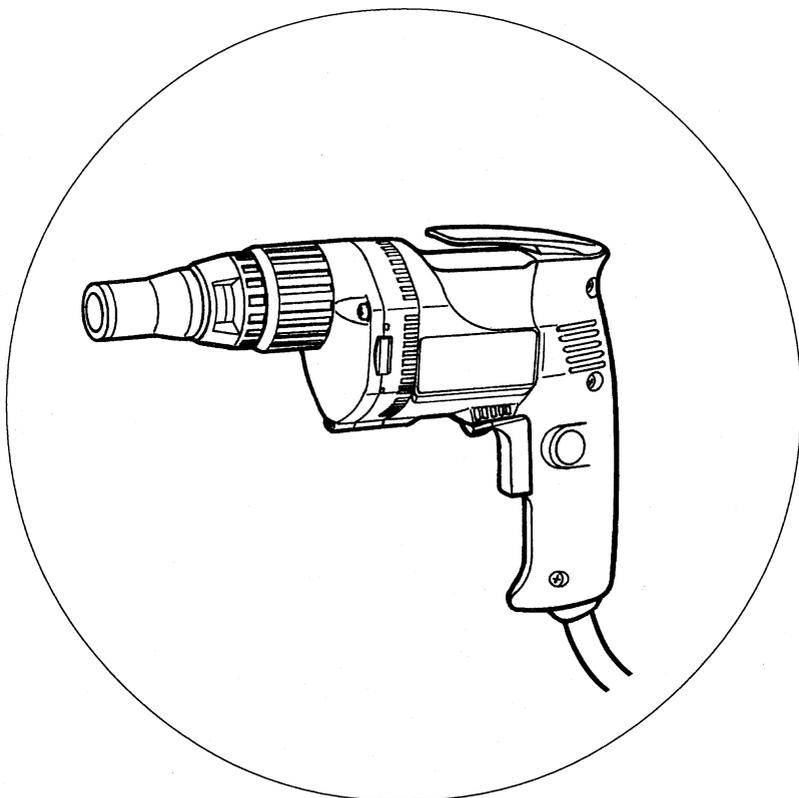


HITACHI

日立牌螺丝起子机 SCREW DRIVER

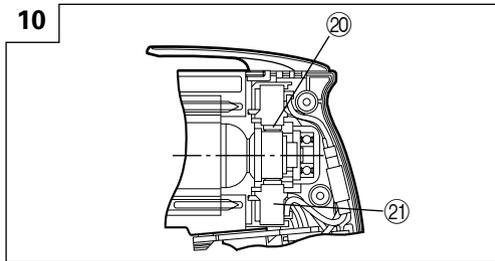
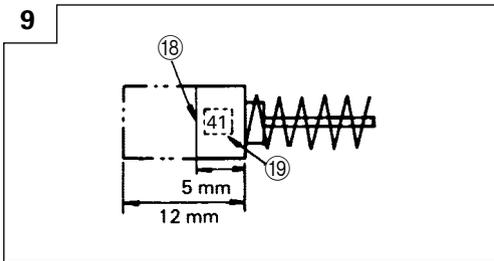
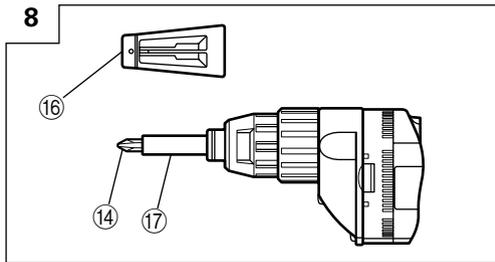
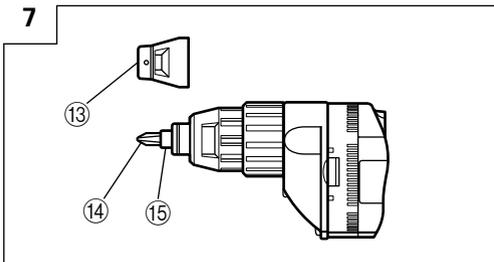
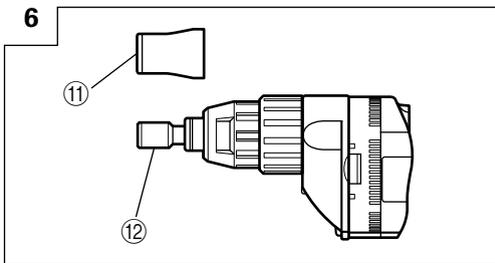
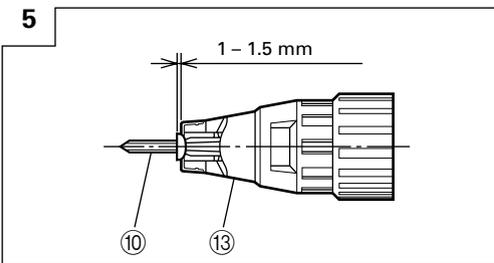
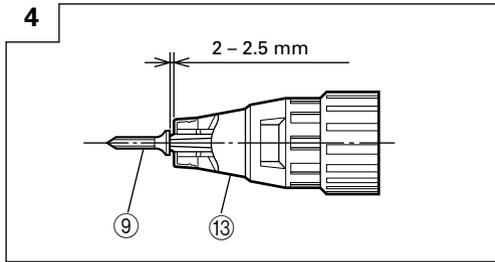
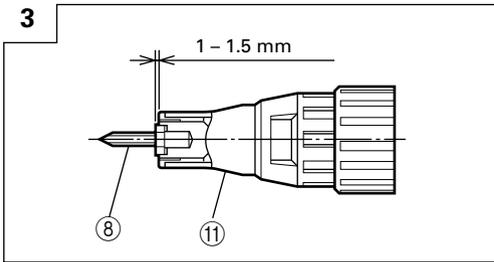
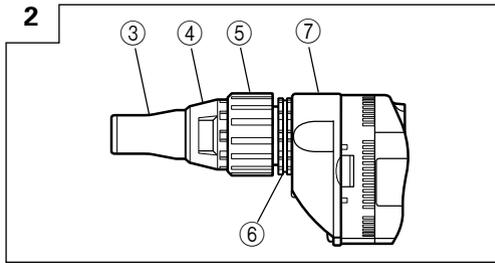
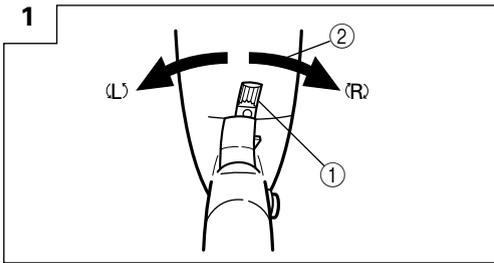
W 6VB2 • W 8VB

使用说明书
Handling instruction



使用前务请详加阅读

Read through carefully and understand these instructions before use.



①	拉杆	Lever
②	R 侧	R side
③	副制动器	Sub-Stopper
④	定位器	Locator
⑤	锁定套	Lock sleeve
⑥	止转楔	Spline
⑦	齿轮罩	Gear cover
⑧	六角头螺丝	Hex. head screw
⑨	清水墙螺丝	Drywall screw
⑩	自钻螺丝	Self-drilling screw
⑪	副制动器 (B)	Sub-Stopper (B)
⑫	磁性六角座	Magnetic hex. socket
⑬	副制动器 (A)	Sub-Stopper (A)
⑭	钻头	Bit
⑮	钻头座 (短型)	Bit holder (Short type)
⑯	副制动器 (C)	Sub-Stopper (C)
⑰	钻头座	Bit holder
⑱	磨损极限	Wear limit
⑲	碳刷号	No. of carbon brush
⑳	碳刷	Carbon brush
㉑	碳刷座	Brush holder

作业上的一般注意事项

警告! 当使用电动工具时, 为了减少造成火灾、电击和人身伤害, 必须时刻遵守基本注意事项, 以及下述操作注意事项。

在操作本机之前, 请通读本说明书, 并予以妥善保管。

安全操作注意事项:

1. 工作场所应打扫干净, 清理妥当, 杂乱无章将导致事故。
2. 确保妥适的作业环境。电动工具不可任其风吹雨打。不得在潮湿的地方作业。工作场所需保持充分的亮度。请勿在有可能造成火灾或爆炸的地方使用电动工具。
3. 谨防触电事故。应避免身体同大地或接地表面不可让访客触摸电动工具或延伸线缆接触(例如: 管道、散热器、炉灶、冰箱等)
4. 不可让孩童靠近工作场所。与作业无关的访客也必须保持安全距离。
5. 不使用的电动工具应存放于干燥而孩童伸手不可及的高处, 并加锁保管。
6. 不得使劲用力推压。电动工具需按设计条件才能有效而安全地工作, 绝不可勉强。
7. 妥适使用工具。不可用小型工具或附件去干重活。不可用于规定外的作业。举例说, 用圆锯进行伐木打枝或原木锯切作业。
8. 工作时衣服穿戴要合适。不要让松散的衣角和宝石类卷入转动部份。屋外作业时, 最好手戴橡胶手套, 脚穿防滑胶鞋。同时要戴上能够罩笼长发的工作帽。
9. 绝大多数的电动工具作业时, 均需戴安全眼镜。进行粉尘飞扬的切削作业时, 需戴防尘面罩。
10. 连接除尘设备
如果提供连击除尘和集尘的设备, 请确认是否已经连接好并且使用正常。
11. 不要拿电线提起电动工具, 也不得拉扯电线从电源插座拆除插头。电线需从热源和油液隔开, 并避免与锐利的边缘接触。
12. 作业以安全第一为原则。工件要用夹具或台钳卡紧。这样做, 比用手按压更为可靠, 也能够让双手专心操作。
13. 作业时脚步要站稳, 身体姿势要保持平衡。
14. 工具应维护妥善, 经常保持锋利、清洁才能充分发挥性能, 落实作业安全的要求。应按规定加注润滑脂、更换附件。线缆应定期检查, 如发现损伤应立即委托专业性的服务单位加以修复。延伸电缆如有损伤应予更换。手柄要保持干燥, 并防止沾附油脂类。
15. 不使用时, 维修前以及更换附件(如: 刀具、钻头、锯具等)之前, 都必须拆卸电源插头才行。
16. 开动前务必把调整用键和扳手类拆除下来。这一点与安全有关。应养成习惯, 严格遵守。
17. 谨防误开动。插头一插上电源插座, 插头就不能随便接触电源开关。插接电源之前, 应先确认: 开关是否切断。
18. 屋外延伸线缆的使用。屋外作业时, 必须使用专用的延伸线缆。
19. 保持高度警觉, 充分掌握情况, 以正常的判断力从事作业。疲惫时切不可开动电动工具。
20. 检查损坏部件。在继续使用电动工具之前, 应详细检查各部零件以及防护装置有无损坏, 以便判断具能否正常工作, 能否发挥正常效能。检查转动部份的对准、空转、各零件有无异常, 安装是否妥善以及其它足以给工作带来不良影响的情况。如防护以及其它零件损伤了。除非本说明书中已有记载否则应立即委托服务中心进行妥善修理或更换。开关一旦发现缺陷, 应立即委托服务中心加以更换。如开关不能正常地接通或切断, 绝不可使用该电动工具。
21. 警告
使用非本说明书中的推荐的附件可能有发生人身损害的危险。
22. 本工具必须委托有资格的维修人员进行维修。本电动工具满足相关的安全要求。维修必须由专业人员使用纯正配件来进行。否则有可能会给用户造成人身损害。

规格

型式	W6VB2	W8VB
电压 (按地区)*	(110 伏, 115 伏, 120 伏, 127 伏, 220 伏, 230 伏, 240 伏) ~	
输入功率*	600 瓦	
空载转速	0 - 2600/分	0 - 1700/分
螺丝旋紧能力	6 毫米	8 毫米
钻头杆的尺寸	6.35 毫米 六角形	
重量 (不含线缆)	1.4 公斤	

*当须改变地区时应检查产品上的铭牌。

标准附件

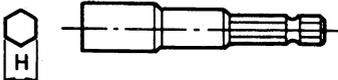
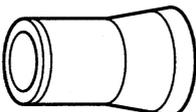
(1) 磁性六脚座 (H=10 毫米) 1

(2) 吊钩 1

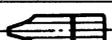
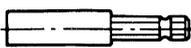
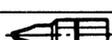
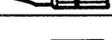
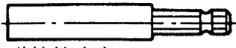
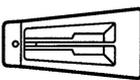
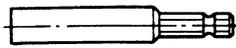
标准附件可能不预先通告而径予更改。

选购附件 (分开销售)

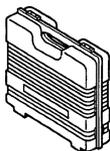
1. 用于六脚头螺丝

六脚座		副制动器 (B)
		
磁性型	无磁性型	
H = 6.35 mm	H = 6.35 mm	H 1/4
H = 7.94 mm	H = 7.94 mm	H 5/16
H = 9.53 mm	H = 9.53 mm	
H = 10 mm	H = 10 mm	H 3/8

2. 用于其他螺丝

螺丝头	钻头型	钻头座	副制动器
⊕	 No.1  No.2  No.3	 磁性钻头座 (短型)	 副制动器 (A)
⊖	 No.1  No.2  No.3	 磁性钻头座	 副制动器 (C)
 B	 B 尺寸 4 mm 5 mm	 无磁性钻头座	

3. 塑料套



选购附件可能不预先通告而径予更改。

用途

- 旋紧六脚头螺丝。
- 清水墙螺丝，木螺丝和自钻螺丝的旋紧。

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符合。
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、铠装合适的延伸线缆，并且要尽可能地短些。
4. 确认钻头的旋转方向（图 1）
将换向开关杆设为“R”侧位置时，钻头按顺时针方向旋转（从后面看时）。将换向开关杆设为“L”侧位置时，钻头按逆时针方向旋转并可以旋松螺丝。
5. 调节旋紧深度（图 2）
请按箭头所示方向拉锁定套，将其从装配在齿轮罩上的止转楔处移开。请边拉边左右旋转锁定套，边调节定位器的位置。请松开锁定套并将齿轮罩的止转楔与锁定套的止转楔对准，这样锁定套便会地被插在齿轮罩的止转楔对上并被锁住。
 - (1) 用于六脚头螺丝：
按图 3 所示方法，将六脚头螺丝装配在六脚座上，并将从副制动器末端至螺丝头底部的距离设为 1-1.5 毫米。
 - (2) 使用清水墙螺丝时
按图 4 所示方法，将清水墙螺丝装配在钻头上，并将从副制动器末端至螺丝头底部的距离设定为 2-2.5 毫米。

- (3) 使用十字形头自钻螺丝时

按图 5 所示方法，将自钻螺丝装配在钻头上，并将从副制动器末端至螺丝头底部的距离设定为 1-1.5 毫米。

6. 安装钻头

详细请参考“安装与拆卸钻头”。

安装与拆卸六脚座或钻头

1. 拆卸六脚座（图 6）

- (1) 一边旋转副制动器一边将其拔出。
- (2) 拆下六脚座后，用手或钳子夹住钻头的反面，用另一钳子拉出钻头。

2. 拆卸钻头（图 7）

与六脚座相似，拆下副制动器（A）并拆下钻头座，然后用钳子拉出钻头。

3. 拆卸钻头（图 8）

与六脚座相似，拆下副制动器（C）并拆下钻头座，然后用钳子拉出钻头。

4. 安装六脚座或钻头

请按与拆卸时的相反顺序来安装钻头。

螺丝起子机的使用方法

1. 开关操作法和转速的调节法

钻头的转速的可变范围为 0-2600/分（W6VB2），0-1700/分（W8VB）。钻头的转速是由扳机开关的扣动程度而决定的。扳机开关完全被拉起时，钻头便达到最大转速 2600/分（W6VB2），1700/分（W8VB）。

若想连续进行操作，请扣动扳机开关后再按下开关停止销。这要，即使松开手指，扳机开关也会停在 ON（开）的位置。再一次扣动扳机时，开关停止销便会自动松开。这时，松开手指的话，扳机开关便回到 OFF（关）的位置。

2. 螺丝起子机的操作法

将开关设在 ON（开）的位置时，马达开始转动，但六脚座（或钻头）仍静止不动。请将六脚座插进螺丝头部的槽中，并将螺丝起子机压在螺丝上。此时，六脚座便开始转动，并将螺丝旋紧。

注意：

操作时，螺丝起子机必须与螺丝头保持完全垂直。若不垂直的话，因驱动力没被全部传递给螺丝，螺丝头和/或六脚座会受损。将螺丝起子机从螺丝上松开时，六脚座便会自动停止转动。

3. 六脚座的旋转方向

将换向开关杆设于 R 侧时，六脚座按顺时针方向旋转（从后侧看时）。而将换向开关杆设于 L 侧时，六脚座按逆时针方向旋转，这时，便可旋松或收回螺丝。

注意：

在马达旋转时，切勿更改六脚座的旋转方向。这样做会严重损坏马达。在更改六脚座的旋转方向之前，请将电源开关设于 OFF（关）处。

注意：

- 务必请遵循如上所述的组装顺序。如内部导线碰到了转子，或夹在了手柄罩与外壳之间，会导致操作者严重触电的危险。
- 切勿乱碰拿些与更换碳刷不相关的零件。

注：为求改进，本手册所载规格可能不预先通告而径予更改。

维护和检查

1. 检查六脚座（或钻头）

如继续使用已破损了的六脚座（或钻头），会损伤螺丝头。因此，一旦注意到六脚座（或钻头）过度破损，请立即用新六脚座（或钻头）更换之。

2. 检查安装螺钉：

要经常检查安装螺钉是否紧固妥善。若发现螺钉松了，应立即重新扭紧，否则会导致严重的事故。

3. 电动机的维护：

电动机绕线是电动工具的“心脏部”。应仔细检查有无损伤，是否被油液或水沾湿。

4. 检查碳刷：（图 9）

电动机上的碳刷是一种消耗品，其磨耗度一旦超出了“磨耗极限”，电动机将发生障碍。因此，磨耗了的碳刷应即更换新件。此外，碳刷必需常保干净状态，这样才能在刷握里自由滑动。

5. 更换碳刷（图 10）

分解：

- (1) 松开三个机械螺丝，拆下手柄罩。
- (2) 用螺丝刀之类的工具轻轻提起碳刷座，然后按图 9 所示方法，边压住碳刷边将碳刷座从外壳上拆下。请注意不要地度拉动导线。
- (3) 从碳刷座上拆下碳刷。

组装：

- (1) 将新的碳刷插进碳刷座上。
- (2) 将碳刷座和碳刷一起插进外壳内的碳刷座仓内。
- (3) 请确认导线及其它零件是否位于正确的位置。并确认导线确实没有可能碰到转子或其它可动零件。
- (4) 边确认内部导线确实没有被夹在手柄罩和外壳之间，边装上手柄罩，然后用三个螺丝固定住手柄罩。

GENERAL OPERATIONAL PRECAUTIONS

WARNING! When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the following.

Read all these instructions before operating this product and save these instructions.

For safe operations:

1. Keep work area clean. Cluttered areas and benches invite injuries.
2. Consider work area environment. Do not expose power tools to rain. Do not use power tools in damp or wet locations. Keep work area well lit. Do not use power tools where there is risk to cause fire or explosion.
3. Guard against electric shock. Avoid body contact with earthed or grounded surfaces. (e.g. pipes, radiators, ranges, refrigerators).
4. Keep children away. Do not let visitors touch the tool or extension cord. All visitors should be kept away from work area.
5. Store idle tools. When not in use, tools should be stored in a dry, high or locked up place, out of reach of children.
6. Do not force the tool. It will do the job better and safer at the rate for which it was intended.
7. Use the right tool. Do not force small tools or attachments to do the job of a heavy duty tool. Do not use tools for purposes not intended; for example, do not use circular saw to cut tree limbs or logs.
8. Dress properly. Do not wear loose clothing or jewellery, they can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protecting hair covering to contain long hair.
9. Use eye protection. Also use face or dust mask if the cutting operation is dusty.
10. Connect dust extraction equipment.
If devices are provided for the connection of dust extraction and collection facilities ensure these are connected and properly used.
11. Do not abuse the cord. Never carry the tool by the cord or yank it to disconnect it from the receptacle. Keep the cord away from heat, oil and sharp edges.
12. Secure work. Use clamps or a vise to hold the work. It is safer than using your hand and it frees both hands to operate tool.
13. Do not overreach. Keep proper footing and balance at all times.
14. Maintain tools with care. Keep cutting tools sharp and clean for better and safer performance. Follow instructions for lubrication and changing accessories. Inspect tool cords periodically and if damaged, have it repaired by authorized service center. Inspect extension cords periodically and replace, if damaged. Keep handles dry, clean, and free from oil and grease.
15. Disconnect tools. When not in use, before servicing, and when changing accessories such as blades, bits and cutters.
16. Remove adjusting keys and wrenches. Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
17. Avoid unintentional starting. Do not carry a plugged-in tool with a finger on the switch. Ensure switch is off when plugging in.
18. Use outdoor extension leads. When tool is used outdoors, use only extension cords intended for outdoor use.
19. Stay alert. Watch what you are doing. Use common sense. Do not operate tool when you are tired.
20. Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated in this handling instructions. Have defective switches replaced by an authorized service center. Do not use the tool if the switch does not turn it on and off.
21. **Warning**
The use of any accessory or attachment, other than those recommended in this handling instructions, may present a risk of personal injury.
22. Have your tool repaired by a qualified person. This electric tool is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts. Otherwise this may result in considerable danger to the user.

SPECIFICATIONS

Model	W6VB2	W8VB
Voltage (by areas)*	(110V, 115V, 120V, 127V, 220V, 230V, 240V) ~	
Power input*	600W	
No-load speed	0 – 2600/min	0 – 1700/min
Capacities	6 mm	8 mm
Bit shank size	6.35 mm Hex.	
Weight (without cord)	1.4 kg	

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

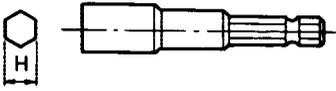
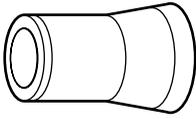
STANDARD ACCESSORIES

- (1) Magnetic hex socket (H = 10 mm) 1
 (2) Hook 1

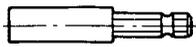
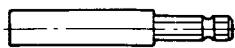
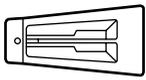
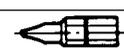
Standard accessories are subject to change without notice.

OPTIONAL ACCESSORIES (sold separately)

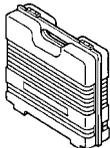
1. For hex-head screws

Hex-socket		Sub-Stopper (B)
		
Magnetic type	Non magnetic type	
H = 6.35 mm	H = 6.35 mm	H 1/4
H = 7.94 mm	H = 7.94 mm	H 5/16
H = 9.53 mm	H = 9.53 mm	H 3/8
H = 10 mm	H = 10 mm	

2. For other screws

Screw head	Bit type	Bit holder	Sub-Stopper
⊕	 No.1 No.2 No.3	 Magnetic bit holder (Short type)	 Sub-Stopper (A)
	 No.1 No.2		
⊖	 No.1 No.2 No.3	 Magnetic bit holder	 Sub-Stopper (C)
	 No.1 No.2		
 B	 B Size 4 mm 5 mm	 Non-magnetic bit holder	

3. Plastic case



Optional accessories are subject to change without notice.

APPLICATIONS

- Tightening hex-head screws
- Tightening drywall screws, wood screws and self-drilling screws.

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 receptacle while the power switch is in the ON position, the power tool will start operating immediately, inviting 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. Confirm the direction of bit rotation (Fig.1)

The bit rotates clockwise (viewed from the rear side) when the reversing switch lever is set to the "R" side position. When the lever is set to the "L" side position, the bit rotates counterclockwise and can be used to loosen and retract screws.

5. Adjusting the tightening depth (Fig.2)

Pull the lock sleeve in the direction of arrow to remove it from the spline installed in the gear cover. While pulling the lock sleeve and turning it right and left, adjust the position of locator. Push the lock sleeve and align the gear cover spline with the lock sleeve spline.
The lock sleeve is inserted onto the gear cover spline and locked.

(1) For hex-head screws:

Mount a hex-head screw on the hex-socket and set the distance between the sub-stopper end and the screw head bottom to 1–1.5 mm, as shown in Fig. 3.

(2) For drywall screws:

Mount a drywall screw on the bit, and set the distance between the sub-stopper end and the screw head to 2–2.5 mm, as shown in Fig.4.

(3) For plus-head self-drilling screws:

Mount a self-drilling screw on the bit, and set the distance between the sub-stopper end and the screw head bottom to 1–1.5 mm, as shown in Fig.5.

6. Mounting the bit

For details, refer to the item "Mounting and dismounting the bit".

will then remain ON even when the finger is removed. By pulling the trigger switch again, the switch stopper is disengaged and the switch is turned OFF when the trigger switch is released.

2. Screw driver operation

When the switch is turned ON, the motor starts to run but the hex-socket (or the bit) does not rotate. Attach the hex-socket to the screw head groove, and push the screw driver against the screw. The hex-socket then rotates, tightening the screw.

CAUTION

Ensure that the screw driver is held truly perpendicular to the head of the screw.

If held at an angle, the driving force will not be fully transferred to the screw, and the screw head and/or hex-socket will be damaged. Hex-socket rotation stops when pushing force is released.

3. Direction of hex-socket rotation

The hex-socket rotates clockwise (viewed from the rear side) when the reversing switch lever is set to the "R" side position. When the lever is set to the "L" side position, the hex-socket rotates counterclockwise, and can be used to loosen and retract screws.

CAUTION

Never change the direction of hex-socket rotation while the motor is running. To do so would seriously damage the motor. Turn the power switch OFF before changing the direction of hex-socket rotation.

MOUNTING AND DISMOUNTING THE HEX-SOCKET OR THE BIT

1. Dismounting the hex-socket (Fig.6)

(1) While rotating the Sub-Stopper pull it out from the locator.

(2) Remove the hex-socket, hold it with the opposite side of bit with hand or vise and pull out the bit with pliers.

2. Dismounting the bit (Fig.7)

Remove the sub-stopper (A) alike case of hex-head socket and remove the bit holder, then pull out the bit with a pliers.

3. Dismounting the bit (Fig.8)

Remove the sub-stopper (C) alike case of hex-head socket and remove the bit holder, then pull out the bit with a pliers.

4. Mounting the hex-socket or the bit

Install the bit in the reverse order to removal.

MAINTENANCE AND INSPECTION

1. Inspecting the hex-socket (or bit)

Since continued use of a worn hex-socket (bit) will damage screw heads, replace the hexsocket (bit) with a new one as soon as excessive wear is noticed.

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. 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.9)

The motor employs carbon brushes which are consumable parts. Since an excessively worn carbon brush can result in motor trouble, replace the carbon brushes with new ones having the same carbon brush No. shown in the figure when they become 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 carbon brushes (Fig.10)

Disassembly:

(1) Loosen the three machine screws, and remove the handle cover.

(2) Lift the brush holder gently with a slotted head screwdriver or the like, and remove it from the housing while suppressing the carbon brush, as shown in Fig.9. Be careful not to excessively pull the lead wire.

HOW TO USE THE SCREW DRIVER

1. Switch operation and rotational speed adjustment

Bit rotational speed can be regulated between 0–2600/min (W6VB2) or 0–1700/min (W8VB) varying the degree by which the trigger switch is pulled. Rotational speed increases as the trigger switch is pulled, and reaches a maximum speed of 2600/min (W6VB2) or 1700/min (W8VB) when the trigger switch is pulled fully.

To facilitate continuous operation, pull the trigger switch and depress the switch stopper. The switch

(3) Remove the carbon brushes from the brush holders.

Assembly

(1) Insert the new carbon brushes into the brush holders.

(2) Insert the brush holders together with the carbon brushes into the brush holder chambers in the housing.

(3) Ensure that the lead wire and other parts are properly positioned, and that there is no possibility of the lead wire coming in contact with the armature or other moving parts.

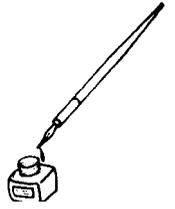
(4) Reinstall the handle cover while ensuring that the internal wiring does not become pinched between the handle cover and the housing, and secure the handle cover with the three machine screws.

CAUTIONS

- Be sure to follow the above assembly procedures exactly. Should the internal wiring contact the armature or become pinched between the handle cover and housing, a serious risk of electric shock to the operator would be created.
- Do not tamper with parts other than those necessary to effect carbon brush replacement.

NOTE

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



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