



# CTS75/150

## BELT GRINDER

### 砂带机



# 1. 机器安全规则

注意:请仔细阅读说明书, 以免出现任何问题。

与所有机器一样, 操作和使用这台机器有一定的危险。小心谨慎地使用机器将大大减少人身伤害的可能性。但是, 如果忽视正常的安全注意事项, 可能会对操作人员造成人身伤害。只要这些规则适用于这台特定的机器, 就要遵守它们。

这台机器是为某些特定用途而设计的。我们强烈建议不要以任何方式修改此机器和/或将其用于设计之外的任何应用。

如果您对其应用有任何疑问, 请在与经销商联系之前不要使用该机器。

- ① 为了您自身的安全, 操作工具前请先阅读使用说明书。
- ② 保持机器处于正常工作状态。
- ③ 拆下调节键和扳手。要养成开机前检查机器的习惯。
- ④ 保持工作区域清洁。杂乱的区域和长椅会引发事故。
- ⑤ 请勿在潮湿或淋雨等危险环境中使用。始终保持工作区域光线充足。
- ⑥ 远离儿童和访客。它们必须始终与机器保持安全距离。
- ⑦ 确保工作区域不允许未经授权的人员进入。使用挂锁, 主开关, 拆下启动钥匙等。
- ⑧ 不要使机器过载。这台机器的容量在适当装载时达到最大。
- ⑨ 不要强迫机器或附件做它没有设计的工作。
- ⑩ 穿着得体。不要穿宽松的衣服、手套、领带、戒指、项链、手镯或珠宝, 它们可能会被活动部件夹住。建议不要穿防滑鞋。戴发网来控制长头发。
- ⑪ 佩戴安全眼镜, 按安全规定工作。如果操作有灰尘, 请使用口罩或防尘口罩。
- ⑫ 保持机器处于最佳状态。保持锋利和清洁。仔细阅读说明书, 按照说明书清洗、润滑和更换工具。
- ⑬ 在维修前或更换附件时, 断开电源。
- ⑭ 只使用推荐的配件。有关推荐的配件, 请查阅用户手册。使用不当的配件可能会造成危险。
- ⑮ 避免意外起动。在插入电源线之前, 请确保开/关开关处于“off”位置。
- ⑯ 不要站在机器上。如果机器倾斜或切割工具不小心接触, 可能会造成严重伤害。
- ⑰ 检查损坏部件。立即更换或修理损坏的部件。检查机器运动部件的对中、运动部件的捆绑、部件的破损、安装和其他可能影响其运行的情况。
- ⑱ 不要让机器在无人看管的情况下运行。在电源完全停止之前, 不要关闭电源。
- ⑲ 千万不要在酒精、药物或毒品的影响下使用机器。
- ⑳ 在维修、维护等之前, 确保机器已断开电源。
- ㉑ 保留原包装, 以备将来运输或搬迁机器之用。

附加安全规则

请记住:

- 在维护和维修期间，机器必须关闭并断开电源。
- 测量夹紧的工件时只能在机器关闭。

不要靠在机器上，注意穿戴宽松的衣服、领带、珠宝等。不要拆除安全装置或防护装置。当防护打开时，不要使用机器。加工粗糙材料时一定要戴上护目镜。

毛刺和碎屑只能用扫地机或其他辅助工具去除，不要徒手去除!不要让机器在无人看管的情况下运行。



一定要戴上护目镜!

2. 技术参数

型号		CTS75	CTS150
电机	KW	3 / 4	3 / 4
接触轮	Mm	200x75	200x150
转向滚轮	Mm	225x75	225x150
平面磨削	Mm	530	530
砂带尺寸	Mm	2000x75	2000x150
砂带速度	Mm/sec.	34	34
工作高度	Mm	475-1240	475-1240
重量	Kg	85	105
宽 x 高 x 长	mm	500x1010x1000	560x1010x1000

3. 安装

机器以木箱交付。机器应放置在水平表面上，并通过四个底板孔用螺栓固定。

检查以下功能:

- ① 砂带运动自如。
- ② 砂带不接触磨削支承架。

4. 电源连接

S型带式磨床必须由合格的电工安装电线。3KW电机配有过载保护开关和无电压释放，可直接连接到380 V, 50/60Hz。连接只能用4芯电缆(1.5mm2)带插头的短电缆完成，从而可以实现完全的电力中断。保险丝16A(请参阅所附电气数据表)。

5. 砂带追踪

参见图1

第一次启动机器时，砂带不能集中在接触轮上运行。这是通过转动跟踪调节器(6)来纠正的:顺时针-砂带向左移动。逆时针-砂带向右移动。

## 6. 更换砂带

参见图1

- ① 关闭机器
- ② 确保砂带处于完全静止状态。
- ③ 拆卸火花阀(1)
- ④ 转动手柄打开侧盖(12)。
- ⑤ 向下移动砂带张力释放杆(7)放松砂带。
- ⑥ 更换砂带。注意砂带的正确旋转方向。
- ⑦ 向上移动砂带松紧杆(7)，紧固砂带。
- ⑧ 关闭侧盖(12)，重新安装火花阀(1)。

## 7. 带式磨床的操作

参见图1



任何时候都要戴上护目镜和耳塞！

### ① 接触研磨

对接触轮(3)进行磨削时，确保砂带防护罩(5)关闭。操作者面向接触轮(3)，双手握住物料向上工作。必须将手放在远离研磨的地方，因为在操作过程中材料会发热。物料被推到砂带上，如有必要，放在研磨支架(2)上。在所需的表面上对材料进行车削和研磨。

### ② 表面磨

表面磨削时，操作者面对打开的砂带保护(5)。双手握住物料，用力推顶工作支撑(4)砂带下的研磨基础必须清洁。

### ③ 高度调整

松开底座旋转点上的头部倾斜锁定螺栓（9）。不要太松，以免磨头倾斜太大。螺栓松开后，研磨头向上或向下调整倾斜以适应您的需要。然后螺栓拧紧。

### ④ 日常维护

经常清洗，如有必要，用压缩空气使车轮脱落。接触轮和转向滚轮的正常保养。只有在使用完全清洁的磨削基础时，才能获得良好的表面磨削效果。否则就必须更新。按要求必须更换砂带，请参阅“更换砂带”。火花阀必须经常放空。

## 8. 专用配件

参见图1

排气集尘袋(与过载保护开关(8)电连接)。

9. 机器概述

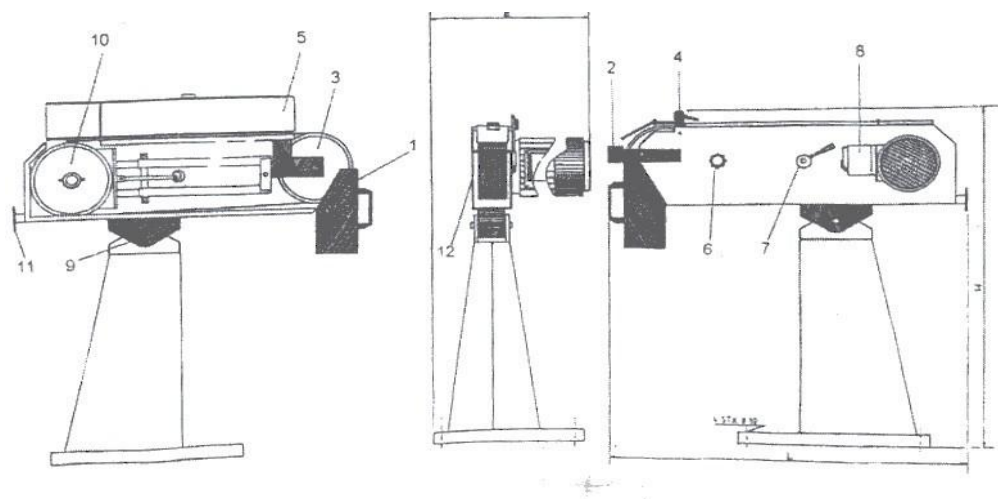


图1

1. 火花收集器	7. 砂带松紧杆
2. 前端工作支架	8. 过载保护开关
3. 接触轮	9. 夹具的角度和高度调整
4. 顶部工作支架	10. 转向辊
5. 砂带护罩	11. 电动排气法兰
6. 跟踪调节器	12. 侧盖

10. 砂带机噪音测量

① 结果:CTS150

机器声音功率:

A:空载(空转)，精疲力尽

B:当磨平杆50x15精疲力尽时

Hz	63	125	250	500	1K	2K	4K	A-距离
A L Wa	73	76	91	82	85	88	88	93
B L Wa	70	74	86	81	84	88	91	93

作业场所的噪音等级:

A: 85 dB (A)空载(空转)耗尽B: 88 dB (A)负载耗尽

② 结果:CTS150

磨扁棒时机器噪音等级50x15

HZ	63	125	250	500	1K	2K	4K	A-距离
LWA	73	74	80	84	86	89	90	96

工作场所噪声等级:90db (A)

# BELT GRINDERS CTS75 - CTS150

## 1. GENERAL SAFETY RULES FOR ALL MACHINES

N.B.: Read the instructions carefully in order to avoid any problems.

As with all machinery there are certain hazards involved with operation and use of this machine. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may occur. Observe these rules insofar as they are applicable to this particular machine.

This machine was designed for certain applications only. We strongly recommend that this machine NOT be modified in any way and/or used for any application other than for which it was designed.

If you have any questions relative to its application DO NOT use the machine until you have contacted your dealer.

1. For your own safety read the instruction manual before operating the tool.
  2. Keep all guards in place and in working order.
  3. Ground all tools.
  4. Remove adjusting keys and wrenches. Make a habit of checking the machine before turning it on.
  5. Keep the work area clean. Cluttered areas and benches invite accidents.
  6. Do not use in a dangerous environment, such as damp or wet locations or expose to rain. Always keep the work area well-lit.
  7. Keep children and visitors away. They must be kept at a safe distance from the machine at all times.
  8. Make sure that the work area is not accessible to unauthorised persons. Use padlocks, master switches, remove starter keys etc.
  9. Never overload the machine. The capacity of the machine is at its largest when properly loaded.
  10. Do not force the machine or attachment to do a job for which it was not designed.
  11. Wear proper apparel. No loose clothing, gloves, neckties, rings, necklaces, bracelets or jewellery: they may get caught in moving parts. No slip footwear is recommended. Wear a hairnet to contain long hair.
  12. Always wear safety glasses and work according to safety regulations. Use a face or dust mask if operation is dusty.
  13. Always secure workpiece tightly using a vise or clamping device. This will keep both hands free to operate the machine.
  14. Do not overreach. Keep your proper footing and balance at all times.
  15. Maintain tools in top condition. Keep them sharp and clean. Read the instructions carefully and follow the instructions for cleaning, lubrication and tool replacement.
  16. Lubricate the machine and fill all oil reservoirs before operation.
  17. Disconnect tools before servicing and when changing accessories such as blades, bits, cutters etc.
  18. Use only recommended accessories. Consult the owner's manual for recommended accessories. The use of improper accessories may cause hazards.
  19. Avoid accidental starting. Make sure the on/off switch is in the "OFF" position before plugging in the power cord.
  20. Never stand on the machine or tools. Serious injury could occur if the machine is tipped or if the cutting tool is accidentally touched.
  21. Check damaged parts. Replace or repair damaged parts immediately. Check machine for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation.
  22. Direction of feed. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
  23. Never leave tool running unattended. Do not turn power off until it has come to a complete stop.
  24. Alcohol, medication, drugs. Never use the machine while under the influence of alcohol, medication or drugs.
  25. Make sure the tool is disconnected from the power supply, before servicing, repairing etc.
  26. Keep the original packing for future transport or relocation of the machine.
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## ADDITIONAL SAFETY RULES

Always keep in mind that:

- the machine must be switched off and disconnected from the power supply during maintenance and repairs,
- clamped workpieces may only be measured when the machine is switched off.

Never lean over the machine, mind loose clothing, ties, jewellery etc. and wear a cap.

Do not remove safety devices or guards. Never use the machine while a guard is open.

Always use safety glasses for machining rough materials.

Burrs and chips should only be removed using a sweeper or other aid, never with your bare hands!

Never leave the machine running unattended.



***Always wear safety glasses!***

## 2. TECHNICAL DATA

Model		CTS75	CTS150
Motor	KW	3,00 / 4,00	3,00 / 4,00
Contact Wheel	Mm	200x75	200x150
Steering Roller	Mm	225x75	225x150
Flat Grinding	Mm	530	530
Belt Size	Mm	2000x75	2000x150
Belt Speed	Mm/sec.	34	34
Working Height	Mm	475-1240	475-1240
Weight	Kg	85	105
W x H x L	mm	500x1010x1000	560x1010x1000

## 3. INSTALLATION

The machine is delivered in a wooden case. The machine should be placed on a level surface and secured by bolts through the four base plate holes.

Check the following functions:

- A) The belt moves freely.
- B) The belt does not touch the grinding supports.

## 4. CONNECTION TO ELECTRICITY SUPPLY

The S Belt Grinder has to be wired in by a competent electrician. The 3,0 KW motor is supplied with an Overload Protection Switch and no-voltage release for direct connection to 3 x 400/415 V or 3 x 230 V, 50/60Hz. The connection is only to be done with a 4-core cable (1.5mm<sup>2</sup>) short cable with plug, making a total electric interruption possible. Fuse 16A (Please see enclosed electrical data sheet).

## 5. BELT TRACKING

See figure 1

When first starting the machine, the belt may not run centrally on the contact wheel. This is corrected by turning the tracking adjuster (6): clockwise - belt moves towards the left.; anticlockwise – belt moves towards the right.

## 6. CHANGING THE BELT

See figure 1

- A) Switch off the machine
- B) Ensure the belt is at a complete standstill.
- C) Remove the spark trap(1)
- D) Open the side cover (12) by turning the handle.
- E) Slacken the belt by moving the belt tension release lever (7) downwards.
- F) Replace the belt. Note correct direction of rotary of the belt.
- G) Tighten the belt by moving the belt tension release lever (7) upwards.
- H) Close side cover (12) and re-mount spark trap(1).



## 7. OPERATION OF BELT GRINDER

See figure 1



*Eye protection and ear plugs are to be worn at all times!*

### 7.1 CONTACT GRINDING

When grinding against the contact wheel(3), ensure that the belt guard (5) is closed. The operator faces the contact wheel(3) and holds the material to work up, with both hands. Hands must be placed away from the place to be grinded, as the material will be warm during the operation. The material is pushed against the belt, resting on the grinding support (2), if necessary. The material is turned and grinded on the required surfaces.

### 7.2 SURFACE GRINDING

The operator faces the open belt guard (5) during surface grinding. The material is held with both hands and is pushed hard against the top work support (4) the grinding foundation under the belt has to be clean.

### 7.3 HEIGHT ADJUSTMENT

Loosening clamp no.9 with an Allen key can do height- and angle adjustment.

### 7.4 ROUTINE MAINTENANCE

Frequent cleaning, if necessary with compressed air so that wheel swart is removed. Normal maintenance of the contact wheel and the steering roller. A commendable surface grinding can only be obtained when using a completely clean grinding foundation. Otherwise this must be renewed. The belt must be replaced as required, compare "Changing the belt". Spark trap must be emptied frequently.

## 8. SPECIAL ACCESSORIES

See figure 1

Exhaust with dust bag (Electric connection to the overload protection switch( 8)).

## 9. MACHINE OVERVIEW

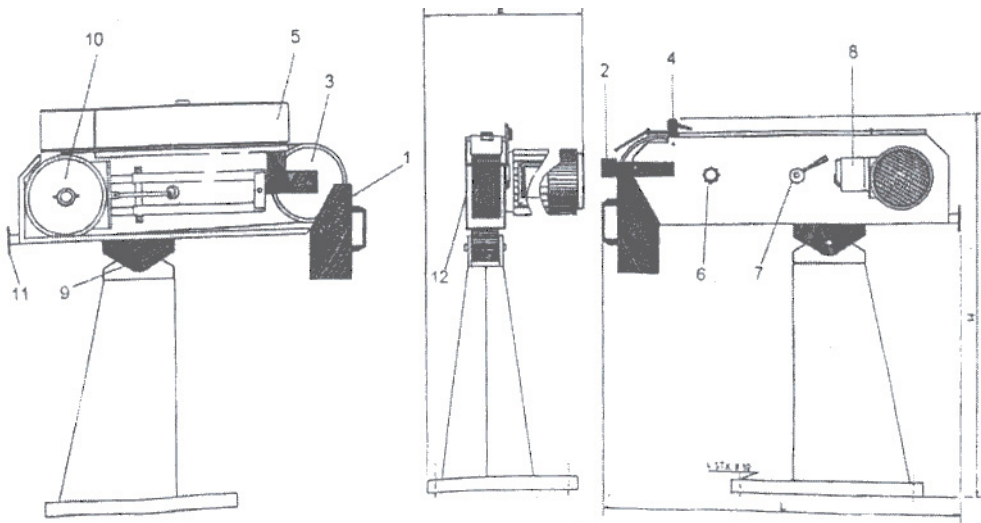


Figure 1

1. Spark trap	7. Belt tension release lever
2. Front work support	8. Overload protection switch
3. Contact wheel	9. Clamp for angle & height adjustment
4. Top work support	10. Steering roller
5. Belt guard	11. Flange for motorized exhaust
6. Tracking adjuster	12. Side cover



## 10. NOISE LEVEL MEASUREMENT FOR BELT GRINDERS

### 10.1 RESULTS CTS75

Sound power of the machine:

A: No load (idle) with exhaustion

B: When grinding flat bar 50x15 with exhaustion

Hz	63	125	250	500	1K	2K	4K	A-Distance
A L Wa	73	76	91	82	85	88	88	93
B L Wa	70	74	86	81	84	88	91	93

Noise level on the place of operation:

A: 85 dB (A) no loaded (idled) with exhaustion

B: 88 dB (A) loaded with exhaustion

### 10.2 RESULTS CTS150

Noise level of the machine when grinding flat bar 50x15

HZ	63	125	250	500	1K	2K	4K	A-Distance
LWA	73	74	80	84	86	89	90	96

Noise level on the place of operation: 90 dB (A)

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11. Electric scheme

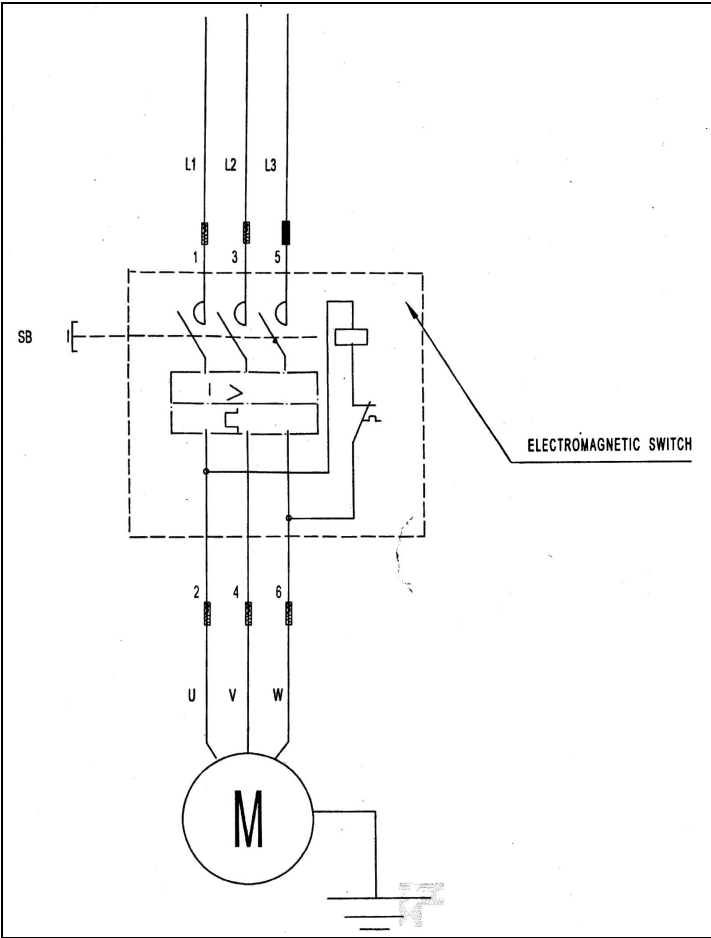


Figure 2

## 12. Parts list

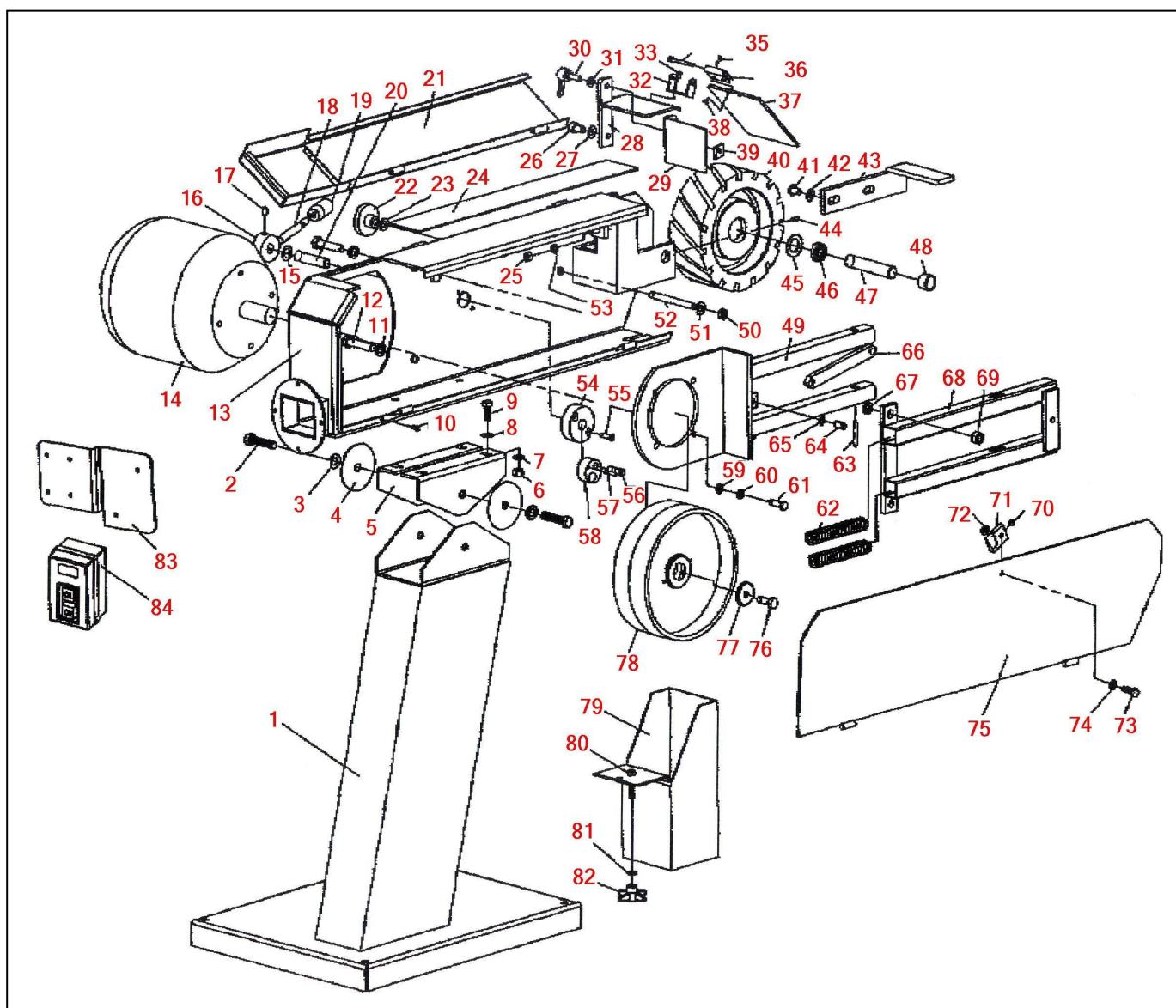


Figure 3

Item	Description	Part No	Qty	Item	Description	Part No	Qty
1	Stand	301488	1	43	Work support		1
2	Hex. screw M12x30		2	44	Screw M5x16		1
3	Washer		2	45	Stop ring	301502	2
4	Paper spacer	301489	2	46	Bearing	301643	2
5	Clamp for angle & height adjustment	301550	2	47	Shaft, axle	301503	1
6	Nut M10		4	48	Spacer, bushing	301504	2
7	Washer		4	49	Motor support	301505	1
8	Washer		4	50	Nut		1
9	Hex. Screw M10x20		4	51	Butterfly spring	301556	1
10	Hex. Screw M5x10		2	52	Screw bar	301506	1
11	Washer		2	53	Washer		2

Item	Description	Part No	Qty	Item	Description	Part No	Qty
12	Hex. Screw M12x50		2	54	Base	301507	1
13	Body	301490	1	55	Screw M6x25		2
14	Motor 220 volt 3 phase	301491	1	56	Shaft	301508	1
14	Motor 220 1 phase	301815					
15	Washer		1	57	Roll Pin		1
16	Belt tension release base	301492	1	58	Eccentric wheel	301509	1
17	Inner hex. Screw M8x20		1	59	Washer		4
18	Belt tension release lever	301493	1	60	Bolt M8x22		4
19	Sleeve, handle	301494	1	61	Spring	301510	2
20	Shaft	301551	1	62	Spring	301512	2
21	Belt guard with flap	301552	1	63	Roll pin	301511	2
22	Tracking adjust knob	301553	1	64	Pin shaft	301513	1
23	Washer		1	65	Stop ring	301514	3
24	Graphite wear strip	301554	1	66	Draw bar	301515	1
25	Nut		2	67	Butterfly spring	301516	12
26	Hex. Screw M10x15		3	68	Support	301517	1
27	Washer		2	69	Belt adjustment device	301518	1
28	Top work support	301495	1	70	Screw		1
29	Top work support plate	301496	1	71	Protect buckle	301519	1
30	Lock handle	301497	1	72	Butterfly spring	301520	2
31	Washer		1	73	Screw M10x30		1
32	Eye protector base	301498	1	74	Washer		1
33	Screw M5x8		2	75	Side cover	301521	1
34	Hex. Screw M5x50		1	76	Bolt M10x30		1
35	Screw M4x12		2	77	Washer		1
36	Eye protector hinge	301499	1	78	Steering/drive wheel	301522	1
37	Eye protector, clear	301500	1	79	Spark catch box	301523	1
38	Nut M4		2	80	Bolt M8x15		1
39	Block with thread	301501	1	81	Washer		1
40	Contact wheel	301555	1	82	Knob, spark catch box	301524	1
41	Hex. Screw M10x15		2	83	Fixture plate	301577	1
42	Washer		2	84	On/off switch (see elect. Diagram)		1
	60 Grit belt	77021			40 Grit belt	77010	