

HIKOKI

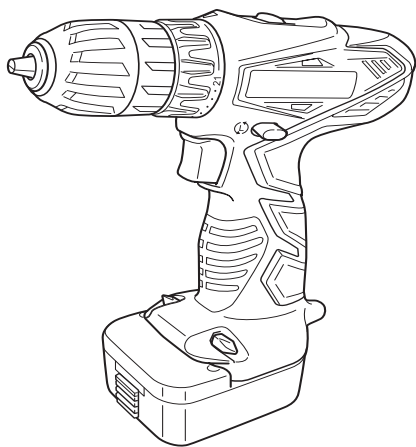
充电式起子电钻

Cordless Driver Drill

DS 9DVC • DS 12DVC

使用说明书

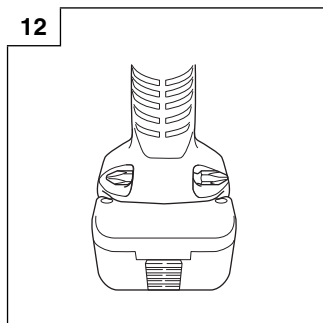
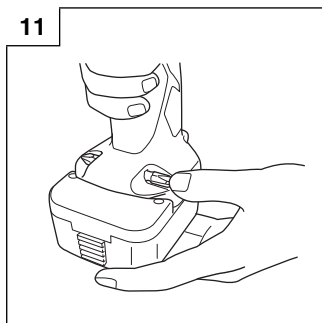
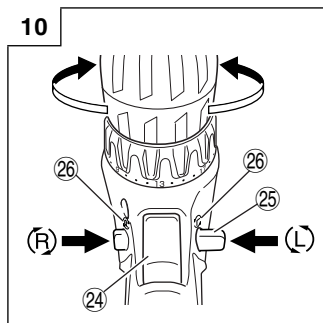
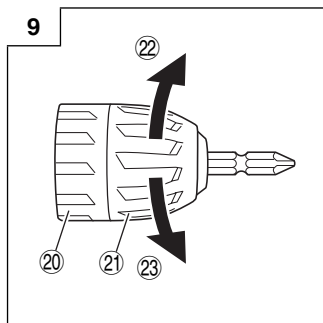
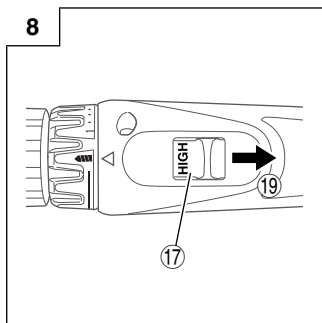
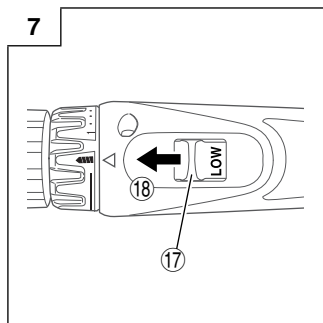
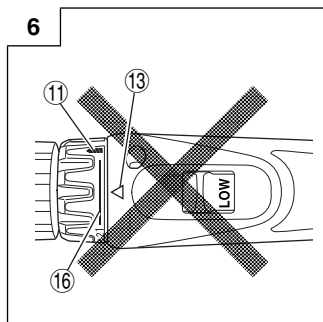
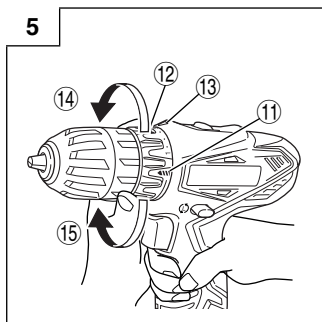
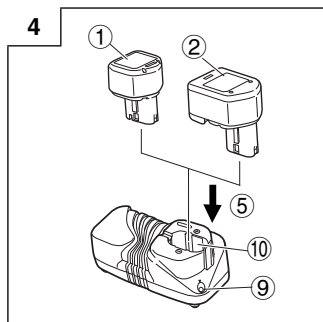
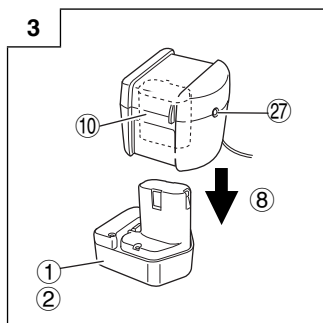
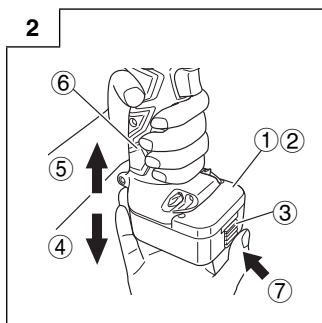
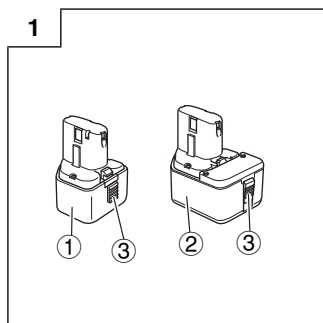
HANDLING INSTRUCTIONS



DS 12DVC

使用前务请详加阅读

Read through carefully and understand these instructions before use.



①	9.6 V 充电式电池 (用于DS9DVC)	9.6 V Rechargeable battery (For DS9DVC)
②	12 V 充电式电池 (用于DS12DVC)	12 V Rechargeable battery (For DS12DVC)
③	插销	Latch
④	拉出	Pull out
⑤	插入	Insert
⑥	把手	Handle
⑦	按	Push
⑧	插入	Insert
⑨	指示灯	Pilot lamp
⑩	充电式电池连接孔	Hole for connecting the rechargeable battery
⑪	电钻机标记	Drill mark
⑫	离合器转盘	Clutch dial
⑬	三角标记	Triangle mark
⑭	弱	Weak
⑮	强	Strong
⑯	线	Line
⑰	变速开关	Shift knob
⑱	低速	Low speed
⑲	高速	High speed
⑳	环	Ring
㉑	导套	Sleeve
㉒	旋紧	Tighten
㉓	放松	Loosen
㉔	扳机开关	Trigger switch
㉕	选择按钮	Selector button
㉖	Ⓜ 和 Ⓛ 标记	Ⓜ and Ⓛ marks
㉗	电池组指示灯	Battery set lamp

一般安全规则

警告！

阅读说明

没有按照以下列举的说明而使用或操作将导致触电、着火和/或严重伤害。

在所有以下列举的警告中术语“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。

保存这些说明

1) 工作场地

- 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纵电动工具。
分心会使你放松控制。

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触电危险。
- 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触电危险。
- 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触电危险。
- 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。
让电动工具远离热、油、锐边或运动部件。
受损或缠绕的电线会增加触电危险。
- e) 当在户外使用电动工具时，使用适合户外使用的外接电线。
适合户外使用的电线将减少触电危险。

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。
切勿在有疲倦、药物、酒精或治疗反应下操作电动工具。
在操作电动工具期间精力分散会导致严重人身伤害。
- b) 使用安全装置。始终配戴护目镜。
安全装置，诸如适当条件下的防尘面具、防滑安全鞋、安全帽、听力防护等装置能减少人身伤害。
- c) 避免突然起动。
确保开关在插入插头时处于关断位置。
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) 手不要伸得太长。
时刻注意脚下和身体平衡。
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带饰品。
让你的头发、衣服和袖子远离运动部件。
宽松衣服、配饰或长发可能会卷入运动部件。
- g) 如果提供了与排屑装置、集尘设备连接用的装置，则确保他们连接完好且使用得当。
使用这些装置可减少碎屑引起的危险。

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。
选用适当的设计额定值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/或将电池盒脱开电源。
这种防护性措施将减少电动工具突然起动的危险。
- d) 将闲置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。
电动工具在未经训练的用户手中是危险的。
- e) 保养电动工具。检查运动件的安装偏差或卡住、零件破损情况和影响电动工具运行的其他条件。
如有损坏，电动工具必须在使用前修理好。
许多事故由维护不良的电动工具引发。
- f) 保持切削刀具锋利和清洁。
保养良好的有锋利切削刃的刀具不易卡住而且容易控制。
- g) 按照使用说明书以及打算使用的电动工具的特殊类型要求的方式，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。
将电动工具用作那些与要求不符的操作可能会导致危险情况。

5) 电池式工具使用和注意事项

- a) 确保开关在插入电池盒前处于断开状态。
将电池盒插入到开关状态为接通的电动工具上会引发事故。
- b) 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。

- c) 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。
 - d) 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。
 - e) 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，必须使用同样的备件进行更换。
这样将确保所维修的电动工具的安全性。

注意事项
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。

充电式起子电钻机使用上的注意事项

1. 务请在10℃~40℃的温度下进行充电。温度低于10℃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℃。

规格

电动工具

型式			DS9DVC	DS12DVC
无负荷速度（低/高）			0 - 260/0 - 1150 转/分	0 - 350/0 - 1400 转/分
能力	钻孔	木料 (厚 18 mm)	21 mm	24 mm
		金属 (厚 1.6 mm)	钢材: 10 mm, 铝材: 12 mm	钢材: 12 mm, 铝材: 15 mm
	螺丝 紧固	机用螺丝	6 mm	6 mm
		木螺丝	5.8 mm (直径) × 45 mm (长) (应有导孔)	5.8 mm (直径) × 45 mm (长) (应有导孔)
充电式电池			BCC912: Ni-Cd 9.6 V (1.2 Ah 8 节电池)	BCC1212: Ni-Cd 12 V (1.2 Ah 10 节电池)
重量			1.2 kg	1.3 kg

充电器

型式	UC18YK	UC9SF	UC12SF
充电电压	7.2 - 18 V	9.6 V	12 V
重量	0.35 kg	0.6 kg	0.6 kg

- 2. 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。
请不要连续充电两节电池以上。
- 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. 在墙壁、地板或天花板上钻孔时，应检查是否有埋设的电源线等。
- 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. 移动充电器时，请勿拉拽电源线。否则，可能导致损坏。
- 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。

标准附件

DS9DVC DS12DVC	① 十字槽头螺丝刀头 (2 号 × 65L)	1
	② 充电器	1
	(UC18YK 或 UC9SF 或 UC12SF)	
	③ 电池	2
	或 电池	1
	④ 塑料盒	1

标准附件可能不预先通告而已于更改。

选购附件（分开销售）

- 1. 电池 (BCC912) (用于 DS9DVC)
 - 2. 电池 (BCC1212) (用于 DS12DVC)
- 选购附件可能不预先通告而已于更改。

用途

- 旋紧和拆除机用螺丝、木螺丝、自攻螺丝等。
- 钻各种金属。
- 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 1 和 图 2）。

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 2）。

充电

使用电动工具之前，按下述方法将电池进行充电。

- 1. 将充电器的电源线插头插入插座
接好电源线后便开始充电。

- 2. 将电池插入充电器
按正确的电极方向插入电池直至其接触到充电器底部（请参照图 3和 图 4）（UC18YK 上的指示灯或者 UC9SF 或 UC12SF 上的电池组指示灯亮起。）。

注意:
○ 如果插入电池后 UC18YK 上的指示灯或者 UC9SF 或 UC12SF 上的电池组指示灯不亮，则请从插座上拔出电源线插头并检查电池的安装情况。

- (1) 关于充电电池的温度。
充电电池的温度如表1所示。

表1 电池充电范围

充电电池	可以对电池进行充电的温度
BCC912, BCC1212	0℃ - 45℃

- (2) 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2所示。

表2 充电时间（20℃下）

充电器 电池	UC18YK	UC12SF	UC9SF
BCC1212	约50分钟。	约180分钟 (低于0: 约4到6小时)	——
BCC912	约50分钟。	——	约180分钟 (低于0: 约4到6小时)

UC18YK:
指示灯熄灭表示电池已经充好。
如果温度或电源电压偏低，电池充电时间则会延长。

UC9SF 或 UC12SF:
参照上述时间，从充电器内取出电池。
从充电器内取出电池后，电池组指示灯熄灭。
当电池温度较低（低于 0）时或者电源电压较低时，充电 180 分钟后电池电量达不到正常容量。
如果电池性能在实际使用过程中明显降低，请充电 4 到 6 小时。

注意:

- 作业停止后, 如电池 (因晒太阳等原因) 而变热, 充电指示灯会不亮。这时, 应先让电池冷却, 然后再充电。

3. 从电源插座拔下充电器的电源线。
4. 握紧充电器并取出电池。

注:

充电完成后, 请先从充电器内取出电池, 然后加以妥善保存。

关于新电池等的放电

因新的和长期未使用的充电式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。
使用后充电式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。

作业之前


1. 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、5、9……21”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。

注意:

- 离合器转盘不能设在数字“1、5、9……21”之间或点之间。
- 当离合器转盘位于“21”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)

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、5、9……21”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、5、9……21”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），且离合器转盘位于“17”或“21”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）。

○

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。

4. 使用范围和建议




表 3 给出了基于本机机械结构的各种可用工作范围。

表 3

工作		建议
钻孔	木料	用于钻孔。
	钢材	
螺丝紧固	机用螺丝	使用与螺丝直径相配的钻头或套筒。
	木螺丝	钻好导孔后使用。

5. 选择旋紧力和转速的方法

表 4

用途		离合器转盘的位置	转速选择（变速开关的位置）	
			LOW（低速）	HIGH（高速）
螺丝紧固	机用螺丝	1 - 21	用于直径在 6 mm 以下的螺丝捣。	用于直径在 6 mm 以下的螺丝。
	木螺丝	1 - 	用于公称直径在 5.8 mm 以下的螺丝。	用于公称直径在 3.8 mm 以下的螺丝。
钻孔	木料		用于 25 mm 以下的直径。 (DS12DVC) 用于 21 mm 以下的直径。 (DS9DVC)	用于 12 mm 以下的直径。
	金属		用于采用金属加工钻头的钻孔作业。	——

注意:

○

表 4 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）的状态下使用起子电钻机。

6. 钻头的安装和拆卸

(1) 安装钻头



当把起子机钻头 etc 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 9）

○

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。

(2) 拆卸钻头
请紧握环，同时左转（从前方看时为逆时针方向）导套将其旋松。（请参照图 9）

7. 确认电池安装正确。

8. 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 10）。（机身上标有  和  标记。）

9. 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。

10. 使用钻头固定器

注意：
○ 将钻头安装在本工具的指定部位。如果未正确安装钻头时使用本工具，钻头可能脱落并引起人体伤害。
○ 安装钻头的长度、规格、尺寸必须与标准附件中的十字槽头螺丝刀头（长65mm）相同。否则钻头可能脱落并引起人体伤害。

- (1) 拆卸钻头
紧紧固定机身，用手指抓住钻头的顶端将其拉出（图11）。
- (2) 安装钻头
安装钻头的步骤与拆卸相反。插入钻头，使其位于正中，如图12所示。

3. 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。

4. 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。

5. 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。

改造：

HIKOKI 牌电动工具经常加以改善和改造以采用最新的先进技术。
因此，某些零部件可能变更，恕不另行通知。

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。

注：

为求改进，本手册所载规格可能不预先通告而已予更改。

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，就应及时磨快或更换工具。

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，否则会导致严重事故。

GENERAL SAFETY RULES

WARNING!

Read all instructions

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

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

SAVE THESE INSTRUCTIONS

1) Work area

- a) **Keep work area clean and well lit.**
Cluttered and 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 of 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.
- 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.

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 safety equipment. Always wear eye protection.**
Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Avoid accidental starting. Ensure the switch is in the off position before plugging in.**
Carrying power tools with your finger on the switch or plugging in 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 these devices 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 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 tools 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 and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.**
Use of the power tool for operations different from intended could result in a hazardous situation.

5) Battery tool use and care

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

- c) **Use power tools only with specifically designated battery packs.**

Use of any other battery packs may create a risk of injury and fire.

- d) **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.

- e) **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.

PRECAUTION

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 DRIVER DRILL

1. Always charge the battery at a temperature of 10°C – 40°C. A temperature of less than 10°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.
2. 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.
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 drilling 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. Do not move the charger by pulling it by the cord. Doing so may lead to damage.
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.

SPECIFICATIONS

POWER TOOL

Model			DS9DVC	DS12DVC
No-load speed (Low/High)			0 – 260 / 0 – 1150 /min	0 – 350 / 0 – 1400 /min
Capacity	Drilling	Wood (Thickness 18 mm)	21 mm	24 mm
		Metal (Thickness 1.6 mm)	Steel: 10 mm Aluminum: 12 mm	Steel: 12 mm Aluminum: 15 mm
	Driving	Machine screw	6 mm	6 mm
		Wood screw	5.8 mm (diameter) × 45 mm (length) (Requires a pilot hole)	5.8 mm (diameter) × 45 mm (length) (Requires a pilot hole)
Rechargeable battery			BCC912: Ni-Cd 9.6 V (1.2 Ah 8 cells)	BCC1212: Ni-Cd 12 V (1.2 Ah 10 cells)
Weight			1.2 kg	1.3 kg

CHARGER

Model	UC18YK	UC9SF	UC12SF
Charging voltage	7.2 – 18 V	9.6 V	12 V
Weight	0.35 kg	0.6 kg	0.6 kg

STANDARD ACCESSORIES

DS9DVC DS12DVC	① Plus driver bit (No. 2 x 65L)	1
	② Charger (UC18YK or UC9SF or UC12SF)	1
	③ Battery	2
	or Battery	1
	④ Plastic case	1

Standard accessories are subject to change without notice.

OPTIONAL ACCESSORIES (sold separately)

1. Battery (BCC912)
(For DS9DVC)
2. Battery (BCC1212)
(For DS12DVC)

Optional accessories are subject to change without notice.

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 latch (2 pcs.) to remove the battery (see **Figs. 1** and **2**).

CAUTION

Never short-circuit the battery.

2. Battery installation

Insert the battery while observing its polarities (see **Fig. 2**).

CHARGING

Before using the driver drill, charge the battery as follows.

1. Connect the charger power cord to the receptacle

Connecting the power cord will turn on the charger.

2. Insert the battery into the charger

Insert the battery firmly while observing its direction, until it contacts the bottom of the charger (See **Fig. 3, 4**). (The pilot lamp on the UC18YK or the battery set lamp on the UC9SF or UC12SF lights up.)

CAUTION

If the pilot lamp on the UC18YK or the battery set lamp on the UC9SF or UC12SF does not light up when the battery is inserted, pull out the power cord from the receptacle and check the battery mounting condition.

- (1) Regarding the temperatures of the rechargeable battery
The temperatures for rechargeable batteries are as shown in **Table 1**.

Table 1 Recharging ranges of batteries

Rechargeable batteries	Temperatures at which the battery can be recharged
BCC912, BCC1212	0°C – 45°C

- (2) Regarding recharging time

Depending on the combination of the charger and batteries, the charging time will become as shown in **Table 2**.

Table 2 Charging time (At 20°C)

Charger Battery	UC18YK	UC12SF	UC9SF
BCC1212	Approx. 50 min.	Approx. 180 min. (Less than 0°C: Approx. 4 to 6 hours)	—
BCC912	Approx. 50 min.	—	Approx. 180 min. (Less than 0°C: Approx. 4 to 6 hours)

UC18YK:

The pilot lamp goes off to indicate that the battery is fully charged.

The battery charging time becomes longer when a temperature is low or the voltage of the power source is too low.

UC9SF or UC12SF:

Using the above times as a guide, remove the battery from the charger.

The battery set lamp goes off when the battery is removed from the charger.

When the temperature of the battery is low (less than 0°C) or the voltage of the power source is low, the capacity of the battery after charging for 180 minutes is reduced. If the battery performance seems poor during practical use, charge for 4 to 6 hours.

CAUTION

If the battery is heated due to direct sunlight, etc., just after operation, the charger pilot lamp may not light up. At that time, cool the battery first, then start charging.

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

4. Hold the charger firmly and pull out the battery

NOTE

After charging, pull out batteries from the charger first, and then keep the batteries properly.

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 rechargeable battery will be hot immediately after use. If such a battery is recharged immediately after use, its internal chemical substance will deteriorate, and the battery life will be shortened. Leave the battery and recharge it after it has cooled for a while.

PRIOR TO OPERATION

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

HOW TO USE

1. **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, 5, 9 ... 21” 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.

CAUTION

- The clutch dial cannot be set between the numerals “1, 5, 9 ... 21” or the dots.
- Do not use with the clutch dial numeral between “21” and the line at the middle of the drill mark. Doing so may cause damage (See Fig. 6).

2. **Tightening torque adjustment**

- (1) **Tightening torque**
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 tightened.
The unit indicates the tightening torque with the numbers “1, 5, 9 ... 21” on the clutch dial, and a dots. The tightening torque at position “1” is the weakest and the torque is strongest at the highest number (See Fig. 5).
- (3) **Adjusting the tightening torque**
Rotate the clutch dial and line up the numbers “1, 5, 9 ... 21” 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.

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 the position of the clutch dial is “17” or “21”, it may happen that the clutch does not engaged and that the motor is locked. In such a case, please set the shift knob to “LOW” (low speed).
- 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.

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 3.

Table 3

Work		Suggestions
Drilling	Wood	Use for drilling purpose.
	Steel	
Driving	Machine screw	Use the bit or socket matching the screw diameter.
	Wood screw	Use after drilling a pilot hole.

5. **How to select tightening torque and rotational speed**

Table 4

Use		Clutch Dial Position	Rotating speed selection (Position of the shift knob)	
			LOW (Low speed)	HIGH (High speed)
Driving	Machine screw	1 – 21	For 6 mm or smaller diameter screws.	For 6 mm or smaller diameter screws.
	Wood screw	1 – 	For 5.8 mm or smaller nominal diameter screws.	For 3.8 mm or smaller nominal diameter screws.
Drilling	Wood		For 25 mm or smaller diameters. (DS12DVC)	For 12 mm or smaller diameters.
			For 21 mm or smaller diameters. (DS9DVC)	
	Metal		For drilling with a metal working drill bit.	_____

CAUTION

- The selection examples shown in **Table 4** 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.
- 6. Mounting and dismounting of the bit**
- (1) After inserting a driver bit, etc. into the keyless drill chuck, firmly grasp the ring and tighten the sleeve by turning it toward the right (in the clockwise direction as viewed from the front) (See **Fig. 9**).
 - If the sleeve becomes loose during operation, tighten it further. The tightening force becomes stronger when the sleeve is tightened additionally.
 - (2) Dismounting the bit
Firmly grasp the ring and loosen the sleeve by turning it toward the left (in the counter-clockwise direction as viewed from the front) (See **Fig. 9**).
- 7. Confirm that the battery is mounted correctly**
- 8. 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. 10**) (The (L) and (R) marks are provided on the body).
- 9. 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.

10. Using the bit holder

CAUTION

- Stow the bit in the specified location on the tool. If the tool is used with the bit stowed improperly, the bit may fall and cause bodily injury.
 - Do not stow bits that are of a different length, gauge or dimension than the plus driver bit (65 mm long) included in the STANDARD ACCESSORIES.
The bit may fall and cause bodily injury.
- (1) Removing the bit
Securely hold the main unit and pull out the bit by holding the tip with your thumb (**Fig. 11**).
 - (2) Installing the Bit
Install the bit with steps opposite of when removing. Insert the bit so that the right and left sides are equal, as shown in **Fig. 12**

MAINTENANCE AND INSPECTION

1. Inspecting the tool

Since use of as 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.

3. 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.

4. Storage

Store the driver drill in a place in which the temperature is less than 40°C and out of reach of children.

5. 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.

MODIFICATIONS

HiKOKI Power Tools are constantly being improved and modified to incorporate the latest technological advancements.

Accordingly, some parts may be changed without prior notice.

Important notice on the batteries for the HiKOKI cordless power tools

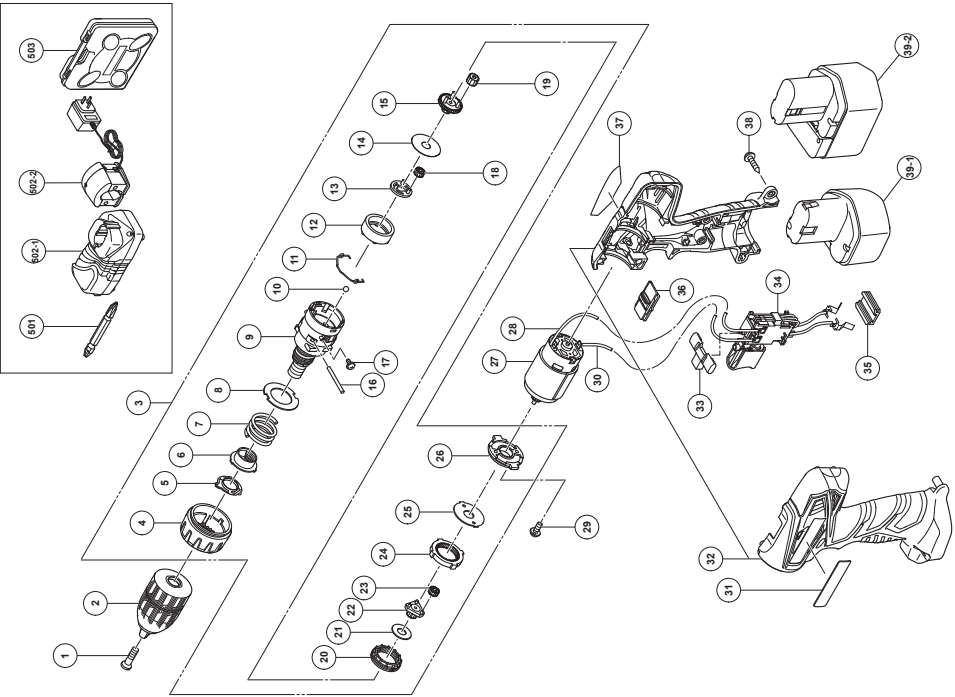
Please always use one of our designated genuine batteries. We cannot guarantee the safety and performance of our cordless power tool when used with batteries other than these designated by us, or when the battery is disassembled and modied (such as disassembly and replacement of cells or other internal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

NOTE

Due to HiKOKI's continuing program of research and development, the specifications herein are subject to change without prior notice.

ITEM NO.	PART NAME	Q'TY
37	NAME PLATE	1
38	TAPPING SCREW (W/FLANGE) D3 x 16	8
39-1	BATTERY (BCC912)	2
39-2	BATTERY (BCC1212)	1
501	PLUS DRIVER BIT (C)	1
502-1	CHARGER (UC18YK)	1
502-2	CHARGER (UC9SF, UC12SF)	1
503	CASE	1

ITEM NO.	PART NAME	Q'TY
1	SPECIAL SCREW (LEFT HAND) (B) M5 x 25	1
2	KEYLESS CHUCK	1
3	GEAR BOX ASSY	1
4	CLUTCH DIAL	1
5	CLICK SPRING	1
6	NUT	1
7	SPRING	1
8	THRUST PLATE	1
9	GEAR CASE	1
10	STEEL BALL D5	6
11	SHIFT ARM	1
12	RING GEAR	1
13	CARRIER	1
14	WASHER (B)	1
15	PINION (C)	1
16	NEEDLE	2
17	TAPPING SCREW D2 x 3.5	2
18	PLANET GEAR (C)	3
19	PLANET GEAR (B)	3
20	SLIDE RING GEAR	1
21	WASHER (C)	1
22	PINION (B)	1
23	PLANET GEAR (A)	3
24	FIRST RING GEAR	1
25	WASHER (A)	1
26	MOTOR SPACER	1
27	MOTOR	1
28	LEAD WIRE (B)	1
29	MACHINE SCREW (W/SP. WASHER) M3 x 8	2
30	LEAD WIRE (B) 90L	1
31	BRAND LABEL	1
32	HOUSING (A) (B) SET	1
33	PUSHING BUTTON	1
34	SWITCH TERMINAL	1
35	TERMINAL SUPPORT (A)	1
36	SHIFT KNOB	1



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