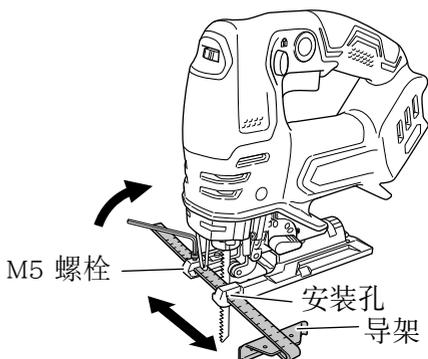


图 25

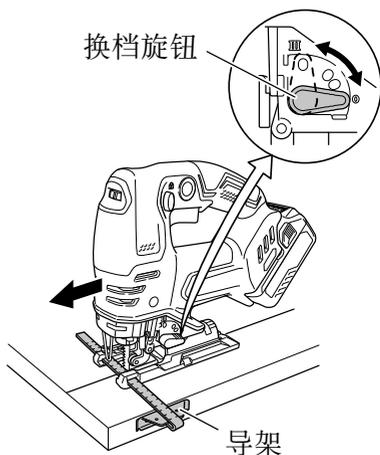


图 26

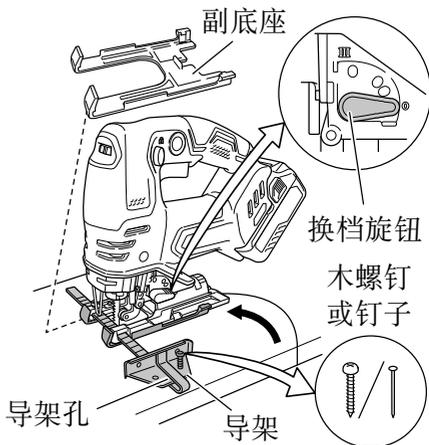


图 27

4. 切割金属材料 (图 28)

- (1) 调整速度。拨到刻度“3”与“4”之间。
- (2) 将轨道位置设置为“0”或图中所示位置。

注:

总是使用适当的切割液(锭子油,肥皂水等)。当切割液不合适时,将油酯涂在切割材料的背面。

5. 钻孔切割 (图 29)

- (1) 使用内六角扳手松开附在底座上的底座螺栓。(第 21 页的图 24)
- (2) 将底座充分向前移动(第 21 页的图 24)再次上紧底座螺栓。
- (3) 将轨道位置设为“0”。

<在木材上>

使锯片的方向与木材的切面一致,逐步切割直至在木材的中心切割出一个空孔来。

<在其他材料上>

在除了木材的其他材料上切割空孔时,首先使用钻子或类似的工具钻出孔来,再进行切割。

6. 角度切割

底座可向两边旋转至最大 45° 以进行角度切割。(图 30)

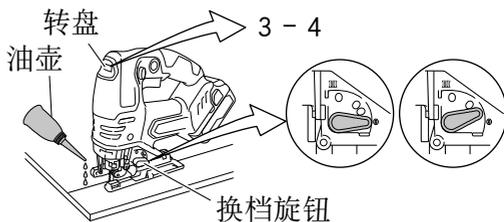


图 28

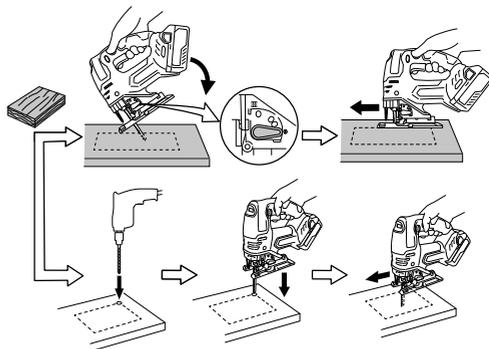


图 29

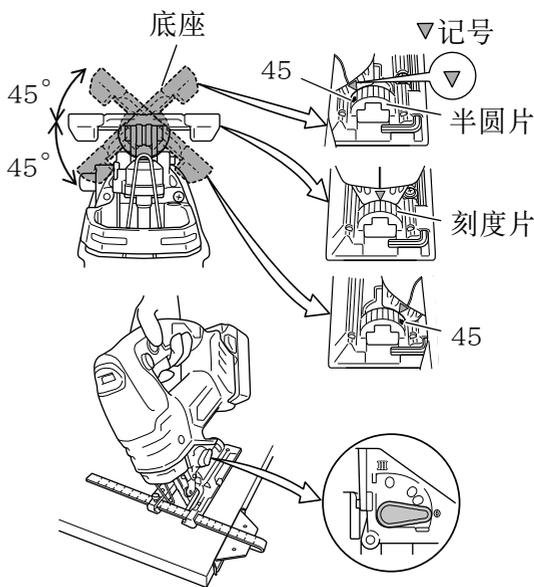


图 30

中文

- (1) 使用内六角扳手松开附在底座上的底座螺栓，并将底座充分向前移动。(图 31)
- (2) 利用后表面上的 [▽] 符号，调整底座半圆片的刻度 (从 0 度到 45，每次增加 15 度)。(图 32)
- (3) 再次上紧 M5 螺栓。(图 31)
- (4) 将轨道位置设为 “0” - “III”。

注：

使用碎屑盖或集尘器时不能进行角度切割。

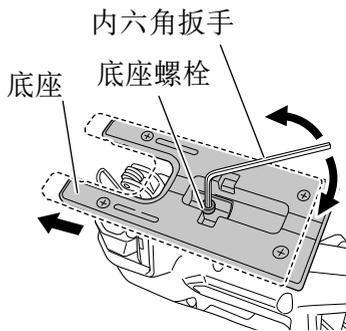


图 31



图 32

关于不锈钢板的切割

当使用 No.97 锯片时 (单独出售)，可以切割不锈钢板。

注意按照以下流程调整设备。(图 33)

注意！

- 为防止锯片撞出，损坏或对柱塞造成额外的磨损，锯时请确保将底座板贴住工作材料。
- 不要在易爆环境，如有易燃液体、气体或粉尘的环境下操作电动工具。

线锯产生火花，其可能会引燃灰尘或烟雾。

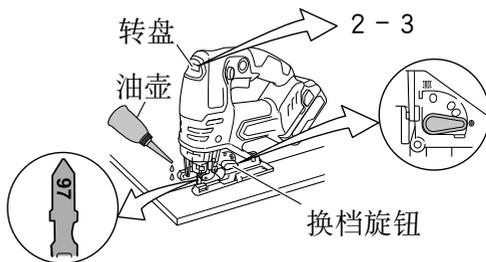


图 33

在切割不锈钢板时，请如下调整设备：

1. 调整速度。

锯片	材料厚度	拨盘刻度
No. 97	1.5 - 2.5 mm	“2”与“3”之间的中间刻度

注：

拨盘刻度读数仅为参考。速度越快，材料切割越快。但这种情况下锯片的使用寿命将被缩短。当速度过低时，切割将耗时较长，而锯片的使用寿命将被延长。请按意愿进行调整。

2. 将轨道位置设为“0”

注：

切割时请使用切割液（油质切割液）以延长锯片的使用寿命。

锯片的选择

○ 附件锯片

为确保最高的作业效率及最好的作业结果，选择最适合切割材料的类型与厚度的适当的锯片是十分重要的。每片锯片的脊部附近刻有锯片号。参考第 32 页的表 6，选择适当的锯片。

卡住内六角扳手

可以卡住底座上的内六角扳手。（参看图 34）

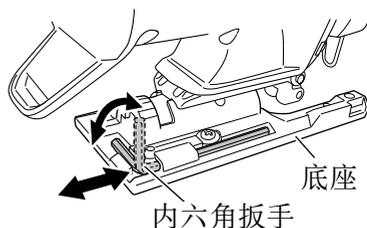


图 34

连接到清洁器

通过集尘器（单独出售）和附加器（单独出售）与清洁器（单独出售）相连接，能够收集大多数尘屑。

(1) 使用内六角扳手松开附在底座上的底座螺栓。（图 35）

（图 35）

(2) 将底座充分向前移动再次上紧底座螺栓（图 35）。

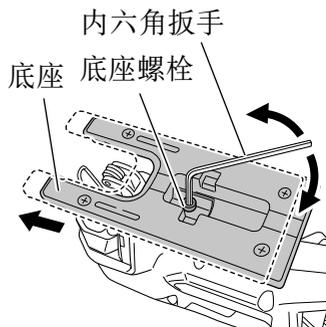


图 35

中文

- (3) 安装盖片。(第 17 页的图 16)
- (4) 通过附加器连接上集尘附加器。(图 36)
- (5) 连接附加器与清洁器的接头。(图 36)
- (6) 将清洁器插入底座的后孔直至勾脚插入槽口。(图 37)
- (7) 按住勾脚以取下集尘附加器。

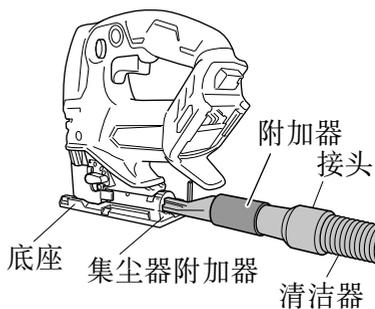


图 36

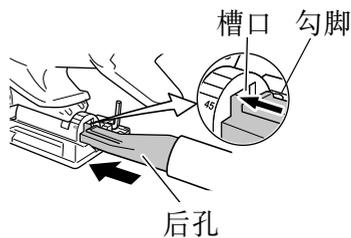


图 37

USB设备的充电方法

警告！

- 使用之前请检查 USB 连接线缆是否有破损或损坏。
使用有破损或损坏的 USB 线缆可能会导致冒烟或着火。
- 不使用产品时，请用橡胶盖封好 USB 端口。
USB 端口中落入灰尘等可能会导致冒烟或着火。

注：

- USB 充电过程中，可能会有偶尔暂停。
- USB 设备未充电时，请将充电器上拔下 USB 设备。
否则不仅会减少 USB 设备的电池寿命，还会导致意外事故。

- 根据设备类型，可能无法对部分 USB 设备进行充电。

(1) 选择充电方式

根据所选的充电方式，将电池插入充电器或连接电源线插入插座。

- 将 USB 设备插入插座进行充电 (图 38-a)。
- 将 USB 设备和电池插入插座进行充电。(图 38-b)

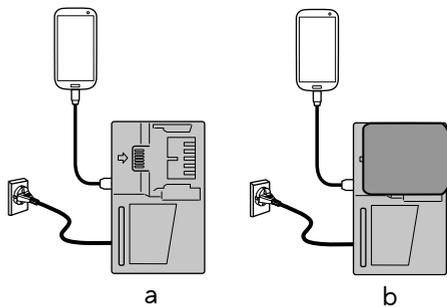


图 38

(2) 连接 USB 线缆。(图 39)

拔下橡胶盖并将市售的 USB 线缆（匹配充电的设备）紧紧插入 USB 端口。

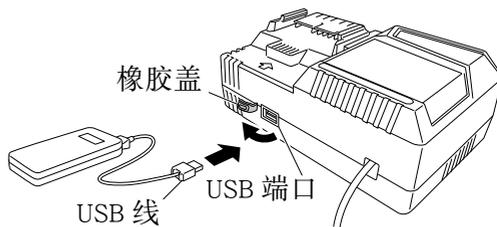


图 39

(3) 充电完成时

- 检查 USB 设备以检验充电状态。
- 从插座中拔下电源线。(图 40)
- 用橡胶盖盖住 USB 端口。

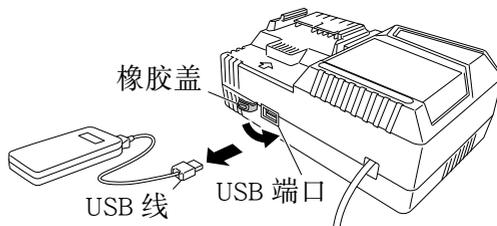


图 40

维护和检查

注意！

维护和检查前请务必关闭开关。

1. 检查刀刃

如继续使用已钝了的或已损坏了的刀刃，会降低工作效率并可能会引起马达超负荷。因此，一旦注意到刀刃磨损，请立即用新刀刃更换之。

注意！

若使用较钝的刀刃作业，则切锯时产生的反作用力会增加。请避免使用未经维修的较钝刀刃。

2. 检查安装螺钉

要经常检查安装螺钉是否紧固妥善。若发现螺钉松了，应立即重新扭紧，否则会导致严重的事故。

3. 电动机的维护

电动机绕线是电动工具的“心脏部”应仔细检查有无损伤，是否被油液或水沾湿。

4. 检查端子（工具和电池）

确保端子上没有堆积削屑和灰尘。

在操作前、操作时和操作后需要时常检查。

注意！

请清除端子上的削屑或灰尘。
否则可能导致故障。

5. 清理外部

电动工具沾污时，用干软布或沾肥皂水的布擦拭。切勿使用氯溶液、汽油或稀释剂，以免塑胶部分溶化。

6. 润滑

不时用一滴油润滑滚轮导轨和刀架。这会延长滚轮的使用寿命。

7. 电力耗尽的电池的处理方法

警告！

请勿将电力耗尽的电池丢弃。如果焚烧电池，可能会引起爆炸。该电池可回收利用。根据各国家和地区的法令法规，将电力耗尽的电池丢弃到城市垃圾中属于违法行为。请向当地的固体废弃物负责人员咨询具体回收事宜或妥善的处理方法。

8. 收藏

电动工具应收藏于温度低于 40°C 和小孩拿不到的地方。

注：

存放锂离子电池

在存放前请确保电池已完全充电。

电池在低电量的状态下长时间存放（3 个月或更长），可能会导致电池性能劣化，使用时间明显减少或无法进行充电。

但是，即使是使用时间明显减少的电池，通过反复充电和使用 2 ~ 5 次，有时也可恢复使用时间。

若反复充电和使用后电池的使用时间仍非常短，请认作为电池已达到了使用寿命并更换新的电池。

注意！

在操作和维修电动工具时，必须遵守贵国制定的安全的有关规则和标准。

关于 HiKOKI 牌无线电动工具的重要通知：

请确保始终使用我们指定的正版电池。如果使用我们指定以外的电池，或对电池进行拆卸和改动（例如拆卸和更换电池组件或其他内部部件），那么我们无法保证我们无线电动工具的安全性和使用性能。

故障排除

如果工具操作不正常，请使用下表中的检查步骤。如果未能解决问题，请向经销商或 HiKOKI 公司授权服务中心咨询。

1. 电动

故障现象	可能原因	纠正方法
工具不运转	电池电量耗尽	给电池充电。
	电池没装好。	将电池推入，直至听到咔嚓声为止。
工具突然停下来	工具负载过重	解决导致负载过重的问题。 在操作过程中，减轻所施加的压力。
	电池或工具过热	使工具和电池彻底冷却。
刀片 - 无法连接 - 脱落	连接部分形状不匹配	使用适合刀片 (参见“选择附件”)
	杆已打开。	将杆闭合。
	刀架内部有异物。	清除异物。
无法拉动开关	锁定按钮已推入。	释放锁定按钮。
拉动扳机开关时发出异常高音噪声。	仅轻微拉动扳机开关。	这并非故障。
刀片磨损得太快。	冲击次数太快	将转盘切换至低于当前的设置。 (切割不锈钢板时切换至低速模式) (参见“调整锯片作业速度”)
	切割金属材料时未使用正确机油	使用机油(汽轮机油等)
	操作过程中施加压力过大	在操作过程中，减轻所施加的压力。
不能正确切割。	刀片不适合要切割材料的质量和厚度	使用合适刀片 (参见“选择附件”)
	速度和轨道位置不适合要切割材料的质量和厚度	设置适合速度和轨道位置 (参见“调整锯片作业速度”)
	刀片磨损、退化或损坏	更换新刀片。
无法安装电池。	试图安装并非为工具指定的电池。	请安装多电压类型电池。

2. 充电器

现象	可能的原因	解决办法
充电指示灯快速 闪动紫色，电池 未开始充电。	电池未完全插入。	请紧紧插入电池。
	电池端部或电池的连接处 有异物。	将异物清除。
充电指示灯闪烁 红色，电池未开 始充电。	电池未完全插入。	请紧紧插入电池。
	电池过热。	如果继续放置，电池将在温度降低后自动开始充电，但此种情况可能会缩短电池使用寿命。建议将电池放置在通风良好的位置，在充电前避免阳光直射。
即使电池完全充 电，电池的使用 寿命也会逐渐缩 短。	电池的使用寿命已耗尽。	请更换新电池。
电池的充电时间 较长。	电池、充电器或周围环境的 温度过低。	请在室内或温暖的环境中充电。
	充电器的排气孔堵塞，导 致其内部部件过热。	请勿堵塞排气孔。
	冷却扇未运转。	请联系 HiKOKI 授权服务中心进行维修。
USB 电源灯熄灭， USB 设备停止充 电。	电池剩余电量低。	用电量充足电池替换它。
		将充电器的电源插头插入电插座中。
即使 USB 设备充 电完毕，USB 电 源灯也不熄灭。	USB 电源灯点亮呈绿色， 提示可进行 USB 充电。	这种情况不属于故障。
不清楚 USB 设备 的充电状态如何 或者是否充电完 毕。	即使充电完毕，USB 电源 灯也不熄灭。	检查正在充电的 USB 设备以确定其充电状态。

现象	可能的原因	解决办法
USB 设备在中途暂停充电。	使用电池作为电源对 USB 设备进行充电时，充电器插入电插座。	这种情况不属于故障。 充电器与电源间存在差异时，USB 将暂停充电约 5 秒钟。
	使用电源插座作为电源对 USB 设备进行充电时，电池插入充电器。	
电池和 USB 设备同时充电时，USB 设备将在中途暂停充电。	电池已完全充电。	这种情况不属于故障。 检查电池是否已充电完成时，充电器将暂停 USB 充电约 5 秒钟。
电池和 USB 设备同时充电时，USB 设备将无法开始充电。	电池剩余电量已不足。	这种情况不属于故障。 电池电量达到一定程度时，USB 将自动开始充电。

表 6 适用锯片列表

切割材料	锯片 材料 性质	No. 1 (超长)	No. 11	No. 12	No. 15	No. 16	No. 21	No. 22	No. 41	No. 97
		材料厚度 (mm)								
木材	一般木材	低于 135	10 ~ 55	低于 20			10 ~ 55	5 ~ 40	10 ~ 65	
	夹板		5 ~ 30	低于 10			5 ~ 30	3 ~ 20		
铁板	软钢板				3 ~ 6	低于 3				2 ~ 5
	不锈钢板									1.5 ~ 2.5
非 铁 金 属	铝, 铜, 黄铜				3 ~ 12	低于 3				低于 5
	铝框				最大 厚度 25					最大 厚度 25
塑 料	酚醛树脂, 蜜胺树脂等				5 ~ 20	低于 6	5 ~ 15	低于 6		5 ~ 15
	氯乙烯, 亚 克力树脂等		5 ~ 30	低于 10	5 ~ 20	低于 5	5 ~ 30	3 ~ 20		5 ~ 15
	泡沫聚乙烯, 泡沫苯乙烯		10 ~ 55	3 ~ 25	5 ~ 25	3 ~ 25	10 ~ 55	3 ~ 40		5 ~ 25
纸 板	卡纸板, 瓦 楞纸		10 ~ 55	3 ~ 25			10 ~ 55	3 ~ 40		
	硬纸板				3 ~ 25	低于 6				3 ~ 25
	纤维板					低于 6				

注:

No. 1 (超长), No. 21, No. 22 以及 No. 41 锯片的最小切割半径为 100 mm。

选择附件

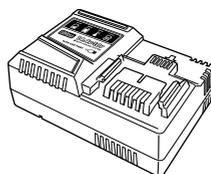
有关详细信息请联系HiKOKI授权服务中心。



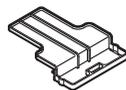
BSL36A18
BSL36C18



BSL36B18

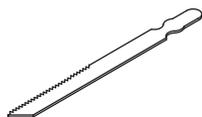


UC18YSL3 (14.4 V - 18 V)



329897

锯片



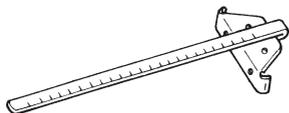
No.	产品编号
1	321878
11	879336
12	879337
15	879338
16	879339
21	879340
22	879341
41	879357
97	963400

内六角扳手



产品编号：944458

导架



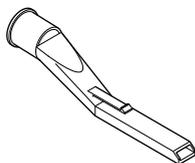
产品编号：879391

碎屑防护头



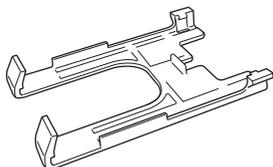
产品编号：338997

集尘附加器



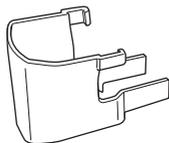
产品编号：370492

副底座



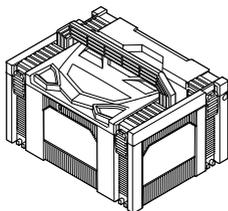
产品编号：339018

碎屑盖



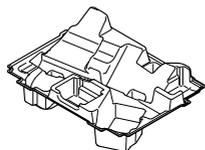
产品编号：338996

塑料箱



产品编号：337108

内托盘



产品编号：375861

Contents

GENERAL POWER TOOL SAFETY WARNINGS	35
JIG SAW SAFETY WARNINGS.....	38
PRECAUTIONS FOR CORDLESS JIG SAW	38
CAUTION ON LITHIUM-ION BATTERY	40
REGARDING LITHIUM-ION BATTERY TRANSPORTATION	42
USB DEVICE CONNECTION PRECAUTIONS	42
SYMBOLS	42
NAME OF PARTS.....	43
SPECIFICATIONS	44
STANDARD ACCESSORIES	44
APPLICATIONS.....	45
BATTERY REMOVAL/INSTALLATION.....	45
CHARGING	45
PRIOR TO OPERATION.....	48
OPERATION.....	52
CUTTING.....	55
CONCERNING CUTTING OF STAINLESS STEEL PLATES	58
SELECTION OF BLADES	59
HOUSING THE HEXAGONAL BAR WRENCH	59
CONNECTING WITH CLEANER.....	59
HOW TO RECHARGE USB DEVICE	60
MAINTENANCE AND INSPECTION	61
TROUBLESHOOTING.....	63
SELECTING ACCESSORIES.....	67

GENERAL POWER TOOL SAFETY WARNINGS

WARNING

Read all safety warnings, instructions, illustrations and specifications provided with this power tool.

Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

- 1) **Work area safety**
 - a) **Keep work area clean and well lit.**
Cluttered or dark areas invite accidents.
 - b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.**
Power tools create sparks which may ignite the dust or fumes.

English

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

2) **Electrical safety**

- a) **Power tool plugs must match the outlet.**
Never modify the plug in any way.
Do not use any adapter plugs with earthed (grounded) power tools.
Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.**
There is an increased risk of electric shock if your body is earthed or grounded.
- c) **Do not expose power tools to rain or wet conditions.**
Water entering a power tool will increase the risk of electric shock.
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool.**
Keep cord away from heat, oil, sharp edges or moving parts.
Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.**
Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.**
Use of an RCD reduces the risk of electric shock.

3) **Personal safety**

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool.**
Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.
A moment of inattention while operating power tools may result in serious personal injury.
- b) **Use personal protective equipment. Always wear eye protection.**
Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.**
Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d) **Remove any adjusting key or wrench before turning the power tool on.**
A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) **Do not overreach. Keep proper footing and balance at all times.**
This enables better control of the power tool in unexpected situations.
- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.**
Loose clothes, jewellery or long hair can be caught in moving parts.

- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.**
Use of dust collection can reduce dust-related hazards.
- h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.**
A careless action can cause severe injury within a fraction of a second.

4) Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.**
The correct power tool will do the job better and safer at the rate for which it was designed.
- b) **Do not use the power tool if the switch does not turn it on and off.**
Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.**
Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.**
Power tools are dangerous in the hands of untrained users.
- e) **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation.**
If damaged, have the power tool repaired before use.
Many accidents are caused by poorly maintained power tools.
- f) **Keep cutting tools sharp and clean.**
Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.**
Use of the power tool for operations different from those intended could result in a hazardous situation.
- h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.**
Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

5) Battery tool use and care

- a) **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.
- b) **Use power tools only with specifically designated battery packs.**
Use of any other battery packs may create a risk of injury and fire.

English

- c) **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.
 - d) **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.
 - e) **Do not use a battery pack or tool that is damaged or modified.**
Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
 - f) **Do not expose a battery pack or tool to fire or excessive temperature.**
Exposure to fire or temperature above 130 °C may cause explosion.
 - g) **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.**
Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.
- 6) **Service**
- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.**
This will ensure that the safety of the power tool is maintained.
 - b) **Never service damaged battery packs.**
Service of battery packs should only be performed by the manufacturer or authorized service providers.

CAUTION

Keep children and infirm persons away.

When not in use, tools should be stored out of reach of children and infirm persons.

JIG SAW SAFETY WARNINGS

1. **Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring.**
Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

PRECAUTIONS FOR CORDLESS JIG SAW

1. **Always charge the battery at a temperature of 0 – 40°C.**
A temperature of less than 0°C will result in over charging which is dangerous. The battery cannot be charged at a temperature greater than 40°C.
The most suitable temperature for charging is that of 20 – 25°C.
2. **When one charging is completed, leave the charger for about 15 minutes before the next charging of battery.**

3. Do not allow foreign matter to enter the hole for connecting the rechargeable battery.
4. Never disassemble the rechargeable battery and charger.
5. Never short-circuit the rechargeable battery.
Short-circuiting the battery will cause a great electric current and overheat. It results in burn or damage to the battery.
6. Do not dispose of the battery in fire.
If the battery burnt, it may explode.
7. Do not insert object into the air ventilation slots of the charger.
Inserting metal objects or inflammables into the charger air ventilation slots will result in electrical shock hazard or damaged charger.
8. Bring the battery to the shop from which it was purchased as soon as the post-charging battery life becomes too short for practical use. Do not dispose of the exhausted battery.
9. Using an exhausted battery will damage the charger.
10. If the machine is used continuously at low speed, an extra load is applied to the motor which can result in motor seizure. Always operate the power tool so that the blade is not caught by the material during operation. Always adjust the blade speed to enable smooth cutting.
11. When using this unit continuously, the unit may overheat, leading to damage in the motor and switch. Please leave it without using it for approximately 15 minutes.
12. Wear earplugs to protect your ears during operation.
13. Do not touch the blade during or immediately after operation. The blade becomes very hot during operation and could cause serious burns.
14. Always hold the handle of the power tool firmly. Otherwise the counterforce produced may result in inaccurate and even dangerous operation.
15. Be sure to turn off the switch, push the lock-off button to the lock position, then remove the battery from the tool in the following situations:
 - When stopping or ending work
 - When attaching or removing a blade
 - When attaching or removing accessories or optional parts
 - When adjusting the base position
 - When maintaining, inspecting, or storing the tool
16. This Jig saw employs a high-power motor. If the machine is used continuously at low speed, an extra load is applied to the motor which can result in motor seizure. Always operate the power tool so that the blade is not caught by the material during operation. Always adjust the blade speed to enable smooth cutting.
17. Dust produced in operation
The dust produced in normal operation may affect the operator's health. Either of following way is recommended.
 - a) Wear a dust mask
 - b) Use external dust collection equipment.

When using the external dust collection equipment, connect the adapter with the hose from external dust collection equipment.

English

18. During use, do not touch the metal portion of the tool.
19. 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.
20. 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.

CAUTION ON LITHIUM-ION BATTERY

To extend the lifetime, the lithium-ion battery equips with the protection function to stop the output.

In the cases of 1 to 3 described below, when using this product, even if you are pulling the switch, the motor may stop. This is not the trouble but the result of protection function.

1. When the battery power remaining runs out, the motor stops.
In such case, charge it up immediately.
2. If the tool is overloaded, the motor may stop. In this case, release the switch of tool and eliminate causes of overloading. After that, you can use it again.
3. If the battery is overheated under overload work, the battery power may stop. In this case, stop using the battery and let the battery cool. After that, you can use it again.

Furthermore, please heed the following warning and caution.

WARNING

In order to prevent any battery leakage, heat generation, smoke emission, explosion and ignition beforehand, please be sure to heed the following precautions.

1. Make sure that swarf and dust do not collect on the battery.
 - During work make sure that swarf and dust do not fall on the battery.
 - Make sure that any swarf and dust falling on the power tool during work do not collect on the battery.
 - Do not store an unused battery in a location exposed to swarf and dust.
 - Before storing a battery, remove any swarf and dust that may adhere to it and do not store it together with metal parts (screws, nails, etc.).
2. Do not pierce battery with a sharp object such as a nail, strike with a hammer, step on, throw or subject the battery to severe physical shock.
3. Do not use an apparently damaged or deformed battery.
4. Do not use the battery in reverse polarity.
5. Do not connect directly to an electrical outlets or car cigarette lighter sockets.
6. Do not use the battery for a purpose other than those specified.

7. If the battery charging fails to complete even when a specified recharging time has elapsed, immediately stop further recharging.
8. Do not put or subject the battery to high temperatures or high pressure such as into a microwave oven, dryer, or high pressure container.
9. Keep away from fire immediately when leakage or foul odor are detected.
10. Do not use in a location where strong static electricity generates.
11. If there is battery leakage, foul odor, heat generated, discolored or deformed, or in any way appears abnormal during use, recharging or storage, immediately remove it from the equipment or battery charger, and stop use.
12. Do not immerse the battery or allow any fluids to flow inside. Conductive liquid ingress, such as water, can cause damage resulting in fire or explosion. Store your battery in a cool, dry place, away from combustible and flammable items. Corrosive gas atmospheres must be avoided.

CAUTION

1. If liquid leaking from the battery gets into your eyes, do not rub your eyes and wash them well with fresh clean water such as tap water and contact a doctor immediately.
If left untreated, the liquid may cause eye-problems.
2. If liquid leaks onto your skin or clothes, wash well with clean water such as tap water immediately.
There is a possibility that this can cause skin irritation.
3. If you find rust, foul odor, overheating, discolor, deformation, and/or other irregularities when using the battery for the first time, do not use and return it to your supplier or vendor.

WARNING

If an electrically conductive foreign object enters the terminals of the lithium ion battery, a short-circuit may occur resulting in the risk of fire. Please observe the following matters when storing the battery.

- Do not place electrically conductive cuttings, nails, steel wire, copper wire or other wire in the storage case.
- Either install the battery in the power tool or store by securely pressing into the battery cover until the ventilation holes are concealed to prevent short-circuits (See Fig. 1).

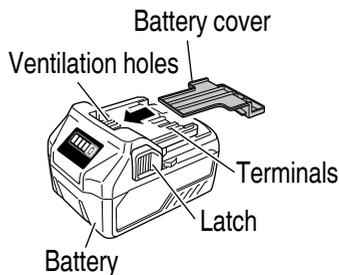


Fig. 1

REGARDING LITHIUM-ION BATTERY TRANSPORTATION

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

WARNING

Notify the transporting company that a package contains a lithium-ion battery, inform the company of its power output and follow the instructions of the transportation company when arranging transport.

- Lithium-ion batteries that exceed a power output of 100Wh are considered to be in the freight classification of Dangerous Goods and will require special application procedures.
- For transportation abroad, you must comply with international law and the rules and regulations of the destination country.
- If the BSL36B18 (sold separately) 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.

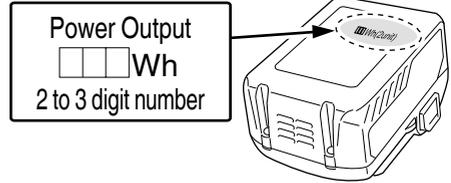


Fig. 2

USB DEVICE CONNECTION PRECAUTIONS

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.

SYMBOLS

WARNING

The following show symbols used for the machine. Be sure that you understand their meaning before use.

	To reduce the risk of injury, user must read instruction manual.	n_0	No-load speed
	Direct current	/min	Oscillation per minute
V	Rated voltage		Warning

NAME OF PARTS

1. POWER TOOL

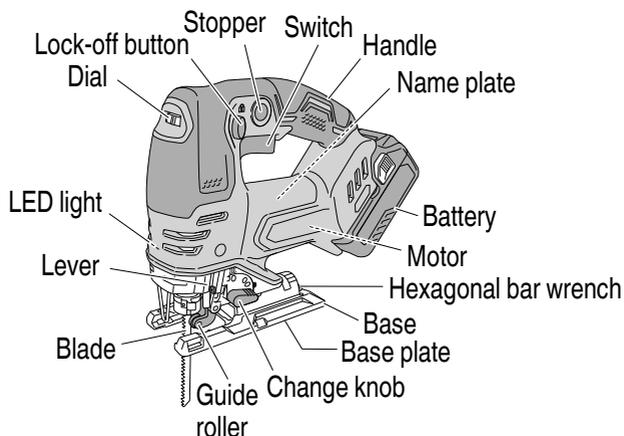


Fig. 3

2. Battery (Optional accessories)

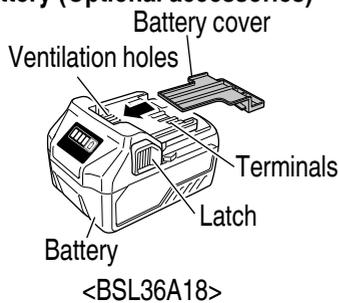


Fig. 4

3. Battery Charger (Optional accessories)

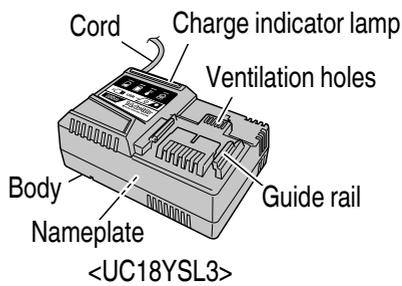


Fig. 5

SPECIFICATIONS

POWER TOOL

Model	CJ36DA
Voltage	36 V
Max. Cutting Depth	Wood 160 mm Mild Steel 10 mm Stainless steel 3.2 mm
No-load speed	800 – 3500 /min
Stroke	26 mm
Min. Cutting Radius	25 mm
Battery*	BSL36A18: Li-ion 36 V / 18 V (2.5 Ah / 5.0 Ah 10 cells)
Weight	2.7 kg (BSL36A18 attached)

* Existing batteries (BSL3660/3626/3620, BSL18xx and BSL14xx series) cannot be used with this tool.

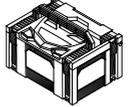
Charger (Sold separately)

Model	UC18YSL3
Charging voltage	14.4 – 18 V
Weight	0.6 kg

STANDARD ACCESSORIES

See the list below to check the accessories for CJ36DA.

Table 1

		CJ36DA (NNP)
Blades (No. 41) Refer to Table 6 on page 66		1
Hexagon bar wrench		1
Splinter guard		1
Chip cover		1
Plastic case		1

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 (with No. 97 blade)

BATTERY REMOVAL/INSTALLATION

1. Battery removal
Hold the handle tightly and push the battery latches to remove the battery (see Fig. 6).

CAUTION

Never short-circuit the battery.

2. Battery installation
Insert the battery while observing its polarities (see Fig. 6).

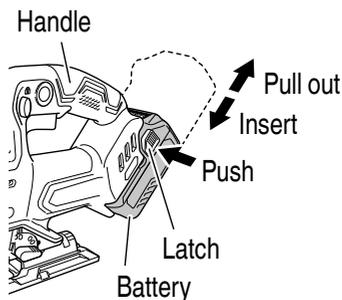


Fig. 6

CHARGING

Before using the power tool, charge the battery as follows.

1. **Connect the charger's power cord to the receptacle.**
When connecting the plug of the charger to a receptacle, the pilot lamp will blink in red (At 1- second intervals).
2. **Insert the battery into the charger.**
Firmly insert the battery into the charger as shown in Fig. 7.

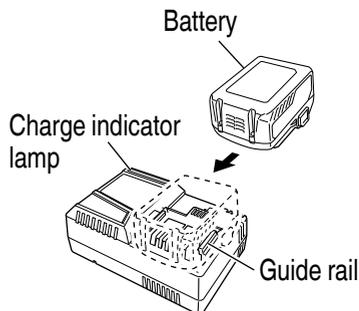


Fig. 7

English

3. Charging

When inserting a battery in the charger, the charge indicator lamp will blink in blue.

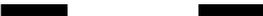
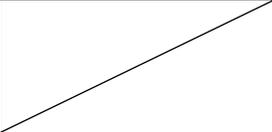
When the battery becomes fully recharged, the charge indicator lamp will light up in green.

(See **Table 2**)

(1) Charge indicator lamp indication

The indications of the charge indicator lamp will be as shown in **Table 2**, according to the condition of the charger or the rechargeable battery.

Table 2

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

- (2) Regarding the temperatures and charging time of the rechargeable battery
The temperatures and charging time will become as shown in **Table 3**.

Table 3

Charger		UC18YSL3					
Battery	Type of battery	Li-ion					
	Temperatures at which the battery can be recharged	0 °C – 50 °C					
	Charging voltage	V	14.4		18		
	Charging time, approx. (At 20°C)	min.	BSL14xx series		BSL18xx series		Multi volt series
			(4 cells)	(8 cells)	(5 cells)	(10 cells)	(10 cells)
		BSL1415S: 15 BSL1415 : 15 BSL1415X: 15 BSL1420 : 20 BSL1425 : 25 BSL1430C: 30	BSL1430 : 20 BSL1440 : 26 BSL1450 : 32 BSL1460 : 38	BSL1815S: 15 BSL1815 : 15 BSL1815X: 15 BSL1820 : 20 BSL1825 : 25 BSL1830C: 30	BSL1830 : 20 BSL1840 : 26 BSL1850 : 32 BSL1860 : 38	BSL36A18: 32 BSL36B18: 52 BSL36C18: 20	
USB	Charging voltage	V	5				
	Charging current	A	2				

NOTE

The recharging time may vary according to the ambient temperature and power source voltage.

4. Disconnect the charger's power cord from the receptacle.

5. Hold the charger firmly and pull out the battery.

NOTE

Be sure to pull out the battery from the charger after use, and then keep it.

Regarding electric discharge in case of new batteries, etc.

As the internal chemical substance of new batteries and batteries that have not been used for an extended period is not activated, the electric discharge might be low when using them the first and second time. This is a temporary phenomenon, and normal time required for recharging will be restored by recharging the batteries 2 – 3 times.

English

How to make the batteries perform longer.

- (1) Recharge the batteries before they become completely exhausted.
When you feel that the power of the tool becomes weaker, stop using the tool and recharge its battery. If you continue to use the tool and exhaust the electric current, the battery may be damaged and its life will become shorter.
- (2) Avoid recharging at high temperatures.
A rechargeable battery will be hot immediately after use. If such a battery is recharged immediately after use, its internal chemical substance will deteriorate, and the battery life will be shortened. Leave the battery and recharge it after it has cooled for a while.

CAUTION

- If the battery is charged while it is heated because it has been left for a long time in a location subject to direct sunlight or because the battery has just been used, the charge indicator lamp of the charger lights for 0.3 seconds, does not light for 0.3 seconds (off for 0.3 seconds). In such a case, first let the battery cool, then start charging.
- When the charge indicator lamp flickers (at 0.2-second intervals), check for and take out any foreign objects in the charger's battery connector. If there are no foreign objects, it is probable that the battery or charger is malfunctioning. Take it to your authorized Service Center.
- Since the built-in micro computer takes about 3 seconds to confirm that the battery being charged with UC18YSL3 is taken out, wait for a minimum of 3 seconds before reinserting it to continue charging. If the battery is reinserted within 3 seconds, the battery may not be properly charged.

PRIOR TO OPERATION

CAUTION

To avoid serious accident, ensure the switch is in the OFF position, and pull out the battery.

1. Check the work area environment
Check the work area to make sure that it is clear of debris and clutter.
Clear the area of unnecessary personnel. Ensure that lighting and ventilation is adequate.
2. Power switch
Ensure that the power switch is in the OFF position.
3. Dust produced in operation
The dust produced in normal operation may affect the operator's health. Either of following way is recommended.
 - a) Wear a dust mask
 - b) Use external dust collection equipment.

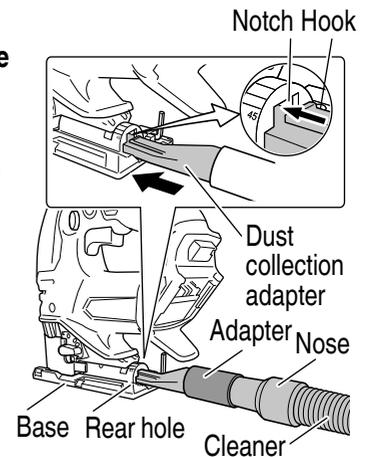


Fig. 8

When using the external dust collection equipment, connect the adapter with the hose from external dust collection equipment. (Fig. 8)

4. Changing blades

CAUTION

- Be sure to switch power OFF and disconnect the battery from the body when changing blades.
 - Do not touch the lever when plunger is moving.
 - Never touch the blade immediately after use. The metal is hot and can easily burn your skin.
- (1) Pull the lever in the direction indicated by the arrow. (Fig. 9-I)
 - (2) With the lever pulled, insert the blade until it butts against the outlet of the blade holder tip. (Fig. 9-II)
 - (3) Release the lever. (Fig. 9-III).

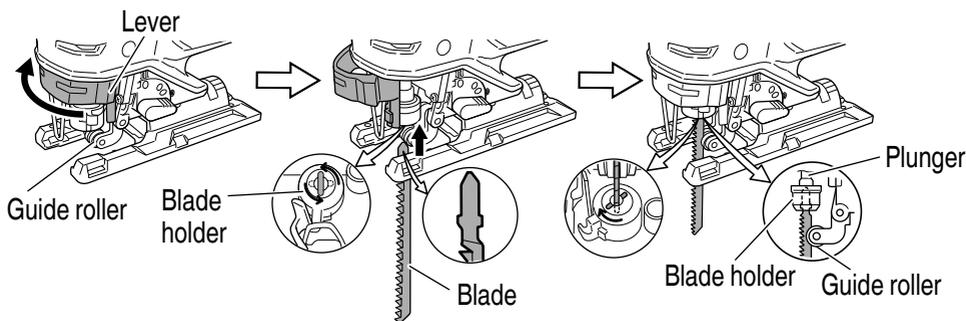


Fig. 9-I

Fig. 9-II

Fig. 9-III

NOTE

- Confirm the protrusions of blade inserted to the blade holder surely.
- Confirm the blade located between the groove of roller. (Fig. 10).

5. Adjusting the blade operating speed

The jig saw is equipped with the electric control circuit which enables stepless speed control. To adjust the speed, turn the dial shown in Fig. 11. When the dial is set to "1", the jig saw operates at the minimum speed (800 /min). When the dial set to "5", the jig saw operates at the maximum speed (3500 /min). Adjust the speed according to the material to be cut and working efficiency.

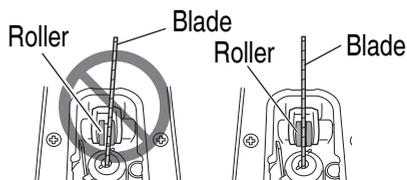


Fig. 10

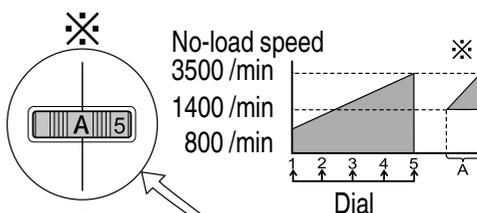


Fig. 11

English

<About Operation mode>

The tool is equipped with two modes: "Standard Mode" and "AUTO Mode".

(1) Standard Mode

You can change the blade operating speed between 800 to 3500 /min by adjusting the dial from "1" to "5".

(2) AUTO Mode

AUTO Mode automatically selects a speed between 1400 and 3500 /min to suit the operating load and maintains that speed until the switch is turned off. This has the effect of lowering vibration and noise prior to and during operation.

Adjust the dial for the mode and speed that best suits your task conditions and materials.

Blade operating speed

Mode	Dial	Blade operating speed
Standard Mode	1 – 5	800 – 3500 /min
AUTO Mode	A	No load: 1400 /min With load: 3500 /min

With AUTO Mode, the vibration frequency may not reach 3500 /min depending on variables such as the type of work.

CAUTION

At low speed (dial setting: 1 or 2) do not cut a wood with a thickness of more than 8 mm or metal with a thickness of more than 1 mm.

6. Adjusting the orbital operation

- (1) This Jig Saw employs orbital operation which moves the blade back and forth, as well as up and down. Set the change knob shown in **Fig. 12** to "0" to eliminate the orbital operation (the blade moves only up and down). The orbital operation can be selected in 4 steps from "0" to "III".

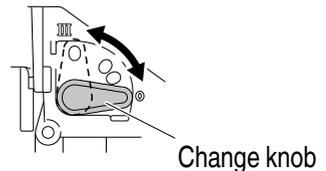


Fig. 12

- (2) For the hard material, such as a steel plate, etc., decrease the orbital operation. For the soft material, such as lumber, plastic, etc., increase the orbital operation to increase work efficiency. To cut the material accurately, decrease the orbital operation.

7. Cutting stainless steel plates

This Jig Saw can cut stainless steel plates by using No. 97 blade (sold separately). Carefully read "Concerning cutting of stainless steel plates" for proper operation.

8. Splinter guard

CAUTION

Be sure to switch OFF and disconnect the battery from body.

Using the splinter guard when cutting wood materials will reduce splintering of cut surfaces.

Using the provided Hexagonal bar wrench, tighten the bolts in the lower area of the base, moving the base as far forward as possible. (See Fig. 13)
Insert the splinter guard in the space on the base, and push it completely. (See Fig. 14)

9. Sub base (sold separately)

CAUTION

Be sure to switch OFF and disconnect the battery from body.

Used for curved cutting of pieces such as arcs and circles. Makes the task easier by eliminating any snags that may occur between the rear of the base and the material.

Fit into position after hooking the sub base to the tip of the base.

To detach, pull up. (Fig. 15)

NOTE

When the sub base is attached, the blade's protrusion from the material being cut will be reduced by 3 mm. When the blade has been moved down to the lowest point, check to make sure that it is protruding from the material.

10. Attaching and detaching the chip cover (Fig. 16)

WARNING

To prevent accidents when attaching or detaching the chip cover, make sure the unit is switched off and pull out the battery.

NOTE

The chip cover cannot be attached with the base in an inclined state.

- (1) Position the unit at a right angle to the surface (0-degree incline).
- (2) Holding the chip cover's guide section open by hand, push into the main unit.
- (3) Insert the chip cover's catches into the main unit's slots.
- (4) When detaching, spread the catches of the chip cover and draw them out from the main unit's slots.

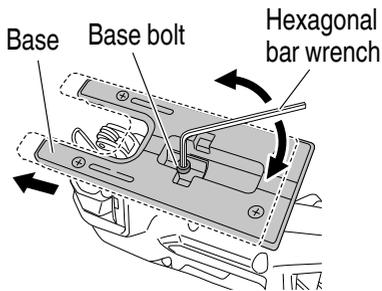


Fig. 13

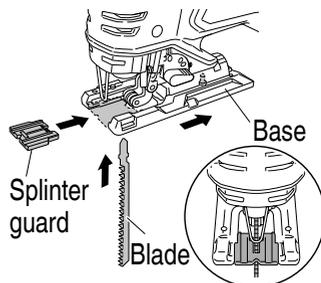


Fig. 14

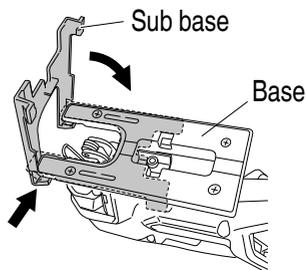


Fig. 15

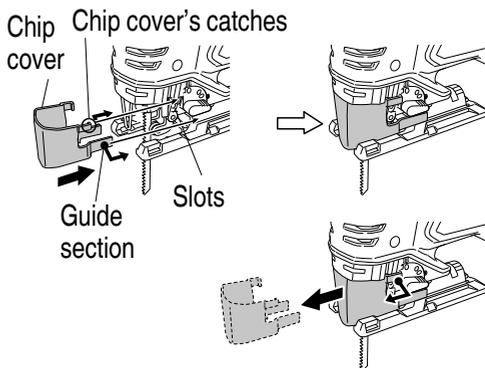


Fig. 16

English

11. Prepare a work bench (Fig. 17)

Since the blade will extend beyond the lower surface of the material, place the material on a work bench when cutting. If a square block is utilized as a work bench, select level ground to ensure it is properly stabilized. An unstable work bench will result in hazardous operation.

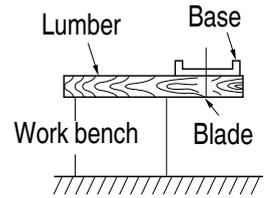


Fig. 17

CAUTION

To avoid possible accident, always ensure that the portion of material remaining after cutting is securely anchored or held in position.

12. Check battery insertion

WARNING

If the battery is inserted while the power switch is in the ON position, the power tool will start operating immediately, inviting serious accident.

CAUTION

Until the battery locks in place with a little click, if not, it may accidentally fall out of the tool causing injury to you or someone around you.

OPERATION

WARNING

- Never touch the moving parts.
- Never operate the Jig saw with the blade turned upward or to the side.

CAUTION

- To extend the lifetime, the lithium-ion battery equips with the protection function to stop the output. Therefore, if the tool is overloaded, the motor may stop. However, this is not the trouble but the result of protection function. In this case, release the switch of tool and eliminate the causes of overloading.
- Don't remove jig saw from workpiece during a cut while the blade is moving.
- Pull out the battery after completing operation.
- In order to prevent blade dislodging, damage or excessive wear on the Plunger, please make sure to have surface of the base plate attached to the work piece while sawing.
- At low speed do not cut a wood with a thickness of more than 10 mm or metal with a thickness of more than 1 mm.

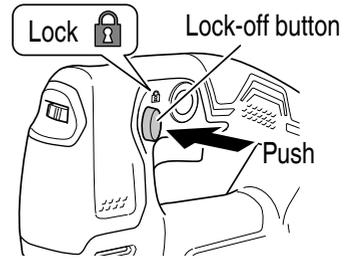
NOTE

Take care not to lock the motor. If the motor is locked, immediately turn the power off. If the motor is locked for a while, the motor or battery may be burnt.

1. Switch operation

(1) Lock-off button

The tool is equipped with a lock-off button. To start the tool, press the lock-off button and then squeeze the trigger switch. (Fig. 18)

**CAUTION**

Do not fix and secure the lock-off button. Besides, keep your finger off the trigger switch when the tool is being carried around. Otherwise, the trigger switch can be inadvertently turned ON, resulting in unexpected accidents.

(2) Trigger switch

This tool is equipped with a variable speed controlled trigger switch. The tool can be turned "ON" or "OFF" by squeezing or releasing the trigger. The blade plunger stroke rate can be adjusted from the minimum to maximum nameplate stroke rate by the pressure you apply to the trigger. Apply more pressure to increase the speed and release pressure to decrease speed. (Fig. 19)



Fig. 18

In addition, releasing the switch activates a break that stops the blade immediately.

For continuous operation, pull the switch in all the way and press the stopper. (Fig. 20)

To cancel continuous operation, once again pull the switch in all the way until the stopper is freed, and then release the switch.

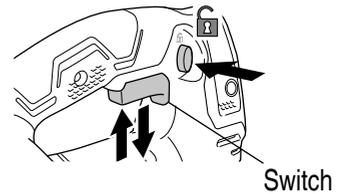


Fig. 19

2. How to use the LED light (Fig. 21)

The LED light will light the area at the tip of the tool when the switch is drawn.

The LED light will automatically power off 10 seconds after the switch is released.

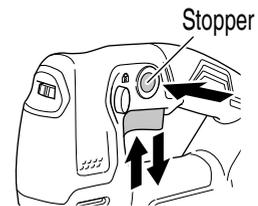


Fig. 20

CAUTION

Do not look directly into the light from the LED lamp. Continuous and direct exposure to the light from the LED lamp can injure your eyes.

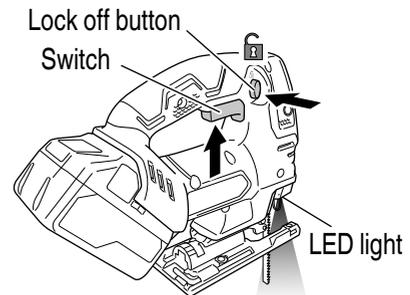
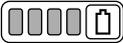
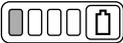
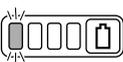


Fig. 21

Table 5

State of lamp	Battery Remaining Power
	Lights ; The battery remaining power is over 75%
	Lights ; The battery remaining power is 50% – 75%.
	Lights ; The battery remaining power is 25% – 50%.
	Lights ; The battery remaining power is less than 25%
	Blinks ; The battery remaining power is nearly empty. Recharge the battery soonest possible.
	Blinks ; Output suspended due to high temperature. Remove the battery from the tool and allow it to fully cool down.
	Blinks ; Output suspended due to failure or malfunction. The problem may be the battery so please contact your dealer.

As the remaining battery indicator shows somewhat differently depending on ambient temperature and battery characteristics, read it as a reference.

NOTE

Do not give a strong shock to the switch panel or break it. It may lead to a trouble.

CUTTING

CAUTION

In order to prevent blade dislodging, damage or excessive wear on the plunger, please make sure to have surface of the base plate attached to the work piece while sawing.

1. Rectilinear cutting
When cutting on a straight line, first draw a marking gauge line and advance the saw along that line. Using the guide (sold separately) will make it possible to cut accurately on a straight line.
- (1) Loosen the base bolt by hexagonal bar wrench attached on base. (**Fig. 24**)
- (2) Move the base fully forward (**Fig. 24**), and tighten the base bolt again.

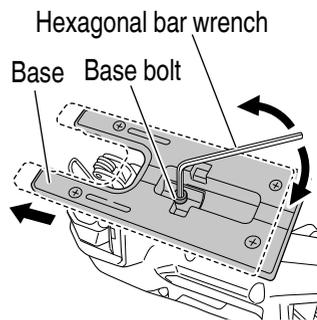


Fig. 24

English

- (3) Attach the guide by passing it through the attachment hole on the base and tighten the M5 bolt. (Fig. 25)
- (4) Set the orbital position to "0".

NOTE

To ensure accurate cutting when using the guide (Fig. 26), always set the orbital position to "0".

- 2. Sawing curved lines
When sawing a small circular arc, reduce the feeding speed of the machine. If the machine is fed too fast, it could cause the blade to break.
Set the orbital position to "0".
- 3. Cutting a circle or a circular arc
The guide also will be helpful for circular cutting. After attaching the guide by same way noted as above, drive the nail or screw into the material through the hole on the guide, then use it for an axis when cutting. (Fig. 27).
Set the orbital position to "0".

NOTE

Circular cutting must be done with the blade approximately vertical to the bottom surface of the base.

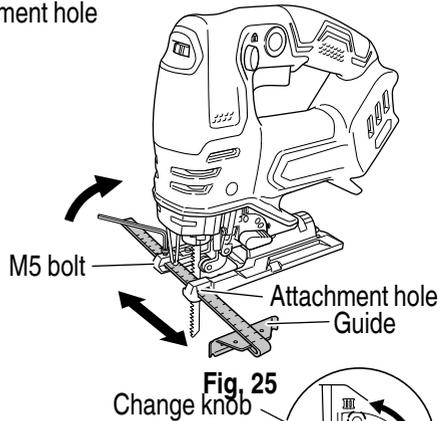


Fig. 25

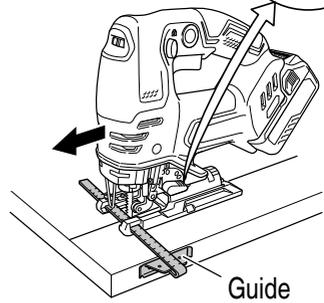


Fig. 26

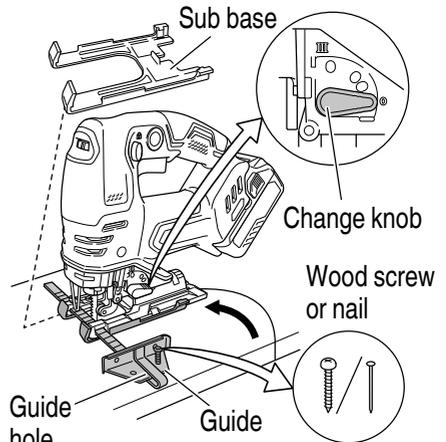


Fig. 27

4. Cutting metallic materials (**Fig. 28**)
 - (1) Adjust the speed dial between scales "3" and "4".
 - (2) Set the orbital position to "0" or to the position indicated in the figure.

NOTE

Always use an appropriate cutting fluid (spindle oil, soapy water, etc.). When a liquid cutting fluid is not available, apply grease to the back surface of the material to be cut.

5. Pocket cutting (**Fig. 29**)
 - (1) Loosen the base bolt by hexagonal bar wrench attached on base. (**Fig. 24 on page 55**)
 - (2) Move the base fully forward (**Fig. 24 on page 55**), and tighten the base bolt again.
 - (3) Set the orbital position to "0".

<In lumber>
Aligning the blade direction with the grain of the wood, cut step by step until a window hole is cut in the center of the lumber.

<In other materials>

When cutting a window hole in materials other than lumber, initially bore a hole with a drill or similar tool from which to start cutting.

6. Angular cutting
The base can be swiveled to both sides by up to 45° for angular cutting. (**Fig. 30**)

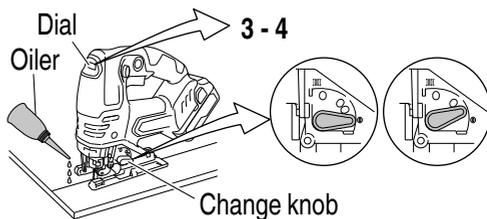


Fig. 28

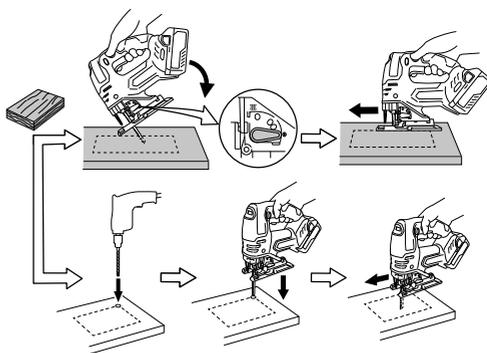


Fig. 29

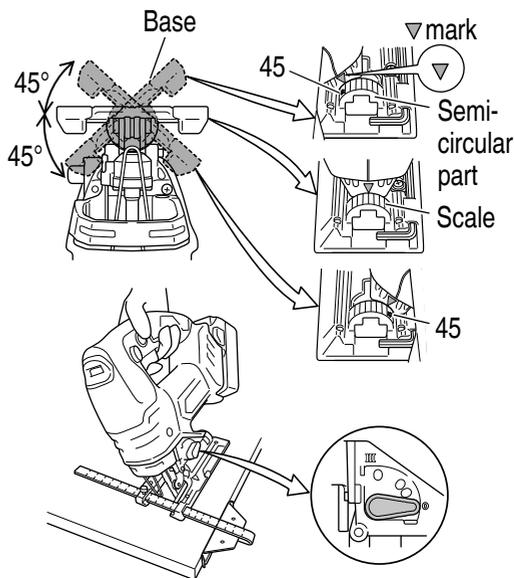


Fig. 30

English

- (1) Loosen the base bolt by hexagonal bar wrench attached on base and move the base fully forward. (Fig. 31)
- (2) Align the scale (from 0 degrees to 45 degrees by 15-degree increments) of the semi-circular part of the base with the [▽] mark on the gear cover. (Fig. 32)
- (3) Tighten the M5 bolt again. (Fig. 31)
- (4) Set the orbital position to "0" – "III".

NOTE

Angular cutting can not be done when adopting chip cover or dust collector.

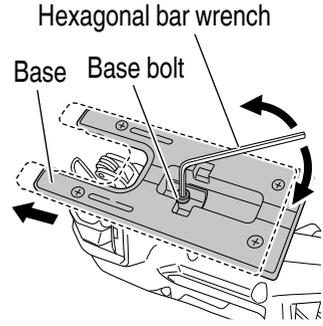


Fig. 31



Fig. 32

CONCERNING CUTTING OF STAINLESS STEEL PLATES

When used with the No. 97 blade (sold separately), can cut stainless steel plates. Note the following to adjust the unit. (Fig. 33)

CAUTION

- In order to prevent blade dislodging, damage or excessive wear on the plunger, please make sure to have surface of the base plate attached to the work piece while sawing.
 - Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.
- Jig saw create sparks which may ignite the dust or fumes.**

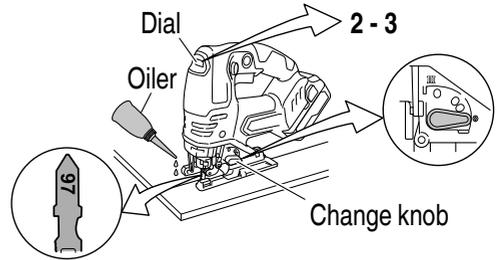


Fig. 33

When cutting stainless steel plates, adjust the unit as described below:

1. Adjust the speed.

Blade	Thickness of material	Dial Scale
No. 97	1.5 – 2.5 mm	Middle groove position between scales "2" and "3"

NOTE

Dial scale reading is for reference only. The higher the speed is, the quicker the material is cut. But the service life of the blade will be reduced in this case. When the speed is too low, cutting will take longer, although the service life will be prolonged. Make adjustments as desired.

2. Set the orbital position to “0”

NOTE

When cutting use cutting fluid (oil base cutting fluid) to prolong the blade's service life.

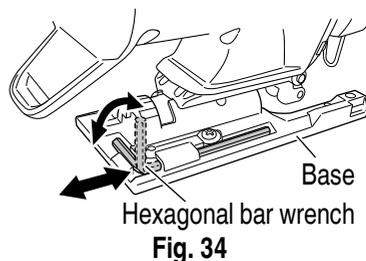
SELECTION OF BLADES

- Accessory blades

To ensure maximum operating efficiency and results, it is very important to select the appropriate blade best suited to the type and thickness of the material to be cut. The blade number is engraved in the vicinity of the mounting portion of each blade. Select appropriate blades by referring to **Table 6 on page 66**.

HOUSING THE HEXAGONAL BAR WRENCH

It is possible to house the hexagonal bar wrench on the base. (See **Fig. 34**)



CONNECTING WITH CLEANER

By connecting with cleaner (sold separately) through dust collector (sold separately) and adapter (sold separately), most of dust can be collected.

- (1) Loosen the base bolt by hexagonal bar wrench attached on base. (**Fig. 35**)
- (2) Move the base fully forward, and tighten the base bolt again. (**Fig. 35**)

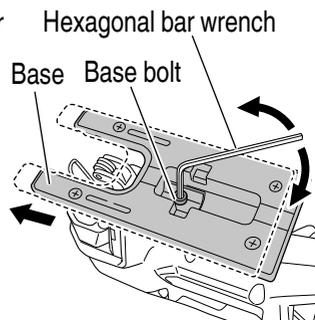


Fig. 35

English

- (3) Attach the chip cover. (**Fig. 16 on page 51**)
- (4) Connect the dust collection adapter with adapter. (**Fig. 36**)
- (5) Connect the adapter with the nose of cleaner. (**Fig. 36**)
- (6) Insert dust collection adapter into the rear hole of the base until the hook catches in the notch. (**Fig. 37**)
- (7) Press the hook to remove the dust collection adapter.

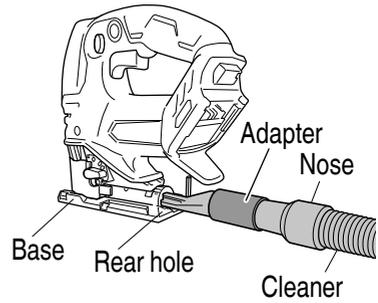


Fig. 36

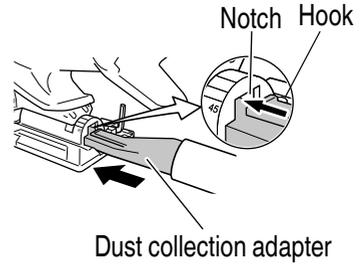


Fig. 37

HOW TO RECHARGE USB DEVICE

WARNING

- Prior to use, check the connecting USB cable for any defect or damage. Using a defective or damaged USB cable can cause smoke emission or ignition.
- When the product is not being used, cover the USB port with the rubber cover. Buildup of dust etc. in the USB port can cause smoke emission or ignition.

NOTE

- There may be an occasional pause during USB recharging.
 - When a USB device is not being charged, remove the USB device from the charger. Failure to do so may not only reduce the battery life of a USB device, but may also result in unexpected accidents.
 - It may not be possible to charge some USB devices, depending on the type of device.
- (1) Select a charging method
Depending on the charge method selected, either the battery is inserted into the charger or the power cord is plugged into an outlet.
- Charging a USB device from a electrical outlet. (**Fig. 38-a**)
 - Charging a USB device and battery from a electrical outlet. (**Fig. 38-b**)

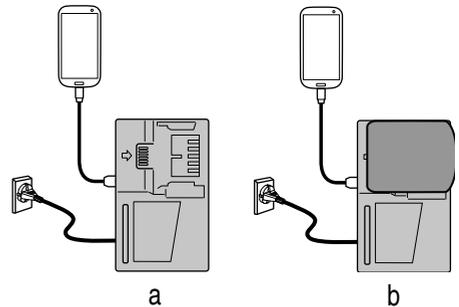


Fig. 38

- (2) Connect the USB cable. (**Fig. 39**)
Pull back the rubber cover and firmly plug in a commercially available USB cable (appropriate to the device being charged) into the USB port.

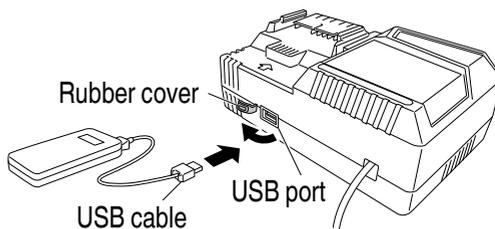


Fig. 39

- (3) When charging is completed
- To verify charge status, check the USB device.
 - Unplug the power cord from the electrical outlet. (**Fig. 40**)
 - Place the rubber cover over the USB port.

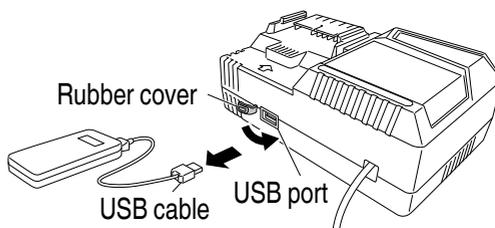


Fig. 40

MAINTENANCE AND INSPECTION

CAUTION

Be sure to turned off the switch and remove the battery before maintenance and inspection.

1. Inspecting the blade
Continued use of a dull or damaged blade will result in reduced cutting efficiency and may cause overloading of the motor. Replace the blade with a new one as soon as excessive abrasion is noted.

CAUTION

If a dull saw blade is used, reactive force is increased during cutting operation. Avoid the use of the dull saw blade without repair.

2. Inspecting the mounting screws
Regularly inspect all mounting screws and ensure that they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in serious hazard.
3. Maintenance of the motor
The motor unit winding is the very "heart" of the power tool. Exercise due care to ensure the winding does not become damaged and/or wet with oil or water.
4. Inspection of terminals (tool and battery)
Check to make sure that swarf and dust have not collected on the terminals.
On occasion check prior, during and after operation.

English

CAUTION

**Remove any swarf or dust which may have collected on the terminals.
Failure to do so may result in malfunction.**

5. Cleaning of the outside
When the Cordless Reciprocating Saw is stained, wipe with a soft dry cloth or a cloth moistened with soapy water. Do not use chloric solvents, gasoline or paint thinner, as they melt plastics.
6. Lubrication
Lubricate the roller guide and blade holder from time to time with a drop of oil. It will extend the life of the roller.
7. Disposal of the exhausted battery

WARNING

Do not dispose of the exhausted battery. The battery may explode if it is incinerated. The battery is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

8. Storage
Store the Cordless Reciprocating Saw in a place in which the temperature is less than 40°C, and out of reach of children.

NOTE

Storing Lithium-ion Batteries

Make sure the batteries have been fully charged before storing them.

Prolonged storage (3 months or more) of batteries with a low charge may result in performance deterioration, significantly reducing battery usage time or rendering the batteries incapable of holding a charge.

However, significantly reduced battery usage time may be recovered by repeatedly charging and using the batteries two to five times.

If the battery usage time is extremely short despite repeated charging and use, consider the batteries dead and purchase new batteries.

CAUTION

In the operation and maintenance of power tools, the safety regulations and standards prescribed in each country must be observed.

Important notice on the batteries for the HiKOKI cordless power tools

Please always use one of our designated genuine batteries. We cannot guarantee the safety and performance of our cordless power tool when used with batteries other than these designated by us, or when the battery is disassembled and modified (such as disassembly and replacement of cells or other internal parts).

TROUBLESHOOTING

Use the inspections in the table below if the tool does not operate normally. If this does not remedy the problem, consult your dealer or the HIKOKI Authorized Service Center.

1. Power tool

Symptom	Possible cause	Remedy
Tool doesn't run	No remaining battery power	Charge the battery.
	Battery isn't fully installed.	Push the battery in until you hear a click.
Tool suddenly stopped	Tool was overburdened	Get rid of the problem causing the overburden.
		During operation, lighten the applied pressure.
Blade - can't be attached - fall off	The shape of the attachment portion doesn't match	Use the appropriate blade (See "Selecting accessories")
	The lever is open.	Close the lever.
	There is foreign matter inside the blade holder.	Remove the foreign matter.
Switch can't be pulled	Lock-off button is pushed in.	Release the Lock-off button.
An abnormal high-pitched noise occurs when the trigger switch is pulled.	The trigger switch is being pulled only slightly.	This is not a malfunction. It does not occur if the trigger switch is pulled more fully.
Blade wears out too quickly.	Number of strokes is too fast	Switch the dial to a lower setting than the current one. (Switch to low speed mode when cutting stainless steel plates) (See "Adjusting the blade operating speed")
		Use machine oil (turbine oil, etc.)
	Proper machine oil not used when cutting metallic materials	
	Too much applied pressure during operation	During operation, lighten the applied pressure.

English

Symptom	Possible cause	Remedy
Unable to properly cut.	Blade is inappropriate for the quality and thickness of the material to be cut	Use the proper blade (See “Selecting accessories”)
	Speed and orbital position are inappropriate for the quality and thickness of the material to be cut	Set the appropriate speed and orbital position (See “Adjusting the blade operating speed”)
	Blade is worn, degraded or damaged	Replace with a new blade.
Battery cannot be installed	Attempting to install a battery other than that specified for the tool.	Please install a multi volt type battery.

2. Charger

Symptom	Possible cause	Remedy
The charge indicator lamp rapidly flickers purple, and battery charging doesn't begin.	The battery is not inserted all the way.	Insert the battery firmly.
	There is foreign matter in the battery terminal or where the battery is attached.	Remove the foreign matter.
The charge indicator lamp blinks red, and battery charging doesn't begin.	The battery is not inserted all the way.	Insert the battery firmly.
	The battery is overheated.	If left alone, the battery will automatically begin charging if its temperature decreases, but this may reduce battery life. It is recommended that the battery be cooled in a well-ventilated location away from direct sunlight before charging it.
Battery usage time is short even though the battery is fully charged.	The battery's life is depleted.	Replace the battery with a new one.
The battery takes a long time to charge.	The temperature of the battery, the charger, or the surrounding environment is extremely low.	Charge the battery indoors or in another warmer environment.
	The charger's vents are blocked, causing its internal components to overheat.	Avoid blocking the vents.
	The cooling fan is not running.	Contact a HiKOKI Authorized Service Center for repairs.

Symptom	Possible cause	Remedy
The USB power lamp has switched off and the USB device has stopped charging.	The battery's capacity has become low.	Replace the battery with one that has capacity remaining.
		Plug the charger's power plug into an electric socket.
USB power lamp does not switch off even though the USB device has finished charging.	The USB power lamp lights up green to indicate that USB charging is possible.	This is not a malfunction.
It is unclear what the charging status of a USB device is, or whether its charging is complete.	The USB power lamp does not switch off even when charging is complete.	Examine the USB device that is charging to confirm its charging status.
Charging of a USB device pauses midway.	The charger was plugged into an electrical socket while the USB device was being charged using the battery as the power source.	This is not a malfunction. The charger pauses USB charging for about 5 seconds when it is differentiating between power sources.
	A battery was inserted into the charger while the USB device was being charged using a power socket as the power source.	
Charging of the USB device pauses midway when the battery and the USB device are being charged at the same time.	The battery has become fully charged.	This is not a malfunction. The charger pauses USB charging for about 5 seconds while it checks whether the battery has successfully completed charging.
Charging of the USB device doesn't start when the battery and the USB device are being charged at the same time.	The remaining battery capacity is extremely low.	This is not a malfunction. When the battery capacity reaches a certain level, USB charging automatically begins.

Table 6 List of appropriate blades

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

NOTE

The minimum cutting radius of No. 1 (Super Long), No. 21, No. 22 and No. 41 blades is 100 mm.

SELECTING ACCESSORIES

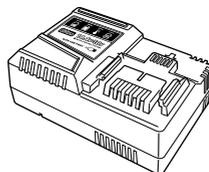
For details contact HiKOKI Authorized Service Center.



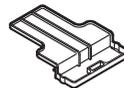
BSL36A18
BSL36C18



BSL36B18

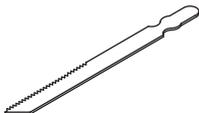


UC18YSL3 (14.4 V – 18 V)



329897

Blades



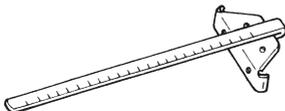
No.	Part Number
1	321878
11	879336
12	879337
15	879338
16	879339
21	879340
22	879341
41	879357
97	963400

Hexagonal bar
wrench



Part Number: 944458

Guide



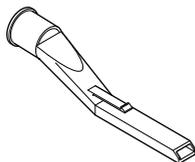
Part Number: 879391

Splinter
guard



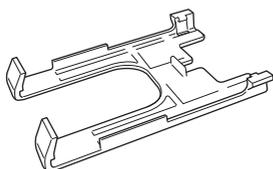
Part Number: 338997

Dust collection
adapter



Part Number: 370492

Sub base

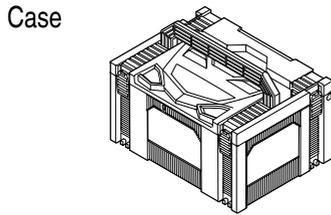


Part Number: 339018

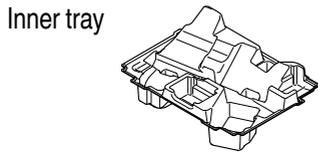
English



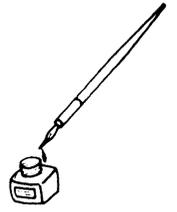
Part Number: 338996

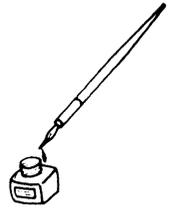


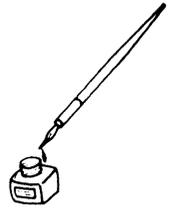
Part Number: 337108



Part Number: 375861







服务中心
高壹工机商业(上海)有限公司
上海市闵行区浦江工业园区三鲁路3585号7幢3楼

制造商
广东高壹工机有限公司
广东省广州市番禺区化龙镇工业路富裕围工业村

Koki Holdings Co., Ltd.

907
编号: C99735421 G
发行日期: 2019年 7月
中国印刷