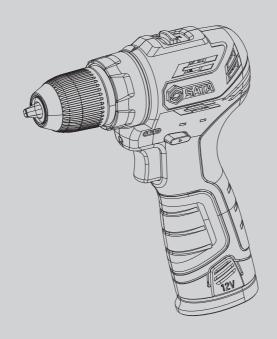


12V 锂电无刷电钻 / 起子机 12V Li-Ion Brushless Drill/ Screwdriver

51006A



使用说明书 \ User's Manual











电动工具的通用安全警告

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。



通用电动工具安全警告-工作场地

- 保持工作场地清洁和明亮。混乱和黑暗的场地会引发事故。
- 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。
- 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。

通用电动工具安全警告-电气安全

- 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。
- 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。
- 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。
- 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。让电动工具远离热源、油、锐边或运动部件受损或缠绕的软线会增加电击危验。
- 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。
- 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。

通用电动工具安全警告-人身安全

- 保持警觉,当操作电动工具时关注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。
- 使用个人防护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。
- 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。
- 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。
- 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。
- 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。
- 如果提供了与排屑装置,集尘设备连接用的装置,要确保他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。







通用电动工具安全警告--电动工具使用和注意事项

- 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。
- 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。
- 在进行任何环节,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启动的危险。
- 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。
- 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,许多事故由维护不良的电动工具引发。
- 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。
- 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用途不符的操作可能会导致危险。

通用电动工具安全警告--电池式工具使用和注意事项

- 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。
- 只有在配有专用电池盒的情况下才能使用电动工具。使用其他电池盒会发生损坏和着火危险。
- 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件,以防一端与另一端连接。电池端部短路会引起燃烧或火灾。
- 在滥用条件下,液体会从电池中溅出,避免接触。如果意外碰到了,用水冲洗。如果液体碰到眼睛,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。

通用电动工具安全警告-维修

- 让专业维修人员使用相同的备件维修电动工具。这将保证所维修的电动工具的安全。





专业要求

- 对机器进行任何修护工作之前,都必须先取出电池包。
- 禁止将机器置于雨或水中。
- 请勿将电池包存储于高于 40℃ 环境下。
- 在 0 至 30°C 的环境下充电,理想充电温度是 18 至 24°C。
- 仅限配套使用本机随附的充电器和电池包。
- 避免电池包连接短路。(比如: 不要让螺栓、钉子等接触到电池包的正负极。)
- 禁止燃烧电池包或弃之于火中, 会引起爆炸。
- 禁止给已损坏的电池包充电。
- 如果充电器上的电源线损坏, 请及时更换。
- 取下电池包之前务必先拔下充电器电源插头。
- 充电过程中, 充电器和电池包发热属正常现象。
- 不使用机器时,请勿将充过电的电池包插在充电器上。
- 充电结束,请立即将电池包拔离充电器。
- 机器工作时, 机身和电池包都会发热, 属正常现象。
- 禁止将废弃电池包置于火中或随生活垃圾处理,必须送回当地收集站或回收点回收。
- 在墙体、地板、天花板上拧螺钉或钻孔之前,要仔细检查是否布有电线电缆、天然气管道或者水管,以免被螺钉或钻头损坏。
- 使用机器时需戴防护耳罩,否则可能导致听力受损。
- 操作之后请勿立刻触摸附件或工件,因为它们可能会非常烫而导致烫伤皮肤。
- 操作机器时,机器可能会接触到隐藏的电线,必须握住机器的绝缘表面。接触到通电导线会使机器表面的金属带电,使用者受到电击。

警告

电池包在温度过高或过度使用的情况下,可能会发生漏液现象。如果电池漏出的液体沾到皮肤上,要 先用肥皂清洗,然后用柠檬汁、醋进行冲洗;若不慎触及眼睛,应立即用清水进行冲洗,并马上去医 院检查治疗。



充电器安全警告

- 使用前请阅读说明书。
- 仅在室内使用,禁止置于雨或水中。
- 禁止给不可充电电池充电。
- 如果电源软线损坏,为避免危险,必须由制造商、其维修部或类似部门的专业人员更换。







标记



为减少伤害,用户应仔细阅读说明书



仅在室内使用



警告标记



禁止置于雨或水中



请戴防护耳罩



禁止置于火中



请戴防护眼镜



请勿丟弃电池,将废旧电池送回到你当地收 集或回收点回收



请戴防尘面具



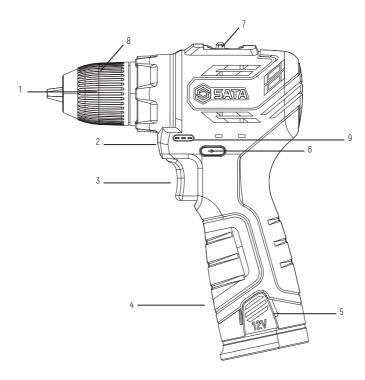
该产品电池包含有某些有毒有害物质,请戴 防尘面具在环保使用期限内可以放心使用, 超过环保使用期限之后则应该进入回收,仅 在室内使用循环系统。

产品中有毒有害物质或元素的名称及含量

| | 有毒有害物质或元素 | | | | | |
|----------|-----------|--------|--------|--------------|------------|---------------------|
| 部件名称 | 铅 (Pb) | 汞 (Hg) | 镉 (Cd) | 六价铬 (Cr(VI)) | 多溴联苯 (PBB) | 多 溴 二 苯 醚 (PBDE) |
| 外壳的金属部分 | 0 | 0 | 0 | 0 | 0 | 0 |
| 外壳的非金属部分 | 0 | 0 | 0 | 0 | 0 | 0 |
| 机械传动机构 | Χ | 0 | 0 | 0 | 0 | 0 |
| 电机组件 | Χ | 0 | 0 | 0 | 0 | 0 |
| 控制组件 | Χ | 0 | 0 | 0 | 0 | 0 |
| 附件 | 0 | 0 | 0 | 0 | 0 | 0 |
| 配件 | 0 | 0 | 0 | 0 | 0 | 0 |
| 连接件 | Χ | 0 | 0 | 0 | 0 | 0 |
| 电源线*① | 0 | 0 | 0 | 0 | 0 | 0 |
| 电池系统 + ② | Х | 0 | 0 | 0 | 0 | 0 |

本表格依据 SJ/T11364 的规定编制

- 〇:表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下
- X:表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。且目前业界没有成熟的替代 方案,符合欧盟 RaHS 指令环保要求。
- ①适用于采用电源线连接供电的产品。
- ②适用于采用充电电池供电的产品。产品环保使用期限内的使用条件参见产品说明书。



机件:

- 1. 夹头
- 2. 工作指示灯
- 3. 起停开关
- 4. 电池包
- 5. 电池包锁钮
- 6. 正反转拨杆
- 7. 两档机械变速拨杆
- 8. 扭力调节圈
- 9. 电量显示灯

充满一个电池包约 100 分钟

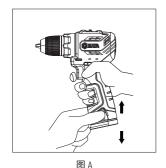
我们建议您从所购买电动工具的商店选配您的附件。请使用有知名品牌的高质量的附件。请选择合适您工作所需的正确附件。请参考附件包装,您将获得附件使用的更多的方法及帮助。

| 机器型号 | | 51006A |
|--------|----|------------------------------------|
| 电压 | | 12V |
| 空载转速 | | 0~400RPM(低速), 0~1680RPM(高速) |
| 扭力调节档位 | | 20+1 档 |
| 最大转矩 | | 30N.M |
| 最大加持能力 | | Ф10ММ |
| 钻孔能力 | 钢材 | 10MM |
| 拉が形と力 | 木材 | 32MM |
| 机器重量 | | 0.9Kg |
| 电池容量 | | 2.0AH |
| 充电时间 | | 100Min |





操作指南













注意

使用机器前,请仔细阅读说明书。

图 D



使用之前

1) 充电

- 本充电器和机器需配套使用,严禁使用其他充电器。
- 本机器内设保护线路,当电池量不足时,保护线路开启,机器停止转动。
- 在温度较高的环境中或者长时间使用后,机器可能会发烫,这时请不要立即充电,待电池冷却后再充电,否则将缩短电池的使用寿命或者因电池过热导致无法充电。
- 机器首次充电时或者长时间不用后,第一次充电器效率可能只能达到 60% 左右,需经 2-3 次的充放电之后,电池效率 方可到达 100%。
- 2] 安装 / 拆除电池包 (见图 A)
- -要取出电池包时,按下电池包两侧的锁钮,然后将其拉出。要插入电池包时,只要将其轻推入机器即可,切忌用力过猛。





操作

1] 启用 / 关闭 (见图 B)

- 按住开关(1), 机器启动, 松开则机器停止运转。
- 该开关设有制动功能,松开开关后,夹头立即停止转动。
- 在开关上的施力大小,可改变转速。改变范围在 0 至最大转速间。施力小,转速低,起钻缓稳容易控制。
- 勿让机器因承受过大的负荷而停止运转。

警告

请勿长时间低速操作,否则机器内部会产生过热反应。



2] 开关锁定(见图 B)

- 开关具有锁住保护功能,有利于减少在没有使用的情况下误启动手电钻。将转向拨杆 [2] 调节至正中位置,就将可以将机器锁住。

3] 改变旋转方向(见图 B)

- 正转:把转向拨杆标有"◢"一面推到底(移至左侧),可用于钻孔和旋入螺丝。反转:把转向拨杆标有"▲"的一面推到底(移至右侧),可用于转松或转出螺丝。

警告

机器完全静止后才可变换转向。



4] 变速 (见图 C)

- 向前拨动变速杆至"1"档转档: 高转矩 / 低转速,用于钻入较粗的钻头或旋入螺丝。
- 向后拨动变速杆至"2"档转档: 低转矩 / 高转速,用于钻入较细的钻头。
- 当机械变速杆由于齿轮撞击而无法拨动时,轻按开关让电机旋转一下再换挡。

警告

机器完全静止后才可变换转速。



5] 安装或拆卸钻头(见图 D)

- 注意: 在安装或拆卸钻头时,一定先确认电钻是否已关掉,电池包是否已取出。
- 一手握持机器,另一手握住夹头套环,逆时针方向旋转来打开夹头,将钻头装入夹头,尽量将其推到底,再握紧套环顺时针旋转来固紧夹头。拆卸钻头时,握住套环逆时针旋转即可。





6) 设定扭力(见图 E)

- 转动扭力调节圈以调节机器扭力。当扭力调节圈上的数字 1 对准机器上方的指示箭头时,扭力最小,当扭力调节圈上的标记对准机器上方的指示箭头时,扭力最大。

设定使用参考如下:

| 1-5 | 旋转小的螺丝 |
|-------|---------------|
| 6-10 | 将螺丝旋入松软材料 |
| 11-15 | 将螺丝拧入松软和较坚硬材料 |
| 16-19 | 将螺丝旋入坚硬材料 |
| 20 | 旋入较大的螺丝 |
| 1 | 高强度钻孔 |

7] 工作灯

- 机器带有照明工作灯: 当使用机器按下开关时,照明灯亮; 松开,照明灯熄灭。

8] 主轴自锁(见图 F)

- 主轴自锁功能可以使机器作为手动工具操作。

在电池包电量耗尽时,可以手动旋转机器来旋紧或旋松螺钉等操作,此时,夹头是固定不动的。

9] 电池电量指示

- 按下机器开关,电量指示灯亮5秒,可按照下表判断电池包剩余电量。

| LED 灯显示 | 剩余电量 |
|---------|---------|
| •00 | 0-30% |
| ••0 | 30-70% |
| ••• | 70-100% |

10) 钻孔操作

- 在硬质材料表面钻孔时,可先用一个尖冲头和锤子在想要钻孔的部位作一标记,以防钻头打滑。握紧手电钻,将钻头尖对准标记,按下开关进行钻孔操作。
- 以适当的压力钻入,请勿过分施压或使用偏移的压力而使孔径变大。

警告

在金属材质上钻孔时,请使用完好的高速钢钻头。使用短小的螺丝批头时,请利用磁性连接杆(不含)。 拧螺丝时,在螺纹上涂抹少许肥皂或其他润滑液,以便于轻松拧入。







问题解答

1) 为什么按压开关而机器却不运转?

在开关上部有一个转向拨杆,处于锁住的位置。将其拨向需要转动方向的位置,再按下按钮,机器就会开始转动。

2] 为什么在螺钉还未拧紧时,手电钻就停止运转?

机器带有低压保护,在电池包电量过低时,机器不能工作,请确认电池包电量。

本机带有温度保护,当长时间满负荷工作时,电池包会过热,温保系统会启动导致机器停止运转,请将机器冷却到常温后再继续使用。

请调节在机身和夹头之间的扭力调节圈。位置 1 对应的扭力最小,位置 20 对应的扭力最大。把扭力调节圈调节到更高档位就可以解决此问题了。

3] 为什么同一个电池包的工作时间会有长有短?

如上所说,一个电池包如果放置时间过长而不使用的话,就会缩短其工作时间,这就是充电次数问题。

在经过几次充电和使用之后,这种状况就会得到改善。在干重活时,例如往硬木材里拧大螺钉,电池包的电量也会消耗的很快。不要在 0° C 以下或 45° C 以上的环境里充电,这同样会影响到电池包的工作表现。

保养与维护

对机器作任何换修工作之前,请务必先拔出插头。您的电动工具不需要再添加润滑油或进行其它保养。

不要用水或化学清洗剂来清洗你的电动工具,用干布擦拭干净就可以了。工具需储藏在干燥的环境中,并保持马达通 风口处的清洁。尽量不要在灰尘较大的环境中使用。

为了有利于与电池包寿命,请注意:

- 电池包存放:将电池包充电 30%-50% 电量,存放在 26℃ 以下环境中。
- 不超过6个月时间,将电池包充满电使用一次







废弃电池包的处理



为保护自然环境,请妥善回收或处理电池包。该电池包含有锂电池。请向当地废物处理部门咨询有关回收和 / 或处理的信息。通过使用手电钻把电池包电量耗尽,卸下电池包,用结实的胶带包裹好极片端口,避免短路和漏电。请勿试图打开或拆取任何部件。

环境保护



处理废弃物

为了响应环保,对于坏损的机器、配件及包装材料必须详细加以分类处理,以便利于回收。为方便分类回收,各塑胶部位都做有材料标识。





General safety warnings for electric tools

Warning

Read all warnings and instructions. Failure to follow the following warnings and instructions will result in electric shock, fire and/or serious injury. Keep all warnings and instructions for reference. In the following warnings, "electric tool" refers to the tools driven by mains supply (wired) or battery (wireless).



General safety warnings for electric tools - workplace

- Maintain the workplace clean and bright. Disordered and dark workplace may result in accident.
- Do not use electric tools under explosive environments where flammable liquid, gas or dust exist. The spark from electric tools may ignite
 dust or gas.
- Operate electric tools after children and onlookers leave. Inattention may cause the operator to lose control of the tools.

General safety warnings for electric tools - electrical safety

- The plug of electric tools must match the socket. Do not refit the plug in any way or use any changeover plug for electric tools to be grounded. The original plug and matched socket can reduce electric shock risks.
- Never let human body contact the grounded surface, such as the pipeline, radiator fins or refrigerator. Body grounding may increase electric shock risks.
- Do not expose electric tools in rainy or humid environment. Electric shock risks may be increased if water enters the electric tools.
- Do not abuse wire. Never handle or pull electric tools or pull out of the plug by wire. Keep electric tools away from heat source, oil, sharp
 edges or damaged or moving parts. The damaged or winded flexible wires may increase electric shock risks.
- When using electric tools outdoors, please use external flexible wires suitable for outdoor use. Such wires can reduce electric shock risks.
- If it is inevitable to operate the electric tools in humid conditions, the residual current device (RCD) shall be used. The use of RCD can reduce electric shock risks.

General safety warnings for electric tools - personal safety

- Concentrate on operation and keep a clear mind when operating electric tools. Do not operate electric tools when you are tired or in the presence of drugs, alcohol or therapeutic reactions.
- Always wear goggles when using personal protective equipment. Protective devices, such as dust mark, anti-sliding safety shoes, safety helmet and hearing protection device, can reduce personal injury under proper conditions.
- Prevent accidental starting. Ensure that the switch is off when connecting the power supply and/or battery box, and picking up or carrying tools. Risks may be caused when putting fingers on the switch connected to the power or inserting the plugs when the switch is connected.
- Remove all adjustment keys or wrenches before powering on the electric tools. Wrenches or keys left on the rotary parts of electric tools may cause personal injury.
- Do not stretch your hands too far, and always pay attention to footholds and body balance. In this way, the electric tools can be well
 controlled in case of any accidents.
- Make proper dressing. Do not wear loose clothes or accessories. Keep your clothes, gloves and hair away from moving parts. Loose clothes, decorations or long hair may be rolled in moving parts.
- If the device connected with the scrap removal device and dust collection device is provided, it is a must to connect and use all these
 devices properly. The use of these devices can reduce the risks caused by scraps.



51006A



General safety warnings for electric tools - precautions for electric tool operation

- Do not abuse electric tools but use it properly according to the application. The electrical tool designed properly will make your work more efficient and safer.
- If the switch cannot power on or power off the tool power, such electric tool cannot be used. Electric tool that cannot be controlled with switch is dangerous. If so, the electric tool must be repaired.
- Unplug from the power supply and/or disconnect the battery box from the tools before any link implementation, accessory replacement
 or electric tool storage. Such protective measures can reduce the risks of sudden starting of tools.
- Keep the unused electric tools beyond the reach of children and do not make the personnel unfamiliar with electric tools or the instructions operate them. It is dangerous for the users to use the electric tools without training.
- Maintain electric tools, and check whether the moving parts are adjusted in place or stuck, as well as the damage of parts and other
 conditions affecting the operation of electric tools. For any damage, electric tools shall be repaired before use. Many accidents result
 from the electric tools with poor maintenance.
- Maintain the cutters sharp and clean. The well maintained cutters with sharp cutting edge are not easily blocked and can be easily controlled.
- Use electric tools, accessories, tool bits, etc. according to the operation instructions, operation conditions and operations. Risks may be
 caused if electric tool is used in the operations which are not in compliance with the purposes.

General safety warnings for electric tools - precautions for battery tool operation

- Use only the charger specified by the manufacturer for charging. The fire will occur when the charger suitable for one type of battery box is used for other types.
- Electric tools can only be used when being equipped with special battery box. The use of other battery boxes will cause damage and fire.
- When battery box is not used, it should be kept far away from other metal objects, such as clip, coin, key, nail, bolt or other small metal articles, so as to avoid connecting one end with the other. The short circuit at the end of battery will cause combustion or fire.
- In case of abuse, liquid will splash from the battery, which cannot be contacted. In case of contact with the liquid by accident, wash it with water immediately. If the liquid contacts eyes, medical aid is required. The liquid splashed from battery will be in corrosion or burning.

General safety warnings for electric tools - maintenance

- The professional maintenance personnel use the same spare parts to maintain the electric tools, so as to ensure the safety of the electric tools being maintained.







Professional requirements

- The battery pack must be removed before any repair of machine.
- Do not put the machine in rain or water.
- Do not store the battery pack in an environment above 40°C.
- The ideal charging temperature is from 18°C to 24°C in case of charging at 0°C to 30°C.
- Use only the charger and battery pack attached with this machine.
- Avoid short circuit of battery pack. (For example, do not allow bolts, nails, etc. to contact with the anode and cathode of the battery pack.)
- Do not burn battery pack or discard it in fire, which may cause explosion.
- Do not charge the damaged battery pack.
- Timely replace the wire (if damaged) on charger.
- Be sure to unplug the charger before removing the battery pack.
- It is normal for the charger and battery pack to be heated during charging.
- Do not plug the charged battery pack into the charger when the machine is not used.
- Unplug the battery pack from the charger immediately after charging.
- It is normal for the body and battery pack to be heated during operation of machine.
- Do not put waste battery pack in the fire or dispose it with domestic waste, but return it to a local collection station or a recycling site for recycling.
- Before screwing bolts or drilling holes on walls, floors and ceilings, carefully check whether wires, cables, natural gas pipes or water pipes are arranged to avoid their damage by bolts or bits.
- Wear ear protectors when using the machine; otherwise, it may cause hearing impairment.
- Do not touch accessories or workpieces immediately after operation, because they may be very hot, thus causing skin burns.
- During operation, the machine may come into contact with hidden wires, so it is required to hold the insulating surface of the machine.
 Contact with the live wire will electrify the metal on the surface of the machine, thus causing electric shock to the user.

Warning

Leakage may occur when the battery pack is overheated or overused. In case that the liquid leaking from the battery touches the skin, wash it with soap firstly, and then wash it with lemon juice and vinegar; if it accidentally touches the eyes, wash it with water immediately, and go to the hospital for examination and treatment.



Charger safety warning

- Please read the instructions before use.
- It is only for indoor use. Do not put in rain or water.
- Do not charge non-rechargeable batteries.
- In case of any damage, the wire must be replaced by the manufacturer or professionals of the maintenance department or other similar departments in order to avoid danger.





Marks



Users shall read the instructions carefully to reduce injury.



It is only for indoor use.



Warning signs.



Do not put in rain or water.



Please wear ear protectors.



Do not put in fire.



Please wear safety goggles.



Do not discard the batteries, but send them back to the local collection or recycling site for recycling.



Please wear a dust mask.



The battery of the product contains some toxic and harmful substances. Please wear a dust mask, and use it safely within the environment-friendly use period (EFUP). After the EFUP, it shall be recycled through indoor circulation system.

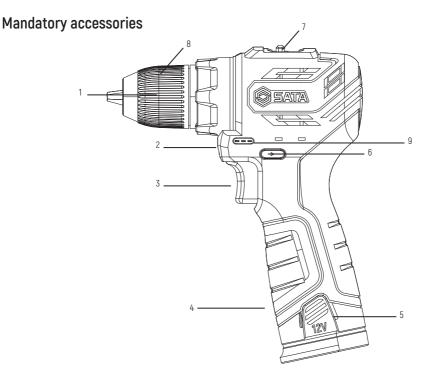
Names and contents of toxic and harmful substances or elements in products

| Toxic and harmful substances or elements | | | | | | |
|--|-----------------|-----------------------|-------------------|------------------------------------|-----------------------------------|---|
| Name of parts | Plumbum (Pb) | Hydrar- gyrum (Hg) | Cadmi- um (Cd) | Hexavalent chro- mium (Cr (VI)) | Polybrominated biphenyls (PBB) | Polybrominated diphenyl ethers (PBDE) |
| Metal parts of shell | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-metal parts of shell | 0 | 0 | 0 | 0 | 0 | 0 |
| Mechanical transmission mechanism | Χ | 0 | 0 | 0 | 0 | 0 |
| Motor assembly | Χ | 0 | 0 | 0 | 0 | 0 |
| Control subassembly | Χ | 0 | 0 | 0 | 0 | 0 |
| Accessories | 0 | 0 | 0 | 0 | 0 | 0 |
| Parts | 0 | 0 | 0 | 0 | 0 | 0 |
| Connectors | Χ | 0 | 0 | 0 | 0 | 0 |
| Wire * ① | 0 | 0 | 0 | 0 | 0 | 0 |
| Battery system + 2 | Х | 0 | 0 | 0 | 0 | 0 |

This table is prepared in accordance with the provisions of SJ/T11364.

- O: The content of the hazardous substance in all homogeneous materials of the component is below the limit specified in GB/T26572.
- X: The content of the hazardous substance in a certain homogeneous material of the component exceeds the limit specified in GB/T26572. At present, there is no mature alternative in the industry, which meets environmental protection requirements of the RqHS instruction of EU.
- 1) It is suitable for products supplied by connection with wires.
- ② It is suitable for products supplied by rechargeable batteries. Please refer to product instructions for the service conditions within EFUP of the product.





Parts:

- 1. Collet
- 2. Operating indicator
- 3. Start-stop switch
- 4. Battery pack
- 5. Lock knob of battery pack
- 6. Forward and reverse deflector rod
- 7. Two-gear mechanical transmission deflector rod
- 8. Torque adjusting ring
- 9. Battery display lamp

Charge a battery pack for about 100 minutes.

We recommend that you should select the accessories from the shop where you purchased the electric tools. Please use high-quality accessories of famous brands. Please select the right accessories for your job. Please refer to the package of accessories for more methods and help.

| | 51006A | |
|-------|---|--|
| | 12V | |
| | 0~400RPM(LOW SPEED), 0~1680RPM(HIGH SPEED) | |
| ition | 20+1档 | |
| | 30N.M | |
| ity | Ф10ММ | |
| Steel | 10MM | |
| Wood | 32MM | |
| | 0.9Kg | |
| | 2.0AH | |
| | 100Min | |
| | ity Steel | |



Operation guide

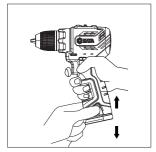






Figure B



Figure C



Figure D



Figure E



Figure F

Note

Please read instructions carefully before using the machine.



Before using

1) Charging

- This charger and the machine shall be used together. It is forbidden to use other chargers.
- The machine is equipped with protection circuit. In case of insufficient battery power, the protection circuit is turned on and the machine is out of operation.
- In the environment with high temperature or after use for a long time, the machine may be hot. Please do not charge immediately, but charge after the battery cools down; otherwise, it will shorten the service life of the battery or the battery will be unable to charge due to overheating.
- When the machine is charged for the first time or not used for a long time, the efficiency of the charger may only reach 60% in the first time. After charging and discharging for twice to three times, the battery efficiency can reach 100%.
- 2) Installation/removal of battery pack (see Figure A)
- Press the lock knobs on both sides of the battery pack when taking out the battery pack, and then pull it out. During insertion, just push the battery pack into the machine gently, without overexertion.







Operation

1) Enabling/disabling (see Figure B)

- Press and hold switch (1) to start the machine, and release it to stop the machine.
- The switch has a function of braking. After the switch is released, the collet stops rotating immediately.
- The magnitude of force applied on the switch can change the speed. The change range is from 0 to the maximum speed. With small force, low speed, slow and steady drilling, it is easy to control the electric drill.
- Do not allow the machine to stop operating because of the excessive load.

Warning

Do not operate at low speed for a long time; otherwise, the internal of the machine will generate overheating reaction.



- 2) Switch locking (see Figure B)
- The switch has the function of locking protection, which is conducive to avoiding incorrect start-up of the electric hand drill when it is not in use. Adjust the steering deflector rod [2] to the center position in order to lock the machine.
- 3) Change of the rotation direction (see Figure B)
- Forward rotation: Push the side marked with " 🕍 " on the steering deflector rod to the end (move to the left side), which can be used for drilling and screwing in screws. Reverse rotation: Push the side marked with " 👞 " on the steering deflector rod to the end (move to the right side), which can be used for loosening or screwing out screws.

Warning

Do not change direction until the machine is completely stationary.



- 4) Adjustable speed (see Figure C)
- Move the transmission lever forward to shift to "1": high torque/low speed. It is used for drilling a thicker bit thicker bit or screwing in screws.
- Move the transmission lever backward to shift to "2": low torque/high speed. It is used for drilling a thicker bit finer bit.
- When the mechanical transmission lever cannot be moved due to the impact of gears, gently press the switch to rotate the motor and then shift.

Warning

Do not change the speed until the machine is completely stationary.



- 5) Installation or removal of bit (see Figure D)
- Note: When installing or removing the drill, check whether the electric drill has been turned off and the battery pack has been taken out.
- Hold the machine with one hand, hold the collet collar with the other hand, turn it anticlockwise to open the collet, install the bit into the collet, push it to the end as far as possible, and then turn the collar clockwise to tighten the collet. When removing the bit, hold the collar and rotate it anticlockwise.







6) Setting of torque (see Figure E)

- Turn the torque adjusting ring to adjust the machine torque. When number 1 on the torque adjusting ring is aligned with the indicating arrow above the machine, the torque is the minimum; when the mark on the torque adjusting ring is aligned with the indicating arrow above the machine, the torque is the maximum.

The reference for setting is as follows:

| 1-5 | Screw the small screws |
|-------|---|
| 6-10 | Screw the screws into soft materials |
| 11-15 | Screw the screws into soft and hard materials |
| 16-19 | Screw the screws into the hard materials |
| 20 | Screw in larger screws |
| 1 | High strength drilling |

7) Working lamp

- Machine with lighting working lamp:

Press the switch of the machine in use, and then the lamp is on; release the switch of the machine in use, and then the lamp is off.

8) Spindle self-locking (see Figure F)

- The function of spindle self-locking enables the machine to operate as a manual tool.

When the battery pack is out of power, you can manually rotate the machine to tighten or loosen the screws. At this time, the collet is fixed.

9) Battery power indicator

- Press the machine switch, and then the power indicator will be on for 5 s. You can judge the remaining power of the battery pack according to the following table.

| LED indicator display | Remaining power |
|-----------------------|-----------------|
| •00 | 0-30% |
| ••0 | 30-70% |
| ••• | 70-100% |

10) Drilling

- When drilling on the surface of hard materials, use a pin punch and a hammer to mark the position to be drilled, to prevent the bit from slipping. Hold the electric hand drill tightly, align the bit tip with the mark, and press the switch for drilling.
- Drill in with proper pressure. Do not over press or use offset pressure to enlarge the bore diameter.

Warning

Please use good high-speed steel bit when drilling on metal materials. Please use magnetic connecting rod (excluded) when using short and small screw bit. Apply a little soap or other lubricants on thread when screwing so that it is easily screwed in.









Question and answer

1) Why doesn't the machine work after pressing the switch?

There is a steering deflector rod on the upper part of the switch, which is locked. Turn it to the position where rotation is required, press the knob again, and then the machine will start to rotate.

2) Why does the electric hand drill stop operating before the screw is tightened?

The machine has a low-voltage protection function. In case of insufficient power of the battery pack, the machine cannot work. Please confirm the power of the battery pack.

This machine has a temperature protection function. When the machine works at full load for a long time, the battery pack can overheat and the temperature protection system will start and cause the machine to stop operating. Please cool the machine to normal temperature before continuing to use.

Please adjust the torque adjusting ring between the body and collet. The torque corresponding to position 1 is the minimum, and the torque corresponding to position 20 is the maximum. The problem can be solved by adjusting the torque adjusting ring to a higher gear.

3) Why are working hours of the same battery pack different?

As mentioned above, if a battery pack has not been used for a long time, its working time shall be shortened, which is the problem of charging times.

After charging and using for several times, this situation shall be improved. In heavy work, for example, screwing large screws into hardwood, the power of the battery pack is fast consumed. Do not charge in the environment below 0°C or above 45°C; otherwise, the performance of the battery pack will also be affected.

Maintenance

Be sure to pull out the plug before any replacement on the machine. Your electric tools need no lubrication or other maintaining. Do not clean your electric tools with water or cleaning agent.

and just wipe it with a piece of dry cloth. Store the tools in a dry environment and keep the air-conditioning vent of motor clean. Try not to use the tools in dusty environment.

In order to lengthen the service life of battery pack, please pay attention to:

- Storage of battery pack: Charge the battery pack with 30% 50% of the power, and store it in the environment below 26°C.
- Fully charge the battery pack once no more than 6 months.





Disposal of waste battery pack



Please recycle or dispose the battery pack properly to protect the natural environment. The battery pack contains lithium batteries. Consult your local waste disposal department for information on recycling and (or) disposal. Use the electric hand drill to drain the battery pack, remove the battery pack, and wrap the port of the pole piece with strong tape to avoid short circuit and leakage. Do not attempt to open or remove any parts.

Environmental protection



Disposal of waste

In order to respond to environment protection policies, machines, accessories and packaging materials damaged must be carefully classified for recycling. In order to facilitate classification and recycling, all plastic parts are marked with material identifications.

适用型号 / Model: 51006A

版本号 / Version No: V_SE_51006A_1014

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