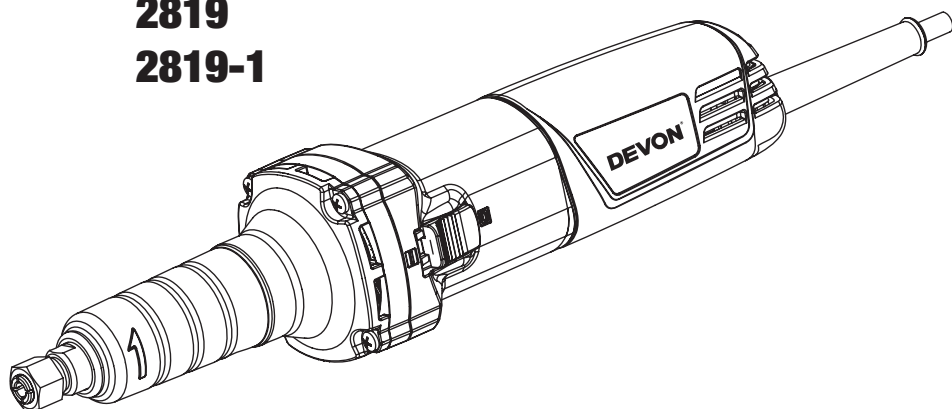


# DEVON® 大有

型号: **2818**  
**2818-1**  
**2819**  
**2819-1**



中国 直向砂轮机

GB Straight grinder

专业电动工具

# PROFESSIONAL TOOLS

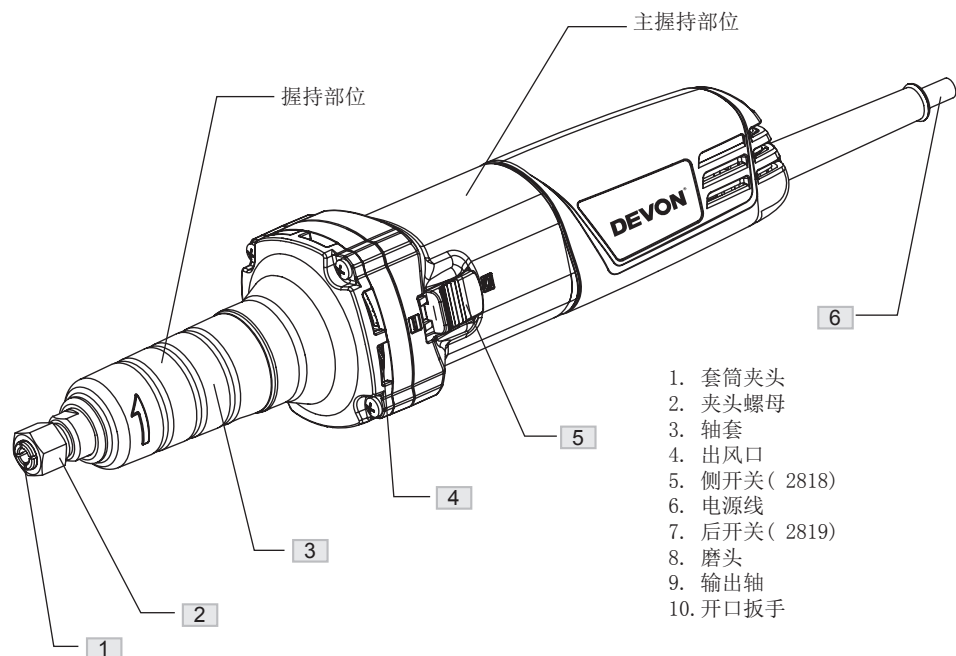
大有工具 “劲”在掌握

# 直向砂轮机简介

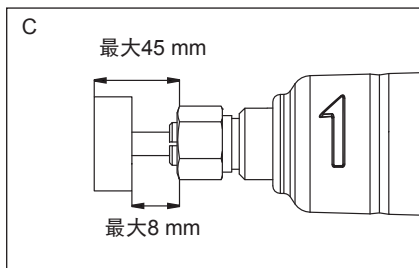
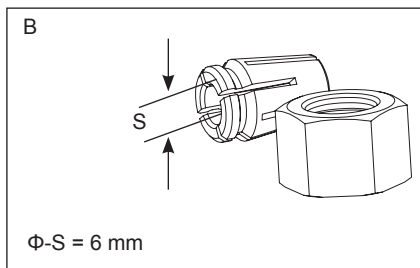
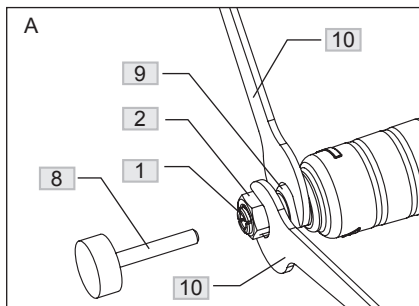
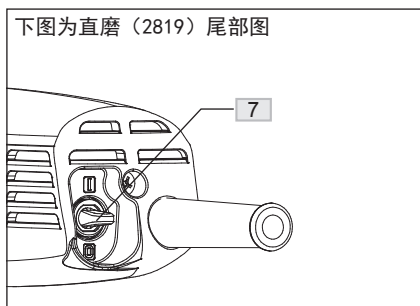


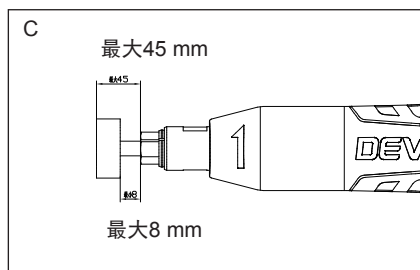
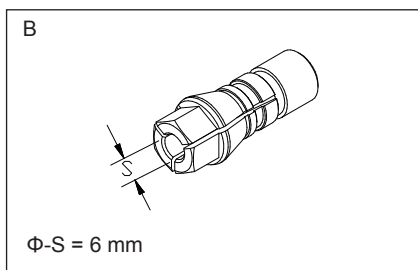
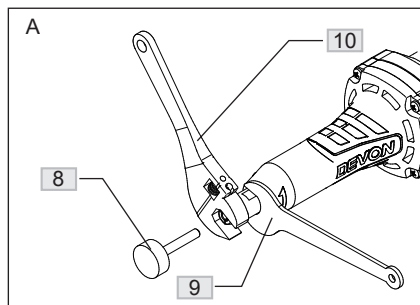
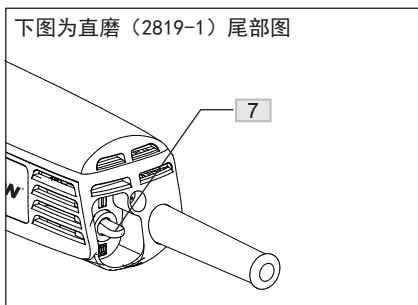
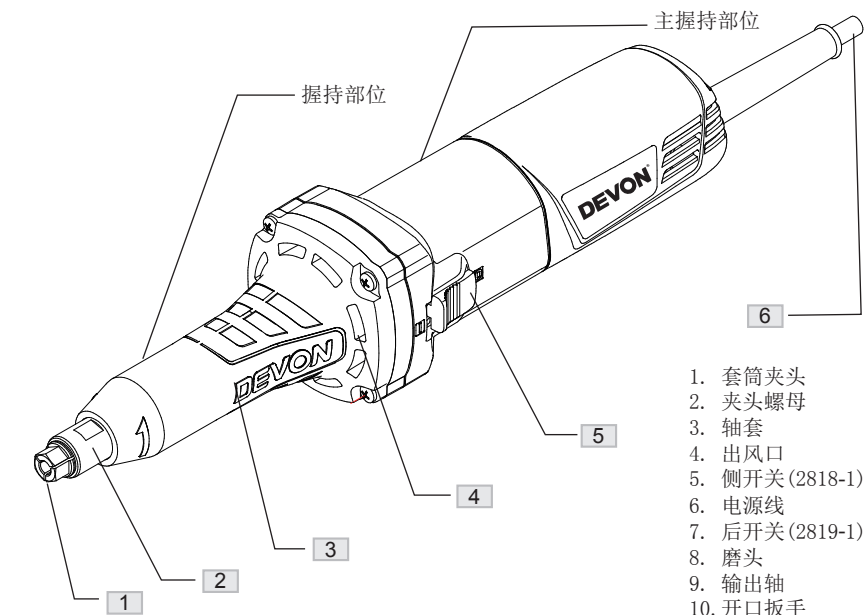
直向砂轮机用于金属的精确研磨，它用研磨钻头可以研磨不含铁的金属、塑料、硬木等。  
请您在使用前务必仔细阅读说明书，并严格按照说明书指示使用该角磨。

## 1. 操作控制

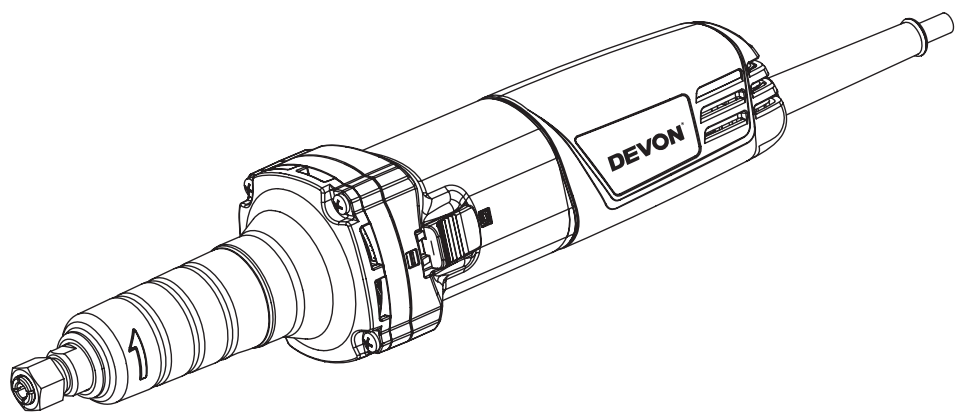


下图为直磨 (2819) 尾部图

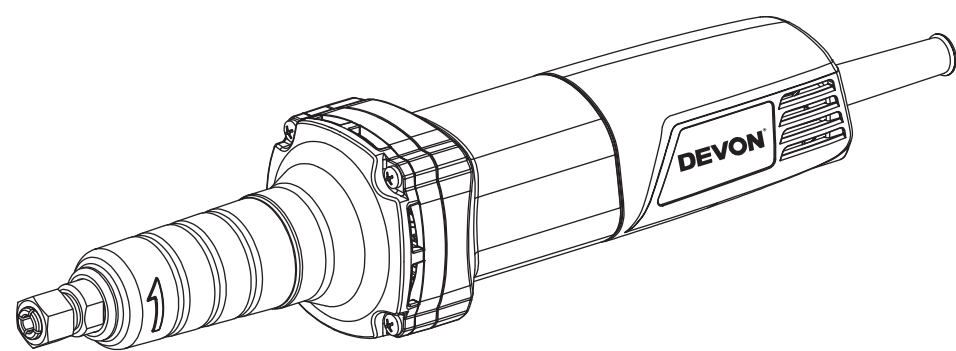




2818



2819



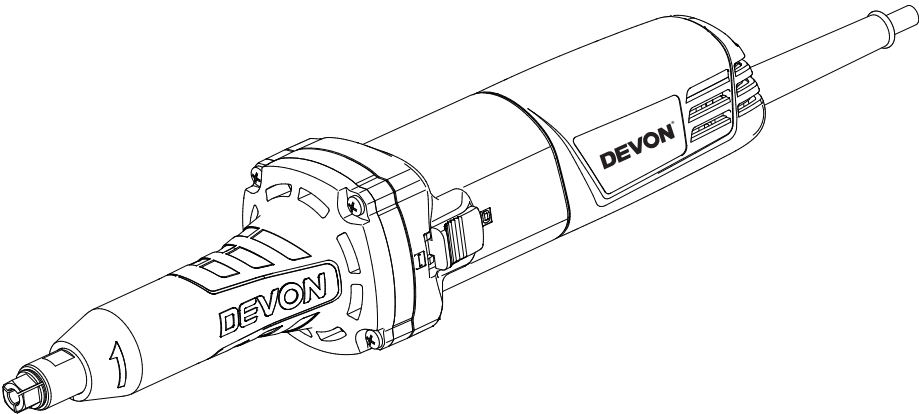
2. 工具规格

型 号	2818	2818-1	2819	2819-1
额定转速 ( /min )	27000	28000	27000	28000
额定输入功率 (W)	480	500	480	500
砂轮最大直径 ( mm )	25	25	25	25
重量 (kg)	1.6	1.6	1.6	1.6
保护等级	□/II	□/II	□/II	□/II
绝缘等级	E	E	E	E
备注				

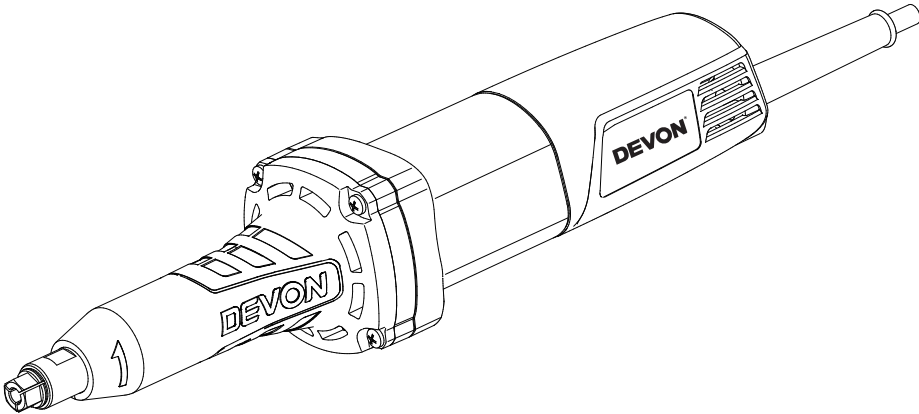
注：1. 为求改进，本说明书所载规格可能不预先通告而给予更改。

2. 本说明书提供的参数是以220V为依据，若有低于或高于此电压的地区，数据有可能不同。

2818-1



2819-1



2. 工具规格


型 号	2818	2818-1	2819	2819-1
额定转速 ( /min )	27000	28000	27000	28000
额定输入功率 (W)	480	500	480	500
砂轮最大直径 ( mm )	25	25	25	25
重量 (kg)	1.6	1.6	1.6	1.6
保护等级	□/II	□/II	□/II	□/II
绝缘等级	E	E	E	E
备注				

注：1. 为求改进，本说明书所载规格可能不预先通告而给予更改。

2. 本说明书提供的参数是以220V为依据，若有低于或高于此电压的地区，数据有可能不同。

# 安全操作须知

## (适用于所有电动工具)

 **阅读说明** 没有按照以下列举的说明而使用或操作将导致触电、着火和/或严重伤害。在所有以下列举的警告中术语“电动工具”指市电驱动（有线）电动工具或电池驱动（无线）电动工具。

保存这些说明。

### 1. 工作场地

- 1) 保持工作场地清洁和明亮。混乱和黑暗的场地会引发事故。
- 2) 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。
- 3) 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

- 1) 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。
- 2) 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。
- 3) 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。
- 4) 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。
- 5) 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。
- 6) 当在潮湿环境下使用该机器不可避免时，使用剩余电流装置（RCD）保护。剩余电流装置的使用可以减少触电的危险。

### 3. 人身安全

- 1) 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。
- 2) 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。
- 3) 避免突然起动。确保开关在插入插头时处于关断位置。手指放在已接通电源的开关上或开关处于接通时插入插头可能会导致危险。

- 4) 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。
  - 5) 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。
  - 6) 着装适当。不要穿宽松衣服或佩带饰品。让头发、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。
  - 7) 如果提供了与排屑装置、集尘设备连接用的装置，则确保它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。
  - 8) 使用夹钳或其他方法将工件固定在平台上。用手握机器或将机器倚靠在身体上导致不平衡可引起失控。
  - 9) 不要使用梯子或其他不稳定的支撑方法。在特殊情况下，稳固的立足使使用更好的控制机器。
  - 10) 使手保持干燥，清洁，无油脂。带油的手可能导致失控。
  - 11) 经常佩戴有侧面护罩的护目镜。日常戴的眼镜可能有防冲击的镜头，但它们不是安全护目镜。遵循该注意事项将减少眼睛伤害。
  - 12) 保护您的呼吸器官。当有尘工作时，佩戴防尘面具。遵循该注意事项将减少严重的身体伤害。
  - 13) 保护您的听觉。在长时间持续工作中，需佩戴耳塞。遵循该注意事项将减少严重的身体伤害。
- ### 4. 电动工具使用和注意事项
- 1) 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。
  - 2) 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。
  - 3) 在进行任何调节、更换附件或贮存电动工具之前，必须从电源上拔掉插头和/或将电池盒脱开电源。这种防护性措施将减少电动工具突然起动的危险。
  - 4) 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。
  - 5) 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。
  - 6) 保持切削刀具锋利和清洁。保养良好的有锋

利切削刀的刀具不易卡住而且容易控制。

- 7) 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。
  - 8) 保存此说明书。向使用该机器的使用者提供该说明书。如果将此机器出借给别人使用，也将此说明书一并借出。
- ### 5. 维修
- 1) 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。
  - 2) 当维修时，仅使用有标示的零部件。
  - 3) 按照本说明书中维修部分操作。使用未经授权的零件或未按该说明书中的指示操作可能引发触电的危险。

## 所有操作安全说明

### 通用安全警告

1. 该电动工具是用于实现砂轮机工具功能的。阅读随该电动工具提供的所有安全警告，说明，图解和规定。不了解以下所列所有说明将导致电击、着火或严重伤害。
2. 不推荐用该电动工具进行诸如砂光、刷光、抛光或切断等操作。电动工具不按指定功能去操作，可能会发生危险和引起人身伤害。
3. 不使用非工具制造商推荐和专门设计的附件。否则该附件可能被装到你的电动工具上，而它不能保证安全操作。
4. 附件的额定速度必须至少等于电动工具上标出的最大速度。附件以比其额定速度大的速度运转会发生爆裂和飞溅。
5. 附件的外径和厚度必须在电动工具额定能力范围之内。不正确的附件尺寸不能得到充分防护或控制。
6. 砂轮、法兰盘、靠背垫或任何其他附件的轴孔尺寸必须适合于安装到电动工具的主轴上。带轴孔的、与电动工具安装件不配的附件将会失稳，过度振动并会引起失控。
7. 不要使用损坏的附件。在每次使用前要检查附件，例如砂轮是否有碎片和裂缝，靠背垫是否有裂缝，撕裂或过度磨损。如果电动工具或附件跌落了，检查是否有损坏或安装没有损坏的附件。检查和安装附件后，让自己和旁观者的位置远离旋转附件的平面，并以电动工具最大空载速度运行1min。损坏的

附件通常在该试验时会碎裂。

8. 戴上防护用品。根据适用情况，使用面罩、安全护目镜或安全眼镜。适用时，戴上防尘面具、听力保护器、手套和能挡小磨料或工件碎片的工程围裙。眼防护罩必须挡住各种操作产生的飞屑。防尘面具或口罩必须能过滤操作产生的颗粒。长期暴露在高强度噪声中会引起失聪。
9. 让旁观者与工作区域保持一安全距离。任何进入工作区域的人必须戴上防护用品。工件或破损附件的碎片可能会飞出并引起紧靠着操作区域的旁观者的伤害。切割附件触及带电导线会使电动工具外露的金属零件带电，并使操作者触电。
10. 使软线远离旋转的附件。如果控制不当，软线可能被切断或缠绕，并使得你的手或手臂可能被卷入旋转附件中。
11. 直到附件完全停止运动才放下电动工具。旋转的附件可能会抓住表面并拉动电动工具而让你失去对工具的控制。
12. 当携带电动工具时不要开动它。意外地触及旋转附件可能会缠绕你的衣服而使附件伤害身体。
13. 经常清理电动工具的通风口。电动机风扇会将灰尘吸进机壳，过多的金属粉末沉积会导致电气危险。
14. 不要在易燃材料附近操作电动工具。火星可能会点燃这些材料。
15. 不要使用需用冷却液的附件。用水或其他冷却液可能会导致电腐蚀或电击。
16. 当在磨削附件有可能切割到暗线或自身电线的场所进行操作时，只能通过绝缘握持面来握住电动工具。磨光机附件碰到一根带电导线可能会使电动工具的外露金属零件带电并使操作者发生电击危险。

### 附加安全说明

- a) 只使用所推荐的砂轮型号和为选用砂轮专门设计的护罩。不是为电动工具设计的砂轮不能充分得到保护，是不安全的。
- b) 护罩必须牢固地装在电动工具上，且放置得最具安全性，只有最小的砂轮部分暴露在操作人面前。护罩帮助保护操作者免于受到爆裂砂轮碎片和偶然触及砂轮的危險。

注：对模具电磨和额定能力小于55mm的砂轮机和切断机可以省略上述警告。

- c) 砂轮只用作推荐的用途。例如：不要用作切割砂轮的侧面进行磨削。施加到砂轮侧面的力



可能会使其碎裂。

- d) 始终为所选砂轮选用未损坏的、有恰当规格和形状的砂轮法兰盘。合适的砂轮法兰盘支承砂轮可以减小砂轮破裂的可能性。切割砂轮的法兰盘可以不同于砂轮法兰盘。
- e) 不要使用从大规格电动工具上用剩的磨损砂轮。用于大规格电动工具上的砂轮不适用于较小规格工具的高速工况并可能会爆裂。

#### ⚠ 反弹和相关警告：

反弹是因卡住或缠绕住的旋转砂轮、靠背垫、钢丝刷或其他附件而产生的突然反作用力。卡住或缠绕会引起旋转附件的迅速堵转，随之使失控的电动工具在卡住点产生与附件旋转方向相反的运动。

例如，如果砂轮被工件缠绕或卡住，伸入卡住点的砂轮边缘可能会进入材料表面而引起砂轮爬出或反弹。砂轮可能飞向或飞离操作者，这取决于砂轮在卡住点的运动方向。在此条件下砂轮也可能碎裂。

反弹是电动工具误用和/或不正确操作工序或条件的结果，可以通过采取以下给出的适当预防措施得以避免。

1. 保持紧握电动工具，使你的身体和手臂处于正确状态以抵抗反弹力。如有辅助手柄，则要一直使用，以便最大限度控制住起动时的反弹力或反力矩。如采取合适的预防措施，操作者就可以控制反力矩或反弹力。
2. 绝不能将手靠近旋转附件。附件可能会反弹碰到手。
3. 不要站在发生反弹时电动工具可能移动到的地方。反弹将在缠绕点驱使工具逆砂轮运动方向运动。
4. 当在尖角、锐边等处作业时要特别小心。避免附件的弹跳和缠绕。尖角、锐边和弹跳具有缠绕旋转附件的趋势并引起反弹的失控。
5. 不要附上锯链、木雕刀片或带齿锯片。这些锯片会产生频繁的反弹和失控。



警告：角磨工作时产生的粉尘可能含有致癌或人体有害的化学物质，例如：

- 油漆中含的铅。
  - 砷和铬与木材起反应后也会产生有毒物质。
- 为了减少这些有毒的化学物质对人体的伤害，要尽量保证在通风的环境下工作，并且工作时配戴合格的安全保护装置。

## 配备

- 夹头
- 扳手

在某些国家或某些特殊的机型，其所提供的配备，可能与以上所给的资料稍有出入。

## 操作说明

1. 检查供电电压 须与铭牌数据相符！

2. 安装砂轮（见A图）

⚠ 不得使用安全线速度低于**40m/s**的磨头，确保磨头在使用前被正确安装、紧固，并在安全位置空载转速运转**30秒**。如果震动剧烈或有其它异常，应立即停止工具运转。严禁使用损坏、龟裂的磨头！

- 1) 将扳手(10)卡在输出轴(9)上，用另一把扳手拧松夹头螺母(2)；
  - 2) 将磨头(8)盘轴插入夹头(1)，直到转动；
  - 3) 用扳手拧紧夹头(1)。
3. 开关机操作

⚠ 检查工具的开关操作是否自如，确保插电前开关处于关停状态！

- 1) 开机：①侧开关：用力按下开关推钮(5)的后部，然后将其向上方推到“1”位置。②后开关：将开关推钮(7)向图示的上方拨到“1”位置。
- 2) 关机：①侧开关：将开关推钮(5)向下方推到“0”位置。②后开关：将开关推钮(7)向图示的下方拨到“0”位置。
- 3) 开动工具后，方可移动工件。
- 4) 在保险子碳刷磨损后，电动工具将自动关机从而避免电机受损！
- 5) 如果是新磨片，必须在保护良好的区域内，以最高空载转速运转至少**5分钟**！

## 实际应用

⚠ 为减少爆炸、电击等危险和伤害，作业前必须检查工件表面下有无隐蔽的电线、气体、供水管道！

⚠ 请操作者牢固握持工具的主握持部位后再行操作！

1. 研磨

- 1) 欲达到最佳之研磨效果，必须在砂轮上轻轻施压并有规律地来回移动砂轮；
- 2) 如果在研磨过程中用力过大，不仅会降低机器之工作效率，也容易磨损砂轮；



- 3) 夹头顶部和砂轮盘底部的间隙務必小于8mm,且夹头顶部和砂轮顶部的间隙控制在45mm以内,以防工具振动和发生意外事故。(见C图)

**⚠ 打磨金属时会产生火花,火花散射范围内,严禁存放任何可燃物料,以免火灾!**

## 工具维护保养



注意: 进行维修检查之前, 必须把插头拔离电源插座!!

1. 避免工具受到震荡、撞击或油脂影响。
2. 检查安装螺钉。经常检查安装螺钉是否紧固稳妥。螺钉松开极易引起严重后果。
3. 定期检查线缆。如发现损伤应立即委托 **DEVON** 授权的维修中心处理。
4. 保持通风槽清洁顺畅。经常清除尘埃、油污, 严防杂物入内。
5. 更换碳刷。经 **DEVON** 授权的维修中心检查和更换碳刷, 以保证工具长期安全使用。
6. 必须由 **DEVON** 授权的维修中心进行维

附表 I : 砂轮的选择方法及用途: 下面表示被研磨物的材质和砂轮大概的标准

被研磨物的材质	砂轮	粒度	结合度	组织	结合剂
炼钢, 硬钢, 锻造钢	WA	60-80	P	m	V
铸铁	C	36	M~O	m	V
黄铜, 青铜, 铝	C	36	J~K	m	V
陶瓷	WA	60-80	M	m	V
合成树脂	C	36	K~M	m	V

附表 II : 一般故障及排除方法

故障	原因	排除方法
1. 接电后电机不运转	1. 电源断了	1. 修复电源
	2. 接头松落	2. 检查所有接头
	3. 开关接触不良或不动作	3. 修理或更换开关
	4. 电刷与换向器表面不接触	4. 更换碳刷
2. 接电后有异响且不旋转或转得很慢	1. 开关触点烧坏	1. 修理或更换开关
	2. 机械部分卡住	2. 检查机械部分
3. 换向器上产生环火或较大火花	1. 电枢短路	1. 修复电枢
	2. 电刷和换向器接触不良	2. 更换碳刷
	3. 换向器表面不光洁	3. 清除杂物, 使换向器表面光洁
4. 工作中旋转慢且有异响	1. 砂轮损坏	1. 更换砂轮
	2. 砂轮碰到钢筋	2. 重新选择作业点

- 修。只能使用 **DEVON** 的配件、零件。
7. 清洁。避免使用造成塑料龟裂损坏的溶剂擦拭塑料零件。建议使用稍微沾湿了肥皂水的柔布擦拭外塑料机壳。

**⚠ 请勿让马达淋到水, 禁止将整个机身投入水中, 以免引起马达故障及触电事故!**

## 环境保护



1. **DEVON** 的包装可以百分之百进行回收再生处理。
2. 报废的电动工具和附件中含有大量有价值的原材料及合成材料, 同样可以进行再生回收。
3. 磨削时所产生的粉尘中会包含有害物质, 因而不应作为普通垃圾倾倒, 而应交给特殊垃圾回收站处理。

## 服务

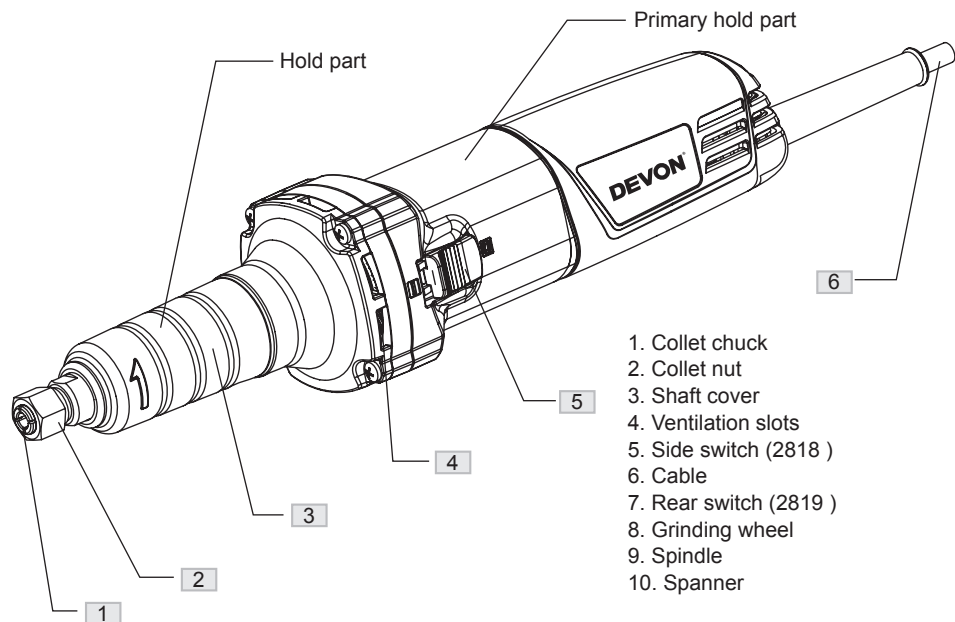
1. 工具需要保修时, 请自行送至当地特约维修中心, 并提供有效保修卡及购机发票原件, 遗失保修卡恕不补发。
2. 由于正常磨损、超载或不当使用而导致的损坏, 不在保修范围内。

# DESCRIPTION OF THE TOOL

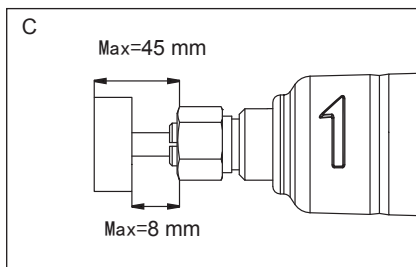
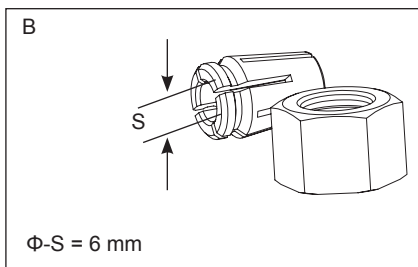
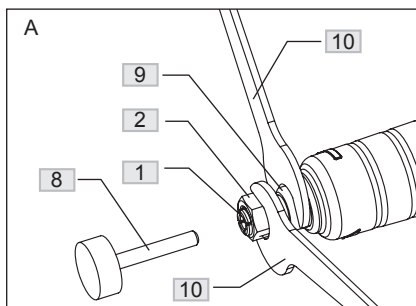
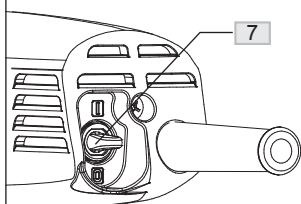
## 1. MAIN PARTS

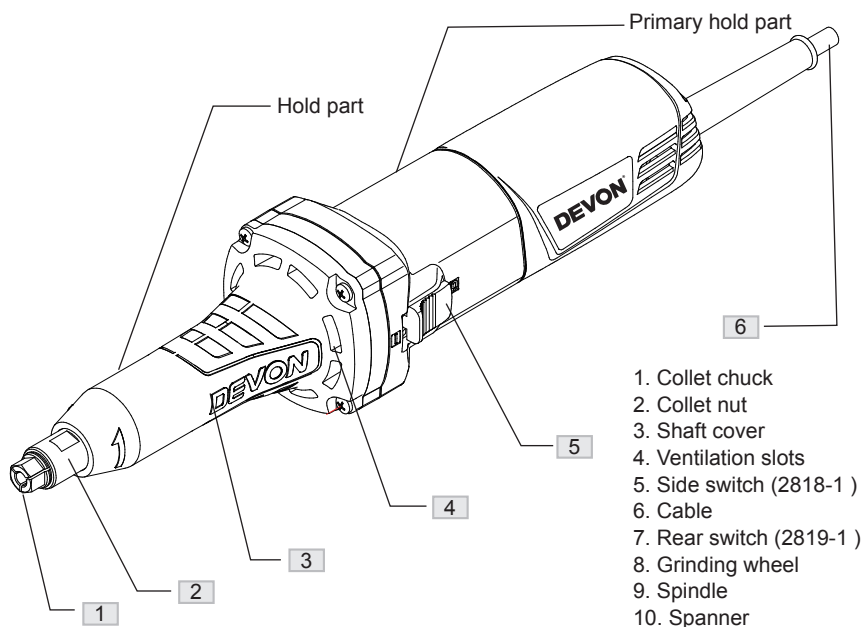


Straight grinders are intended for the precision grinding of metals by means of end milling bits and for the milling of nonferrous metals, plastics, hardwoods etc. by means of end milling bits. Read, understand and follow all safety rules and instructions before using this tool.

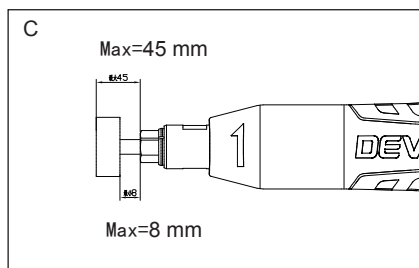
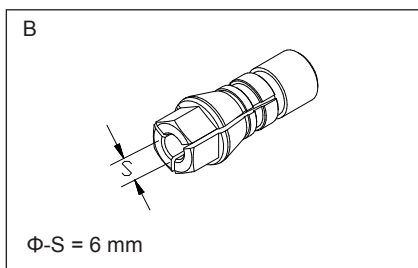
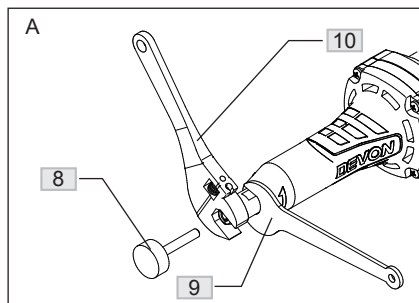
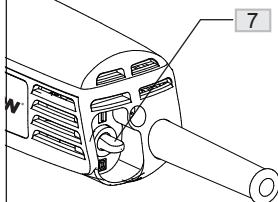


The next picture is after body of straight grinder (2819):

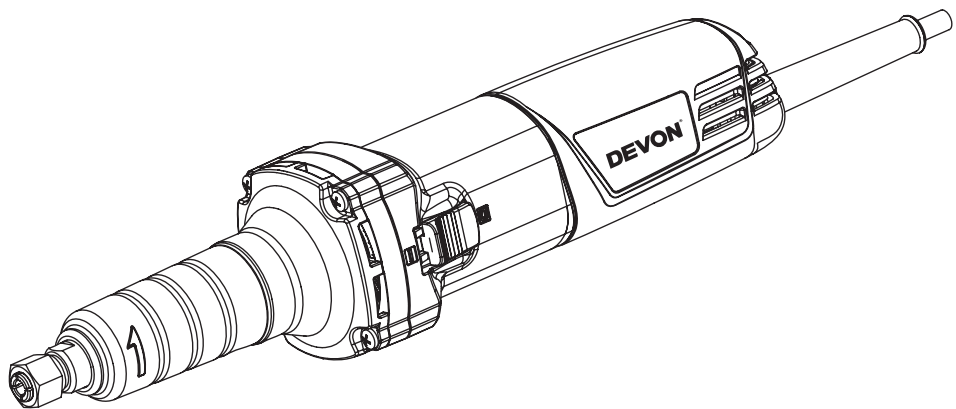




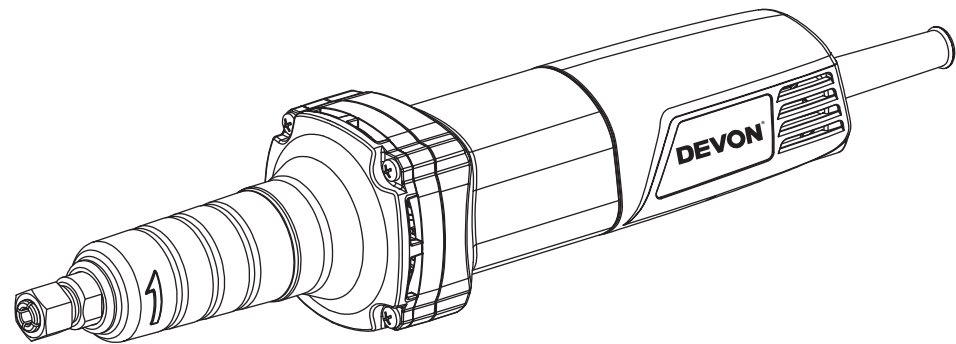
The next picture is after body of straight grinder (2819-1):



2818



2819



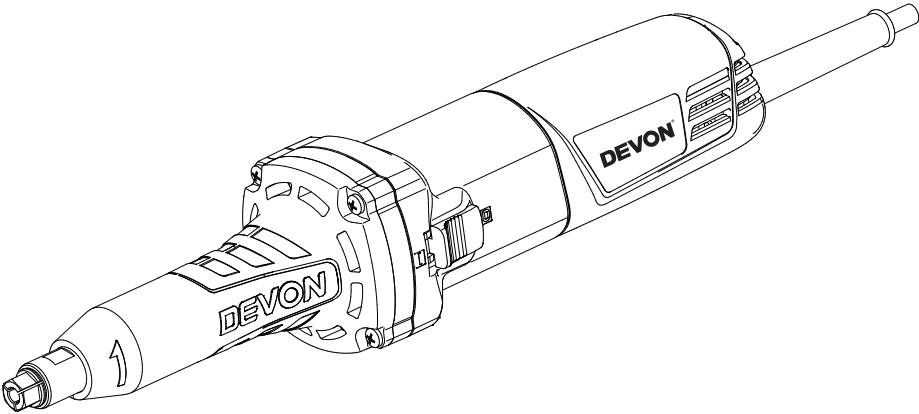
2. TOOL SPECIFICATIONS

Model	2818	2818-1	2819	2819-1
No-load( /min )	27000	28000	27000	28000
Input Power( W )	480	500	480	500
Wheel diameter ( mm )	25	25	25	25
Weight( kg )	1.6	1.6	1.6	1.6
Protect grade	□/II	□/II	□/II	□/II
Insulated grade	E	E	E	E
Remark				

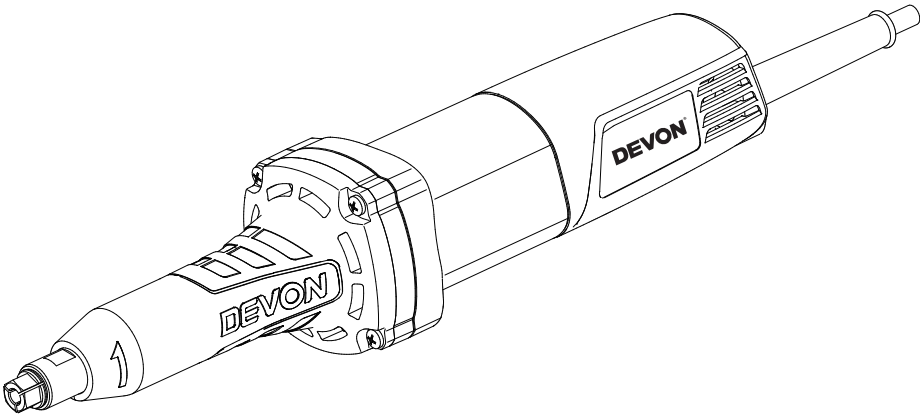
Note1: Due to's **DEVON**'s continuing program of development, the specifications herein are subject of change without prior notice

Note2: The values given are valid for nominal voltages [U] of 220 V. For lower or higher voltages and models for specific countries, these values can vary.

2818-1



2819-1




2. TOOL SPECIFICATIONS

Model	2818	2818-1	2819	2819-1
No-load( /min )	27000	28000	27000	28000
Input Power( W )	480	500	480	500
Wheel diameter ( mm )	25	25	25	25
Weight( kg )	1.6	1.6	1.6	1.6
Protect grade	□/II	□/II	□/II	□/II
Insulated grade	E	E	E	E
Remark				

Note1: Due to's **DEVON**'s continuing program of development, the specifications herein are subject of change without prior notice

Note2: The values given are valid for nominal voltages [U] of 220 V. For lower or higher voltages and models for specific countries, these values can vary.

## GENERAL SAFETY RULES (All of the power tools)

 **WARNING:** Read instructions. Failure to follow instructions listed below may result in electric shock, fire and/or serious personal 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 instructions for consultation.

### 1. WORK AREA

- 1) Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- 2) 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.
- 3) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

### 2. ELECTRICAL SAFETY

- 1) 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.
- 2) Avoid body contact with earthed or grounded surfaces such as pipes, radiators and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- 3) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- 4) 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.
- 5) 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.
- 6) 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

- 1) 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.
- 2) Use safety equipment. Always wear eye protection. Safety equipment such as a dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- 3) 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.
- 4) Remove any adjusting key or wrench before turning the tool on. A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.
- 5) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- 6) Dress properly. Do not wear loose clothing or jewellery. Keep your clothing, gloves and hair away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- 7) If devices are provided for the connection of dust extraction and collection facilities, ensure that these are connected and properly used. Use of these devices can reduce dust-related hazards.
- 8) Use clamps or another practical way to support and secure the workpiece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
- 9) Do not use on a ladder or unstable support. Stable footing on a solid surface enables better control of the power tool in unexpected situations.
- 10) Keep handles dry, clean, and free from oil and grease. Slippery hands cannot safely

- 11) Always wear safety glasses with side shields. Everyday glasses may have impact resistant lenses, but they are not safety glasses. Following this rule will reduce the risk of eye injury.
- 12) Protect your lungs. Wear a face or dust mask if the operation is dusty. Following this rule will reduce the risk of serious personal injury.
- 13) Protect your hearing. Wear hearing protection during extended periods of operation. Following this rule will reduce the risk of serious person injury.

#### 4. POWER TOOL USE AND CARE

- 1) 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.
- 2) 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.
- 3) Disconnect the plug from the power source or come away the battery box 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.
- 4) 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.
- 5) 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.
- 6) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- 7) 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.

- 8) Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you lend this tool to someone else, also lend them these instructions.

#### 5. SERVICE

- 1) Have your power tool serviced by a qualified repair person.
- 2) When servicing a power tool, use only identical replacement parts.
- 3) Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of shock or injury.

#### ALL OF SAFETY RULES

##### CURRENT SAFETY WARNING


1. This power tool is intended to function as a grinder tool and cut-off tool. Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.
2. Do not recommend use this power tool operations as sander, wire brush and so on. Used this power tool do besides appointed function will cause hazards and personal injuries.
3. Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.
4. The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can fly apart.
5. The outside diameter and the thickness of your accessory must be within the capacity



rating of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled.

6. The arbor size of wheels, flanges, backing pads or any other accessory must properly fit the spindle of the power tool. Accessories with arbor holes that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
7. Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, backing pads for cracks, tear or excessive wear. If the power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute. Damaged accessories will normally break apart during this test time.
8. Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and shop apron capable of stopping small abrasive or work piece fragments. The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
9. Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of the work piece or of a broken accessory may fly away and cause injury beyond the immediate area of operation. Contact with "live" wire will also make exposed metal parts of the power tool "live" and shock the operator.
10. Hold the power tool only by the insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own power cord. Contact with a "live" wire will also make exposed metal parts of the power tool "live" and shock the operator.
11. Position the cord clear of the spinning accessory. If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.
12. Never lay the power tool down until the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control.
13. Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
14. Regularly clean the air vents of the power tool. The fan of the motor will draw dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
15. Do not operate the power tool near flammable materials. Sparks could ignite these materials.
16. Do not use accessories that require coolants. Using water or other coolants may result in electric cauterization or electric shock.

#### **ADDITIONAL SAFETY WARNING:**

 Kickback and related warnings:

Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation at the point of the binding.

For example, if an abrasive wheel is snagged or pinched by the work piece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on the direction of the wheel's movement at the point of pinching. Abrasive wheels may also break under these conditions.

Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

1. Maintain a firm grip with your hands on the power tool and position your body and arm to allow you to resist kickback forces. Always use the auxiliary handle, for maximum control over kick- back or torque reaction during start-up. The operator can control torque reactions or kick back forces, if proper precautions are taken.
2. Never place your hand near the rotating accessory. The accessory may kickback over your hand.
3. Do not position your body in the area where the power tool will move if kickback occurs. Kickback will propel the tool in the direction opposite to the wheel's movement at the point of snagging.
4. Use special care when working sharp edges , sharp sides etc. Avoid bouncing and snagging the accessory. Sharp edges, sharp sides or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
5. Do not attach a saw chain, woodcarving blade or toothed saw blade. Such blades create frequent kickback and loss of control.

#### **ADDITIONAL GRINDING SAFETY WARNING:**

1. Use only wheel types that are recommend for you power tool and the specific guard designed for the selected wheel. Wheel for which the power tool was not designed cannot be adequately guarded and are unsafe.
2. The guard must be firmly attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. The guard helps to protect the operator from broken wheel fragments and accidental contact with the wheel.
3. Wheels must be used only for recommended applications. For example: Do not grind with the side of a cut-off wheel. Side forces applied to these wheels may cause them to shatter.
4. Always use undamaged wheel flanges that are of correct size and shape for your selected wheel. Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage. Flanges for cut-off wheels may be different from grinding wheel flanges.

5. Do not use worn down wheels from larger power tools. A wheel intended for a larger power tool is not suitable for the higher speed of a smaller tool and may burst.



**WARNING:** Some dust created by power Cutting contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints
- Arsenic and chromium from chemically reacted lumber.

Your risk from these exposures varies, depending on how often you do this type pf work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment.

### **STANDERD ACCESSORIES**

- Collet
- Spanner

Be sure to check the accessories as it is subject to change by areas and models.

### **OPERATION**

#### **1. POWER SUPPLY**

The power tool supply must match the nameplate date.

#### **2. INSTALLING WHEEL ( Fig : A )**

**⚠ WARNING:** Only use grinding wheels with maximum safe operating speed rated at or above 40m/s. Ensure that the grinding wheel is correctly mounted and tightened before use and run the tool at no-load speed for 30 seconds in a safe position. Stop immediately if there is considerable vibration or if other defects are detected. Never use damaged grinding wheels or rimous ones.

- 1) Mount the spanner (10) to the spindle (9) and loosen the clamping nut (2) by another spanner.
- 2) nsert the grinding wheel (8) shaft into the collet chuck (1) as far as it will go.
- 3) Tighten the collet chuck (1) securely by using the spanners.

### 3. SWITCH ON AND OFF

**⚠ WARNING:** Make sure you can control the switch freely and keep it off before plugging grinder.

- 1) **ON:** ① **Side Switch:** Depress the rear of the switch (5) and push it forward to position "I". ② **Rear Switch:** Shift rear switch (7) to "I".
- 2) **OFF:** ① **Side Switch:** Shift switch (5) to "0". ② **Rear Switch:** Shift rear switch (7) to "0".
- 3) **Moving the parts after starting power tool.**
- 4) **Once the safety brush torn, grinder is designed to be turned off automatically. Avoid the motor was damaged.**
- 5) **If you have just installed a new grinding wheel or are just beginning a period of work, test wheel by letting it spin for five minutes before applying it to the work piece.**

### APPLICATION

**⚠ WARNING:** To reduce the risk of injury, electric shock and damage to the tool, before any work check the utility lines electricity, gas or water supply line are hidden in the work area.

**⚠ WARNING:** Firmly grasp primary hold part of tool and side handle before starting.

#### 1. GRINDING APPLICATION

- 1) Optimum grinding results are achieved when the grinding tool is moved uniformly back and forth with light pressure.
- 2) Pressure that is too strong reduces the performance capability of the machine and causes the grinding tool to wear more quickly.
- 3) Be sure that the distance between the top of collet chuck and bottom of the grinding wheel is less than 8 mm and between the top of collet chuck and top of the grinding wheel is less than 45 mm to prevent vibration of the tool and unexpected accidents. ( Fig : C )

**⚠ WARNING:** Sparks generated when grinding metal. Take care that no combustible material presented in the area of flying sparks.

### TOOL MAINTENANCE

**⚠ WARNING:** Before any work on the machine itself, pull the power plug.

1. Avoid the tool vibration or impact, and keep it from oil and grease.
2. Inspect bolts periodically. If the bolts loosen, tighten them immediately, or will result in serious accident.
3. Inspect tool cords periodically. If damaged, have repaired at your nearest Authorized Service Center.
4. Keep the rents clean. Clean all parts of the tool, clean dust periodically. To prevent debris entry.
5. Change the brush. Inspect and change the brush by Authorized Service Center to ensure safety operation and long use life.
6. All service MUST only be performed by Authorized Service Center. ALWAYS use only accessories that are recommended for this tool.
7. Cleanliness. Avoid the use of plastic cracks caused by damage to the solvent. Use clean cloths and mild soap to clean the plastic housing.

### ENVIRONMENT PROTECTION



1. Tool, accessories and packaging should be sorted for environment-friendly recycling.
2. Power tools and accessories at the end of their service life still contain large amounts of valuable raw
3. Some dust created by working contains harmful chemicals must be collected by special garbage re- cycle site.

### SERVICE

1. In case of guarantee, repair or purchase of replacement parts, always contact the qualified service center. And supplied with the efficient service card and invoice.
2. It is without the scope of guarantee when the tool was normal wear, overload or improper use of damage.

## Addenda I: Choice and use of wheels

This means is material by grinded, and wheel's standard probable.

Material by grinded	Wheel	Granularity	Combine	structure	bond
Steel-making, Hard steel, Wrought steel	WA	68~80	P	m	V
Cast iron	C	36	M~O	m	V
Brass, Bronze, Aluminum	C	36	J~K	m	V
Chinaware	WA	60~80	M	m	V
Synthetic resin	C	36	K~M	m	V

## Addenda II: Problem Shooting

Problems	Reasons	Ways to Solve The Problems
1. The motor stops running	1. Unconnected to power source	1. Connect to power source
	2. Plugs not fully connect	2. Check all plugs
	3. Switch out of work	3. Replace or repair the switch
	4.Brushs not touch the commutator	4. Replace the brushes with two new ones
2. Running slowly (Not running) with the noise at the beginning of power turn-on	1. Switch out of work	1. Replace or repair the switch
	2. Mechanical trouble	2. Check mechanical parts
3. Commutator sparkle	1. Armature short circuit	1. Repair the armature
	2. Poor connection between the brush and the commutator	2. Replace it with a new one
	3. Commutator surface not smooth	3. Clean the commutator surface
4. Running slowly with the noise in process of working	1. Grinding wheel worn out	1. Replace it with a new one
	2. Grinding wheel touched reinforcing steel bar	2. Chose another work place

## POWER, IN YOUR HANDS

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# 保修卡

## Warranty Card

<b>合格证</b> <b>PRODUCT CERTIFICATION</b>	
制造商: 南京德朔实业有限公司 地址: 江苏南京江宁经济技术开发区将军大道159号 销售商: 泉峰(中国)工具销售有限公司	检验员 

全国统一售后服务电话  
**400-828-9076**

### 重要提示

机身铭牌上的9位编码是厂家判断机器真伪及提供售后服务的重要凭证, 如您购买了编码无法辨识的机器, 可能无法得到厂家正常的保修服务

## 保修服务说明:

- 工具需要维修时, 请送至当地大有授权维修中心或寄至泉峰售后服务部, 产品保修期以购机发票/收据原件上的日期起算。
- 仅对存在质量缺陷的产品给与免费维修或免费换新, 其前提是经大有授权维修中心证明其故障是由于材料或制造缺陷所造成的, 并处于保修期内。
- 保修期及保修条款根据工具类别而定:
  1. 交流工具:
    - 1.1. 整机保修6个月或者转子换向器直径磨损量在0.2毫米以内, 以先到为准。
  2. 直流工具:
    - 2.1. 12V产品: 机身保修12个月, 电池、充电器为12个月内包换。
    - 2.2. 14V以上产品: 机身保修6个月, 电池、充电器为6个月内包换。
  3. 光电工具:
    - 3.1. 激光测距仪: 保修24个月。
    - 3.2. 其他光电产品: 保修12个月。
- 保修不包括:
  1. 任何自然磨损以及正常使用时所发生损耗, 如气缸、齿轮、O形圈、转子换向器直径磨损量超过0.2毫米、碳刷、轴承、开关、电子线路板、电源线等。
  2. 由于不遵守操作说明、不正确使用、异常的环境条件、不当的操作条件、过载或缺乏足够的维护和保养所导致的工具故障。
  3. 自行或非大有授权维修点拆修的所导致的工具故障。
  4. 由于使用非原装大有配件而引起的缺陷。
  5. 经过改装或增加部件的工具。
  6. 随机附送的配件或者附件。
- **Quark**系列产品定位于家庭DIY用户, 不能用于任何商业目的场合。如有违反, 厂家将不提供保修服务。
- 具体保修明细可查询大有官网: [www.devon.com.cn](http://www.devon.com.cn)

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如有 **DEVON 大有** 牌电动工具产品需要维修、保养和咨询服务，  
请您与 **DEVON 大有** 特约维修中心联系。

**售后服务官方QQ:** 3051884030

**售后服务邮箱:** devon-afterservice@chervon.com.cn

**售后服务咨询电话:** 025-52786697、025-87159105

**售后服务地址:** 江苏省南京市江宁区将军大道159号，  
德朔工业园，泉峰（工具）中国销售有限公司，  
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**售后件寄回收件人:** 客服1号

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本资料内容如有变更，恕不另行通知。

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# **DEVON<sup>®</sup>**

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