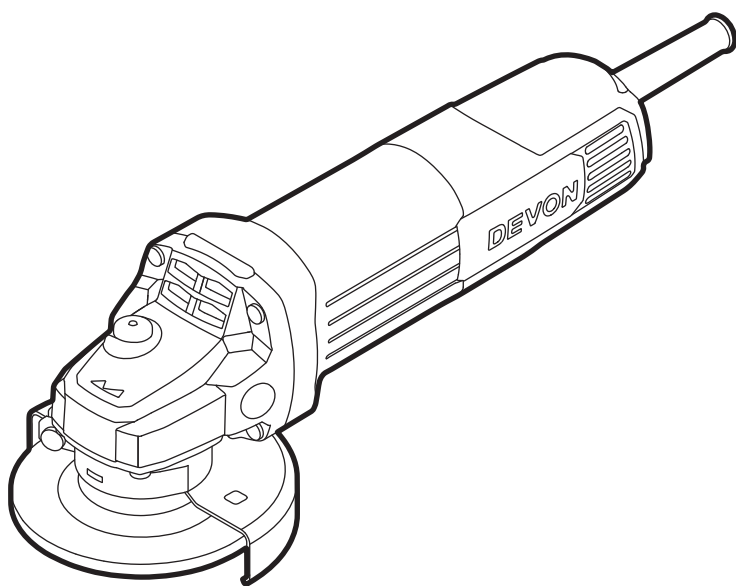


# DEVON<sup>®</sup> 大有

型 号：2851-11-100B



中国 角磨

GB Angle Grinder

各产品外观之间存在差异，请以实物为准

专业电动工具

## PROFESSIONAL TOOLS

大有工具 “劲”在掌握

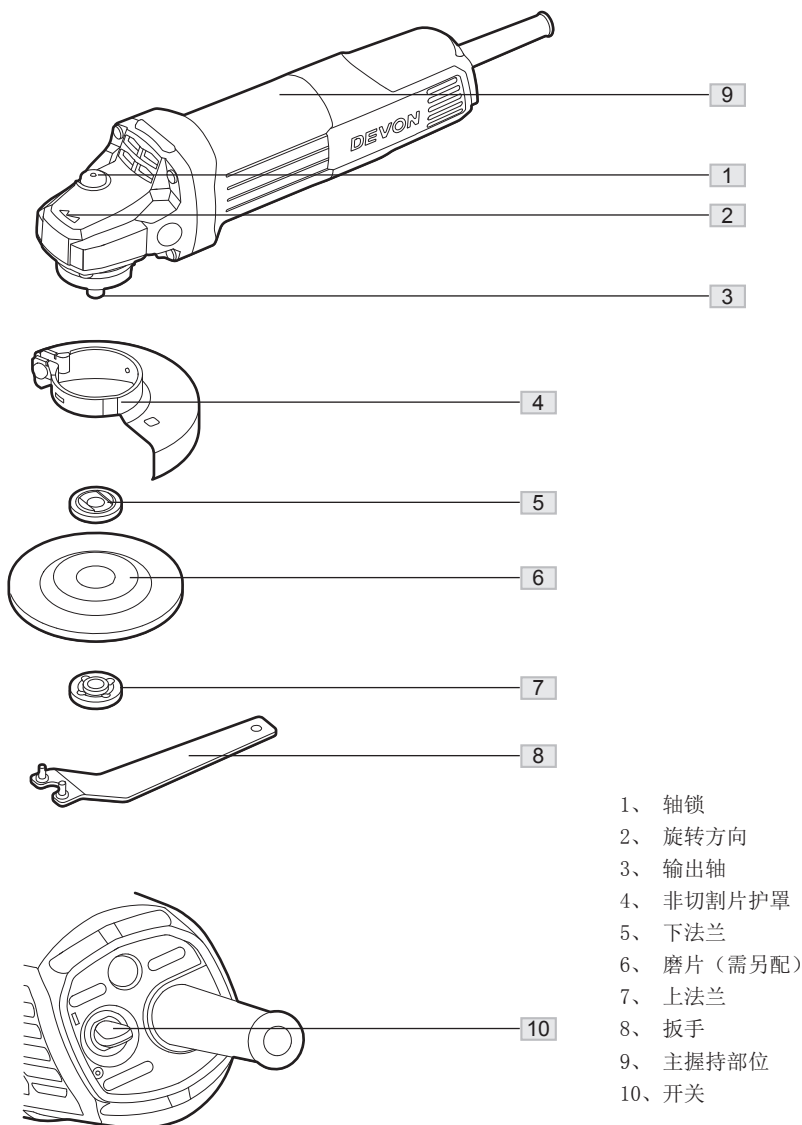
# 角磨简介



本工具适用于金属或石材上打磨。打磨时不能使用水。

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



2、工具规格

型号	2851-11-100B
额定输入功率（瓦）	1100
额定转速（转/分钟）	11000
主轴直径	M10
磨片直径（毫米）	100
重量（千克）	1.84
保护等级	□/II
绝缘等级	E

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。

# 电动工具通用安全警告

**⚠ 警告！** 阅读随电动工具提供的所有安全警告、说明、图示和规定。不遵照以下所列说明会导致电击、着火和/或严重伤害。

保存所有警告和说明书以备查阅。

警告中的术语“电动工具”是指市电驱动（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

- 1) 保持工作场地清洁和明亮。杂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) 操作电动工具时，远离儿童和旁观者。注意力不集中会使你失去对工具的控制。

## 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降低电击风险。
- 2) 避免人体接触接地表面，如管道、散热片和冰箱。如果你身体接触接地表面会增加电击风险。
- 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电击风险。
- 4) 不得滥用软线。绝不能用软线搬运、拉动电动工具或拔出其插头。使软线远离热源、油、锐边或运动部件。受损或缠绕的软线会增加电击风险。
- 5) 当在户外使用电动工具时，使用适合户外使用的延长线。适合户外使用的电线将降低电击危险。

## 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。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。
- 2) 使用个人防护装置。始终佩戴护目镜。防护装置，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。
- 3) 防止意外起动。在连接电源和/或电池包、拿

起或搬运工具前确保开关处于关断位置。手指放在开关上搬运工具或开关处于接通时通电会导致危险。

- 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) 手不要过分伸展。时刻注意立足点和身体平衡。这样能在意外情况下能更好地控制住电动工具。
  - 6) 着装适当。不要穿宽松衣服或佩戴饰品。让你的头发和衣服远离运动部件。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、集尘设备连接用的装置，要确保其连接完好且使用得当。使用集尘装置可降低尘屑引起的危险。
  - 8) 不要因为频繁使用工具而产生的熟悉感而掉以轻心，忽视工具的安全准则。某个粗心的动作可能在瞬间导致严重的伤害。
- ## 4. 电动工具使用和注意事项
- 1) 不要勉强使用电动工具，根据用途使用合适的电动工具。选用合适的按照额定值设计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电源，则不能使用该电动工具。不能通过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/或卸下电池包（如可拆卸）。这种防护性的安全措施降低了电动工具意外起动的风险。
  - 4) 将闲置不用的电动工具贮存在儿童所及范围之外，并且不允许不熟悉电动工具和不了解这些说明的人操作电动工具。电动工具在未经培训的使用者手中是危险的。
  - 5) 维护电动工具及其附件。检查运动部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，应在使用前修理好电动工具。许多事故是由维护不良的电动工具引发的。
  - 6) 保持切削刀具锋利和清洁。维护良好地的有锋利切削刃的刀具不易卡住而且容易控制。
  - 7) 按照使用说明书，并考虑作业条件和要进行的作业来选择电动工具、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情况。

- 8) 保持手柄和握持表面干燥、清洁，不得沾有油脂。在意外的情况下，湿滑的手柄不能保证握持的安全和对工具的控制。
5. 维修
- 由专业维修人员使用相同的备件维修电动工具。这将保证所维修的电动工具的安全。

#### 所有操作说明

##### 通用安全警告

1. 该电动工具是实现砂轮机功能的。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、着火和/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。电动工具不按指定的功能去操作，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，钢丝刷是否松动或金属丝是否断裂。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作围裙。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. 当在切割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。切割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。
11. 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。
12. 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。
13. 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。
14. 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。
15. 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。
16. 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。

#### 附加安全说明

##### 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启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。

#### 附加磨削和砂磨的专用安全警告

1. 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防护，是不安全的。
2. 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险。
3. 砂轮只用于推荐的用途。例如：不要用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。
4. 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。
5. 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于较小规格工具的高速工况并可能会爆裂。

符号

含义



阅读说明书。



警告标记。



危险范围！手掌，手臂和手指头必须尽可能远离这个范围。



请佩戴护目镜。



佩戴耳罩。工作噪音会损坏听力。



请佩戴防尘面具。



佩戴工作手套



II类工具。



不要丢入垃圾桶。



警告：器具工作时产生的粉尘可能含有致癌或对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

- 扳手 1个

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

### 安装

**⚠ 警告：**为了避免意外开动电动工具。安装附件时或进行电动工具的维护修理工作时，机器的插头都不可以插在插座中。

检查供电电压，须与铭牌数据相符！

#### 1. 安装护罩

**⚠ 警告：**当使用角磨来打磨时，务必确保护罩是正确安装在机器上。

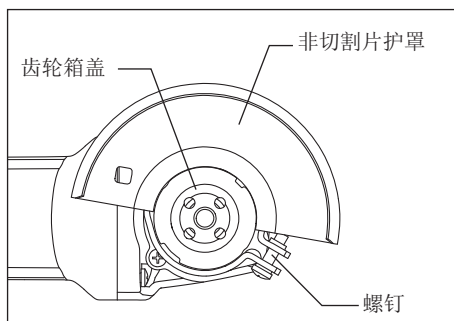
**⚠ 注意：**有受伤风险！请带上防护手套。

1) 拔下插头。

2) 将护罩箍上的突起部分与齿轮箱盖上的沟槽吻合。

3) 顺时针旋转护罩。

4) 逆时针方向旋转为拆卸护罩。

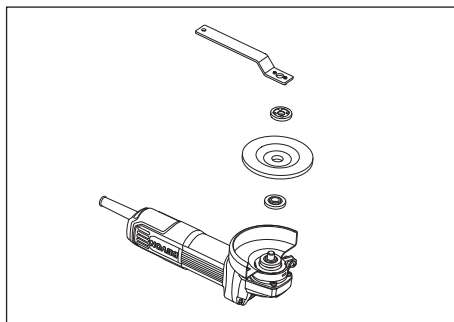


## 2. 安装磨片

**⚠ 注意：**不得使用安全线速度低于80m/s的砂轮，严禁使用损坏、不平衡的砂轮！

- 1) 按下并按住角磨轴锁。
- 2) 使用扳手来松开角磨轴上的上法兰。
- 3) 将磨片正确的放置好。
- 4) 按住角磨轴锁。
- 5) 使用扳手拧紧上法兰。
- 6) 在使用前，请试运行一下角磨，检查各个部件是不是安装到位。

**⚠ 注意：**在使用前，请先运行角磨大于30秒左右，检查角磨各个部件是不是安装到位，有无异常振动。



少30秒的无载试机。不可以使用已经损坏、变形或会震动的磨片。损坏的磨片可能会破裂并且造成伤害。

加工含铅的颜料以及矿物和金属所产生的废尘有害健康。工作场所要保持空气流通。最好佩戴P2 滤网等级的口罩。

**⚠ 注意：**请操作者牢固握持工具的主握持部位后再行操作！

## 1. 启动和关闭

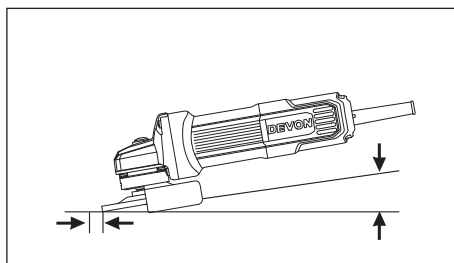
**⚠ 注意：**检查工具的开关操作是否自如，确保插电前开关处于关停状态！

- 1) 开启：将开关推钮拨到“I”位置。
- 2) 关闭：将开关推钮拨到“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！

## 2. 打磨

将工具以20-40°位置操作时会达到最佳的效果。使用时，请使用恰当的力度，在工件的表面来回移动角磨。因此，加工件不会变的特别热，也不会导致变色。

**⚠ 注意：**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！



## 实际应用

**⚠ 注意：**电源的电压！电源的电压必须和电动工具铭牌上标示的电压一致。


**⚠ 注意：**工作时，请不要握持头壳操作。操作之前先检查磨片。不仅要正确地安装好磨片，而且磨片必须能够无阻地旋转。必须进行至

## 工具维护保养



警告：对器具进行维修检查之前，必须把插头拔离电源插座。

- 1) 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事故。
- 2) 定期检查线缆。电源线是特殊制备的，如发现损伤应立即委托 **DEVON** 授权的维修中心处理。此工具所用电源线为特殊结构，且勿擅自更换电源线，如需更换，请到 **DEVON** 授权的维修中心处理。
- 3) 保持通风槽清洁顺畅。经常清除尘埃、油污，严防杂物入内。
- 4) 更换碳刷(仅针对有刷电机工具)。当碳刷磨损到一定长度器具将会停止，一旦发生此情况，应及时更换碳刷，为了保证产品的安全性和可靠性，由经 **DEVON** 授权的维修中心检查和更换碳刷，以防止触电和保证工具长期安全使用。
- 5) 必须由 **DEVON** 授权的维修中心进行维修。只能使用 **DEVON** 的配件、零件。
- 6) 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。
- 7) 避免工具受到震荡、撞击或油脂影响。

 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) 磨屑或切割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、过载或不当使用而导致的损坏，不在保证范围内。

### 附：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. 旋转慢且有异响	1. 磨头损坏	1. 更换磨头
	2. 磨削碰到钢筋	2. 重新选择作业点



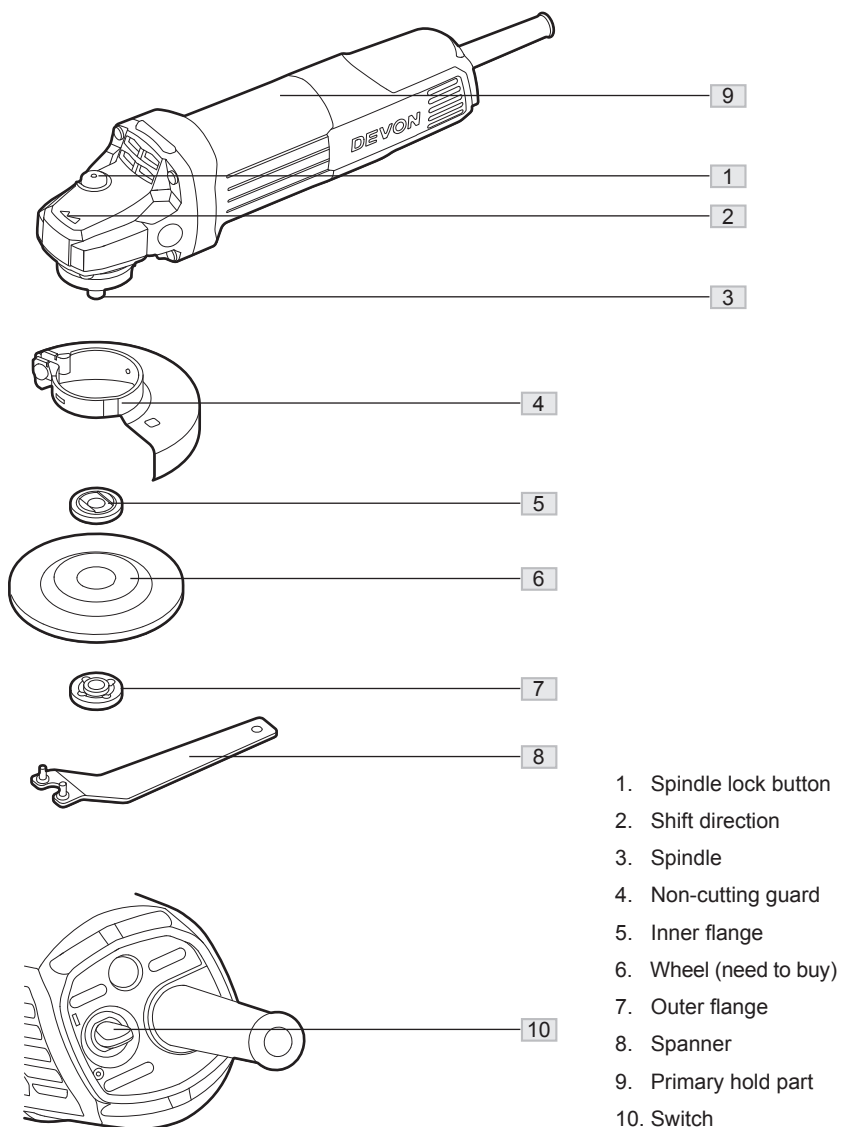
## DESCRIPTION OF THE TOOL



The power tool is intended for dry grinding metal and stone.

Read, understand and follow all safety rules and instructions before using this tool.

### 1. MAIN PARTS




2、 TOOL SPECIFICATIONS

Model	2851-11-100B
Rated power input (W)	1100
Rated speed(/min)	11000
Spindle thread	M10
Max. grinding tool Ø (mm).	100
Weight	1.84
Protection class	□/II
Insulation grade	E

**NOTE 1:** Due to **DEVON**'s continuing program of development, the specifications herein are subject of change without prior notice.

**NOTE 2:** 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

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

### SAVE THESE INSTRUCTIONS

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.

#### 1. WORK AREA SAFETY

- 1) **Keep your work area clean and well lit.**  
Cluttered or dark areas invite accidents
- 2) **Do not operate power tools in explosive atmosphere, 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 may 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 grounded power tools. Unmodified plugs and matching outlets will reduce the risk of electric shock.
- 2) **Avoid body contact with grounded surfaces, such as pipes, radiators, ranges, and refrigerators.** There is an increased risk of electric shock if your body is 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 the cord away from heat, oil, sharp edge, 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 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 dust mask, non-skid safety shoes, hard hat, and hearing protection, when used for appropriate conditions, will reduce personal injuries.
- 3) **Avoid accidental starting.** Make sure that the switch is in the “OFF” position before plugging the tool into an electrical outlet. Carrying power tools with your finger on the switch or plugging in power tools that have the power switch “ON” invites accidents.
- 4) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or key 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 jewelry.** Keep your clothing, gloves, and hairs away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- 7) **If devices are provided for the connection of dust extraction and collection facilities, make sure that these are connected and properly used.** Use of these devices can reduce dust-related hazards.

#### 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 more safely at the rate for which it was designated.
- 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 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.

**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 tool's 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 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 those intended could result in a hazardous situation.

## **5. SERVICE**

- 1) Have your power tool serviced by a qualified repair person.

## **ALL OF SAFETY RULES**

1. This power tool is intended to function as a grinder 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.

## SYMBOL

### SYMBOL



Read the instruction



Warning



Danger area! Keep hands, fingers or arms away from this area.



Wear safety goggles.



Wear ear protectors. Exposure to noise can cause hearing loss.



Wear a dust respirator.



Wear protective gloves.



Double Insulation



Don't drop into the trash



**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
- Arsenics and chromium from chemically reacted lumber.

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

## STANDARD ACCESSORIES

### ● Spanner

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

## OPERATION

### POWER SUPPLY

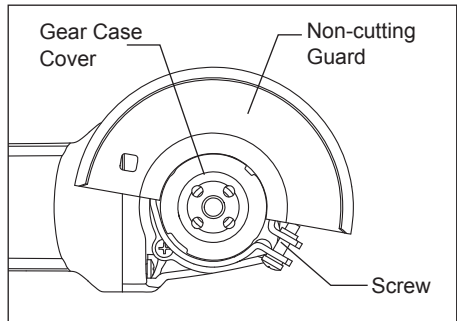
The power tool supply must match the nameplate date.

### Attach the Guard

**⚠ WARNING:** When using the angle grinder for roughing, never work without the guard.

**⚠ CAUTION!** Risk of injury! Wear protective gloves.

- 1) Pull out the mains plug.
- 2) Lugs on the guard hood must be located in the flange recesses.
- 3) Turn guard hood clockwise. Rotation is possible in one direction only!
- 4) Remove in reverse order.

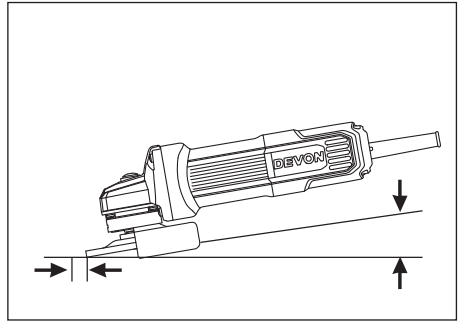
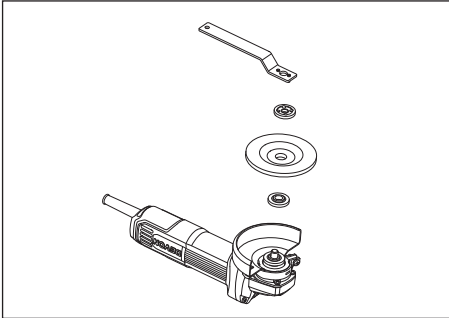


### Attach the Handle

**⚠ WARNING:** Only use grinding wheels with maximum safe operating speed rated at or above 80m/s. Never use damaged or imbalance grinding wheels.

- 1) Press and hold down the spindle lock.
- 2) Using the spanner, loosen the Outer flange on the spindle in an anti-clockwise direction and remove.
- 3) Insert the grinding wheel in the correct position.
- 4) Press and hold down the spindle lock.
- 5) Tighten the Outer flange with the spanner.
- 6) Carry out a test run to check that the tool is clamped in the centre.

**NOTE:** Switch on the angle grinder with the switch (without engaging it) and run the angle grinder for approx. 30seconds. Check for imbalances and vibrations.



## TOOL MAINTENANCE



**WARNING:** Before any work on the machine itself, unplug the saw from the power source.

1. Inspect bolts periodically. If the bolts loosen, tighten them immediately, or will result in serious accident.
2. Inspect tool cords periodically. The cord is special prepared, if damaged, have repaired at your nearest Authorized **DEVON** Service Center. This tool was used with the power cord as a particular structure, don't replace the power cord without authorization, such as replacement, please go to the Authorized **DEVON** Service Center.
3. Keep the vents clean. Clean all parts of the tool, clean dust periodically. To prevent debris from entry.
4. Replace the carbon brush when the carbon brush is worn out in certain length and motor stops running. All maintenance should be carried Out by Authorized **DEVON** Service Center.
5. All service **MUST** only be performed by Authorized **DEVON** Service Center. **ALWAYS** use only **DEVON** accessories that are recommended for this tool.
6. Cleaning. Avoid the use of plastic cracks caused by damage to the solvent. Use clean cloths and mild soap to remove dirt, dust, etc.
7. Avoid the tool vibration or impact, and keep it from oil and grease.

**WARNING:** Do not allow the water entering the motor and the tool full immersed in the ware, which will result in motor malfunction and electric shock.

## APPLICATION

**NOTE:** Observe correct mains voltage!

**NOTE:** Don't hold gear box to operate!

### 1. Switching On and Off

- 1) ON: Shift rear switch to "I".
- 2) OFF: Shift rear switch 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.

**NOTE:** Following a power failure, the switched on power tool does not restart.

### 2. Rough-grinding

**WARNING:** Never use cutting-off wheels for rough-grinding.

Angle of wheel 20–40° for best performance. Applying moderate pressure, move the angle grinder backwards and forwards. As a result, the workpiece will not become too hot and there will be no discoloration; nor will there be any grooves. Applying moderate pressure, move the angle grinder backwards and forwards. As a result, the workpiece will not become too hot and there will be no discoloration; nor will there be any grooves.

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

## 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 materials and plastics which can likewise be fed back into a recycling process.
3. Some dust created by working contains harmful chemicals must be collected by special garbage recycle 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.

### Trouble 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. Brushes 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	1. Cut sheet worn out	1. Replace it with a new one
	2. Bearing worn out	2. Replace it with a new one



## POWER, IN YOUR HANDS

# 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的种类而定:
  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、不适当的操作条件、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)

本资料内容可能有变更, 将不另行通知。如有疑问, 可拨打400官方服务热线咨询。



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、025-84994857、  
025-84994858

**售后服务地址:** 江苏省南京市江宁区将军大道529号，  
德朔 泉峰(工具)售后服务部

**售后件寄回收件人:** 客服1号

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输入“售后”二字，即可  
查询售后服务网点



全国统一售后服务电话

**400-828-9076**

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版次：1803

**DEVON®大有**

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