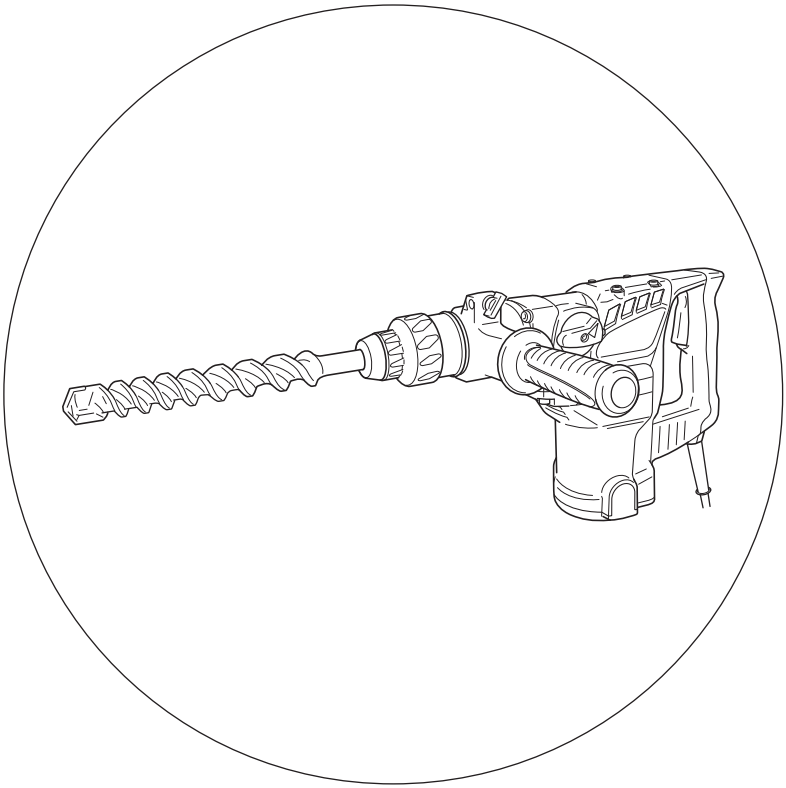
HITACHI

中文

English

电锤
Rotary Hammer

DH 38MS



保留备用
Keep for future reference

使用说明书
Handling instructions

Hitachi Koki

目次

电动工具通用安全警告

⚠警告！

阅读所有警告和所有说明。
不遵照以下警告和说明会导致电击、着火和 / 或严重伤害。

保存所有警告和说明书以备查阅。

在所有下列的警告中术语“电动工具”指市电驱动 (有线) 电动工具或电池驱动 (无线) 电动工具。

1) 工作场地的安全
   a) 保持工作场地清洁和明亮。
      混乱和黑暗的场地会引发事故。
   b) 不要在易爆环境，如有易燃液体、气体或粉尘的环境下操作电动工具。
      电动工具产生的火花会点燃粉尘或气体。
   c) 让儿童和旁观者离开后操作电动工具。
      注意力不集中会使操作者失去对工具的控制。

2) 电气安全
   a) 电动工具插头必须与插座相配。绝不能以任何方式改装插头。需接地的电动工具不能使用任何转换插头。
      未经改装的插头和相配的插座将减少电击危险。
   b) 避免人体接触接地表面，如管道、散热片和冰箱。
      如果你身体接地会增加电击危险。
   c) 不得将电动工具暴露在雨中或潮湿环境中。
      水进入电动工具将增加电击危险。
   d) 不得滥用电线。绝不能用电线搬运、拉动电动工具或拔出其插头。使电线远离热源、油、锐边或运动部件。
      受损或缠绕的软线会增加电击危险。

e) 当在户外使用电动工具时，使用适合户外使用的外接软线。
适合户外使用的软线将减少电击危险。

f) 如果在潮湿环境下操作电动工具是不可避免的，应使用剩余电流动作保护器（ＲＣＤ）。
使用ＲＣＤ可减小电击危险。

3）人身安全

a) 保持警觉，当操作电动工具时关注所从事的操作并保持清醒。当你感到疲倦，或在有药物、酒精或治疗反应时，不要操作电动工具。
在操作电动工具时瞬间的疏忽会导致严重人身伤害。

b) 使用个人防护装置。始终佩戴护目镜。
安全装置，诸如适当条件下使用防尘面具、防滑安全鞋、安全帽、听力防护等装置能减少人身伤害。

c) 防止意外起动。确保开关在连接电源和／或电池盒、拿起或搬运工具时处于关断位置。
手指放在已接通电源的开关上或开关处于接通时插入插头可能会导致危险。

d) 在电动工具接通之前，拿掉所有调节钥匙或扳手。
遗留在电动工具旋转零件上的扳手或钥匙会导致人身伤害。

e) 手不要伸展得太长。时刻注意立足点和身体平衡。
这样在意外情况下能很好地控制电动工具。

f) 着装适当。不要穿宽松衣服或佩戴饰品。让衣服、手套和头发远离运动部件。
宽松衣服、佩饰或长发可能会卷入运动部件中。

g) 如果提供了与排屑、集尘设备连接用的装置，要确保它们连接完好且使用得当。
使用这些装置可减少尘屑引起的危险。

4）电动工具使用和注意事项

a) 不要滥用电动工具，根据用途使用适当的电动工具。
选用适当设计的电动工具会使你工作更有效、更安全。

b) 如果开关不能接通或关断工具电源，则不能使用该电动工具。
不能用开关来控制的电动工具是危险的且必须进行修理。

c) 在进行任何调节、更换附件或贮存电动工具之前，必须从电源上拔掉插头和／或使电池盒与工具脱开。
这种防护性措施将减少工具意外起动的危险。

d) 将闲置不用的电动工具贮存在儿童所及范围之外，并且不要让不熟悉电动工具或对这些说明不了解的人操作电动工具。
电动工具在未经培训的用户手中是危险的。

e) 保养电动工具。检查运动件是否调整到位或卡住，检查零件破损情况和影响电动工具运行的其他状况。如有损坏，电动工具应在使用前修理好。
许多事故由维护不良的电动工具引发。

f) 保持切削刀具锋利和清洁。
保养良好的有锋利切削刃的刀具不易卡住而且容易控制。

g) 按照使用说明书，考虑作业条件和进行的作业来使用电动工具、附件和工具的刀头等。
将电动工具用于那些与其用途不符的操作可能会导致危险。

5) 维修

a) 将你的电动工具送交专业维修人员，使用同样的备件进行修理。
这样将确保所维修的电动工具的安全性。

注意！

不可让儿童和体弱人士靠近工作场所。
应将不使用的工具存放在儿童和体弱人士接触不到的地方。

电锤使用安全警告

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. 在切削附件可能触及暗线或其自身软线之处进行操作时，要通过绝缘握持面来握持工具。切削附件碰到带电导线会使工具外露的金属零件带电从而使操作者受到电击。
4. 作业之后的钻头仍处在高热状态下，切不可摸触，以免灼伤。
5. 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。
6. 使用电锤时，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。
7. 当电动工具作业时，请勿触摸其金属部分。若作业中的电动工具接地，则抑制工具无线波杂音的功能会受影响。
8. 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。

符号

警告！

如下所示的符号用于本机。使用前请务必理解其含意。

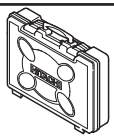
	为降低伤害风险，用户必须阅读使用说明书

规格

电压	220 V ～
输入功率	950 W
能力	钻头：38 mm 取心钻具：105 mm
空载转速	620 /min
满载锤击率	2800 /min
重量（不带电源线和侧柄）	6.4 kg

标准附件

除了主机（1 台）外，产品包中还包括表中所列的附件。

壳体（塑料模制品）		1
侧柄		1

选购附件（分开销售）

1．穿孔钻（旋钻＋锤击）

（1）钻头（SDS 最大柄）

外径（mm）	总长（mm）	外径（mm）	总长（mm）
16	340，540	28	370，570
19		32	
22	320，520	38	
25			

2. 锚栓孔钻（旋钻＋锤击）

钻头（锥柄）

（3）制销

＋

（1）钻头（锥柄）　　（2）锥柄附加器

外径：11，12.3，12.7，14.3，14.5，17.5 mm　　（SDS 最大柄）

锥柄附加器	适用钻头
莫氏锥度（1 号）	钻头（锥柄） 11，12.3，12.7，14.3，14.5，17.5 mm

SDS 加柄头的附加器

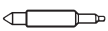
＋

（1）钻头（SDS 加柄）　　（2）SDS 加柄头的附加器

（SDS 最大柄）

3. 大径孔钻（旋钻＋锤击）

＋



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＋

（带导板）　　（1）中间销　　（2）取心钻具　　（3）取心钻柄

（1）中间销

● 适应自 38 mm 至 105 mm 的取心钻具。

● 适应 32 mm 至 35 mm 的取心钻具。

注：

不能适用于 25 mm 和 29 mm 的取心钻具。

（2）取心钻具

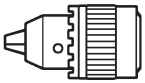
● 外径 25，29，32，35，38，45，54，64，79，94，105mm（带导板，不适应 25 mm 和 29 mm 的取心钻具）

（3）取心钻柄

● 适应于 38 mm 以上的取心钻具。

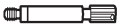
● 适应于 35 mm 以下的取心钻具。

4. 钻孔 .....用于钻金属和木材

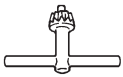


13 mm 电钻夹盘
(13VLA)

+



夹盘附加器
(SDS 最大柄)

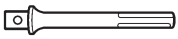


夹盘扳手

5. 用树脂锚栓进行螺栓放置作业。
(旋钻＋锤击)

(市售的标准插座)

+

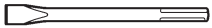


(SDS 最大柄)
12.7 mm 树脂锚栓附加器
19 mm 树脂锚栓附加器

6. 破碎 (锤击)

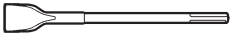
(1) 尖凿
总长： 280, 400 mm

7. 开槽和饰边 (锤击)



(1) 冷钻
总长： 280, 400 mm

8. 切柏油 (锤击)



(1) 刀具

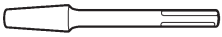
9. 挖掘工件 (锤击)

(1) 挖掘

10.表面粗加工 (锤击)

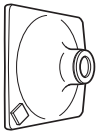
(1) 衬套工具

+



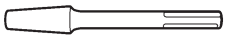
(2) 柄

11.夯实 (锤击)



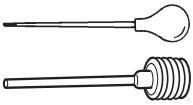
(1) 撞锤
150 × 150 mm

+



(2) 柄

12.喷射器 (用于清除切层)



13.电动锤润滑油 A
500g (在油罐内)
70g (在管内)
30g (在管内)

用途

○ 混凝土钻孔
○ 钻开锚栓孔
○ 粉碎混凝土，凿平，挖掘，切屑 (与选购件配合使用)

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. 延伸电缆
   若作业场所移到离开电源的地点，应使用负载量足够、铠装合适的延伸线缆，并且要尽可能地短些。
4. 如何安装工具

注：

对于诸如尖钻头和冷凿之类的工具，请只使用日立牌正宗产品。

(1) 先将工具柄擦净，然后将润滑油或机油涂抹于工具柄上。(图 1)

(2) 如图 2 所示，要安装工具 (SDS 最大柄) 时，将它插入孔内直至其抵达孔底。
如果继续轻轻转动工具，您可感觉到有钩处。在此位置，将夹持器推向箭头标记方向并将工具完全插入，直至其抵达尽头。
松开夹持器，使夹持器恢复原来的状态，并将工具固定在相应位置。

(3) 拉动工具以确认它已被完全锁定。

(4) 要卸下工具时，按箭头方向尽量拉动夹持器并拉出工具。

图 1

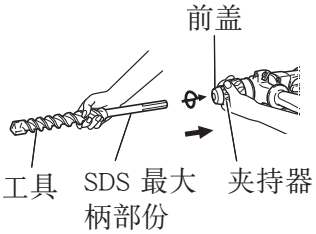


图 2

使用手提电锤的方法

注：

使用工具之前，请确定侧柄中的翼形螺栓已正确锁紧。

1. 钻孔方法 (图 3)

(1) 把钻头放到钻孔位置，然后拉动开关触发器。

(2) 电锤只需稍按压，让切屑能自由排出即可，无需用力推压。

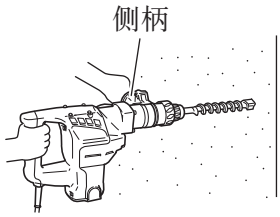


图 3

注意！

本机内装有滑动离合器，钻头碰到钢筋等硬物时，钻头会突然停止转动。这时，机身会因反冲力而转动。因此，进行作业时，必须牢牢握住侧柄和主柄。

2. 凿平和破碎（图 4）
   把钻头放到凿平和破碎的作业位置上，利用手提电锤自重进行作业。
   作业时，无需用力推压。
3. 在“旋钻＋锤击”状态下钻孔时：

注意！

在马达转动时如果切换选择杆，工具会突然开始转动，从而导致意外事故发生。务请在马达完全停止转动后再切换选择杆。

(1) 切换至“旋钻＋锤击”状态
   (a) 按该键，解除锁定并按顺时针方向转动选择杆。
   (b) 如图 5 所示，将选择杆的 ▲ 对准选择杆座上的 ⚒。
   (c) 松开该键锁定选择杆。

注：
   转动选择杆（请勿按该键）以查看它是否完全锁定并确认它不会转动。

4. 在“锤击”状态下凿平和凿孔：

注意！

○ **如果在马达转动中切换选择杆，工具可能会突然开始转动而导致意外事故发生。务请在马达完全停止转动的状态下切换选择杆。**
○ **如果在“旋钻＋锤击”的位置使用尖钻或冷凿，工具会开始转动而导致意外事故发生。务请在“锤击”的位置使用它们。**

(1) 切换至“锤击”
   (a) 按该键，松开锁定并按逆时针方向转动选择杆。
   (b) 如图 6 所示，将选择杆的 ▲ 对准选择杆座上的 ⚒。
   (c) 松开该键以锁定选择杆。

注：
   转动选择杆（请勿按键）以查看它是否被完全锁定并确认它不会转动。

(2) 当固定冷凿等的作业位置时
   (a) 按该键，松开锁定并转动选择杆。
   如图 7 所示，将选择杆的 ▲ 对准选择杆座上的 ◎。

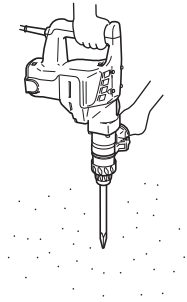


图 4

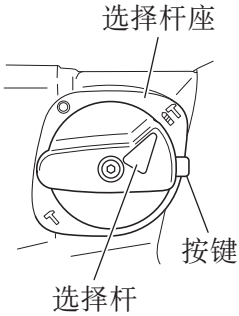


图 5

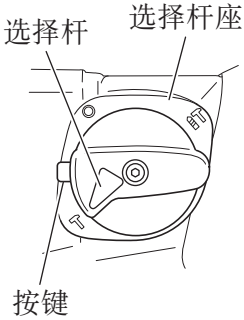


图 6

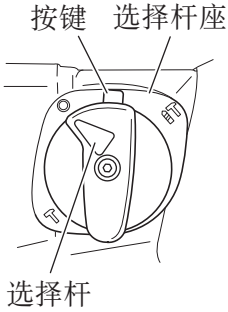


图 7

(b) 松开该键以锁定选择杆。
(c) 如图 8 所示，转动夹持器并将工具固定在所需的作业方向。
(d) 请根据上面 (1) 中所述的步骤，将选择杆切换至“锤击”的位置并固定工具的位置。

5. 加热 (图 9)
在寒冷地区，本装置的润滑油润滑系统可能需要加热。
使钻头前端触及混凝土表面，打开开关开始加热。注意，在听到钻击声后才使用本装置。

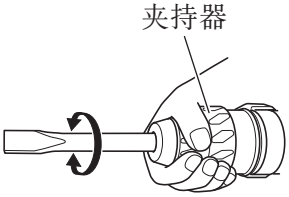


图 8

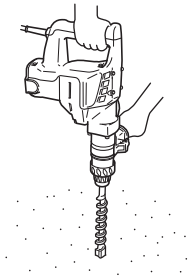


图 9

注意！

在进行加热作业时，请用双手稳稳地握住侧柄和钻体，并小心不要因钻头被卡住而使您的身体倾斜。

使用自钻锚栓进行钻孔和打入作业

1. 使用锥柄附加器时 (图 10)
(1) 把钻头连同锥柄一起安装于锥柄附加器。
(2) 接通开关进行钻孔，直到到达标示槽的孔深为止。
(3) 用喷射器清除屑尘后，把塞子装配于锚栓尖端，用手锤或钳子打入锚栓。
(4) 要卸下钻头 (带锥柄) 时，请将制销插入锥柄转接器槽，并在停止时用手锤支撑锤击制销头。(图 11)

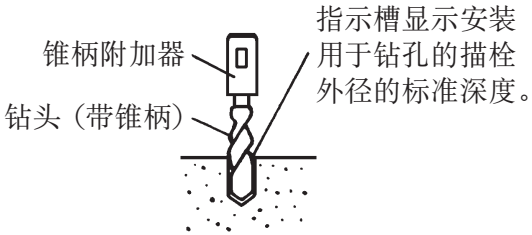


图 10

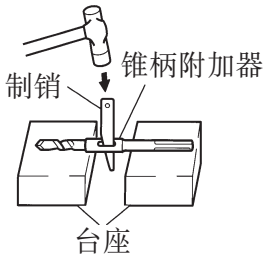


图 11

使用电锤夹盘和夹盘附加器

请注意，若安装电锤夹盘和夹盘附加器等另售部件，本机可在“仅旋钻”状态下使用。请与在“旋钻＋锤击”状态下定位的选择杆一起使用。

注意！

在操作中，请务必紧握把手和侧把手，以防您的身体摆动。

(1) 切换至“旋钻＋锤击”状态
有关切换至“旋钻＋锤击”状态的操作，请按照第 9 页的〔3. 在“旋钻＋锤击”状态下钻孔时〕中的相同步骤进行。

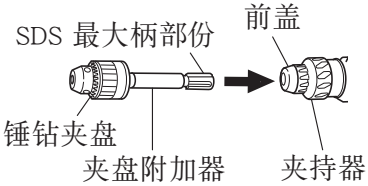


图 12

(2) 将夹盘附加器安装在电锤夹盘上 (图 12)
(a) 将夹盘附加器安装在电锤夹盘上。
(b) 夹盘附加器的 SDS 最大柄相当于钻头。
因此，请按照第 8 页的〔如何安装工具〕中的相同步骤进行安装和拆卸。

(3) 钻孔
(a) 即使在机体上施加过大的压力，钻孔也不会达到您所期望的速度。若对机体用力过度或施加过大压力，反而会损坏钻头，导致工作效率下降并缩短本机的寿命。
(b) 当钻孔快结束时钻头有时可能会折断。在钻孔快结束时，最好减小推力。

操作取心钻具的方法

使用取心钻具，可以钻开大口径孔和盲孔。这时候，应使用取心钻具用选购附件 (如中间销和取心钻柄)。以便顺利开展作业。

1. 安装

注意！

安装取心钻具之前，应从电源插座拆除电线插头。

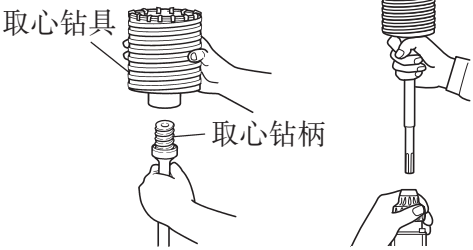


图 13　　图 14

(1) 把取心钻具安装于取心钻柄。(图 13)
在此之前，应注油到取心钻柄的螺纹部，使拆卸时更为容易。
(2) 把取心钻柄安装于手提电锤主体。其方法与装配钻头和尖钻头时一样。(图 14)
(3) 把中间销插入导板，直到尽头为止。
(4) 将导板的凹陷部配套于取心钻具尖端。导板左、右转动而使凹陷部位置移动。这时候，即使钻具朝下导板也不会滑脱。(图 15)

图 15

2. 钻孔
(1) 把插头插入电源插座。
(2) 中间销里装有弹簧。垂直而平稳地把它压附于墙壁和地板面上，使取心钻具尖端全面地接触，然后开始钻孔作业。(图 16)

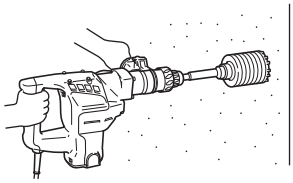


图 16

(3) 当孔深到达约 5 mm 时，孔位就固定下来。此时，可从取心钻具拆下中间销和导板，然后继续进行作业。

注意！

拆除中间销和导板时，必须先从电源插座拆卸插头。

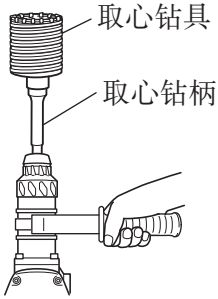


图 17

3. 拆卸取心钻具

○ 把手提电锤固定于朝上的位置，然后开动钻机反复地进行锤击运转 2 至 3 次。这样，螺钉就松开，使手提电锤易拆解。(图 17)

○ 从手提电锤下取心钻具，用一手握住取心钻具，以手锤强力敲打取心钻柄的 SDS 大柄头部份 2 至 3 次，使圆头螺钉松开，手提电锤就易于拆解。(图 18)

图 18

更换润滑油

该机具有全气密结构以防尘和润滑油漏失。因此该机可以长期不注油运转。更换润滑油方法如下：

1. 润滑油更换周期
   在购入后每用了六个月应更换润滑油。请到最近的指定的日立代理店更换润滑油。不得不自己更换润滑油时，请按下列顺序进行。
2. 润滑油的更换方法

注意！

更换润滑油前应先关上电源并拔下电源插销。

(1) 取下曲轴罩并除净里面的润滑油。(图 19)

(2) 向曲轴壳内注入 60 克日立电锤润滑油 A (标准附件，贮存在软管中)。

(3) 更换润滑油后，正确地装上曲轴罩。

注：

日立电锤润滑油 A 是一种低黏度型润滑油。如有必要，请从经授权的日立维修服务代理店购买。

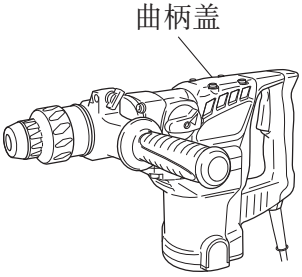


图 19

维护和检查

1. 工具检修
   当使用变钝的工具时会降低效率并可能使电动机出现故障，因此刚一发现就立即磨快或更换该工具。
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. 检查炭刷（图 20）
   电动机里的炭刷是一种消耗品。炭刷一旦使用到磨损极限，电动机就会出现各种障碍；如果所使用的炭刷是“自停式”，电动机将自动地停止转动。遇到上述情况，应立即换上与图上代号一致的新炭刷。此外，炭刷应经常保持干净状态，以保证能在刷握里自由滑动。

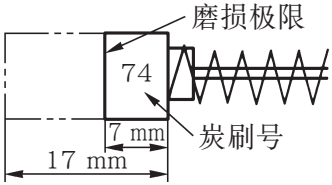


图 20

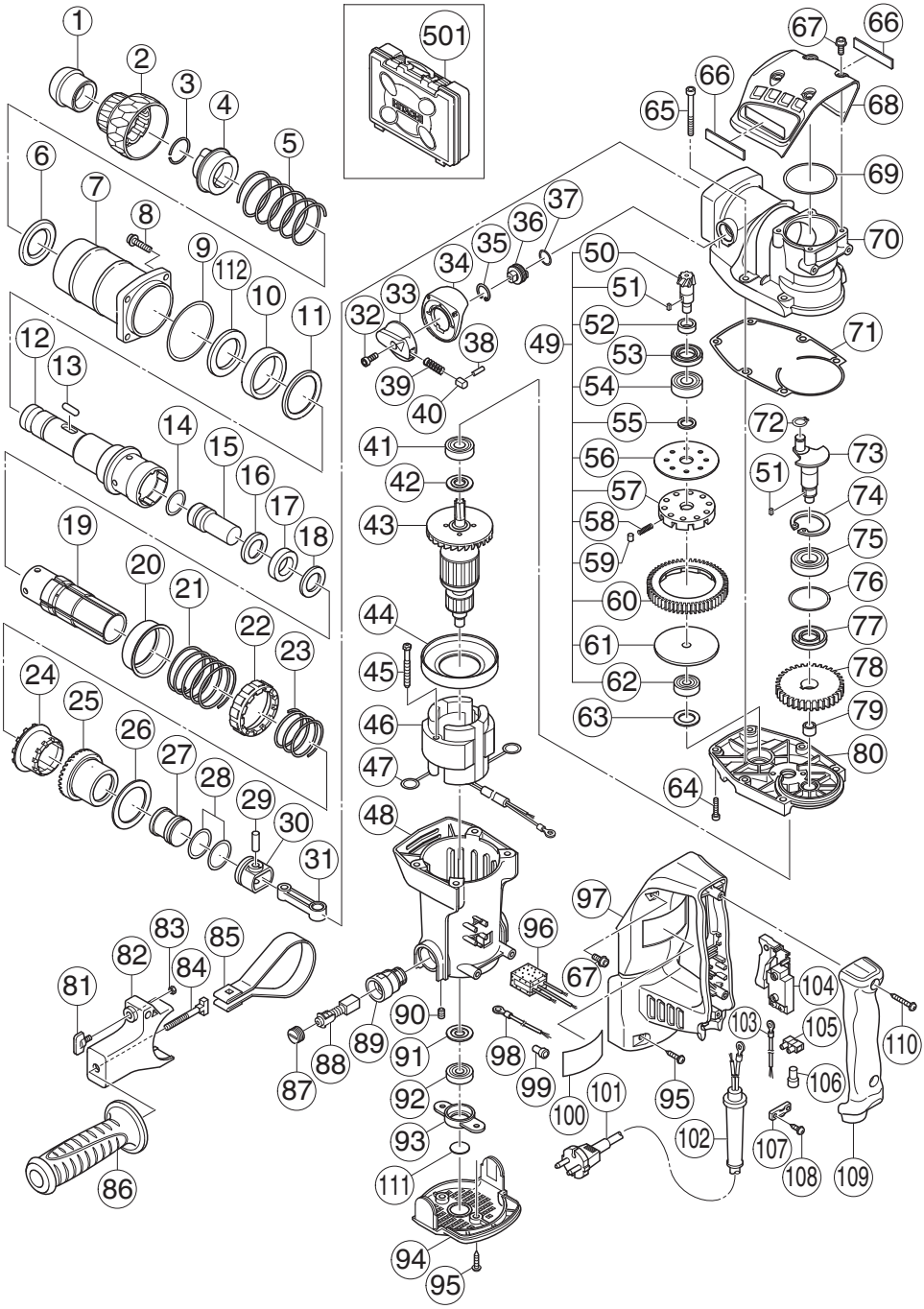
5. 更换炭刷
   松开其两个固定螺丝并拆下罩盖，然后取下炭刷罩和炭刷。更换炭刷后，请拧紧炭刷罩并拧紧两个固定螺丝以安上罩盖。
6. 维修零部件一览表

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。

维修零部件一览表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项目号	代码号	使用数	备注
1	331542	1	
2	331541	1	
3	331540	1	
4	331539	1	
5	331538	1	
6	331537	1	
7	331530	1	
8	991712	4	
9	956996	1	1AS-60
10	331531	1	
11	331532	1	
12	331524	1	
13	331536	2	D8×20
14	313396	1	
15	331525	1	
16	331224	1	
17	321835	1	
18	331225	1	
19	331526	1	
20	331533	1	
21	331534	1	
22	331535	1	
23	331527	1	
24	331528	1	
25	331529	1	
26	331234	1	
27	331235	1	
28	986104	2	
29	331221	1	
30	326369	1	
31	321285	1	
32	983162	1	M4×12
33	331545	1	
34	331544	1	
35	311229	1	
36	331543	1	
37	873095	1	P-16
38	331548	1	
39	331546	1	
40	321311	1	
41	6201DD	1	6201DDCMPS2L

项目号	代码号	使用数	备注
42	325003	1	
43	360875E	1	220V-230V
44	331252	1	
45	953174	2	D5×55
46	340753E	1	220V-230V “47”
47	930703	2	
48	331251	1	“89, 90”
49	331210	1	“50-52, 54-62”
50	331211	1	
51	944109	2	3×3×8
52	331212	1	
53	313050	1	
54	6002DD	1	6002DDCMPS2L
55	331213	1	
56	331214	1	
57	321281	1	
58	331218	10	
59	331217	10	
60	331215	1	
61	331219	1	
62	629VVM	1	629VVC2PS2L
63	331220	1	
64	992803	2	M6×20
65	986940	4	M6×45
66	———	2	
67	994192	6	M5×16
68	331245	1	
69	878713	1	
70	331523	1	
71	331549	1	
72	939540	1	
73	331208	1	
74	948391	1	
75	6203DD	1	6203DDCMPS2L
76	996363	1	S-40
77	321274	1	
78	331209	1	
79	939299	1	M661
80	331253	1	
81	307947	1	M6×12
82	331248	1	

中文

项目号	代码号	使用数	备注
83	949556	1	M6
84	331247	1	
85	331246	1	
86	330209	1	
87	945161	2	
88	999043	2	
89	958900	2	
90	938477	2	M5×8
91	982631	1	
92	608VVM	1	608VVC2PS2L
93	331254	1	
94	331202	1	
95	302089	4	D5×20
96	331203	1	
97	331204	1	
98	330216	1	270L
99	959141	1	
100	———	1	
101	500457Z	1	
102	940778	1	D10.7
103	981974	1	
104	313093	1	
105	938307	1	
106	959141	1	
107	960266	1	
108	984750	2	D4×16
109	331205	1	
110	307028	2	D4×25
111	331547	1	
112	331550	1	
501	331206	1	

CONTENTS

GENERAL POWER TOOL SAFETY WARNINGS

⚠ WARNING

Read all safety warnings and all instructions.
Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

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

1) **Work area safety**
   a) **Keep work area clean and well lit.**
      Cluttered or dark areas invite accidents.
   b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.**
      Power tools create sparks which may ignite the dust or fumes.
   c) **Keep children and bystanders away while operating a power tool.**
      Distractions can cause you to lose control.

2) **Electrical safety**
   a) **Power tool plugs must match the outlet.**
      Never modify the plug in any way.
      Do not use any adapter plugs with earthed (grounded) power tools.
      Unmodified plugs and matching outlets will reduce risk of electric shock.

b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.**
There is an increased risk of electric shock if your body is earthed or grounded.

c) **Do not expose power tools to rain or wet conditions.**
Water entering a power tool will increase the risk of electric shock.

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.

f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.**
Use of an RCD 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 personal protective equipment. Always wear eye protection.**
Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

c) **Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, picking up or carrying the tool.**
Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.

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 dust collection 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 and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.**
Such preventive safety measures reduce the risk of starting the power tool accidentally.

d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.**
Power tools are dangerous in the hands of untrained users.

e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation.**
If damaged, have the power tool repaired before use.
Many accidents are caused by poorly maintained power tools.

f) **Keep cutting tools sharp and clean.**
Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.**
Use of the power tool for operations different from those intended could result in a hazardous situation.

5) **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.

CAUTION

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. **Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.**
4. **Do not touch the bit during or immediately after operation. The bit becomes very hot during operation and could cause serious burns.**

5. **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.**
6. **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.**
7. **Do not touch the metal parts of machine when operating. Earthing metal parts of running tool affects the performance of radio noise suppression of machine.**
8. **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.

SYMBOL

WARNING

The following show symbols used for the machine. Be sure that you understand their meaning before use.

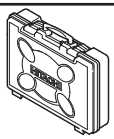
	To reduce the risk of injury, user must read instruction manual.

SPECIFICATIONS

Voltage	220 V ~
Power input	950 W
Capacity	Drill bit: 38 mm Core bit: 105 mm
No load speed	620 /min
Full-load impact rate	2800 /min
Weight (without cord, side handle)	6.4 kg

STANDARD ACCESSORIES

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

Case (Molded plastic)		1
Side Handle		1

OPTIONAL ACCESSORIES (sold separately)

1. Through-hole drilling (Rotation + Hammering)

(1) Drill bit (SDS max shank)

Outer diameter (mm)	Overall length (mm)	Outer diameter (mm)	Overall length (mm)
16	340, 540	28	370, 570
19		32	
22	320, 520	38	
25			

2. Anchor hole drilling (Rotation + Hammering)

Drill bit (Taper shank)

(3) Cotter

+

+

(1) Drill bit (taper shank)
External dia.: 11, 12.3, 12.7, 14.3, 14.5, 17.5 mm

(2) Taper shank adapter (SDS max shank)

Taper shank adapter	Application drill bit
Morse taper (No. 1)	Drill bit (taper shank) 11, 12.3, 12.7, 14.3, 14.5, 17.5 mm

Adapter for SDS-plus shank bit

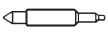
+

(1) Drill bit (SDS-plus shank)

(2) Adapter for SDS-plus shank bit (SDS max shank)

3. Large dia. hole boring (Rotation + Striking)

+



+

+

(Guide plate) (1) Center pin (2) Core bit (3) Core bit shank

(1) Center pin

- Applied to core bits from 38 mm to 105 mm
- Applied to core bits 32 mm and 35 mm

NOTE

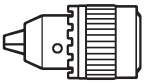
Do not use core bits 25 mm or 29 mm.

(2) Core bit

- External dia. 25, 29, 32, 35, 38, 45, 54, 64, 79, 94, 105 mm (with guide plate, not applicable to cores 25 mm or 29 mm)

(3) Core bit shank
- Applied to core bits above 38 mm
- Applied to core bits below 35 mm

4. Drilling holes..... For drilling metal and wooden materials



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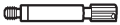
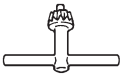


13 mm drill chuck (13VLA)

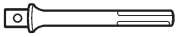
Chuck adapter (SDS max shank)



Chuck wrench

5. Bolt placing operation with Chemical Anchor. (Rotation + Hammering)

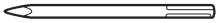
+



(Standard socket on the market)

(SDS max shank)
12.7 mm Chemical Anchor Adaptor
19 mm Chemical Anchor Adaptor

6. Crushing (Hammering)

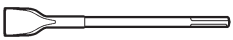


(1) Bull point
Overall length: 280, 400 mm

7. Groove digging and edging (Hammering)

(1) Cold chisel
Overall length: 280, 400 mm

8. Asphalt cutting (Hammering)



(1) Cutter

9. Scooping Work (Hammering)

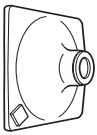
(1) Scoop

10. Surface Roughing (Hammering)

+

(1) Bushing Tool (2) Shank

11. Tamping (Hammering)

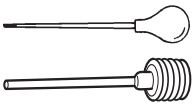


+

(1) Rammer
150 × 150 mm

(2) Shank

12. Syringe (for chip removal)



13. Hammer grease A
500 g (in a can)
70 g (in a green tube)
30 g (in a green tube)

APPLICATIONS

- Drilling holes in concrete
- Drilling anchor holes
- Demolishing concrete, chipping, digging, and squaring (by applying optional accessories)

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. How to install tool

NOTE

For tools such as a bull point and a cold chisel, use only Hitachi genuine parts.

(1) Clean, then smear the tool shank with the grease or machine oil (**Fig. 1**).

(2) To attach the tool (SDS max shank), insert it into the hole until it contacts the innermost end of the hole as illustrated in **Fig. 2**.
If you continue to turn the tool with slight pressure, you can feel a spot where there is a hitch. At that spot, pull the grip to the direction of an arrow mark and insert the tool all the way until it hits the innermost end.
Releasing the grip reverts the grip and secures the tool in place.

(3) Pull the tool to make sure it is locked completely.

(4) To remove the tool, fully pull the grip in the direction of the arrow and pull out the tool.

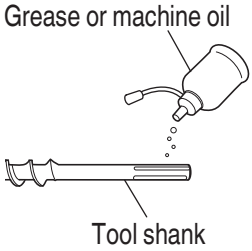


Fig. 1

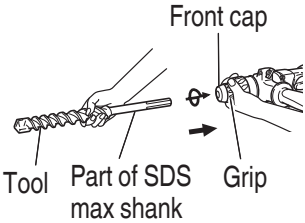


Fig. 2

HOW TO USE THE ROTARY HAMMER

NOTE

Ensure that the wing bolt in the side handle is properly tightened before using the tool.

1. How to drill holes (**Fig. 3**)

(1) Pull the switch trigger after applying the drill bit tip to the drilling position.

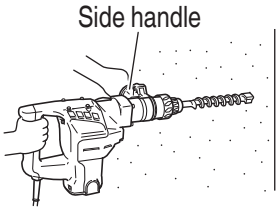


Fig. 3

(2) It is unnecessary to forcibly press the rotary hammer main body. It is sufficient to slightly press the rotary hammer to an extent that shavings are freely discharged.

CAUTION

Although this machine is equipped with a safety clutch, if the drill bit becomes bound in concrete or other material, the resultant stoppage of the drill bit could cause the machine body to turn in reaction. Ensure that the main handle and side handle are gripped firmly during operation.

2. How to chisel or demolish (**Fig. 4**)
   By applying the drill bit tip to the chiseling or demolishing position, operate the rotary hammer by utilizing its empty weight.
   Forcible pressing or thrusting is unnecessary.
3. When drilling at “rotation + hammering”:

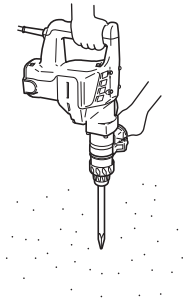


Fig. 4

CAUTION

If you switch the selector lever during motor rotation, the tool can start to rotate abruptly, resulting in unexpected accidents. Be sure to switch the selector lever when the motor is at a complete stop.

(1) Switching to “rotation + hammering”
   (a) Push the button, release lock and turn the selector lever clockwise.
   (b) Align ▲ of the selector lever and ⚒ of the lever holder as illustrated in **Fig. 5**.
   (c) Release the button to lock the selector lever.

NOTE

Turn the selector lever (do not push the button) to check if it is completely locked and make sure that it does not turn.

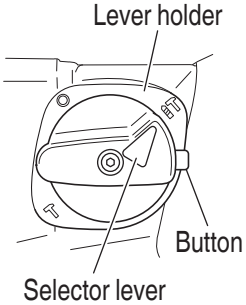


Fig. 5

4. When demolishing and chiseling at “hammering”:

CAUTION

○ **If the selector lever is switched during motor rotation, the tool can start to rotate abruptly, resulting in unexpected accidents. Make sure to switch the selector lever when the motor is at a complete stop.**

○ **If the bull point or cold chisel is used at the position of “rotation + hammering”, the tool can start to rotate, resulting in unexpected accidents. Make sure that they are used at the position of “hammering”.**

(1) Switching to “hammering”
   (a) Push the button, release lock and turn the selector lever counterclockwise.
   (b) Align ▲ of the selector lever and ⚒ of the lever holder as illustrated in **Fig. 6**.

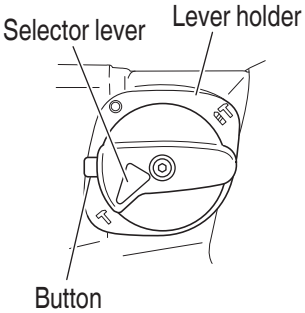


Fig. 6

(c) Release the button to lock the selector lever.

NOTE

Turn the selector lever (do not push the button) to check if it is completely locked and make sure that it does not turn.

(2) When fixing working positions of tools such as cold chisel, etc.,

(a) Push the button, release lock and turn the selector lever.
Align ▲ of the selector lever and ◎ of the lever holder as illustrated in **Fig. 7**.

(b) Release the button to lock the selector lever.

(c) Turn the grip as illustrated in **Fig. 8** and fix the tool to the desired working direction.

(d) Switch the selector lever to "hammering" according to the procedures mentioned in the above item (1) and secure the position of the tool.

5. Warming up (**Fig. 9**)
The grease lubrication system in this unit may require warming up in cold regions.
Position the end of the bit so makes contact with the concrete, turn on the switch and perform the warming up operation. Make sure that a hitting sound is produced and then use the unit.

CAUTION

When the warming up operation is performed, hold the side handle and the main body securely with both hands to maintain a secure grip and be careful not to twist your body by the jammed drill bit.

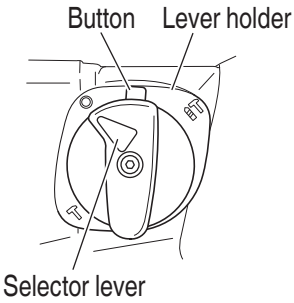


Fig. 7

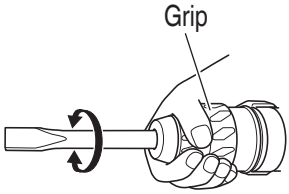


Fig. 8

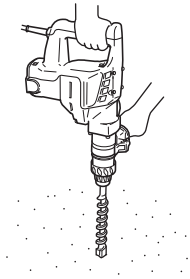


Fig. 9

DRILLING AND DRIVING-IN OPERATIONS FOR ANCHORS

1. When a taper shank adapter is used. (**Fig. 10**)

(1) Install drill bit with taper shank in the taper shank adapter.

(2) Turn the power on and drill a base hole to the depth sounded by indicating groove on the drill bit.

(3) After cleaning out dust with a syringe, attach the plug to the anchor tip and drive in the anchor with a manual hammer.

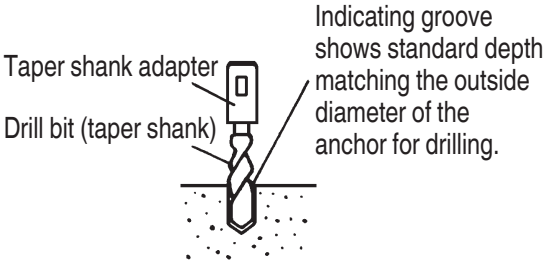


Fig. 10

(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 manual hammer supporting on a rest. (**Fig. 11**)

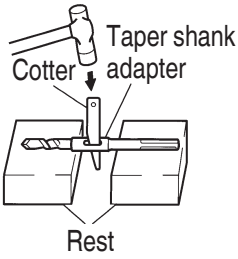


Fig. 11

USING DRILL CHUCK, CHUCK ADAPTER

Note that this machine can be used at “rotation only” if separately sold parts such as drill chuck and chuck adapter are attached. Use it with the selector lever positioned at “rotation + hammering”.

CAUTION

During operation, be sure to grip the handle and the side handle firmly to prevent your body from swaying.

(1) Switching to “rotation + hammering”
For switching to “rotation + hammering”, follow the same procedures mentioned in [3. When drilling at “rotation + hammering”] in page 24.

(2) Attaching chuck adapter to drill chuck (**Fig. 12**)
   (a) Attach the chuck adapter to the drill chuck.
   (b) The SDS max shank of the chuck adapter is equivalent to the drill bit. Therefore, follow the same procedure as [How to install tool] in page 23 for attaching and detaching.

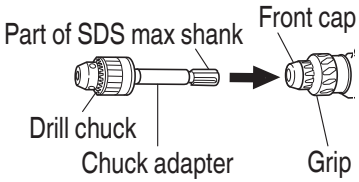


Fig. 12

(3) Drilling
   (a) Even if you apply more-than-required pressure to the machine body, drilling can never be performed as quickly as you expect. Applying more force or pressure to the machine body than what is needed, on the contrary, damages the drill tip, resulting in the declined working efficiency and shortened life of this machine.
   (b) A drill can snap sometimes when drilling is almost finished. It is important to relax your thrusting pressure when drilling is nearing the end.

HOW TO HANDLE A CORE BIT

When a core bit is used, large diameter holes and blind holes can be drilled. In this case, use optional accessories for core bits (such as a center pin and core bit shank) for more efficient operation.

1. Mounting

CAUTION

Prior to mounting a core bit, always disconnect the plug from the power supply receptacle.

(1) Mount the core bit on the core bit shank. (**Fig. 13**)
Before that, feed oil to the screw portion of core bit shank for easy dismounting.

(2) Mount the core bit shank on the main body in the same manner as in mounting the drill bit and the bull point. (**Fig. 14**)

(3) Insert the center pin into the guide plate until it reaches the extremity.

(4) Fit in the guide plate by aligning its concaved portion with the core bit tip. When the position of the concave is shifted by turning the guide plate right or left, the guide plate never slips off even when the drill is used in a downward direction. (**Fig. 15**)

2. Drilling holes

(1) Insert the plug into a receptacle.

(2) A spring is built in the center pin. By straightly and gently pressing it to the wall or floor surface, the entire surface of the core bit tip attains contact to start the hole drilling job. (**Fig. 16**)

(3) When the hole depth reaches approximately 5 mm, the hole position can be determined. Then remove the center pin and guide plate from the core bit and continue the hole drilling job.

CAUTION

When removing the center pin and guide plate, always disconnect the plug from the receptacle.

3. How to dismount the core bit

○ By holding the rotary hammer (with the core bit inserted) in an upward position, drive the rotary hammer to repeat impact operation two or three times, whereby the screw is loosened and the rotary hammer becomes ready for disassembly. (**Fig. 17**)

○ Remove the core bit shank from the rotary hammer, hold the core bit with one hand, and strongly strike the head of the SDS max shank portion of the core bit shank with a manual hammer two or three times, whereby the round head screw is loosened and the rotary hammer is ready for disassembly. (**Fig. 18**)

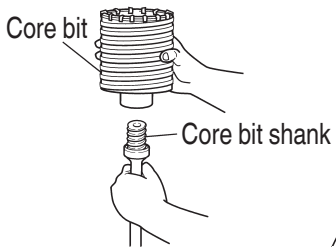


Fig. 13

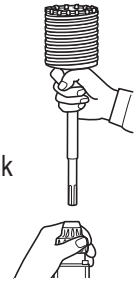


Fig. 14

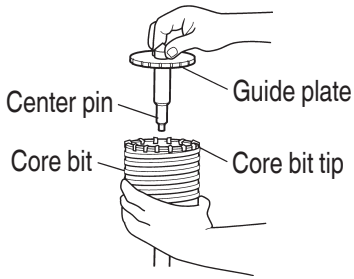


Fig. 15

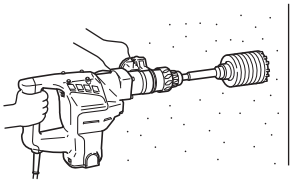


Fig. 16

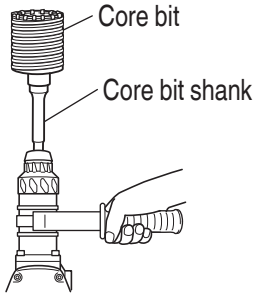


Fig. 17

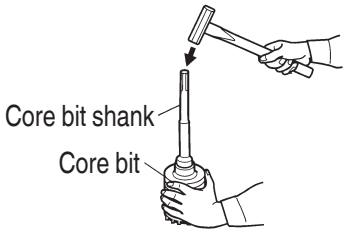


Fig. 18

HOW TO REPLACE GREASE

This machine is of full air-tight construction to protect against dust and to prevent lubricant leakage. Therefore, the machine can be used without lubrication for long periods. Replace the grease as described below.

1. Grease replacement period
   After purchase, replace grease after every 6 months of usage. Ask for grease replacement at the nearest Hitachi authorized Service center. Proceed for replacement of grease.
2. Grease replenishment

CAUTION

Before replenishing the grease, turn the power off and pull out the power plug.

(1) Remove the crank cover and wipe off the grease inside. (**Fig. 19**)
(2) Supply 60g of Hitachi Electric Hammer Grease A (Standard accessory, contained in tube) to the crank case.
(3) After replenishing the grease, install the crank cover securely.

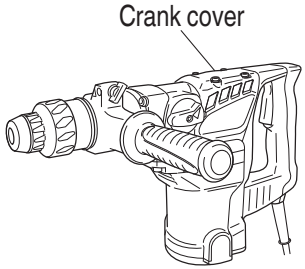


Fig. 19

NOTE

The Hitachi Electric Hammer Grease A is of the low viscosity type. If necessary purchase from an Hitachi authorized Service center.

MAINTENANCE AND INSPECTION

1. Inspecting the tool
   Since use of a dull tool will degrade efficiency and cause possible motor malfunction, sharpen or replace the tool as soon as abrasion is noted.
2. Inspecting the mounting screws:
   Regularly inspect all mounting screws and ensure that they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in serious hazard.
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. 20**)
   The Motor employs carbon brushes which are consumable parts. When they become worn to or near the “wear limit”, it could result in motor trouble. When an auto-stop carbon brush is equipped, the motor will stop automatically. At that time, replace both carbon brushes with new ones which have the same carbon brush Numbers shown in the figure. In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.

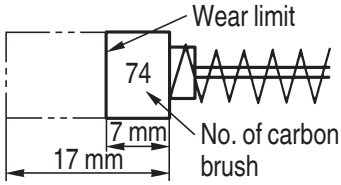


Fig. 20

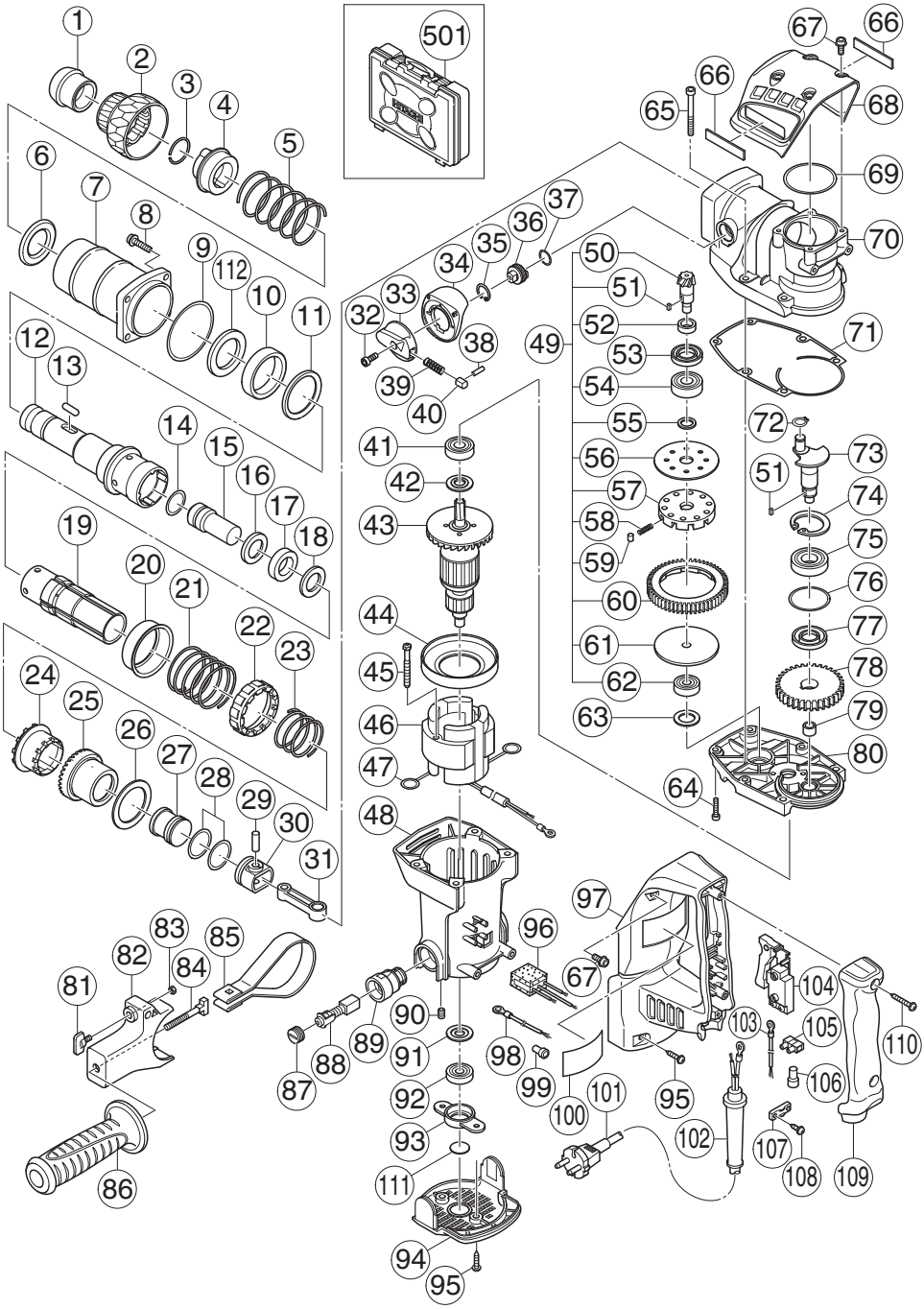
5. Replacing carbon brushes
   Loosen the two set screws and remove the tail cover. Remove the brush caps and carbon brushes. After replacing the carbon brushes, tighten the brush caps securely and install the tail cover with securely tightening two set screws.
6. Service parts list

CAUTION

Repair, modification and inspection of Hitachi Power Tools must be carried out by a 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.

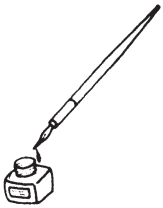
SERVICE PARTS LIST

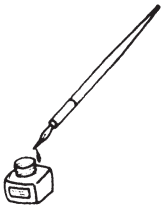


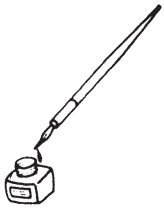
Item No.	Code No.	No. Used	Remarks
1	331542	1	
2	331541	1	
3	331540	1	
4	331539	1	
5	331538	1	
6	331537	1	
7	331530	1	
8	991712	4	
9	956996	1	1AS-60
10	331531	1	
11	331532	1	
12	331524	1	
13	331536	2	D8×20
14	313396	1	
15	331525	1	
16	331224	1	
17	321835	1	
18	331225	1	
19	331526	1	
20	331533	1	
21	331534	1	
22	331535	1	
23	331527	1	
24	331528	1	
25	331529	1	
26	331234	1	
27	331235	1	
28	986104	2	
29	331221	1	
30	326369	1	
31	321285	1	
32	983162	1	M4×12
33	331545	1	
34	331544	1	
35	311229	1	
36	331543	1	
37	873095	1	P-16
38	331548	1	
39	331546	1	
40	321311	1	

Item No.	Code No.	No. Used	Remarks
41	6201DD	1	6201DDCMPS2L
42	325003	1	
43	360875E	1	220V-230V
44	331252	1	
45	953174	2	D5×55
46	340753E	1	220V-230V “47”
47	930703	2	
48	331251	1	“89, 90”
49	331210	1	“50-52, 54-62”
50	331211	1	
51	944109	2	3×3×8
52	331212	1	
53	313050	1	
54	6002DD	1	6002DDCMPS2L
55	331213	1	
56	331214	1	
57	321281	1	
58	331218	10	
59	331217	10	
60	331215	1	
61	331219	1	
62	629VVM	1	629VVC2PS2L
63	331220	1	
64	992803	2	M6×20
65	986940	4	M6×45
66	———	2	
67	994192	6	M5×16
68	331245	1	
69	878713	1	
70	331523	1	
71	331549	1	
72	939540	1	
73	331208	1	
74	948391	1	
75	6203DD	1	6203DDCMPS2L
76	996363	1	S-40
77	321274	1	
78	331209	1	
79	939299	1	M661
80	331253	1	

Item No.	Code No.	No. Used	Remarks
81	307947	1	M6×12
82	331248	1	
83	949556	1	M6
84	331247	1	
85	331246	1	
86	330209	1	
87	945161	2	
88	999043	2	
89	958900	2	
90	938477	2	M5×8
91	982631	1	
92	608VVM	1	608VVC2PS2L
93	331254	1	
94	331202	1	
95	302089	4	D5×20
96	331203	1	
97	331204	1	
98	330216	1	270L
99	959141	1	
100	———	1	
101	500457Z	1	
102	940778	1	D10.7
103	981974	1	
104	313093	1	
105	938307	1	
106	959141	1	
107	960266	1	
108	984750	2	D4×16
109	331205	1	
110	307028	2	D4×25
111	331547	1	
112	331550	1	
501	331206	1	







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