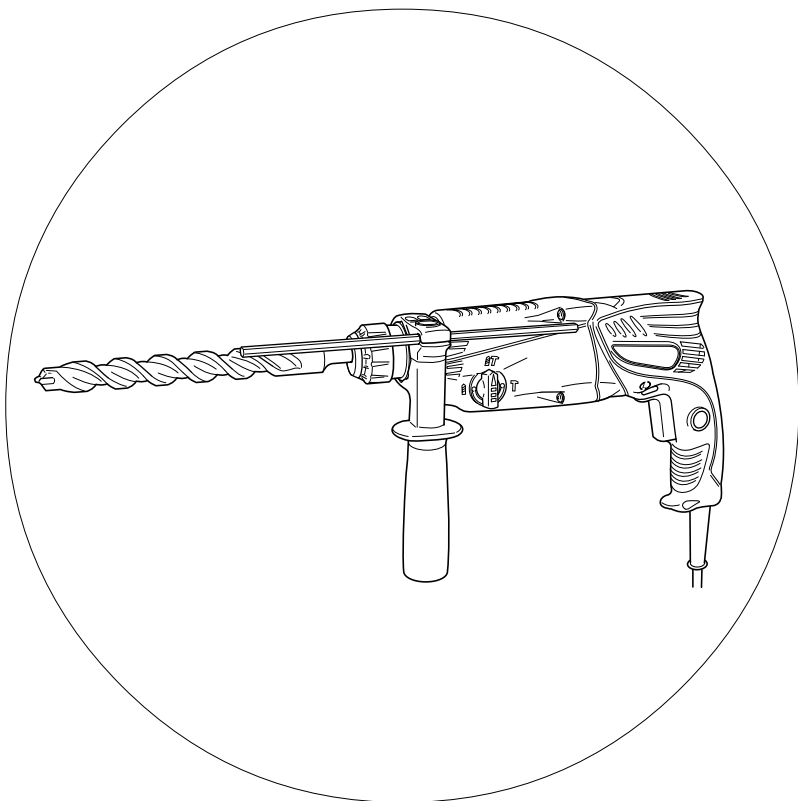


HITACHI

电动锤钻 Rotary Hammer

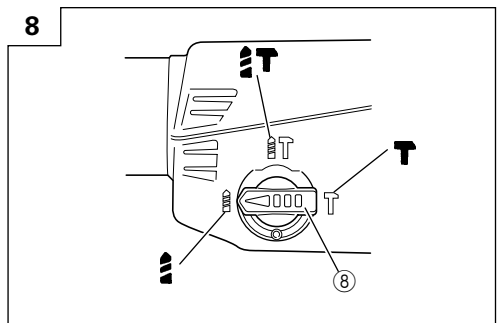
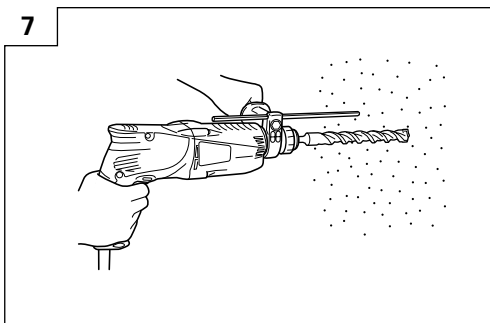
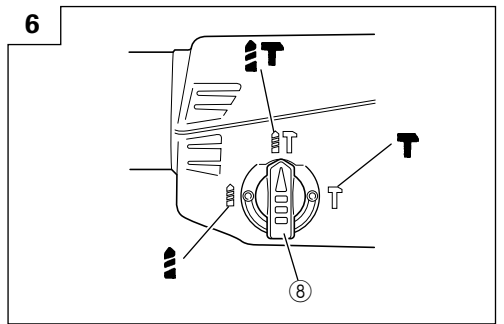
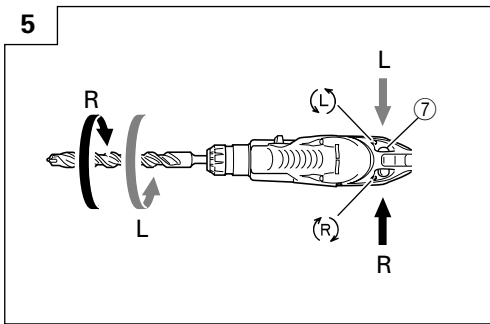
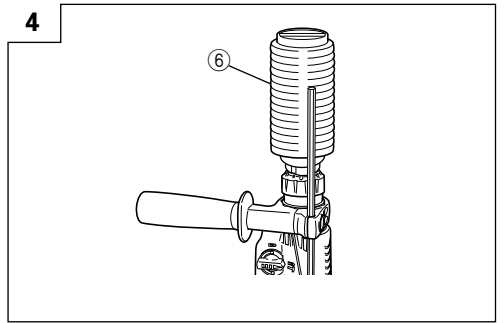
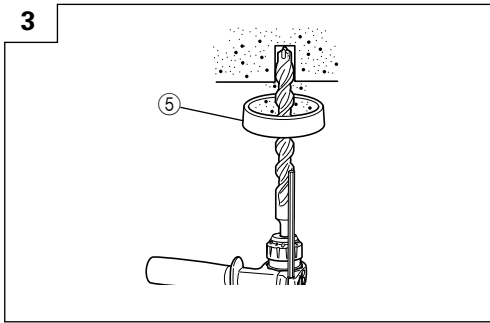
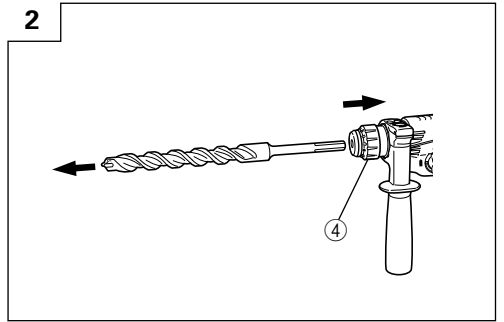
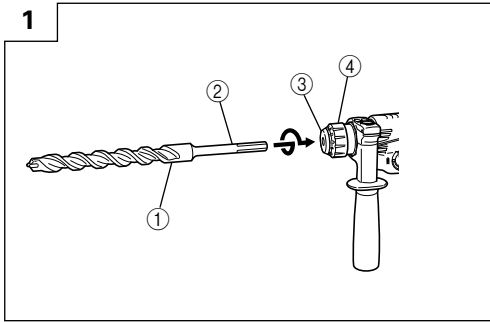
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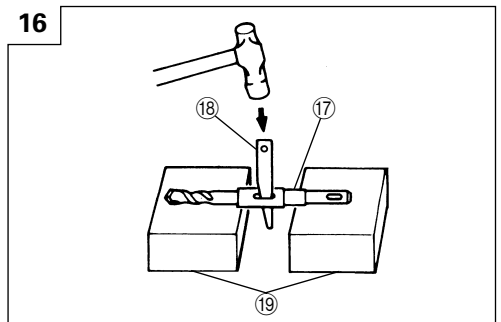
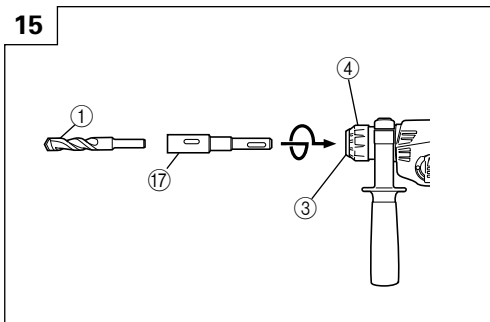
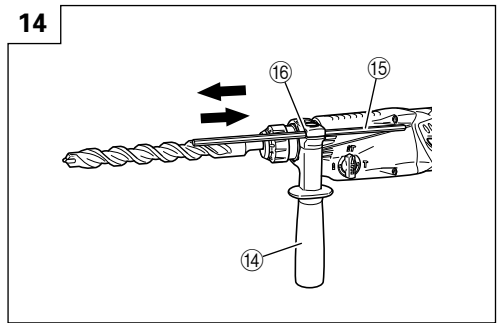
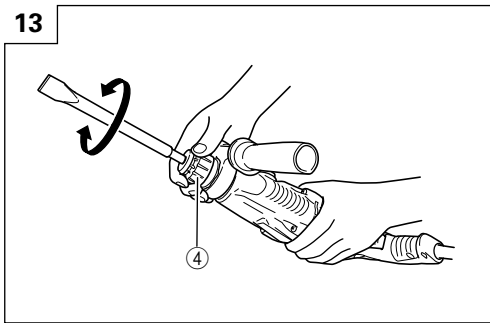
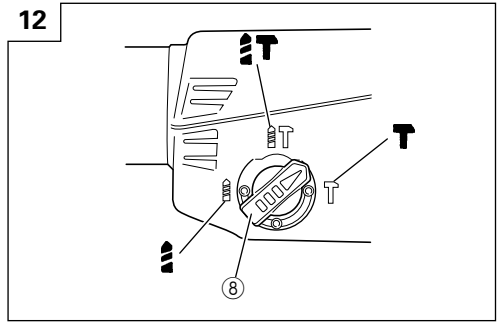
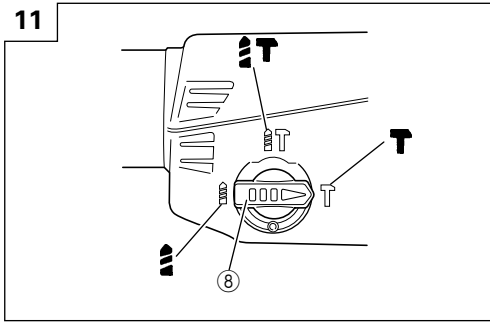
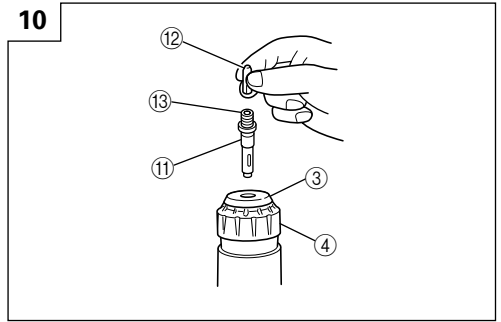
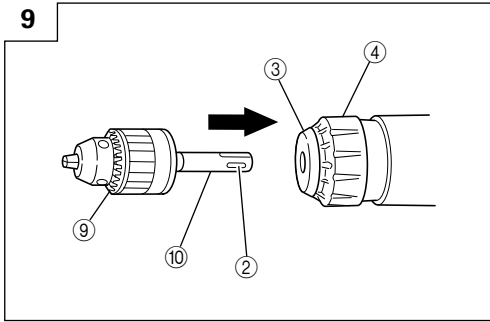
使用说明书
HANDLING INSTRUCTIONS



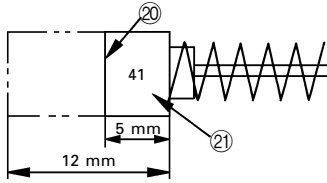
使用前务请详加阅读
Read through carefully and understand these instructions before use.

Hitachi Koki

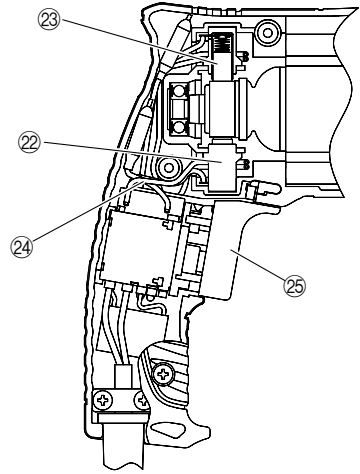




17



18



①	钻头	Drill bit
②	SDS-plus 长柄部	Part of SDS-plus shank
③	前帽	Front cap
④	夹卡	Grip
⑤	防尘杯	Dust cup
⑥	集尘杯(B)	Dust collector (B)
⑦	按钮	Push button
⑧	选择杆	Change lever
⑨	钻头夹盘	Drill chuck
⑩	夹盘附加器	Chuck adapter
⑪	夹盘附加器 (D)	Chuck adapter (D)
⑫	螺丝钻头	Driver bit
⑬	夹紧器	Socket
⑭	侧柄	Side handle
⑮	深度计	Depth gauge
⑯	安装孔	Mounting hole
⑰	锥柄附加器	Taper shank adapter
⑱	制销	Cotter
⑲	台座	Rest
⑳	磨损极限	Wear limit
㉑	碳刷号	No. of carbon brush
㉒	碳刷座	Brush holder
㉓	碳刷	Carbon brush
㉔	内部导线	Internal wiring
㉕	开关	Switch

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) 工作场所

- 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) 避免突然启动。
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、佩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/或将电池盒断开电源。
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) 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。

电动锤钻使用安全警告

1. **戴好耳罩。**
暴露在噪声中会引起听力损伤。
2. **使用随工具提供的辅助手柄。**
操作失手会引起人身伤害。
3. 作业之后的钻头仍处在高热状态下，切不可接触，以免灼伤。
4. 对墙壁、天花板和地板进行钻孔或钻碎作业时，应彻底查明里面是否敷设电缆或导管。
5. 使用锤钻时，应牢牢握住工具的操作柄和侧柄。否则，所产生的反作用力会将孔钻歪，甚至会造成危险。
6. **佩戴防尘口罩**
不要吸入在钻凿操作过程中产生的有害粉尘。粉尘会危机到自身和旁观者的身体健康。

规格

电压（按地区）*	(110V, 115V, 120V, 127V, 220V, 230V, 240V) ~
输入功率	620 W*
空载转速	0-1400转/分
满载冲击率	0-5600次/分
能力：混凝土	3.4-22 mm
钢铁	13 mm
木材	24 mm
重量（不含线缆和侧柄）	2.1 kg

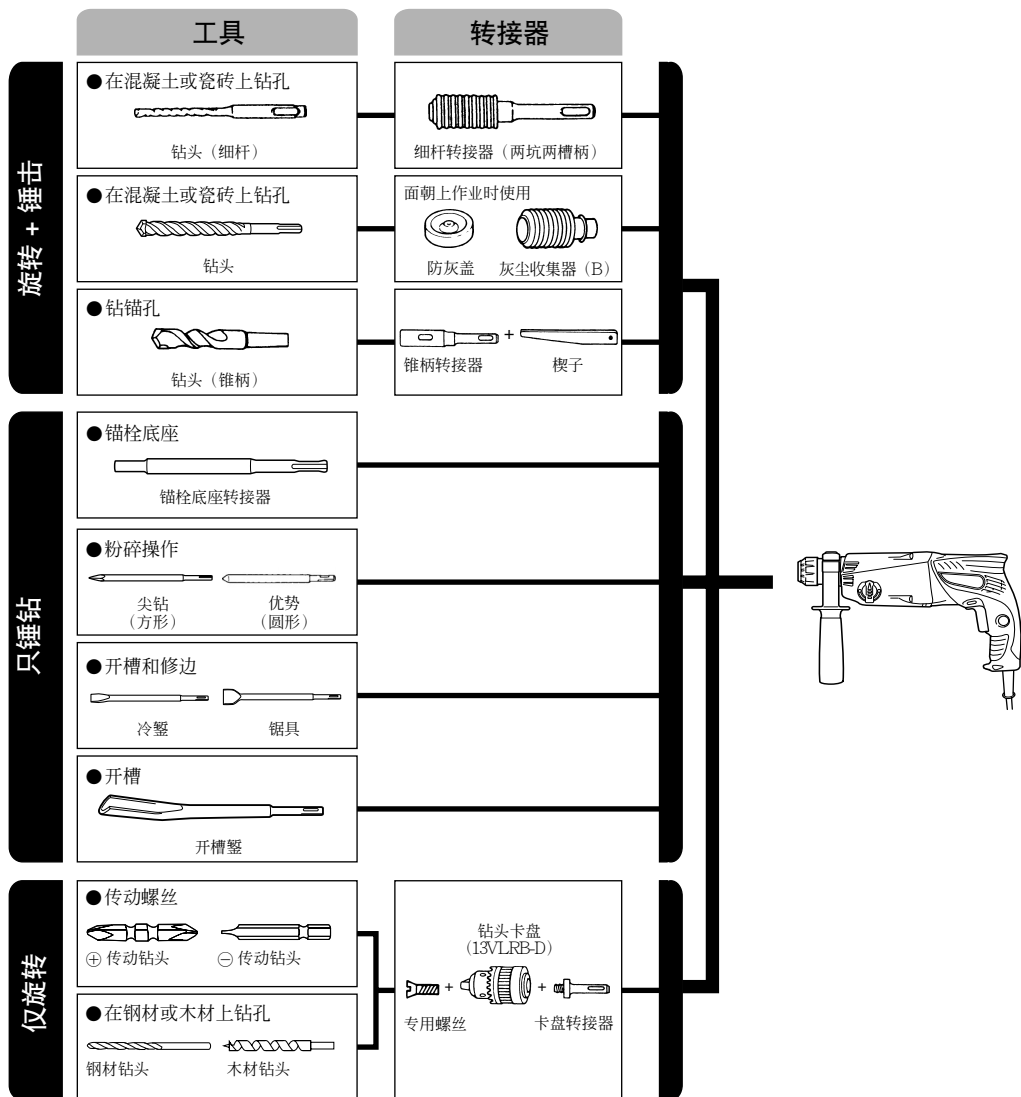
* 当须改变地区时应检查产品上的铭牌。

标准附件

- (1) 塑料盒 1
- (2) 侧柄 1
- (3) 深度计 1

标准附件可能不预先通告而予以更改。

选购附件 (分开销售)



● 在混凝土或瓷砖上钻孔

钻头（细杆）		
外径	整体长度	有效长度
3.4 mm	90 mm	45 mm
3.5 mm		

两坑两槽钻头		
外径	整体长度	有效长度
4.0 mm	110 mm	50 mm
5.0 mm	110 mm	50 mm
	160 mm	100 mm
5.5 mm	110 mm	50 mm
6.5 mm	160 mm	100 mm
7.0 mm	160 mm	100 mm
8.0 mm	160 mm	100 mm
8.5 mm	160 mm	100 mm
9.0 mm	160 mm	100 mm
12.0 mm	166 mm	100 mm
	260 mm	200 mm
12.7 mm	166 mm	100 mm
14.0 mm	166 mm	100 mm
15.0 mm	166 mm	100 mm
16.0 mm	166 mm	100 mm
	260 mm	200 mm
17.0 mm	166 mm	100 mm
19.0 mm	260 mm	200 mm
20.0 mm	250 mm	200 mm
22.0 mm	250 mm	200 mm

● 钻锚孔

锥柄转接器 锥柄模式
1 号莫氏锥柄
2 号莫氏锥柄
A-锥柄
B-锥柄

● 锚栓底座

锚栓底座转接器 锚栓尺寸
W 1/4"
W 5/16"
W 3/8"

选购附件可能不预先通告而予以更改。

用途

旋钻与锤钻

- 钻开锚栓孔
- 对混凝土钻孔
- 对瓷砖钻孔

单纯旋钻

- 对钢材或木材钻孔
(与选购附件匹配使用)
- 旋紧机械螺丝、木螺丝
(与选购附件匹配使用)

单纯锤钻

- 轻凿混凝土、开槽和修边。

作业之前

1. 电源

确认所使用的电源与工具铭牌上标示的规格是否相符。

2. 电源开关

确认电源开关是否切断。若电源开关接通，则插头插入电源插座时电动工具将出其不意地立刻转动，从而招致严重事故。

3. 延伸线缆

若作业场所移到离开电源的地点，应使用容量足够、装合适的延伸线缆，并且要尽可能地短些。

4. 安装钻头（图 1）

注意：

为避免意外事故，请务必关闭开关并拔下电源插头。

注：

当使用尖钻、钻头工具时，请务必使用本公司原装配件。

- (1) 清洁钻头柄。
- (2) 旋转钻头将其插入钻头夹盘直至插锁插紧。（图 1）
- (3) 拉钻头以检查是否完全插紧。
- (4) 卸下钻头时，首先请按箭头所示方向将夹卡完全拉出，然后将钻头从夹卡上拉下。（图 2）

5. 安装集尘杯和集尘器 (B) (选购附件)

(图 3、图 4)

使用电动锤钻进行头上工作时，请装上集尘杯和集尘器(B)，以减少灰尘的掉下，便于操作。

○ 集尘杯的安装方法

请按照图 3 所示方法，将集尘杯装在钻头上使用。使用粗径钻头时，请用本电动锤钻将集尘杯的中心孔开大。

○ 集尘器 (B) 的安装方法

使用集尘器 (B) 时，请将集尘器 (B) 与夹卡上的槽对准后，将集尘器 (B) 从钻头的顶端插进去 (图 4)。

注意：

- 集尘杯和集尘器 (B) 是专门用于混凝土的钻孔，请勿用于金属、木材的钻孔。
- 请将集尘器 (B) 完全插入主机的夹盘部。
- 当集尘器 (B) 与混凝土表面有一段距离的状态下，打开电动锤钻开关进行工作时，集尘器 (B) 会跟钻头同时旋转。因此，请务必将集尘杯紧压在混凝土表面上后再打开开关进行钻孔工作。(如将集尘器 (B) 用于全长 190 mm 以上的钻头时，集尘器 (B) 便无法贴紧混凝土表面而旋转。因此，请将集尘器 (B) 与全长 166 mm、160 mm、110 mm 的钻头配套使用。)
- 每钻 2~3 个孔后，请将粉尘丢掉。
- 更换钻头时，请卸下集尘器 (B) 以后再进行。

6. 选择螺丝钻头

为了避免螺丝头或钻头被损坏，旋螺丝时一定要使用与螺丝直径相配的钻头。

7. 确认钻头的旋转方向 (图 5)

按下按钮右侧时，钻头按顺时针方向旋转 (从后部看)。按下按钮左侧时，钻头按逆时针方向旋转。

使用方法

注意：

在进行钻头及各种零部件的安装、拆卸，中断作业时及作业之后，为防止发生意外事故，请务必关闭开关，从插座拔出插头。

1. 开关的操作

钻头的转速可以靠改变触发开关的拉动量来控制。轻拉触发开关，转速低；稍用力拉开关，转速增高。拉动触发开关后再按下停止销的话，便可进行连续作业。若想关掉触发开关，请再次拉动触发开关，以使停止销松开并使触发开关回到其起始位置。

然而，倒转时只能将触发开关拉出一半，旋转速度为正常旋转时的约一半。

另外，倒转时不能使用开关止动器。

2. 旋钻 + 锤钻

将转换控制杆转动到  标志处 (图 6) 即可将本冲击电钻模式设置为旋转加锤击。

(1) 安装钻头。

(2) 将钻头尖端放在钻孔位置，然后拉动触发开关。(图 7)

(3) 使用电动锤钻进行作业时，不需要用力推压。只要稍加按压，让钻碎的粉尘徐徐排即可。

注意：

钻头碰到建筑物的钢筋时会立即停止转动。但电动锤钻又将随即转动 (如图 7)，因此，必需握紧侧柄和操作柄。

3. 旋钻

将转换控制杆转动到  标志处 (图 8) 即可将本冲击电钻模式设置为仅旋转。

用配备的钻头夹盘和夹盘附加器 (选购附件) 钻木材或金属时，请按下列程序操作。

安装钻头夹盘和夹盘附加器：(图 9)

(1) 将钻头夹盘装配在夹盘附加器上。

(2) SDS-plus 长柄与钻头相同。因此，装配 SDS-plus 长柄时，请参照“安装钻头”处的说明。

注意：

- 过分用力不仅无助于作业，而且会损坏钻头的刀尖，缩短钻头的寿命。
- 从钻孔中抽出钻头时，电动锤钻可能会折断，所以抽出时必须小心。
- 不要在单旋钻的功能下用锤钻钻锚孔或在混凝土上钻孔。
- 装有钻头夹盘和夹盘附加器时，不要在旋钻加锤击的功能下使用电动锤钻，这会严重缩短机器各个部件的寿命。

4. 旋机械螺丝时 (图 10)

首先把钻头插入夹盘附加器(D)端部的夹紧器中。然后,按 4 (1), (2), (3), 中所描述的步骤把夹盘附加器(D)装在主机上,然后将钻头的刃尖放入螺丝头部的槽内,抓紧主机,旋紧螺丝。

注意:

- 注意不要过分加长旋螺丝的时间,否则,过大的力会损坏螺丝。
- 旋螺丝时,电动锤钻要垂直对准螺丝头,否则,螺丝头或钻头会受损,或者旋转力不能被完全传给螺丝。
- 装有钻头和夹盘附加器时,不要在旋钻加锤击的功能下使用电动锤钻。

5. 旋木螺丝时 (图 10)

(1) 选择适当的钻头

如果可能的话,请尽量使用十字头螺丝,因为钻头很容易滑出一字头螺丝的槽。

(2) 旋木螺丝

- 在旋木螺丝之前,在木板上开适当的先导孔,然后把钻头放入螺丝头部的槽内,缓缓地将螺丝旋进孔内。
- 低速转动电动锤钻一会儿直到木螺丝被旋进木板一部分,然后更紧地握住触发开关以便得到最佳旋转力。

注意:

在为木螺丝准备先导孔时,应特别注意木板的硬度。如果孔极小或极浅,用较大的力将螺丝旋进孔的话,有时会损坏木螺丝的螺纹。

6. 只锤钻

将选择杆转至“**T**”标记处,电动锤钻能以单纯锤钻模式工作。(图 11)

- (1) 安装尖钻或冷镦。
- (2) 将选择杆转至“**T**”标记和“**T**”标记的中间。(图 12)
松开旋钮,转动夹卡将冷镦调到所需的位置。(图 13)
- (3) 将选择杆转至“**T**”标记处。(图 11)
锁定尖钻或冷镦。

7. 使用深度计 (图 14)

- (1) 旋松侧柄的圆头螺丝,把深度计插进侧柄上的安装孔。
- (2) 按孔深调节深度计的位置,然后旋紧圆头螺栓。

8. 钻头 (锥柄) 和锥柄附加器的使用

- (1) 把锥柄附加器安装在电动锤钻上。(图 15)
- (2) 把钻头 (锤柄) 安装在锤柄附加器上。(图 15)
- (3) 接通开关,按预定深度钻开一个孔口。
- (4) 拆卸钻头时,可将制销插入锥柄附加器的缝隙,把钻头放在台座上,用锥子敲打制销头部。(图 16)

润滑

此一电动锤钻应使用低粘度滑脂。这样,可长时间使用而无需更换滑脂。若滑脂因螺钉松开而漏泄,应与最近的服务站联系,商询更换事宜。

如果在滑脂缺少的状态下继续使用,电动锤钻就会卡住,并因而缩短使用寿命。

注意:

此锤钻必需使用指定的滑脂,切不可随便使用其他滑脂,以免发生各种不利影响。具体上,请商询服务站加以确认。

维护和检查

1. 检查钻头

使用迟钝的钻头,将使电动机工作失常,并降低作业效率。因此,若钻头发现显著的磨损,应立即更换新件,或加以磨快。

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。

3. 电动机的维护

电动机绕线是电动工具的“心脏部”应仔细检查有无损伤,是否被油液或水沾湿。

4. 检查碳刷 (图 17)

马达使用碳刷,它是消耗部品,因为使用过久的碳刷将会导致马达故障,用具有相同碳刷号的新碳刷去更换旧的,碳刷编号用数字表示碳刷何时用旧或接近于磨损极限,此外,要经常保持碳刷清洁以及保证它在刷握里能自由滑动。

5. 更换碳刷 (图 18)

- 拆卸
 - (1) 松开手柄盖上的三个螺丝,拆下手柄盖。
 - (2) 取出碳刷搁放架的碳刷,注意不要强拉碳刷搁放架中的导线。

- (3) 抽出刷子端头，从碳刷搁放架上卸下碳刷。
- 重新装上
- (1) 将新的碳刷放入碳刷搁放架，连接刷子端头和碳刷。
- (2) 按图 18 所示把碳刷搁放架和其他部件放回原位。
- (3) 把导线放於指定位置，注意不要让导线碰到电机的转子或其他转动部分。
- (4) 盖上手柄盖，注意不要压住导线，然後旋紧三个螺丝。

注意：

如果导线被手柄盖压住或者碰到电机的转子或转动部分时，操作者有触电的危险-在拆卸和安装电机时要极其小心，严格按上面的步骤操作。不要拆卸那些与更换碳刷无关的部件。

6. 维修零部件一览表

注意：

日立牌电动工具的维修、改造和检查须由经日立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日立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。

● 供电电缆线

本电动工具应采用性能不低于重型氯丁橡胶 245IEC66 (YCW) 型电缆线更换。

改造：

日立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。

注：

为求改进，本手册所载规格可能不预先通告而予以更改。

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) 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.

ROTARY HAMMER SAFETY WARNINGS

1. **Wear ear protectors.**
Exposure to noise can cause hearing loss.
2. **Use auxiliary handles supplied with the tool.**
Loss of control can cause personal injury.
3. Do not touch the bit during or immediately after operation. The bit becomes very hot during operation and could cause serious burns.
4. Before starting to break, chip or drill into a wall, floor or ceiling, thoroughly confirm that such items as electric cables or conduits are not buried inside.
5. Always hold the body handle and side handle of the power tool firmly. Otherwise the counterforce produced may result in inaccurate and even dangerous operation.
6. **Wear a dust mask**
Do not inhale the harmful dusts generated in drilling or chiseling operation. The dust can endanger the health of yourself and bystanders.

SPECIFICATIONS

Voltage (by areas)*	(110V, 115V, 120V, 127V, 220V, 230V, 240V) ~
Power Input	620 W*
No-load speed	0 – 1400/min.
Full-load impact rate	0 – 5600/min.
Capacity: concrete	3.4 – 22 mm
steel	13 mm
wood	24 mm
Weight (without cord and side handle)	2.1 kg

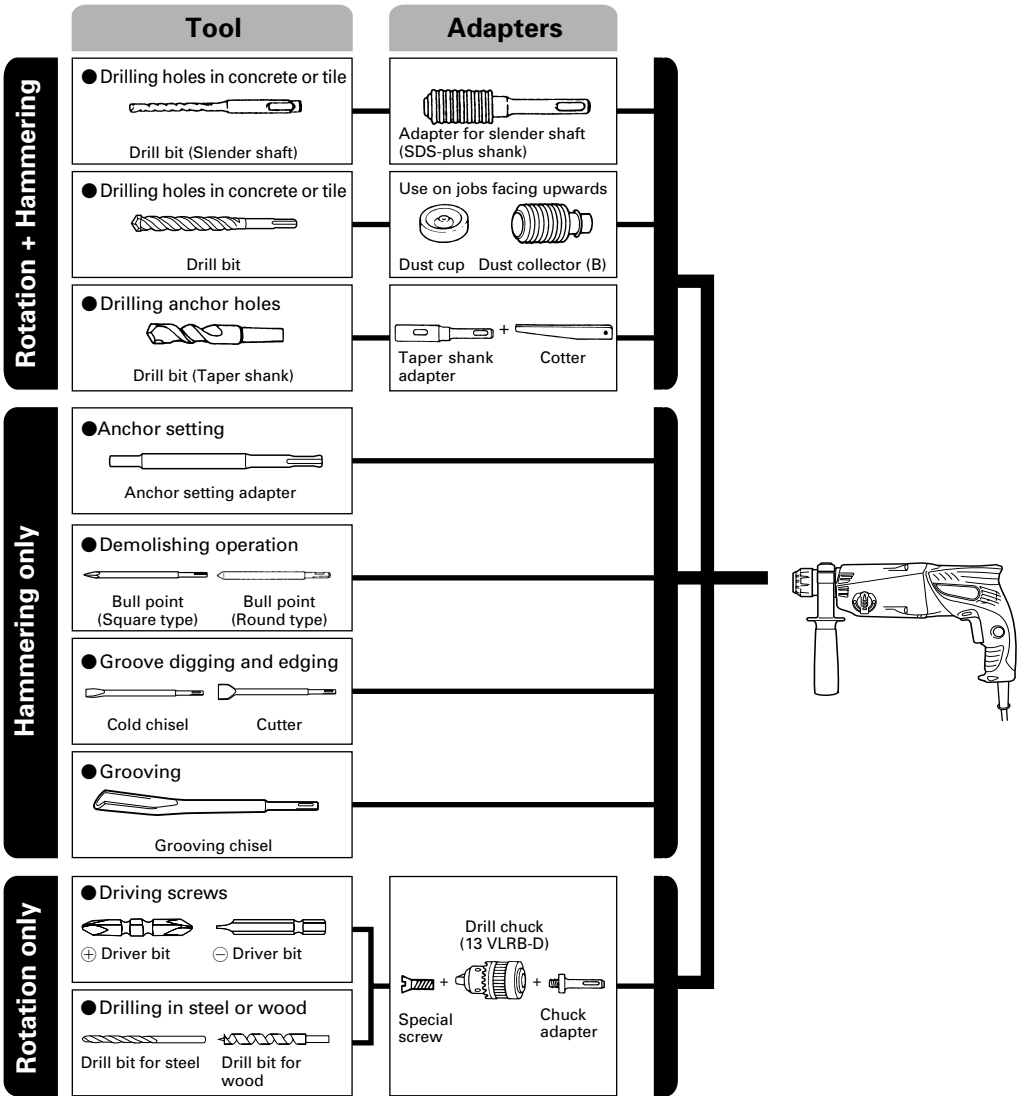
*Be sure to check the nameplate on product as it is subject to change by areas.

STANDARD ACCESSORIES

- (1) Plastic case 1
(2) Side handle 1
(3) Depth gauge 1

Standard accessories are subject to change without notice.

OPTIONAL ACCESSORIES (sold separately)



● Drilling holes in concrete or tile

Drill bit (slender shaft)		
Outer diameter	Overall length	Effective length
3.4 mm	90 mm	45 mm
3.5 mm		

SDS-plus Drill bit		
Outer diameter	Overall length	Effective length
4.0 mm	110 mm	50 mm
5.0 mm	110 mm	50 mm
	160 mm	100 mm
5.5 mm	110 mm	50 mm
6.5 mm	160 mm	100 mm
7.0 mm	160 mm	100 mm
8.0 mm	160 mm	100 mm
8.5 mm	160 mm	100 mm
9.0 mm	160 mm	100 mm
12.0 mm	166 mm	100 mm
	260 mm	200 mm
12.7 mm	166 mm	100 mm
14.0 mm	166 mm	100 mm
15.0 mm	166 mm	100 mm
16.0 mm	166 mm	100 mm
	260 mm	200 mm
17.0 mm	166 mm	100 mm
19.0 mm	260 mm	200 mm
20.0 mm	250 mm	200 mm
22.0 mm	250 mm	200 mm

● Drilling anchor holes

Taper shank adapter Taper mode
Morse taper No.1
Morse taper No.2
A-taper
B-taper

● Anchor setting

Anchor setting adapter Anchor size
W 1/4"
W 5/16"
W 3/8"

Optional accessories are subject to change without notice.

APPLICATIONS

Rotation and hammering function

- Drilling anchor holes
- Drilling holes in concrete
- Drilling holes in tile

Rotation only function

- Drilling in steel or wood (with optional accessories)
- Tightening machine screws, wood screws (with optional accessories)

Hammering only function

- Light-duty chiselling of concrete, groove digging and edging.

PRIOR TO OPERATION

1. Power source

Ensure that the power source to be utilized conforms to the power requirements specified on the product nameplate.

2. Power switch

Ensure that the power switch is in the OFF position. If the plug is connected to a power receptacle while the power switch is in the ON position, the power tool will start operating immediately, which could cause a serious accident.

3. Extension cord

When the work area is removed from the power source, use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as practicable.

4. Mounting the drill bit (Fig. 1)

CAUTION:

To prevent accidents, make sure to turn the switch off and disconnect the plug from the receptacle.

NOTE:

When using tools such as bull points, drill bits, etc., make sure to use the genuine parts designated by our company.

- (1) Clean the shank portion of the drill bit.
 - (2) Insert the drill bit in a twisting manner into the tool holder until it latches itself. (Fig. 1)
 - (3) Check the latching by pulling on the drill bit.
 - (4) To remove the drill bit, fully pull the grip in the direction of the arrow and pull out the drill bit. (Fig. 2)
- 5. Installation of dust cup or dust collector (B) (Optional accessories) (Fig. 3, Fig. 4)**

When using a rotary hammer for upward drilling operations attach a dust cup or dust collector (B) to collect dust or particles for easy operation.

- Installing the dust cup
Use the dust cup by attaching to the drill bit as shown in Fig. 3.

When using a bit which has big diameter, enlarge the center hole of the dust cup with this rotary hammer.

- Installing dust collector (B)
When using dust collector (B), insert dust collector (B) from the tip of the bit by aligning it to the groove on the grip. (Fig. 4)

CAUTION:

- The dust cup and dust collector (B) are for exclusive use of concrete drilling work. Do not use them for wood or metal drilling work.

- Insert dust collector (B) completely into the chuck part of the main unit.
 - When turning the rotary hammer on while dust collector (B) is detached from a concrete surface, dust collector (B) will rotate together with the drill bit. Make sure to turn on the switch after pressing the dust cup on the concrete surface. (When using dust collector (B) attached to a drill bit that has more than 190 mm of overall length, dust collector (B) cannot touch the concrete surface and will rotate. Therefore please use dust collector (B) by attaching to drill bits which have 166 mm, 160 mm, and 110 mm overall length.)
 - Dump particles after every two or three holes when drilling.
 - Please replace the drill bit after removing dust collector (B).
- 6. Selecting the driver bit**
Screw heads or bits will be damaged unless a bit appropriate for the screw diameter is employed to drive in the screws.
- 7. Confirm the direction of bit rotation (Fig. 5)**
The bit rotates clockwise (viewed from the rear side) by pushing the R-side of the push button. The L-side of the push button is pushed to turn the bit counterclockwise.

HOW TO USE

CAUTION:

To prevent accidents, make sure to turn the switch off and disconnect the plug from the receptacle when the drill bits and other various parts are installed or removed. The power switch should also be turned off during a work break and after work.

1. Switch operation

The rotation speed of the drill bit can be controlled steplessly by varying the amount that the trigger switch is pulled. Speed is low when the trigger switch is pulled slightly and increases as the switch is pulled more. Continuous operation may be attained by pulling the trigger switch and depressing the stopper. To turn the switch OFF, pull the trigger switch again to disengage the stopper, and release the trigger switch to its original position. However, the switch trigger can only be pulled in halfway during reverse and rotates at half the speed of forward operation.

The switch stopper is unusable during reverse.

2. Rotation + hammering

This rotary hammer can be set to rotation and hammering mode by turning the change lever to the **T** mark (Fig. 6).

- (1) Mount the drill bit.
- (2) Pull the trigger switch after applying the drill bit tip to the drilling position. (Fig. 7)
- (3) Pushing the rotary hammer forcibly is not necessary at all. Pushing slightly so that drill dust comes out gradually is sufficient.

CAUTION:

When the drill bit touches construction iron bar, the bit will stop immediately and the rotary hammer will react to revolve. Therefore grip the side handle and handle tightly as shown in Fig. 7.

3. Rotation only

This rotary hammer can be set to rotation only mode by turning the change lever to the **⚡** mark (Fig. 8). To drill wood or metal material using the drill chuck and chuck adapter (optional accessories), proceed as follows.

Installing drill chuck and chuck adapter: (Fig. 9)

- (1) Attach the drill chuck to the chuck adapter.
- (2) The part of the SDS-plus shank is the same as the drill bit. Therefore, refer to the item of "Mounting the drill bit" for attaching it.

CAUTION:

- Application of force more than necessary will not only expedite the work, but will deteriorate the tip edge of the drill bit and reduce the service life of the rotary hammer in addition.
- Drill bits may snap off while withdrawing the rotary hammer from the drilled hole. For withdrawing, it is important to use a pushing motion.
- Do not attempt to drill anchor holes or holes in concrete with the machine set in the rotation only function.
- Do not attempt to use the rotary hammer in the rotation and hammering function with the drill chuck and chuck adapter attached. This would seriously shorten the service life of every component of the machine.

4. When driving machine screws (Fig. 10)

First, insert the bit into the socket in the end of chuck adapter (D).

Next, mount chuck adapter (D) on the main unit using procedures described in 4 (1), (2), (3), put the tip of the bit in the slots in the head of the screw, grasp the main unit and tighten the screw.

CAUTION:

- Exercise care not to excessively prolong driving time, otherwise, the screws may be damaged by excessive force.
- Apply the rotary hammer perpendicularly to the screw head when driving the screw; otherwise, the screw head or bit will be damaged, or driving force will not be fully transferred to the screw.
- Do not attempt to use the rotary hammer in the rotation and hammering function with the chuck adapter and bit attached.

5. When driving wood screws (Fig. 10)

- (1) Selecting a suitable driver bit

Employ cross-recessed screws, if possible, since the driver bit easily slips off the heads of slotted-head screws.

- (2) Driving in wood screws

- Prior to driving in wood screws, make pilot holes suitable for them in the wooden board. Apply the bit to the screw head grooves and gently drive the screws into the holes.
- After rotating the rotary hammer at low speed for a while until the wood screw is partly driven into the wood, squeeze the trigger more strongly to obtain the optimum driving force.

CAUTION:

Exercise care in preparing a pilot hole suitable for the wood screw taking the hardness of the wood into consideration. Should the hole be excessively small or shallow, requiring much power to drive the screw into it, the thread of the wood screw may sometimes be damaged.

6. Hammering only

This rotary hammer can be set to hammering only mode by turning the change lever to the **T** mark (Fig. 11).

- (1) Mount the bull point or cold chisel.
- (2) Set the change lever to middle of **T** mark and **T** mark (Fig. 12).

The rotation is released, turn the grip and adjust the cold chisel to desired position. (Fig. 13)

- (3) Turn the change lever to **T** mark. (Fig. 11)
Then bull point or cold chisel is locked.

7. Using depth gauge (Fig. 14)

- (1) Loosen the knob on the side handle, and insert the depth gauge into the mounting hole on the side handle.
- (2) Adjust the depth gauge position according to the depth of the hole and tighten the knob securely.

8. How to use the drill bit (taper shank) and the taper shank adapter

- (1) Mount the taper shank adapter to the rotary hammer. (Fig. 15)
- (2) Mount the drill bit (taper shank) to the taper shank adapter. (Fig. 15)
- (3) Turn the switch ON, and drill a hole in prescribed depth.
- (4) To remove the drill bit (taper shank), insert the cotter into the slot of the taper shank adapter and strike the head of the cotter with a hammer supporting on a rests. (Fig. 16)

LUBRICATION

Low viscosity grease is applied to this rotary hammer so that it can be used for a long period without replacing the grease. Please contact the nearest service center for grease replacement when any grease is leaking from loosened screw.

Further use of the rotary hammer with lock off grease will cause the machine to seize up reduce the service life.

CAUTION:

A special grease is used with this machine, therefore, the normal performance of the machine may be badly affected by use of other grease. Please be sure to let one of our service agents undertake replacement of the grease.

MAINTENANCE AND INSPECTION

1. Inspecting the drill bits

Since use of a dull tool will cause motor malfunctioning and degraded efficiency, replace the drill bit with new ones or resharpen them without delay when 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. 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. Inspecting the carbon brushes (Fig. 17)

The motor employs carbon brushes which are consumable parts. Since an excessively worn carbon brush can result in motor trouble, replace the carbon brush with a new one having the same carbon brush No. shown in the figure when it becomes worn to or near the "wear limit". In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.

5. Replacing a carbon brush (Fig. 18)

○ Disassembling

- (1) Loosen the three screws on the handle cover, and remove the handle cover.
- (2) Lift out the brush holder together with the carbon brush, while being very careful not to forcibly pull the lead wires within the brush holder.
- (3) Withdraw the brush terminal, and remove the carbon brush from the brush holder.

○ Reassembling

- (1) Place a new carbon brush into the brush holder, and connect the brush terminal to the carbon brush.
- (2) Return the brush holder and other parts to their original positions, as illustrated in Fig. 18.
- (3) Place the lead wire in the specified position. Be very careful not to allow the lead wire to contact the armature or rotating parts of the motor.
- (4) Replace the handle cover, while being careful to ensure it does not pinch the lead wire, and secure it firmly with the three screws.

CAUTION

Should the lead wire be pinched by the handle cover or come in contact with the armature or rotating parts of the motor, a serious danger of electric shock to the operator will be created. Exercise extreme caution in disassembling and reassembling the motor, following the above procedures exactly. Do not attempt to disassemble any parts other than those necessary to effect replacement of the carbon brush.

6. Service parts list

CAUTION

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

This Parts List will be helpful if presented with the tool to the Hitachi 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.

● Power supply cable

In case you need replacing of power supply cable, use the heavy polychloroprene sheathed flexible cable 245IEC66 (YCW) or equivalent.

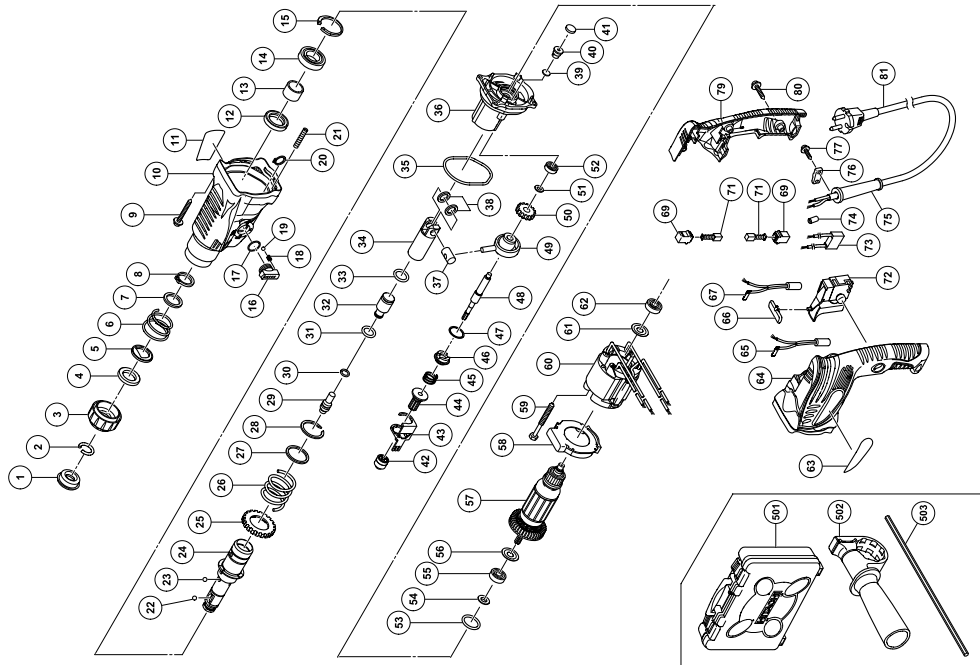
MODIFICATIONS

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

Accordingly, some parts may be changed without prior notice.

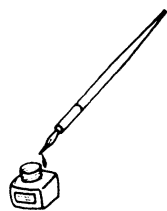
NOTE:

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



Item No.	Part Name	Q'TY
1	FRONT CAP	1
2	STOPPER RING	1
3	GRIP	1
4	BALL HOLDER	1
5	HOLDER PLATE	1
6	HOLDER SPRING	1
7	WASHER (B)	1
8	RETAINING RING FOR D20 SHAFT	1
9	TAPPING SCREW (W/FLANGE) D4x30	4
10	GEAR COVER	1
11	NAME PLATE	1
12	OIL SEAL	1
13	SLEEVE	1
14	BALL BEARING	1
15	RETAINING RING 37MM	1
16	CHANGE LEVER	1
17	SPRING (H)	1
18	O-RING	1
19	STEEL BALL D3.97	1
20	RETAINING RING FOR D15SHAFT	1
21	SPRING (C)	1
22	STEEL BALL D7	1
23	STEEL BALL D5.55	3
24	CYLINDER	1
25	SECOND GEAR	1
26	SPRING (A)	1
27	WASHER (A)	1
28	RETAINING RING D28	1
29	SECOND HAMMER	1
30	O-RING (B)	1
31	O-RING (A)	1
32	STRIKER	1
33	O-RING (A)	1
34	PISTON	1
35	O-RING (A)	1
36	INNER COVER	1
37	PISTON PIN	1
38	WASHER (C)	2
39	FELT PACKING (A)	1
40	VALVE	1
41	FELT PACKING (B)	1
42	PINION SLEEVE	1
43	LOCK PLATE	1
44	SECOND PINION	1
45	CLUTCH SPRING	1

Item No.	Part Name	Q'TY
46	CLUTCH	1
47	WASHER	1
48	SECOND SHAFT	1
49	RECIPRO BEARING	1
50	FIRST GEAR	1
51	WASHER (B) D12.5	1
52	BALL BEARING 62x6VVC2	1
53	O-RING	1
54	FRINGER	1
55	BALL BEARING 609DDC3PS2-L	1
56	WASHER (A)	1
57	ARMATURE	1
58	FANGUIDE	1
59	HEX. HD. TAPPING SCREW D4x45	2
60	STATOR	1
61	WASHER (A)	1
62	BALL BEARING 608VVC2	1
63	HITACHI LABEL	1
64	HOUSING	1
65	CHOKE COIL (A)	1
66	PUSH BUTTON	1
67	CHOKE COIL (A)	1
69	BRUSH HOLDER	2
71	CARBON BRUSH	2
72	SWITCH	1
73	NOISE SUPPRESSOR	1
74	TUBE (D)	1
75	CORD ARMOR	1
76	CORD CLIP	1
77	TAPPING SCREW (W/FLANGE) D4x16	2
79	HANDLE COVER	1
80	TAPPING SCREW (W/FLANGE) D4x20	3
81	CORD	1
501	CASE	1
502	SIDE HANDLE	1
503	DEPTH GAUGE	1



服务中心

日立工机商业（中国）有限公司

上海市长宁区遵义路100号

虹桥上海城B栋2686 - 2689室

制造商

福建日立工机有限公司

福建省福州市福兴投资区

 **Hitachi Koki Co., Ltd.**

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