

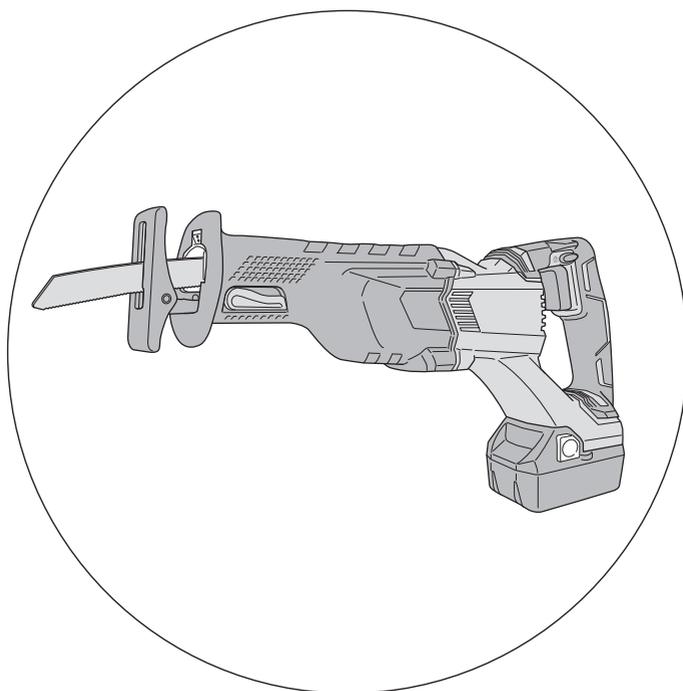
HiKOKI

充电式往复锯

Cordless Reciprocating Saw

CR 18DBL

中文
English



保留备用

Keep for future reference



使用说明书

Handling instructions

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电动工具通用安全警告

⚠ 警告！

阅读所有警告和所有说明。

不遵照以下警告和说明会导致电击、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。

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) 在进行任何调节、更换附件或贮存电动工具之前，必须从电源上拔掉插头和 / 或使电池盒与工具脱开。
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) 保养电动工具。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。

中文

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。

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。

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。

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。

充电式往复锯使用注意事项

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. 在墙上、地板上或天花板上切割时，请检查埋入的电线等。

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. 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。
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. 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. 在进行调整、更换附件或存放工具之前请取出电池或将开关置于锁定或关闭位置。

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。

中文

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。

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）。

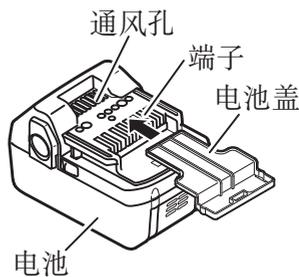


图 1

锂离子电池运输

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。

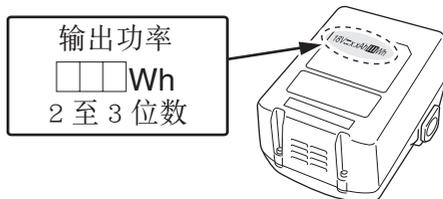


图 2

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

规格

电动工具

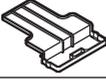
型式	CR18DBL
无负荷速度	0 — 2500 /min
行程	32 mm
能力	软钢管：外径 130 mm
	聚氯乙烯管：外径 130 mm
	木材：厚度 120 mm
	软钢板：厚度 19 mm
电池	BSL1850：锂离子 18 V (5.0 Ah 10 节)
重量	3.4 kg (安装 BSL1850)

充电器

型式	UC18YFSL
充电电压	14.4 V — 18 V
重量	0.5 kg

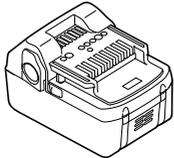
标准附件

CR18DBL 分为 2LJRK 型和 NN 型两种。各型号的附件请参见以下列表。

	CR18DBL (2LJRK)	CR18DBL (NN)
充电器 (UC18YFSL) 	1	—
电池 (BSL1850) 	2	—
电池盖 	1	—
塑料箱 	1	—
刀刃 (141(S) 号) 	1	1

选购附件 (分开销售)

1. 电池



<BSL1850>

2. 工具和转接器

- | | | |
|-------------|--------------|-----------------|
| (1) 4 号刀刃 | (7) 103 号刀刃 | (13) 121 号刀刃 |
| (2) 5 号刀刃 | (8) 104 号刀刃 | (14) 131 号刀刃 |
| (3) 95 号刀刃 | (9) 107 号刀刃 | (15) 132 号刀刃 |
| (4) 96 号刀刃 | (10) 108 号刀刃 | (16) 141(S) 号刀刃 |
| (5) 101 号刀刃 | (11) 109 号刀刃 | (17) 142(S) 号刀刃 |
| (6) 102 号刀刃 | (12) 110 号刀刃 | (18) 143(S) 号刀刃 |

○ (1) - (4) HCS 刀刃 (HCS: 高速碳钢)

○ (5) - (18) BI-METAL 刀刃

使用刀刃时, 请参照第 23-24 页的表 6, 表 7 和表 8。

用途

- 金属和不锈钢管的切锯。
 - 各种木材的切锯。
 - 软钢、铝和铜板的切锯。
 - 苯酚树脂、聚氯乙烯等合成树脂的切锯。
- 详细内容，请参照“刀刃的选择”一节的内容。

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 3 和图 4）。

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 4）

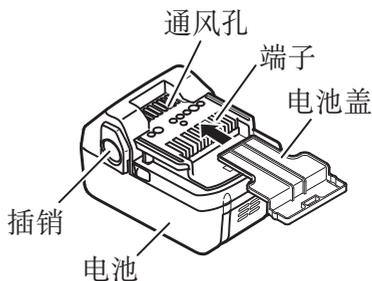


图 3

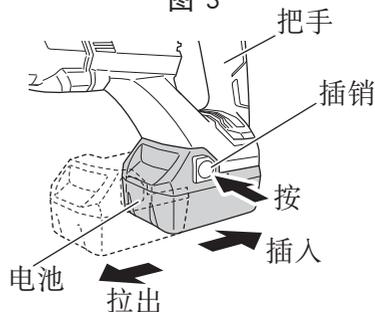


图 4

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 5 所示，将电池紧紧地插入充电器。

3. 充电

将电池插入充电器后，将开始充电，指示灯会持续点亮呈红色。

电池完全充电后，指示灯将闪烁呈红色（以 1 秒的间隔）（参照如第 10 页的表 1）。

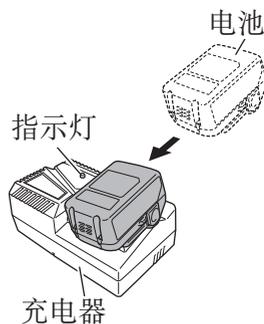


图 5

中文

● 指示灯显示

根据充电器或充电式电池的情况，指示灯的显示如表 1 所示。

表 1

指示灯的显示				
指示灯 (红色)	充电前	闪烁	点亮 0.5 秒钟，不点亮 0.5 秒钟 (熄灭 0.5 秒钟) 	
	充电时	点亮	连续点亮 	
	充电完成	闪烁	点亮 0.5 秒钟，不点亮 0.5 秒钟 (熄灭 0.5 秒钟) 	
	过热而等待	闪烁	点亮 1 秒钟，不点亮 0.5 秒钟 (熄灭 0.5 秒钟) 	电池过热。无法充（电池冷却后开始进行充电）。
	无法充电	闪动	点亮 0.1 秒钟，不点亮 0.1 秒钟 (熄灭 0.1 秒钟) 	电池或充电器有问题。

● 电池温度和充电时间相关资料。

温度和充电时间如表 2 所示

表 2

电池		充电器	UC18YFSL
充电电压		V	14.4 – 18
重量		kg	0.5
电池可充电温度			0°C – 50°C
电池容量的大致充电时间 (20°C 下)			
1.5 Ah	分钟		22
2.0 Ah	分钟		30
2.5 Ah	分钟		35
3.0 Ah	分钟		45
4.0 Ah	分钟		60
5.0 Ah	分钟		75
电池数			4 – 10

注：

充电时间可能根据环境温度和电压而有变化。

注意！

连续使用时，电池充电器温度将提升，因此会导致出现故障。完成充电后，下次充电前，请让电池充电器休息 15 分钟。

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，然后妥善保存。

注意！

- 如果电池长时间放置在阳光直接照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，充电器上的指示灯会点亮 1 秒钟，不点亮 0.5 秒钟（熄灭 0.5 秒钟）。
在此情况下，先让电池冷却下来，然后再充电。
- 指示灯闪动时（以 0.2 秒钟的间隔），请检查并取出充电器电池接口处的任何异物。若无异物，则可能电池或充电器发生故障。请带去经授权的维修中心检查。
- 由于内置的微型计算机需要大约 3 秒钟来确认使用充电器充电的电池已取出，所以请等待至少 3 秒钟后再将电池重新插入继续充电。如果电池在 3 秒内重新插入，电池可能无法正常充电。
- 如果指示灯未以红色闪烁（每秒一次），但充电池电源线已连接至电源，表明充电器的保护电路可能已激活。
拔下电源线或插座，然后等待 30 秒左右再次连接。如果指示灯仍未以红色闪烁（每秒一次），请将充电器送还至 HiKOKI 授权服务中心。

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. 安装锯条
该工具采用了不使用扳钳或其他工具便可装卸锯条的可装卸式装置。

中文

- (1) 扭转控制杆，打开刀刃钳。
- (2) 扭转控制杆，将刀刃座完全插入柱塞端部的插槽中。可朝上或朝下安装此刀刃。（图 6、图 7）
- (3) 松开控制杆时，弹簧的弹力会使控制杆自动返回正确的位置。
- (4) 用手试着拉刀刃背两三次，以确认刀刃已安装牢固。（图 8）

注意！

当拉动锯条时务必从后侧拉动，拉动锯条的其他部分将造成人身伤害。

3. 卸下锯条

注意！

切勿用手触摸刚刚使用过的锯条，否则，灼热的金属极易烫伤您的皮肤。

- (1) 转动控制杆后，将刀刃向下。刀刃会自行脱落。如果刀刃未掉下来，用手将刀刃拔出。

当刀刃损坏时

即使当刀刃破损并残留在刀刃座的小插槽内时，若扭转控制杆并使刀刃朝下，它仍会自行掉下。若未自行掉下，请按下述步骤将它取出。

- (1) 若损坏的刀刃某部分粘在了刀刃座的小插槽中，拔出插条并将刀刃拔出。
- (2) 若损坏的锯条藏在小插槽内部，请用锯条的尖部将其钩住并取出。（图 9）

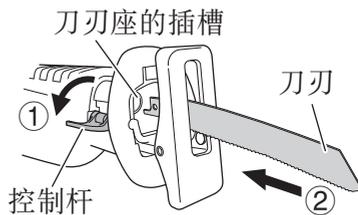


图 6

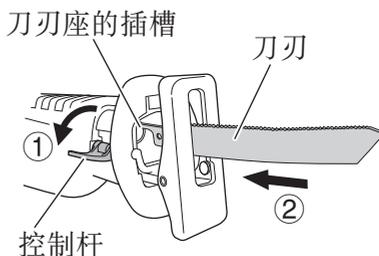


图 7

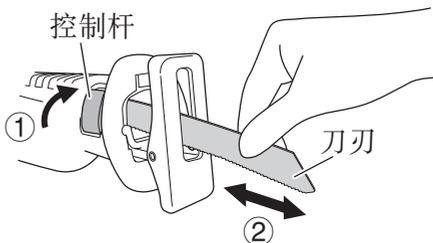


图 8

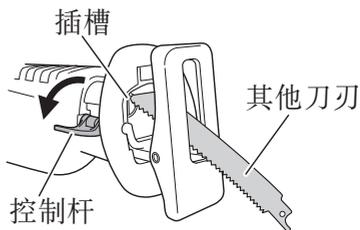


图 9

电锯的维护和检查

- (1) 使用后，请用气刷或刷子清除掉锯条上的灰尘、泥土、尘沙或潮气等，以确保锯条的工作顺畅。

注：
若在不干净或未润滑刀刃的状态下使用工具，控制杆的功能可能因积尘和碎屑而使控制杆运转不畅。此时可以扭转控制杆，并将刀刃座周围擦拭干净，吹走积尘。

注意！

请勿使用带有磨损刀刃孔的刀刃。否则，刀刃可能会掉下，导致人员受伤。（图 10）

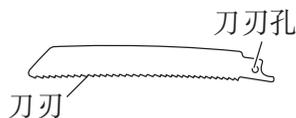


图 10

4. 调结基座

为最大限度地延长刀刃的使用寿命，请滑入或滑出基座，调整行程长度以便于高效使用。

- (1) 断开开关，拆下电池。
- (2) 顺时针扭转基座控制杆；使基座滑至适宜位置。可将基座调至 5 个位置。
- (3) 逆时针扭转控制杆以固定基座。（图 11）
- (4) 请确保基座不会对刀刃产生干扰。

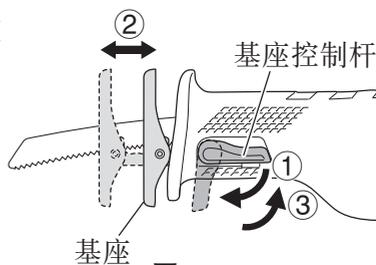


图 11

警告！

为了避免人员受伤和机器损坏，请勿在未安装基座的情况下操作本往复锯。否则可能会因刀刃座撞击工件而造成往复运动机构损坏。

5. 检查电池的插入

警告！

若电源开关接通，则插入电池后，电动工具将出其不意地立刻转动，从而导致严重事故。

注意！

请确保电池装入正确的位置，直至发出喀嗒声，否则可能会使电池突然掉落，导致使用者或周围人员受伤。

使用方法

警告！

请勿触碰移动的部件。

注意！

- 在作业中请小心勿使锯屑、灰尘、水等通过柱塞部份进入机内。若锯屑等积于柱塞部份，请务必在使用前加以清除。
- 请勿取下前盖。
务必从前盖的顶部拿住机身。(图 12)
- 在使用时，在切锯作业中请将底座压在材料上面。若未将底座紧紧压在工件上，振动会导致刀刃损坏。
因此，有时刀刃端会接触管内壁，导致刀刃损坏。
- 请选择长度最适当的刀刃。理论上，减去行程量后从刀刃座突出的刀刃长度应大于材料。(参照图 13 和图 15)
- 若切锯超过刀刃切锯能力的大工件、大木块等，刀刃可能会接触到管内壁和木料等，从而发生危险。(参照图 14 和图 16)。
- 为延长使用期限，锂离子电池配备停止输出的保护功能。因此，若工具超过负荷，马达亦可能停止。然而，这并非故障问题，而是保护功能作用的结果。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。
- 移动刀刃进行切锯时，请勿将工具从工件上移开。
- 完成作业后，取出电池。

注：

请勿锁住马达。若马达锁住，请立即断开开关。若马达已被锁住一段时间，可能会使马达或电池烧损。

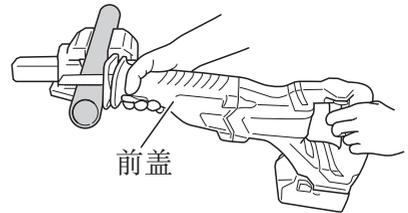


图 12



图 13



图 14



图 15



图 16

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 17）



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 18）

锁定解除按钮



图 17

2. LED 灯使用方法

拔出开关后，LED 灯将自动点亮工具尖头部分（图 19）。

开关松开后，LED 灯将会自动关闭 10 秒钟。

LED 灯也具有警示信号功能，在使用期间点亮。

详情见“10. LED 灯警示信号”。

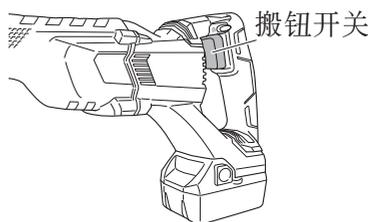


图 18

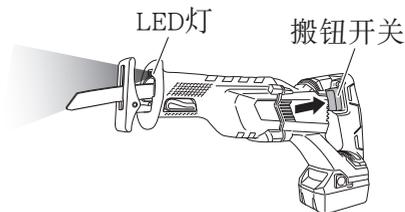


图 19

注意！

- 请不要直视灯光，避免眼睛直接受灯光照射。

如果眼睛持续受灯光照射，会伤害眼睛。

- 用软布仔细擦拭附着在 LED 灯镜片上的灰尘或污垢，小心不要划伤镜片。如果划伤 LED 灯的镜片，可能会导致亮度减弱。

3. 有关电池余量指示

按下电池余量指示开关后，电池余量指示灯会点亮，能检查电池剩余电量。（图 20）

将手指从电池余量指示开关上放开后，电池余量指示灯会熄灭。电池余量指示灯的状态和电池剩余电量如表 3 所示。

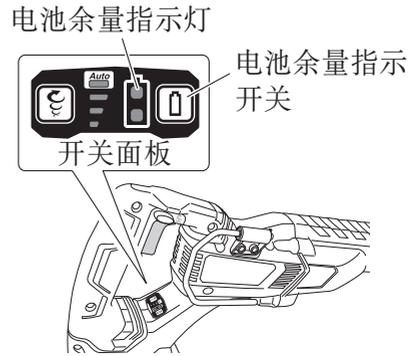


图 20

表 3

指示灯状态	电池剩余电量
	电池剩余电量充足。
	电池剩余一半电量。
	电池已快无剩余电量。请尽快给电池再充电。

因为电池余量指示因环境温度和电池特性而略有不同，上表仅供参考。

注：

- 请勿对开关面板施加强烈冲击或将其损坏，否则可能会导致故障。
- 为了节约电池用电，按住电池余量指示开关时电池余量指示灯才点亮。

4. 调整运行速度

注意！

- 请勿撞击或损坏开关面板。
- 请在松开扳机开关时选择模式。否则可能导致故障。

可根据机体开关的插入程度，将刀刃的行程量调节至任意级别。

此外，可利用模式选择开关选择行程量最大值。开关拉动的程度越大，则行程量越大。

切锯作业启动时，开始将以低行程量（低速）准确切锯所需位置。实现准确切锯后，可增加行程量（高速），直至完成切锯。

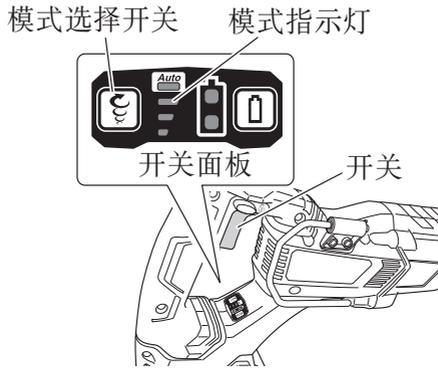


图 21

安装电池并接通电源后，可通过按压模式选择开关更改模式。（图 22）



图 22

- 速度变化模式允许最大行程量在以下 3 种级别间切换：低速、中速和高速。即使负荷发生变化，也可以利用速度变化模式保留最大行程量的设置数值。
- 在自动模式下，可减少马达空载运行时的最大行程量，以降低功率消耗和噪音。若运转时负荷增加，自动模式下的转速将增加。若负荷减轻，转速将自动降低。指示灯的状态和速度如第 18 页的表 4 所示。

表 4

模式		指示灯状态	运转速度	用途
传输模式	低速		0 - 1600 /min	不锈钢 塑料 纤维板
	中速		0 - 2300 /min	软钢板 铸铁管 L-型角钢 铝 / 黄铜 / 铜
	高速		0 - 2500 /min	石膏板 木材
自动模式			0 - 1600 /min 2500 /min (负荷增加时)	注意！ 请勿在自动模式下切锯不锈钢。

注：

仅在工具已安装电池且已拉动过一次扳机开关后，才可以对模式选择开关进行设定。

5. 挂钩的使用方法

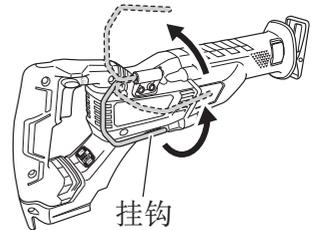
使用挂钩可以在运转期间暂时悬挂机体（图 23、图 24）。

注意！

请勿用挂钩悬挂人。

使用挂钩时，请确保主要机体不会滑倒或倒落，或被风吹动等。

请勿将机器挂在腰带或裤子上，否则可能会导致事故。



挂钩

图 23

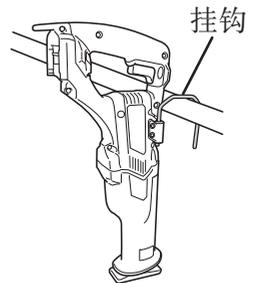


图 24

6. 切锯金属材料

注意！

- 将底座紧紧按在工件之上。
- 切锯时请勿给刀刃施加异常力量。否则很容易损坏刀刃。
- 根据切割物的构成或锯条的不同有时马达会锁住。一旦马达锁住，请立即关闭开关。
- 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。往复锯产生的火花会点燃粉尘或气体。

- (1) 在作业前牢牢固定工件。(图 25)
- (2) 在切锯金属材料时，请使用适当的机油（涡轮油等）。未使用液体机油时，请给工件涂上润滑油。

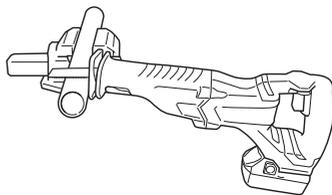


图 25

注意！

若未使用机油，刀刃的使用寿命会大幅缩短。

7. 切锯木料

切锯木料时，在开始操作前务必先牢牢固定工件。(图 26)

注意！

切锯时请勿给刀刃施加异常力量。同时，请将底座紧紧压在木料上。

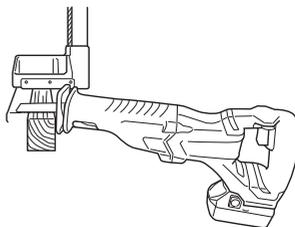


图 26

8. 切锯曲线

建议使用第 23 页表 7 中的 BI-METAL 刀刃，因为这种刀刃坚韧耐用。

注意！

将材料切割成小圆弧时须降低进料速度，速度过快可能会损坏刀刃。

中文

9. 插入切锯

使用本电动往复锯，可在木合板和薄板材料上进行插入切锯。使用本电动往复锯，可在木合板和薄板材料上插入切锯。如图 28、图 30、图 32 所示。

请尽量使用短而薄的刀刃。为此，建议使用第 23 页表 7 中列出的 BI-METAL 刀刃号码 132 号。在切锯作业中请务必小心操作并遵守以下步骤。

- (1) 请将底座的下部（或上部）压在切锯材料上，使刀刃前端脱离切锯材料并扣扳机。（图 27、图 28）
- (2) 慢慢抬起把手并用刀刃一点一点地切入。（图 29、图 30）
- (3) 紧紧抓住机身，直至刀刃完全切入材料。（图 31、图 32）

注意！

- 避免对金属材料进行切锯，否则很容易损坏刀刃。
- 在刀刃前端压在切锯材料上时切勿扣扳机。否则，当刀刃接触材料时很容易被损坏。
- 务必紧紧抓住机身缓慢地进行切锯。在切锯作业中若对刀刃异常用力，则很容易损坏刀刃。

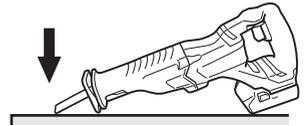


图 27

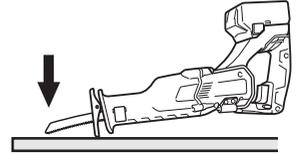


图 28

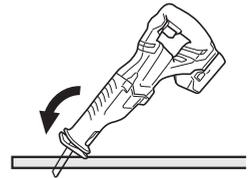


图 29

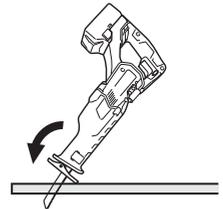


图 30

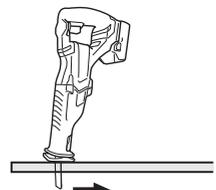


图 31

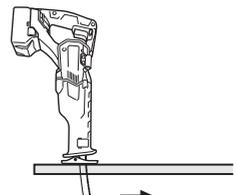


图 32

中文

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. 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。

5. 润滑

考虑到该工具在正常作业条件下的预期使用寿命，轴承已经过优质润滑油的充分润滑。因此，无需进一步润滑。

6. 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 and 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。

刀刃的选择

为了确保最大工作效率和效果，必须选择种类和厚度最适合切锯材料的刀刃。

注:

表中所示的工件尺寸，表示将底座设置于最靠近充电式往复锯安装位置时的尺寸。须注意，若将底座安装在远离充电式往复锯处，则工件尺寸将变小。

1. HSC 刀刃的选择

表 6 中 HCS 刀刃的刀刃号码标示于各刀刃的安装位置附近。请参照下面表 6 和表 8 来选择适当的刀刃。

表 6: HCS 刀刃

刀刃号码	用途	厚度 (mm)
4 号	切锯和磨毛木料	50 - 70
5 号	切锯和磨毛木料	30 以下
95 号	切锯直径小于 100 mm 的不锈钢管	2.5 以下
96 号	切锯直径小于 30 mm 的不锈钢管	2.5 以下

注:

4 号 - 96 号 HSC 刀刃为另售件。

2. BI-METAL 刀刃的选择

表 7 中的 BI-METAL 刀刃号码表示特殊套装附件。请参照下面表 7 和表 8 选择适当的刀刃。

表 7: BI-METAL 刀刃

刀刃号码	用途	厚度 (mm)
101 号 103 号 109 号 141(S) 号	切锯外径小于 60 mm 的钢管和不锈钢管	2.5 - 6
102 号 104 号 110 号 142(S) 号 143(S) 号	切锯外径小于 100 mm 的钢管和不锈钢管	2.5 - 6
107 号	切锯外径小于 60 mm 的钢管和不锈钢管	3.5 以下
108 号	切锯外径小于 100 mm 的钢管和不锈钢管	3.5 以下
121 号	切锯和磨毛木料	100
131 号	多用途	100
132 号	多用途	100

注:

101 号至 132 号 BI-METAL 刀刃为另售件。

3. 选择用于其他材料的刀刃

表 8

切锯材料	材料性质	厚度 (mm)	刀刃号码
铁板	软钢板	2.5 - 10	101, 102, 103, 104, 109, 110, 131, 141(S), 142(S), 143(S) 号
		3.5 以下	107, 108 号
有色金属	铝、铜和青铜	5 - 20	101, 102, 103, 104, 109, 110, 131, 132, 141(S), 142(S), 143(S) 号
		5 以下	107, 108 号
合成树脂	苯酚树脂、蜜胺 甲醛树脂等	10 - 50	101, 102, 103, 104, 131, 132, 141(S), 142(S), 143(S) 号
		5 - 30	107, 108, 109, 110 号
	聚氯乙烯树脂、 丙烯酸树脂等	10 - 60	101, 102, 103, 104, 131, 132, 141(S), 142(S), 143(S) 号
		5 - 30	107, 108, 109, 110 号

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GENERAL POWER TOOL SAFETY WARNINGS

WARNING

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions 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.

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.

English

- 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 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.

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 the battery pack 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. 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.

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.
- 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.

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.

CAUTION

Keep children and infirm persons away.

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

PRECAUTIONS FOR CORDLESS RECIPROCATING 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 higher than 40°C.
The most suitable temperature for charging is that of 20 – 25°C.
2. Do not use the charger continuously.
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 is burnt, it may explode.
7. When cutting in wall, floor or ceiling, check for buried electric power cord, etc.
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. 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.
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 body handle and front cover of the power tool firmly. Otherwise the counterforce produced may result in inaccurate and even dangerous operation.
15. Remove the battery from tool or place the switch in the locked or off position before making any adjustments, changing accessories, or storing the tools.

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.

English

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).

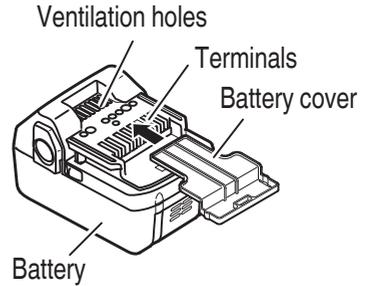


Fig. 1

REGARDING LITHIUM-ION BATTERY TRANSPORTATION

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.

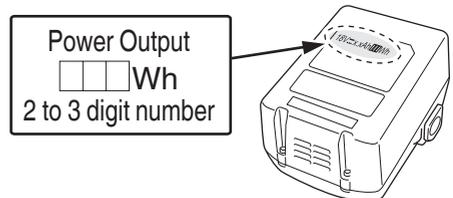


Fig. 2

SYMBOL

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

SPECIFICATIONS

Power Tool

Model	CR18DBL
No-load speed	0 – 2500 /min
Stroke	32 mm
Capacity	Mild Steel Pipe: O.D. 130 mm
	Vinyl Chloride Pipe: O.D. 130 mm
	Wood: Depth 120 mm
	Mild Steel Plate: Thickness 19 mm
Battery	BSL1850: Li-ion 18 V (5.0 Ah, 10 cells)
Weight	3.4 kg (BSL1850 attached)

Charger

Model	UC18YFSL
Charging voltage	14.4 V – 18 V
Weight	0.5 kg

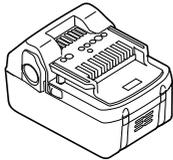
STANDARD ACCESSORIES

CR18DBL have two types which are designated as 2LJRK and NN. For their respective accessories, see the Table below.

		CR18DBL (2LJRK)	CR18DBL (NN)
Charger (UC18YFSL)		1	—
Battery (BSL1850)		2	—
Battery cover		1	—
Plastic case		1	—
Blade (No. 141(S))		1	1

OPTIONAL ACCESSORIES (sold separately)

1. Battery



<BSL1850>

2. Blades

- | | | |
|-------------------|--------------------|-----------------------|
| (1) No. 4 Blade | (7) No. 103 Blade | (13) No. 121 Blade |
| (2) No. 5 Blade | (8) No. 104 Blade | (14) No. 131 Blade |
| (3) No. 95 Blade | (9) No. 107 Blade | (15) No. 132 Blade |
| (4) No. 96 Blade | (10) No. 108 Blade | (16) No. 141(S) Blade |
| (5) No. 101 Blade | (11) No. 109 Blade | (17) No. 142(S) Blade |
| (6) No. 102 Blade | (12) No. 110 Blade | (18) No. 143(S) Blade |

○ (1) – (4): HCS Blades (HCS: Highspeed Carbon Steel)

○ (5) – (18): BI-METAL Blades.

Refer to **Table 6, 7 and 8 on page 47-48** for use of the blades.

APPLICATIONS

- Cutting metal and stainless steel pipe.
- Cutting various lumbers.
- Cutting mild steel, aluminum and copper plate.
- Cutting synthetic resins, such as phenol resin and vinyl chloride.

For details refer to the section entitled "SELECTION OF BLADES".

BATTERY REMOVAL/INSTALLATION

1. Battery removal
Hold the handle tightly and push the battery latches to remove the battery (see **Fig. 3** and **4**).

CAUTION

Never short-circuit the battery.

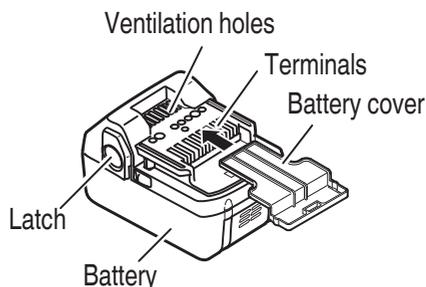


Fig. 3

2. Battery installation
Insert the battery while observing its polarities (See **Fig. 4**).

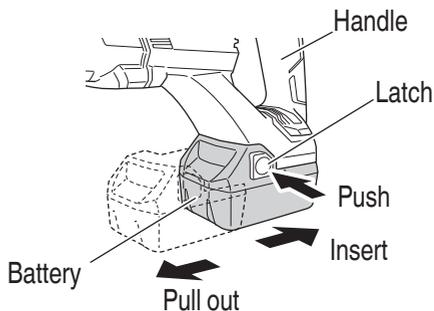


Fig. 4

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. 5**.
3. Charging
When inserting a battery in the charger, charging will commence and the pilot lamp will light continuously in red.
When the battery becomes fully recharged, the pilot lamp will blink in red. (At 1-second intervals) (See **Table 1 on page 34**)

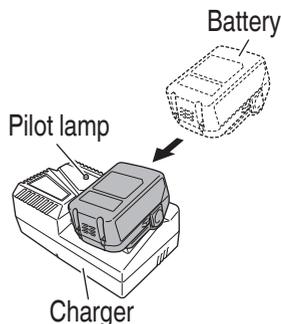


Fig. 5

English

- Pilot lamp indication

The indications of the pilot lamp will be as shown in **Table 1**, according to the condition of the charger or the rechargeable battery.

Table 1

Indications of the pilot lamp				
Pilot lamp (red)	Before charging	Blinks	Lights for 0.5 seconds. Does not light for 0.5 seconds. (off for 0.5 seconds) 	/
	While charging	Lights	Lights continuously 	
	Charging complete	Blinks	Lights for 0.5 seconds. Does not light for 0.5 seconds. (off for 0.5 seconds) 	
	Overheat standby	Blinks	Lights for 1 second. Does not light for 0.5 seconds. (off for 0.5 seconds) 	Battery overheated. Unable to charge. (Charging will commence when battery cools)
	Charging impossible	Flickers	Lights for 0.1 seconds. Does not light for 0.1 seconds. (off for 0.1 seconds) 	Malfunction in the battery or the charger

- Regarding the temperatures and charging time of the battery.

The temperatures and charging time will become as shown in **Table 2**.

Table 2

Battery		Charger	UC18YFSL
Charging voltage		V	14.4 – 18
Weight		kg	0.5
Temperatures at which the battery can be recharged			0°C – 50°C
Charging time for battery capacity, approx. (At 20°C)			
1.5 Ah		min.	22
2.0 Ah		min.	30
2.5 Ah		min.	35
3.0 Ah		min.	45
4.0 Ah		min.	60
5.0 Ah		min.	75
Number of battery cells			4 – 10

NOTE

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

CAUTION

When the battery charger has been continuously used, the battery charger will be heated, thus constituting the cause of the failures. Once the charging has been completed, give 15 minutes rest until the next charging.

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.

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 pilot lamp of the charger lights for 1 second, does not light for 0.5 seconds (off for 0.5 seconds). In such a case, first let the battery cool, then start charging.
- When the pilot 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 charger 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.
- If the pilot lamp does not blink in red (every second) even though the charger cord is connected to the power, it indicates that the protection circuit of the charger may be activated.

Remove the cord or plug from the power and then connect it again after 30 seconds or so. If this does not cause the pilot lamp to blink in red (every second), please take the charger to the HiKOKI Authorized Service Center.

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. Mounting the blade
This unit employs a detachable mechanism that enables mounting and removal of saw blades without the use of a wrench or other tools.

English

- (1) Pivot the lever to open the blade clamp.
- (2) Insert the saw blade all the way into the small slit of the blade holder with the lever pivoting. You can mount this blade either in the upward or downward direction. (Fig. 6, Fig. 7)
- (3) When you release the lever, the spring force will return the lever to the correct position automatically.
- (4) Pull the back of the saw blade two or three times by hand and check that the blade is securely mounted. (Fig. 8)

CAUTION

When pulling the saw blade, be absolutely sure to pull it from the back. Pulling other parts of the blade will result in an injury.

3. Dismounting the blade

CAUTION

Never touch the saw blade immediately after use. The metal is hot and can easily burn your skin.

- (1) After pivoting the lever, point the blade downward. The blade should fall out on its own. If the blade fails to fall out, pull it out by hand.

WHEN THE BLADE IS BROKEN

Even when the saw blade is broken and remains inside the small slit of the blade holder, it should fall out when the lever is pivoted and the blade is pointed downward. If the blade fails to fall out on its own, take it out by using the procedures described below.

- (1) If a part of the broken saw blade is sticking out of the small slit of the blade holder, pull out the protruding part and take the blade out.
- (2) If the broken saw blade is hidden inside the small slit, hook the broken blade using a tip of another saw blade and take it out. (Fig. 9)

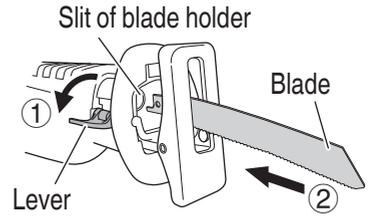


Fig. 6

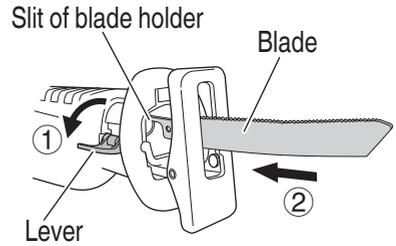


Fig. 7

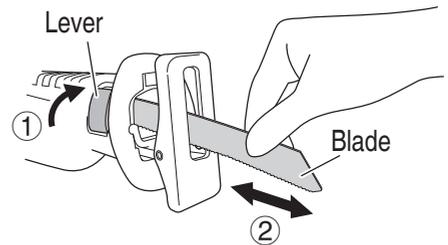


Fig. 8

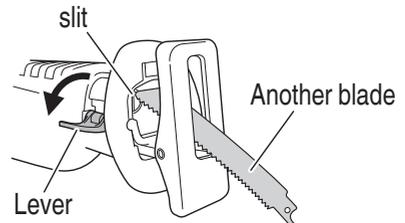


Fig. 9

MAINTENANCE AND INSPECTION OF SAW BLADE MOUNT

- (1) After use, blow away sawdust, earth, sand, moisture, etc., with air or brush them away with a brush, etc., to ensure that the blade mount can function smoothly.

NOTE

Continued use of the tool without cleaning the area where the saw blade is attached can result in sawdust and chip buildup which may adversely affect the movement of the lever. Should this be the case, pivot the lever and clean around the blade holder and lever by wiping or blowing away the buildup.

CAUTION

Do not use any saw blade with a worn-out blade hole. Otherwise, the saw blade can come off, resulting in personal injury. (Fig. 10)

4. Adjusting the base

To maximize blade life, the base slides in or out to allow the stroke length to be adjusted for better efficiency.

- (1) Turn off the switch and remove the battery.
- (2) Pivot the base lever clockwise; and slide the base to the desired position. There are five positions that the base can be adjusted to.
- (3) Pivot the base lever counterclockwise to secure the base. (Fig. 11)
- (4) Make sure that the base is not interfering with the blade.

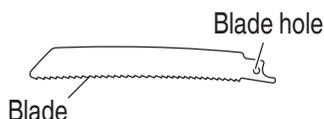


Fig. 10

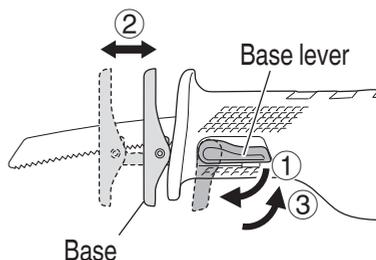


Fig. 11

WARNING

To avoid injury and damage, do not operate the saw without the base in place. The blade holder may strike against the workpiece and damage the reciprocating mechanism.

5. 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.

HOW TO USE

WARNING

Never touch the moving parts.

CAUTION

- Be careful not to let sawdust, earth, moisture, etc., enter the inside of the machine through the plunger section during operation. If sawdust and the like accumulate in the plunger section, always clean it before use.
- Do not remove the front cover. Be sure to hold the body from the top of the front cover (Fig. 12).
- During use, press the base against the material while cutting. **Vibration can damage the saw blade if the base is not pressed firmly against the workpiece. Furthermore, a tip of the saw blade can sometimes contact the inner wall of the pipe, damaging the saw blade.**
- Select a saw blade of the most appropriate length. Ideally, the length protruding from the base of the saw blade after subtracting the stroke quantity should be larger than the material (see Fig. 13 and Fig. 15). **If you cut a large pipe, large block of wood, etc., that exceeds the cutting capacity of a blade; there is a risk that the blade may contact with the inner wall of the pipe, wood, etc., resulting in damage (Fig. 14, Fig. 16).**
- 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 the tool from workpiece during a cut while the saw blade is moving.
- Pull out the battery after completing operation.

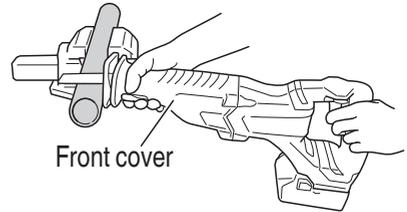


Fig. 12

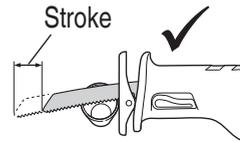


Fig. 13

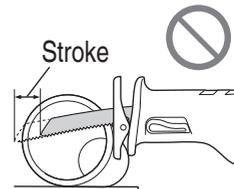


Fig. 14

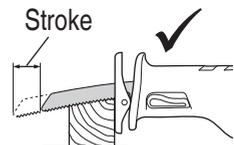


Fig. 15

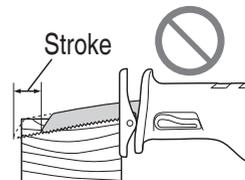


Fig. 16

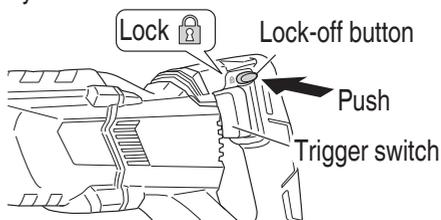
NOTE

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. 17)**

**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.

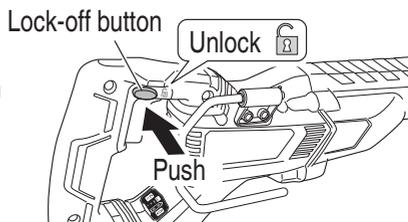
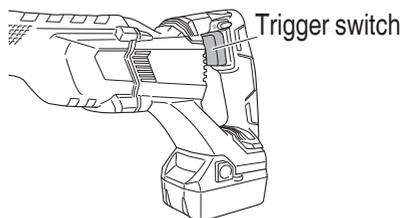
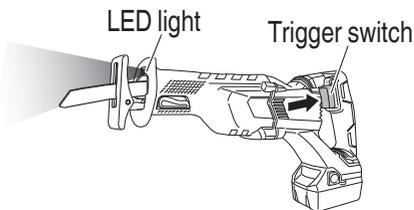
(2) Trigger switch

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. 18)**

2. How to use the LED light

While the switch is pulled, the LED light will automatically light up the tip portion of the tool. **(Fig. 19)**

The LED light will automatically turn off 10 seconds after the switch is released. The LED light also functions as a warning signal that lights up during use. For details, see "10. LED light warning signals".

**Fig. 17****Fig. 18****Fig. 19****CAUTION**

- Do not expose directly your eye to the light by looking into the light. If your eye is continuously exposed to the light, your eye will be hurt.
- Wipe off any dirt or grime attached to the lens of the LED light with a soft cloth, being careful not to scratch the lens. Scratches on the lens of the LED light can result in decreased brightness.

English

3. About Remaining Battery Indicator
When pressing the remaining battery indicator switch, the remaining battery indicator lamp lights and the battery remaining power can be checked. (Fig. 20)

When releasing your finger from the remaining battery indicator switch, the remaining battery indicator lamp goes off. The **Table 3** shows the state of remaining battery indicator lamp and the battery remaining power.

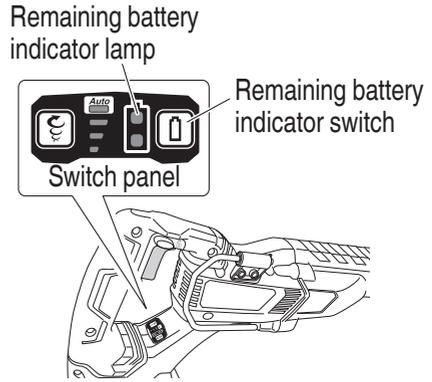


Fig. 20

Table 3

State of lamp	Battery Remaining Power
	The battery remaining power is enough.
	The battery remaining power is a half.
	The battery remaining power is nearly empty. Re-charge the battery soonest possible.

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.
 - To save the battery power consumption, the remaining battery indicator lamp lights while pressing the remaining battery indicator switch.
4. Adjusting operating speed

CAUTION

- **Do not subject the switch panel to shock or damage.**
- **Select mode while the trigger switch is released. Failure to do so could result in malfunction.**

The blade's stroke volume can be adjusted to any level depending on how much the unit's switch is pulled in.

Also, the maximum number of strokes can be selected with the mode selector switch. The more the unit's switch is pulled, the higher the number of strokes.

When starting a cut, begin cutting with low strokes (slow speed) to accurately cut the desired position. Once you have the desired cut, raise the number of strokes (high speed) and finish cutting.

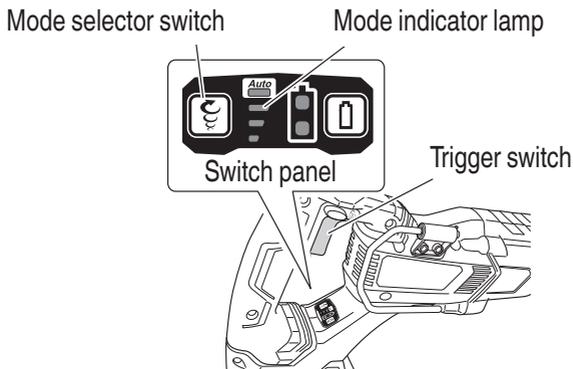


Fig. 21

Once you install the battery and switch on the power, you can change modes with each press of the mode selector switch. (Fig. 22)



Fig. 22

- Speed change mode allows the number of maximum strokes to be switched between 3 levels: low speed, medium speed and high speed. With speed change mode, the set number of maximum strokes will be maintained even if there is a change in load.
- With auto mode, electricity consumption and noise can be suppressed by lowering the number of maximum strokes during no-load motor operation. Auto mode automatically increases the number of revolutions when the load becomes heavier during operation. When the load becomes lighter, the number of revolutions is automatically reduced.

Table 4 on page 42 shows the lamp status and speed.

Table 4

Mode		State of lamp	Operating speed	Uses
Transmission Mode	Low		0 – 1600 /min	Stainless steel Plastic Fiber board
	Medium		0 – 2300 /min	Mild steel pipes Cast-iron tubes L-shaped angle steel Aluminum / brass / copper
	High		0 – 2500 /min	Plaster board Wood
AUTO Mode			0 – 1600 /min 2500 /min (When the load becomes heavier)	CAUTION Do not cut stainless steel in Auto Mode.

NOTE

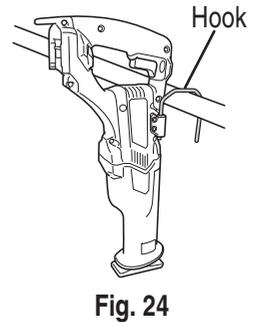
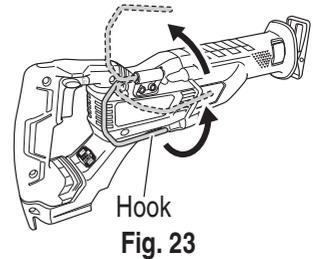
The mode selector switch can only be set after the battery has been installed in the tool and the trigger switch has been pulled once.

5. How to use the Hook

The hook can be used to hang up the unit temporarily during operations (**Fig. 23, Fig. 24**).

CAUTION

The hook should never be used to hang the unit on your person.
When using the hook, check to make sure that the main unit will not slip and fall, or become unstable by the wind, etc.
Never hang the unit from your belt or trousers as this could cause accidents.



6. Cutting metallic materials

CAUTION

- Press the base firmly against the workpiece.
- Never apply any unreasonable force to the saw blade when cutting. Doing so can easily break the blade.
- The motor can be locked sometimes, depending on the combination of the material to be cut and the blade. Whenever the motor gets locked, switch it off immediately.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Reciprocating saw create sparks which may ignite the dust or fumes.

- (1) Fasten a workpiece firmly before operation. (Fig. 25)
- (2) When cutting metallic materials, use proper machine oil (turbine oil, etc.). When not using liquid machine oil, apply grease over the workpiece.

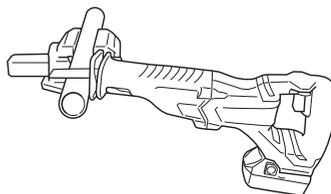


Fig. 25

CAUTION

The service life of the saw blade will be drastically shortened if you don't use machine oil.

7. Cutting lumber
When cutting lumber, make sure that the workpiece is fastened firmly before beginning. (Fig. 26)

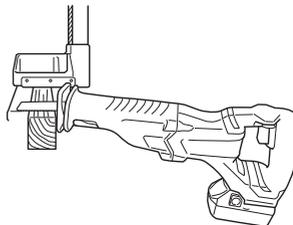


Fig. 26

CAUTION

Never apply any unreasonable force to the saw blade when cutting. Also remember to press the base against the lumber firmly.

8. Sawing curved lines
We recommend that you use the BI-METAL blade mentioned in **Table 7 on page 47** for the saw blade since it is tough and hardly breaks.

CAUTION

Delay the feed speed when cutting the material into small circular arcs. An unreasonably fast feed may break the blade.

English

9. Plunge cutting

With this tool, you can perform plunge cutting on plywood panels and thin board materials. You can carry out plunge cutting quite easily with the saw blade installed in reverse as illustrated in **Fig. 28**, **Fig. 30**, **Fig. 32**.

Use the saw blade that is as short and thick as possible.

We recommend for this purpose that you use BI-METAL Blade No. 132 mentioned in **Table 7 on page 47**. Be sure to use caution during the cutting operation and observe the following procedures.

- (1) Press the lower part (or the upper part) of the base against the material. Pull the switch trigger while keeping the tip of the saw blade apart from the material (**Fig. 27**, **Fig. 28**).
- (2) Raise the handle slowly and cut in with the saw blade little by little (**Fig. 29**, **Fig. 30**).
- (3) Hold the body firmly until the saw blade completely cuts into the material (**Fig. 31**, **Fig. 32**).

CAUTION

- **Avoid plunge cutting for metallic materials. This can easily damage the blade.**
- **Never pull the Trigger switch while the tip of the saw blade is pressed against the material. If you do so, the blade can easily be damaged when it collides with the material.**
- **Make absolutely sure that you cut slowly while holding the body firmly. If you apply any unreasonable force to the saw blade during the cutting operation, the blade can easily be damaged.**

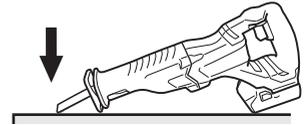


Fig. 27

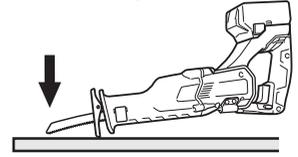


Fig. 28

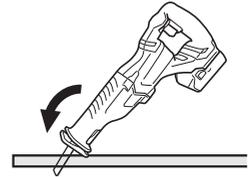


Fig. 29

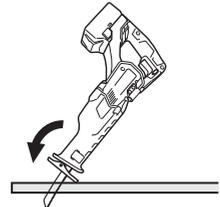


Fig. 30

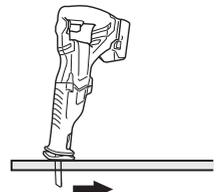


Fig. 31

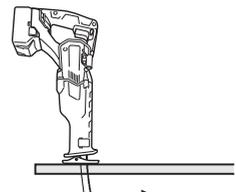


Fig. 32

English

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. 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.
5. Lubrication
The bearings in this tool have been sufficiently lubricated with quality lubricating oil, taking into account the expected life of this tool under normal operating conditions. As a result, no further lubrication is necessary.
6. 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).

SELECTION OF 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.

NOTE

Dimensions of the workpiece mentioned in the table represent the dimensions when the mounting position of the base is set nearest to the body of the Cordless Reciprocating Saw. Caution must be exercised since dimensions of the workpiece will become smaller if the base is mounted far away from the body of the Cordless Reciprocating Saw.

1. Selection of HCS blades

The blade number of HCS blades in **Table 6** is engraved in the vicinity of the mounting position of each blade. Select appropriate blades by referring to **Tables 6** and **8** below.

Table 6: HCS blades

Blade No.	Uses	Thickness (mm)
No. 4	For cutting and roughing lumber	50 – 70
No. 5	For cutting and roughing lumber	Below 30
No. 95	For cutting stainless steel pipe less than 100 mm in diameter	Below 2.5
No. 96	For cutting stainless steel pipe less than 30 mm in diameter	Below 2.5

NOTE

No. 4 – No. 96 HCS blades are sold separately as optional accessories.

2. Selection of BI-METAL blades

The BI-METAL blade numbers in **Table 7** are described on the packages of special accessories. Select appropriate blades by referring to **Table 7** and **8** below.

Table 7: BI-METAL blades

Blade No.	Uses	Thickness (mm)
No. 101 No. 103 No. 109 No. 141(S)	For cutting steel and stainless pipes less than 60 mm in outer diameter	2.5 – 6
No. 102 No. 104 No. 110 No. 142(S) No. 143(S)	For cutting steel and stainless pipes less than 100 mm in outer diameter	2.5 – 6
No. 107	For cutting steel and stainless pipes less than 60 mm in outer diameter	Below 3.5
No. 108	For cutting steel and stainless pipes less than 100 mm in outer diameter	Below 3.5
No. 121	For cutting and roughing lumber	100
No. 131	All purpose	100
No. 132	All purpose	100

English

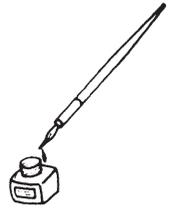
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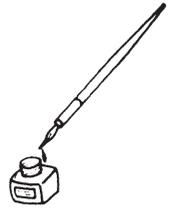
No. 101 – No. 132 BI-METAL blades are sold separately as optional accessories.

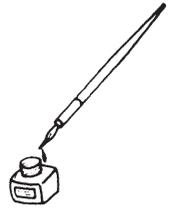
3. Selection of blades for other materials

Table 8

Material to be cut	Material quality	Thickness (mm)	Blade No.
Iron plate	Mild steel plate	2.5 – 10	No. 101, 102, 103, 104, 109, 110, 131, 141(S), 142(S), 143(S)
		Below 3.5	No. 107, 108
Nonferrous metal	Aluminium, Copper and Brass	5 – 20	No. 101, 102, 103, 104, 109, 110, 131, 132, 141(S), 142(S), 143(S)
		Below 5	No. 107, 108
Systhetic resin	Phenol resin, Melamine resin, etc.	10 – 50	No. 101, 102, 103, 104, 131, 132, 141(S), 142(S), 143(S)
		5 – 30	No. 107, 108, 109, 110
	Vinyl chloride, Acrylic resin, etc.	10 – 60	No. 101, 102, 103, 104, 131, 132, 141(S), 142(S), 143(S)
		5 – 30	No. 107, 108, 109, 110







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