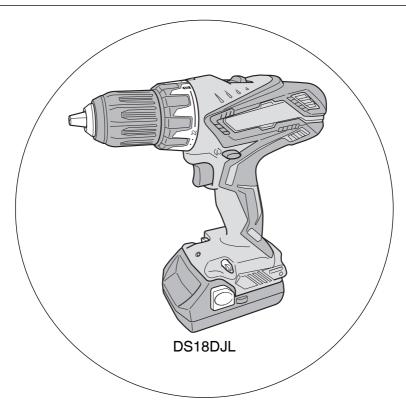


充电式起子电钻 Cordless Driver Drill

DS 14DJL • DS 18DJL • FDS 18DGL



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	用途8
充电式起子电钻安全警告4	
锂离子电池使用注意事项5	
符号7	作业之前11
规格7	使用方法11
标准附件8	维护和检查15
选购附件(分开销售)8	

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。 毛埃拉在已经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

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。

充电式起子电钻安全警告

- 1. 请使用辅助握把(如果工具有提供),以免失控而造成人员受伤。
- 2. 在执行切割附件或紧固件会接触到暗线的操作时,通过绝缘的抓紧表面拿住电动工具。

接触 "带电" 电线的切割附件或紧固件会使电动工具的裸露金属部件 "带电",并可能使操作员遭到电击。

- 3. 务请在 0℃~ 40℃的温度下进行充电。温度低于 0℃将会导致充电过度,极其危险。电池不能在高于 40℃的温度下充电。 最适合于充电的温度是 20 ~ 25℃。
- 4. 充电结束时,在下节电池充电之前,请先将充电器放置大约 15 分钟。 切勿将电池充电超过 2 小时。
- 5. 勿让杂质进入电池连结口内。
- 6. 切勿拆卸电池与充电器。

- 7. 切勿使电池短路。使电池短路将会造成很大的电流和过热,从而烧坏电池。
- 8. 请勿将电池丢入火中。 电池受热将会爆炸。
- 9. 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。
- 10.请勿使用耗竭了的电池,否则会损坏充电器。
- 11.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。
- 12. 当把钻头装入无键夹盘时,请充分旋紧导套。如果导套没有旋紧,钻头则会 松脱,从而造成伤害。
- 13.本产品在马达内含有强永磁。请遵守下面有关碎屑粘附在工具上和永磁对电子设备效应的注意事项。

注意!

○请勿将工具放在有金属碎屑的工作台上或工作区 域内。

否则碎屑可能会粘附在工具上, 导致受伤或故障。



○如果碎屑已粘附在工具上,请勿触摸。请用刷子 去除碎屑。

否则可能会导致受伤。

- ○如果使用心脏起搏器或其它电子医疗设备,请勿操作或接近工具。 可能会影响电子设备的操作。
- ○请勿在手机、磁卡或电子存储媒体等精密设备附近使用工具。 否则可能会导致误操作、故障或数据损失。

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 至 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。

中文

- 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干削屑和灰尘的位置。
- 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!

如果导电异物接触到锂离子电池的端子, 电池可能短路, 并导致火灾。

存放锂离子电池时, 请务必遵循下列注意事项。

- 切勿在存放盒中放置导电的残片,钉子,以及 导线,如铁线和铜线。
- 为防止发生短路,应将电池装入工具中或者在 存放时牢固地插入电池盖,直至看不到通风口。(图 1)

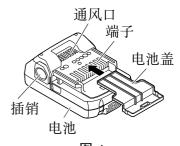


图 1

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。

规格

电动工具

型式			DS14DJL	DS18DJL	FDS18DGL
无负征	无负荷速度(低/高)		0 - 450 / 0 - 1250 /min		
木料 (厚 18 mm)			30 mm	38	mm
	钻孔	金属 (厚 1.6 mm)	钢材:13 mm 铝:13 mm		
化刀		机用螺丝	6 mm		
螺丝紧固		木螺丝	6.0 mm (直径) × 75 mm (长) (应有导孔)	6.8 mm (50 mm (应有	(长)
电池			BSL1415:锂离子 14.4 V (1.5 Ah 4 节)		理离子 18 V n 5 节)
重量			1.6 kg	1.7	kg

充电器

型式	UC18YKSL
充电电压	14.4 V- 18 V
重量	0.35 kg

<u>中文</u>

标准附件

除了主机(1台)外,产品包中还包括表中所列的附件。

	DS14DJL	DS18DJL	FDS18DGL
十字槽头螺丝刀头(2号)	1	1	1
充电器	1	1	1
电池 (BSL1415)	2	_	_
电池 (BSL1815)	_	2	2
塑料盒	1	1	1
电池盖	1	1	1

选购附件(分开销售)

〇 电池





○ 挂钩(带螺丝)

用途

- 旋紧和拆除机用螺丝、木螺丝、自攻螺丝等。
- 钻各种金属。
- 〇 钻各种木料。

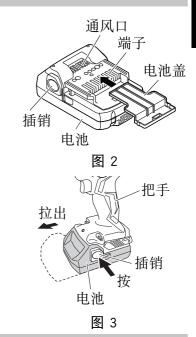
电池的拆卸/安装法

1. 电池的拆卸法 请先紧抓住把手,然后再推压电池插销(2个) 以拆下电池(参照图 2 和图 3)。

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 3)



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,指示灯会闪烁呈 红色(间隔为1秒)。
- 2. 将电池插入充电器。 如图 4 所示,将电池紧紧地插入充电器。

秒的间隔)(参照第10页的表1)。

- 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
- (1)指示灯显示 根据充电器或电池的情况,指示灯的显示如第 10 页的表 1 所示。



表 1

	指示灯的显示					
	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			
指示灯(红色)	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	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。		

(2) 关于电池的温度

电池的温度如表 2 所示,在充电前应使已发热的电池冷却片刻。

表 2 电池充电范围

电池	可以对电池进行充电的温度
BSL1415, BSL1815	0°C − 50°C

(3) 关于充电时间

由充电器和电池共同决定, 充电时间变化如表 3 所示。

表 3 充电时间(20℃下)

充电器 电池	UC18YKSL
BSL1415, BSL1815	约 40 分钟。

注:

再充电时间可能因环境温度和电源电压而异。

- 4. 将充电器的电源线从插座上拔下。
- 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。

关于新电池等的放电

因新的和长期未使用的电池内部的化学物质无活性,故第一次和第二次使用时其放电能力可能较低。这是暂时现象,这种电池充电 2 - 3 次后即可恢复其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!

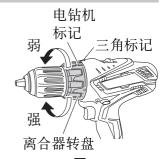
- 如果电池长时间放置在阳光直接照射的地方或者刚刚使用完毕时,电池会变热。如果此时对电池充电,充电器上的指示灯会点亮 1 秒钟,不点亮 0.5 秒钟(熄灭 0.5 秒钟)。在此情况下,先让电池冷却下来,然后再充电。
- 信号灯呈快速闪烁(闪烁间隔为 0.2 秒钟)时,请检查充电器的电池连接器 内是否有异物并加以清除。若没有异物,则可能是电池或充电器发生了故障, 请将其送往当地授权服务中心。
- 因内置的微机需要约 3 秒钟才能确认正用 UC18YKSL 进行充电的电池已被取出,因此请待 3 秒钟后再重新插入电池继续充电。如果在不到 3 秒内就插入电池,则电池可能充电不正常。

作业之前

工作环境的准备和检查请按下列注意事项检查工作环境是否适当。

使用方法

- 1. 确认离合器转盘的位置(请参照图 5) 本机的旋紧转矩可根据离合器转盘的位置设定来 调节。
- (1) 当把本机作为起子机使用时,请将离合器转盘上的"1、3、5······22"中的某个数字或点与机身外侧上的三角标记对齐。
- (2) 当把本机作为钻机来使用时,请将离合器转盘的钻机标记"*******"与机身外侧上的三角标记对齐。



中文

注意!

- 离合器转盘不能设在数字"1、3、5……22"之 间或点之间。
- 当离合器转盘位于"22"和钻机标记中部的线之 间时, 请勿使用本机, 否则会造成损坏。(请参 照图 6)

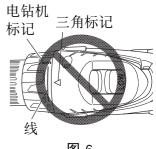


图 6

- 2. 旋紧转矩的调节
- (1)旋紧转矩

旋紧转矩的强度应与螺丝直径相对应。如果转矩过大,螺丝头则会损坏或受 损。务请按螺丝直径来调节离合器转盘的位置。

(2) 旋紧转矩的指示

螺丝类型及受紧固的材料不同,则旋紧转矩也不同。

本机采用离合器转盘上的数字"1、3、5……22"以及线来指示旋紧转矩。 旋紧转矩在位置"1"时最小,在最大数字处时最大。(请参照第 11 页的图 5)

(3) 调节旋紧转矩

转动离合器转盘并使离合器转盘上的数字"1、3、5……22"或点与机身外 侧上的三角标记对齐。按所需转矩将离合器转盘向小转矩或大转矩方向调节。

注意!

- 当把本机用作钻机时,马达可能会被锁住而停止转动。请在使用起子电钻机 过程中不要锁住马达。
- 如果冲击时间过长,螺丝可能会因旋紧力过大而折断。

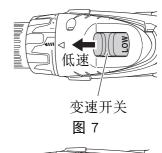
3. 改变转速

请用变速开关来改变转速。请按箭头方向移动变 速开关(请参照图7和图8)。

如果变速开关被设在"LOW"位置,钻机则低速 旋转:如果变速开关被设在"HIGH"位置,钻 机则高速旋转。

注意!

- 当用变速开关改变转速时,应确保电源开关已被 断开。
- 如果在马达旋转过程中改变速度,则会损坏齿轮。 ○ 当把变速开关设为 "HIGH" (高速), 且离合器 转盘位干"17"或"22"时,可能会出现离合 器不能啮合和马达被锁住的现象。在这种情况下, 请将变速开关设为"LOW"(低速)。



变速开关

图 8

如果马达被锁住,则应立即断开电源。如果马达的锁定状态持续一会儿,马 达或电池可能会被烧毁。务必转动变速开关。

4. 使用范围和建议

表 4 给出了基于本机机械结构的各种可用工作范围。

表 4

工作		离合器 转盘的位置	建议
木料 钻孔 钢材 铝			用于钻孔。
Im // Im Fi	机用螺丝	1 - 22	使用与螺丝直径相配的钻头或套筒。
螺丝紧固	木螺丝	1 -	钻好导孔后使用。

5. 选择旋紧力和转速的方法

表 5

离合器 转速选择(变速开关的位置)			速开关的位置)		
	用途	转盘的 LOW(低速) HIGH(高速)			
	机用螺丝 1 – 22		用于直径在 6 mm 以下的	用于直径在 6 mm 以下的	
			螺丝刀。	螺丝刀。	
螺丝			用于公称直径在 6.8 mm	用于公称直径在 4.8 mm	
紧固	木螺丝	1 -	以下的螺丝。(DS18DJL,	以下的螺丝。(DS18DJL,	
秋凹			FDS18DGL)	FDS18DGL)	
			用于公称直径在 6 mm 以	用于公称直径在 3.8 mm	
			下的螺丝。(DS14DJL)	以下的螺丝。(DS14DJL)	
			用于 38 mm 以下的直径。	用于 24 mm 以下的直径。	
	半 和	下科	(DS18DJL, FDS18DGL)	(DS18DJL, FDS18DGL)	
钻孔	1/1/17		用于 30 mm 以下的直径。	用于 12 mm 以下的直径。	
NH 10			(DS14DJL)	(DS14DJL)	
	金属		用于采用金属加工钻头的铅	钻孔作业。	

注意!

- 表 5 中给出的选择例子应作为一般标准来考虑。在实际工作中使用的都是不同类型的紧固螺丝和受紧固的材料,因此理应进行适当的调节。
- 在机用螺丝处于 HIGH(高速)的状态下使用起子电钻机时,因旋紧转矩过大,螺丝可能会损坏或钻头可能会松弛。使用机用螺丝时,请在 LOW(低速)的状态下使用冲击起子电钻。

中文

注:

在寒冷环境(0℃以下)中使用电池有时会造成旋紧扭矩变弱以及作业量的减少。但是,这只是暂时现象,在电池变热后将会恢复正常。

6. 使用灯光

扳动扳机开关使灯点亮。扳机开关处于扳动 状态时,灯一直点亮。松开扳机开关后,灯 熄灭。(图 9)

(灯将在松开扳机开关约10秒钟后自动熄灭。)



注意!

请不要看着灯,让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。

- 7. 钻头的安装和拆卸
- (1) 安装钻头

左转导套(从前方看时为逆时针方向)将其旋松,以打开无键夹盘上的夹子。 当把起子机钻头等插入无键钻机夹盘后,请 紧握环,同时右转(从前方看时为顺时针方向) 导套将其旋紧。(请参照图 10)

○ 如果导套在作业中变松,应将其旋得再 紧一些。 如果导套被旋得过紧,旋紧力则会变大。



左转导套(从前方看时为逆时针方向)将其旋松,然后取出钻头等。(请参照**图** 10)

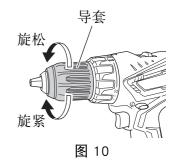
注:

如果导套被旋紧至无键夹盘的夹子打开至最大程度的状态,可能会发生卡嗒声。这是防止无键夹盘松弛时发出的声音而不是故障。

注意!

当导套再也无法旋松时,请用老虎钳或类似的工具将钻头固定住。接着将离合器模式设在 1 和 11 之间,然后在操作离合器的同时将导套朝放松的一侧(左侧)转动。这样一来导套应当易干旋松了。

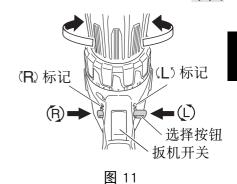
- 8. 自动锁定主轴机构 本机具有自动锁定主轴机构,以便迅速更换钻头。
- 9. 确认电池安装正确。



10.检查旋转方向

按选择按钮的 R (右) 侧, 钻头便会顺时针(从后方看时) 旋转;按选择按钮的 L (左) 侧则使钻头逆时针旋转。(请参照图 11)。(选择按钮上标有(L)和(R)标记。)

11.使用挂钩(分开销售) 挂钩用于在工作时将电动工具挂到腰带 上。

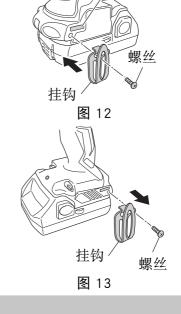


注意!

- 使用挂钩时,牢固挂好挂钩,以防意外掉落。如果电动工具掉落,可能造成 意外伤害。
- 将电动工具挂在腰带上行动时,切勿在电动工具头上安装任何钻头。如果在 将电动工具挂在腰带上行动时安装了尖利的钻头,可能造成伤害。
- 将挂钩安装牢固。如果安装不牢固,在 使用时可能造成伤害。
- (1)装上挂钩并拧紧螺丝。 将挂钩牢固安装到电动工具的凹槽中, 拧紧螺丝固定挂钩。(图 12)
- (2)卸下挂钩。 用十字螺丝刀卸下用于固定挂钩的螺 丝。(图 13)
- 12.开关操作
- 压下扳机开关,则本机旋转;松开扳机,则本机停止。
- 钻机的转速可通过改变扳机开关的扣动 幅度来控制:幅度小则速度低,幅度大 则速度高。

注:

当马达即将起转时,可能会产生一种嗡嗡声。这只不过是一种噪音,而非机器 故障。



凹槽

维护和检查

1. 检查工具

由于使用已经钝化的工具会降低效率并可能引起马达故障,因此一旦注意到 磨损情况,就应及早磨快或更换工具。

中文

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. 清理外部

冲击电钻机沾污时,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. 收藏

冲击电钻机应收藏于温度低于 40℃和小孩拿不到的地方。

注:

存放锂离子电池

在存放前请确保锂离子电池已完全充电。

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。

6. 维修零部件一览表

注意!

HiKOKI牌电动工具的维修、改造和检查须由经HiKOKI公司授权的维修中心进行。

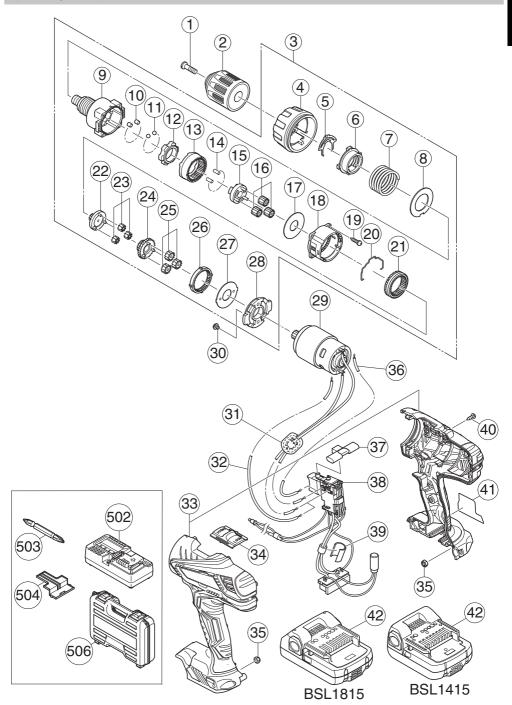
当要求维修或其他保养服务时,若将此零部件一览表与电动工具一起呈交给 经HiKOKI公司授权的维修中心,将有助于维修或保养工作。

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。

维修零部件一览表



中文

项目 号	零件名称	数量
1	专用螺丝(左手) M6×23	1
2	无键夹盘 13MM	1
3	齿轮箱总成 (包括 4 至 28)	1
4	离合器转盘	1
5	棘轮弹簧	1
6	螺帽	1
7	弹簧	1
8	垫圈 (D)	1
9	前壳	1
10	辊子组件	6
11	钢珠 D5	6
12	锁环	1
13	环状齿轮	1
14	针辊(A)组	6
15	载杆	1
16	行星齿轮(C)组	3
17	垫圈(A)	1
18	后壳	1
19	螺丝组件 D3×12	4
20	换档臂	1
21	滑动环状齿轮 (B)	1
22	小齿轮(C)	1
23	行星齿轮(B)组	3
24	小齿轮(B)	1
25	行星齿轮(A)组	3
26	头档环状齿轮	1
27	垫圈 (B)	1
28	马达垫片	1
29	马达	1

项目 号	零件名称	数量
30	机用螺丝(附弹簧垫圈) M4×6	2
31	内部电线铁氧体组件	1
32	内部电线 (黑色)	1
33	外罩 (A) (B) 组	1
34	变速开关	1
35	锁定螺帽 M4	2
36	内部电线 (红色)	1
37	按钮	1
38	开关端子组件	1
39	台座(D)	1
40	自攻螺丝(附法兰) D3×16	9
41	铭牌	1
42	电池 (BSL1415/BSL1815)	2
502	充电器 (UC18YKSL)	1
503	十字槽头螺丝刀头 2 号 65L	1
504	电池盖	1
506	外壳	1

GENERAL POWER TOOL SAFETY WARNINGS

MARNING

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.
 - 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.

Do not abuse the cord. Never use the cord for carrying, pulling or unplugging d) the power tool.

Keep cord away from heat, oil, sharp edges or moving parts.

Damaged or entangled cords increase the risk of electric shock.

When operating a power tool outdoors, use an extension cord suitable for e) outdoor use.

Use of a cord suitable for outdoor use reduces the risk of electric shock.

If operating a power tool in a damp location is unavoidable, use a residual f) current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

3) Personal safety

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 iniurv.

Use personal protective equipment. Always wear eye protection. b) Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

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.

- Remove any adjusting key or wrench before turning the power tool on. d) A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- 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.

If devices are provided for the connection of dust extraction and collection g) facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

4) Power tool use and care

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.

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

20

- 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

- 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

 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.

CORDLESS DRIVER DRILL SAFETY WARNINGS

- 1. Use auxiliary handle(s), if supplied with the tool. Loss of control can cause personal injury.
- 2. Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory or fastener may contact hidden wiring.

 Cutting accessory or fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- 3. Always charge the battery at a temperature of 0°C 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°C 25°C.
- When one charging is completed, leave the charger for about 15 minutes before the next charging of battery.
 Do not charge more than two batteries consecutively.
- 5. Do not allow foreign matter to enter the hole for connecting the battery.
- 6. Never disassemble the battery and charger.
- 7. Never short-circuit the battery. Short-circuiting the battery will cause a great electric current and overheat. It results in burn or damage to the battery.
- Do not dispose of the battery in fire.If the battery is burnt, it may explode.
- Bring the battery to the shop from which it was purchased as soon as the postcharging battery life becomes too short for practical use. Do not dispose of the exhausted battery.
- 10. Using an exhausted battery will damage the charger.
- 11. 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.
- 12. When mounting a bit into the keyless chuck, tighten the sleeve adequately. If the sleeve is not tight, the bit may slip or fall out, causing injury.
- 13. This product contains a strong permanent magnet in the motor.

 Observe the following precautions regarding adhering of chips to the tool and the effect of the permanent magnet on electronic devices.

CAUTION

Do not place the tool on a workbench or work area where metal chips are present.
 The chips may adhere to the tool, resulting in





If chips have adhered to the tool, do not touch it.
 Remove the chips with a brush.
 Failure to do so may result in injury.

injury or malfunction.

If you use a pacemaker or other electronic medical device, do not operate or approach the tool. Operation of the electronic device may be affected. Do not use the tool in the vicinity of precision devices such as cell phones, magnetic cards or electronic memory media.
 Doing so may lead to misoperation, malfunction or loss of data.

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

- 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 a conductive foreign matter enters in the terminal of lithium ion battery, the battery may be shorted, causing fire. When storing the lithium ion battery, obey surely the rules of following contents.

- Do not place conductive debris, nail and wires such as iron wire and copper wire in the storage case.
- To prevent shorting from occurring, load the battery in the tool or insert securely the battery cover for storing until the ventilator is not seen. (Fig. 1)

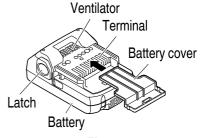


Fig. 1

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.

SPECIFICATIONS

POWER TOOL

Model		DS14DJL DS18DJL FDS18DGL		FDS18DGL	
No-load s	load speed (Low/High) 0 – 450 / 0 – 1250 /min		in		
	Drilling	Wood (Thickness 18 mm)	30 mm	38 :	mm
	Drilling	Metal (Thickness 1.6 mm)	Steel: 13 mm		
Canacity		Machine screw		6 mm	
Capacity	Driving	Wood screw	6.0 mm (diameter) × 75 mm (length) (Requires a pilot hole)	6.8 mm (d 50 mm (Requires a	(length)
Battery		BSL1415: Li-ion 14.4 V (1.5 Ah 4 cells) BSL1815: Li-ion 18 V (1.5 Ah 5 cells)			
Weight		1.6 kg	1.7	kg	

CHARGER

Model	UC18YKSL		
Charging voltage	14.4 V — 18 V		
Weight	0.35 kg		

STANDARD ACCESSORIES

In addition to the main unit (1 unit), the package contains the accessories listed in the below.

	, , , ,	D044D II	D040D II	ED040D01
		DS14DJL	DS18DJL	FDS18DGL
Plus driver bit (No. 2)		1	1	1
Charger		1	1	1
Battery (BSL1415)		2	_	_
Battery (BSL1815)			2	2
Plastic case		1	1	1
Battery cover		1	1	1

OPTIONAL ACCESSORIES (sold separately)

Battery





O Hook (with screw)

APPLICATIONS

- Driving and removing of machine screws, wood screws, tapping screws, etc.
- Drilling of various metals.
- Drilling of various woods.

BATTERY REMOVAL/INSTALLATION

1. Battery removal Hold the handle tightly and push the battery latches (2 pcs.) to remove the battery (see **Figs. 2** and **3**).

CAUTION

Never short-circuit the battery.

2. Battery installation Insert the battery while observing its polarities (see Fig. 3).

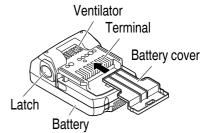


Fig. 2

Pull out

Latch

Push

Battery

Fig. 3

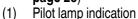
CHARGING

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. 4**.
- 3. Charging

When inserting a battery in the charger, charging will commence and the pilot lamp will light up 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 28**)



The indications of the pilot lamp will be as shown in **Table 1 on page 28**, according to the condition of the charger or the battery.

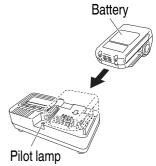


Fig. 4

Table 1

Indications of the pilot lamp				
	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	
Pilot lamp (red)	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 second. Does not light for 0.1 seconds. (off for 0.1 seconds)	Malfunction in the battery or the charger

(2) Regarding the temperatures of the battery

The temperatures for batteries are as shown in the **Table 2**, and batteries that have become hot should be cooled for a while before being recharged.

Table 2 Recharging ranges of batteries

Batteries	Temperatures at which the battery can be recharged
BSL1415, BSL1815	0°C – 50°C

(3) Regarding recharging time

Depending on the combination of the charger and batteries, the charging time will become as shown in **Table 3**.

Table 3 Charging time (At 20°C)

Charger Battery	UC18YKSL
BSL1415, BSL1815	Approx. 40 min.

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.

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 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 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-seconds 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 UC18YKSL 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

Setting up and checking the work environment Check if the work environment is suitable by following the precautions.

HOW TO USE

- Confirm the clutch dial position (See Fig. 5)
 The tightening torque of this unit can be adjusted according to the clutch dial position, at which the clutch dial is set.
- (1) When using this unit as a screwdriver, line up the one of the numbers "1, 3, 5 ... 22" on the clutch dial, or the dots, with the triangle mark on the outer body.
- (2) When using this unit as a drill, align the clutch dial drill mark "** with the triangle mark on the outer body.

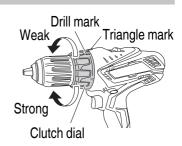


Fig. 5

CAUTION

- The clutch dial cannot be set between the numerals "1, 3, 5 ... 22" or the dots.
- Do not use with the clutch dial numeral between \bigcirc "22" and the line at the middle of the drill mark. Doing so may cause damage (See Fig. 6).

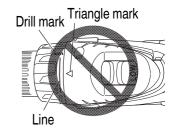


Fig. 6

- Tightening torque adjustment 2.
- Tightening torque (1) Tightening torque should correspond in its intensity to the screw diameter. When too strong torque is used, the screw head may be broken or be injured. Be sure to adjust the clutch dial position according to the screw diameter.
- (2) Tightening torque indication The tightening torque differs depending on the type of screw and the material being tiahtened.

The unit indicates the tightening torque with the numbers "1, 3, 5 ... 22" on the clutch dial, and the dots. The tightening torque at position "1" is the weakest and the torque is strongest at the highest number (See Fig. 5 on page 29).

Adjusting the tightening torque (3)Rotate the clutch dial and line up the numbers "1, 3, 5 ... 22" on the clutch dial, or the dots, with the triangle mark on the outer body. Adjust the clutch dial in the weak or the strong torque direction according to the torque you need.

CAUTION

- The motor rotation may be locked to cease while the unit is used as drill. While operating the driver drill, take care not to lock the motor.
- Too long hammering may cause the screw broken due to excessive tightening. \bigcirc
- 3. Change rotation speed Operate the shift knob to change the rotational speed. Move the shift knob in the direction of the arrow (See Figs. 7 and 8).

When the shift knob is set to "LOW", the drill rotates at a low speed. When set to "HIGH", the drill rotates at a high speed.

CAUTION

- When changing the rotational speed with the shift knob, confirm that the switch is off. Changing the speed while the motor is rotating will damage the gears.
- When setting the shift knob to "HIGH" (high speed) and \bigcirc the position of the clutch dial is "17" or "22", it may happen that the clutch is not engaged and that the motor is locked. In such a case, please set the shift knob to "LOW" (low speed).

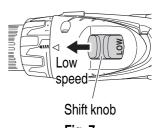


Fig. 7 High speed Shift knob

Fig. 8

- 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.
 Be sure to turn the shift knob.
- 4. The scope and suggestions for uses
 The usable scope for various types of work based on the mechanical structure of this unit is shown in **Table 4**.

Table 4

Work		Clutch dial position	Suggestions
	Wood		
Drilling	Steel		Use for drilling purpose.
	Aluminum		
Driving	Machine screw	1 – 22	Use the bit or socket matching the screw diameter.
	Wood screw	1-1	Use after drilling a pilot hole.

5. How to select tightening torque and rotational speed

Table 5

Use		Clutch Dial	Rotating speed selection (Position of the shift knob)	
		Position	LOW (Low speed)	HIGH (High speed)
	Machine screw	1 – 22	For 6 mm or smaller diameter screws.	For 6 mm or smaller diameter screws.
Driving	Wood screw	1 –	For 6.8 mm or smaller nominal diameter screws. (DS18DJL, FDS18DGL)	For 4.8 mm or smaller nominal diameter screws. (DS18DJL, FDS18DGL)
			For 6 mm or smaller nominal diameter screws. (DS14DJL)	For 3.8 mm or smaller nominal diameter screws. (DS14DJL)
Drilling W	Wood	ANN	For 38 mm or smaller diameters. (DS18DJL, FDS18DGL)	For 24 mm or smaller diameters. (DS18DJL, FDS18DGL)
			For 30 mm or smaller diameters. (DS14DJL)	For 12 mm or smaller diameters. (DS14DJL)
	Metal		For drilling with a metal working drill bit.	

CAUTION

The selection examples shown in Table 5 should be considered as general standard. As different types of tightening screws and different materials to be tightened are used in actual works proper adjustments are naturally necessary.

When using the driver drill with a machine screw at HIGH (high speed), a screw may damage or a bit may loose due to the tightening torque is too strong. Use the driver drill at LOW (low speed) when using a machine screw.

NOTE

The use of the battery in a cold condition (below 0 degree Centigrade) can sometimes result in the weakened tightening torque and reduced amount of work. This, however, is a temporary phenomenon, and returns to normal when the battery warms up.

6. Using the light

Pull the trigger switch to light up the light. The light keeps on lighting while the trigger switch is being pulled. The light goes out after releasing the trigger switch. (**Fig. 9**)

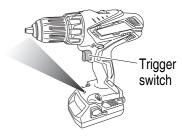


Fig. 9

(The light automatically goes out 10 seconds after releasing the trigger switch.)

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.

- 7. Mounting and dismounting of the bit
- (1) Mounting the bit

Loosen the sleeve by turning it toward the left (in the counterclockwise direction as viewed from the front) to open the clip on the keyless chuck. After inserting a driver bit, etc., into the keyless drill chuck, and tighten the sleeve by turning it toward the right (in the clockwise direction as viewed from the front). (See **Fig. 10**)

 If the sleeve becomes loose during operation, tighten it further.

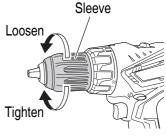


Fig. 10

The tightening force becomes stronger when the sleeve is tightened additionally.

(2) Dismounting the bit

Loosen the sleeve by turning it toward the left (in the counterclockwise direction as viewed from the front), and then take out the bit etc. (See **Fig. 10**)

NOTE

If the sleeve is tightened in a state where the clip of the keyless chuck is opened to a maximum limit, a click noise may occur. This is the noise that occurs when the loosening of the keyless chuck is prevented and is not a malfunction.

CAUTION

When it is no longer possible to loosen the sleeve, use a vise or similar instrument to secure the bit. Set the clutch mode between 1 and 11 and then turn the sleeve to the loose side (left side) while operating the clutch. It should be easy now to loosen the sleeve.

- Automatic spindle-lock mechanism
 This unit has automatic spindle-lock mechanism for quick bit changes.
- 9. Confirm that the battery is mounted correctly
- Check the rotational direction
 The bit rotates clockwise (viewed from the rear side) by pushing the R-side of the selector button.

The L-side of the selector button is pushed to turn the bit counterclockwise. (See **Fig. 11**) (The (L) and (R) marks are provided on the body.)

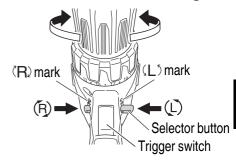


Fig. 11

Using the hook (sold separately)
 The hook is used to hang up the power tool to your waist belt while working.

CAUTION

- When using the hook, hang up the power tool firmly not to drop accidentally. If the power tool is dropped, it may lead to an accident.
- When carrying the power tool with hooked to your waist belt, do not fit any bit to the tip of power tool. If the sharp bit such as drill is fitted to the power tool when carrying it with hooked to your waist belt, you will be injured.

Install securely the hook. Unless the hook is securely installed, it may cause an injury while using.

- (1) Placing the hook and tightening the screws. Install securely the hook in the groove of power tool and tighten the screws to fix the hook firmly. (Fig. 12)
- (2) Removing the hook.
 Remove the screws fixing the hook with Phillips screw driver. (Fig. 13)
- 12. Switch operation
- When the trigger switch is depressed, the tool rotates. When the trigger is released, the tool stops.
- The rotational speed of the drill can be controlled by varying the amount that the trigger switch is pulled. Speed is low when the trigger switch is pulled slightly and increases as the trigger switch is pulled more.

NOTE

A buzzing noise is produced when the motor is about to rotate; This is only a noise, not a machine failure.

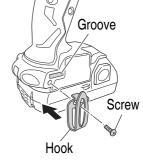


Fig. 12



Fig. 13

MAINTENANCE AND INSPECTION

- 1. Inspecting the tool
 - Since use of a dull tool will degrade efficiency and cause possible motor malfunction, sharpen or replace the tool as soon as abrasion is noted.
- 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.

- 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 on the outside
 - When the driver drill is stained, wipe with a soft dry cloth or a cloth moistened with soapy water. Do not use chloric solvents, gasoline or paint thinner, for they melt plastics.
- 5. Storage

Store the driver drill 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 lithium-ion 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.

6. Service parts list

CAUTION

Repair, modification and inspection of HiKOKI Power Tools must be carried out by a HiKOKI Authorized Service Center.

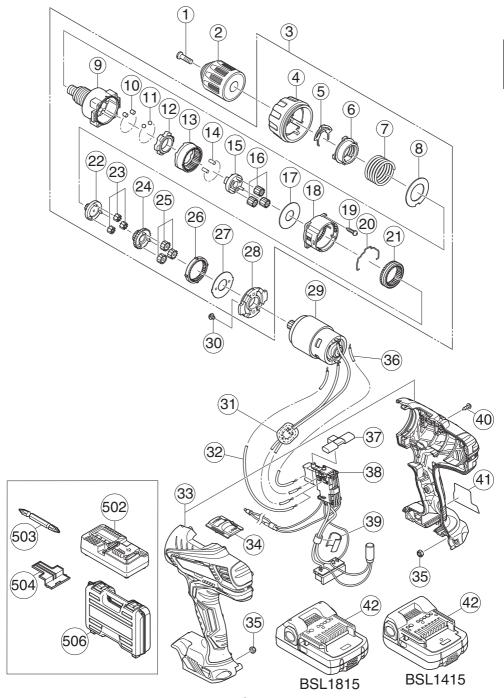
This Parts List will be helpful if presented with the tool to the HiKOKI Authorized Service Center when requesting repair or other maintenance.

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).

SERVICE PARTS LISTSERVICE PARTS LIST



_		
Item No.	Part Name	Q'TY
1	SPECIAL SCREW (LEFT HAND) M6X23	1
2	KEYLESS CHUCK 13MM	1
3	GEAR BOX ASS'Y (INCLUD.4-28)	1
4	CLUTCH DIAL	1
5	CLICK SPRING	1
6	NUT	1
7	SPRING	1
8	WASHER (D)	1
9	FRONT CASE	1
10	ROLLER SET	6
11	STEEL BALL D5	6
12	LOCK RING	1
13	RING GEAR	1
14	NEEDLE ROLLER (A) SET	6
15	CARRIER	1
16	PLANET GEAR (C) SET	3
17	WASHER (A)	1
18	REAR CASE	1
19	SCREW SET D3X12	4
20	SHIFT ARM	1
21	SLIDE RING GEAR (B)	1
22	PINION(C)	1
23	PLANET GEAR (B) SET	3
24	PINION (B)	1
25	PLANET GEAR (A) SET	3
26	FIRST RING GEAR	1
27	WASHER (B)	1
28	MOTOR SPACER	1
29	MOTOR	1
30	MACHINE SCREW (W/SP. WASHER) M4X6	2

Item No.	Part Name	Q'TY
31	INTERNAL WIRE FERRITE SET	1
32	INTERNAL WIRE (BLACK)	1
33	HOUSING (A) (B) SET	1
34	SHIFT KNOB	1
35	LOCK NUT M4	2
36	INTERNAL WIRE (RED)	1
37	PUSHING BUTTON	1
38	SWITCH TERMINAL SET	1
39	SUPPORT (D)	1
40	TAPPING SCREW (W/FLANGE) D3X16	9
41	NAME PLATE	1
42	BATTERY (BSL1415 / BSL1815)	2
502	CHARGER (UC18YKSL)	1
503	PLUS DRIVER BIT NO.2 65L	1
504	BATTERY COVER	1
506	CASE	1







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.

901

编号: C99214424 G 发行日期: 2019年1月

中国印刷