

AXMINSTER

WORKSHOP

Code 107685

Original Instructions

AW200WSG Wide Stone Bench Grinder



AT: 16/02/2023
BOOK VERSION: 9

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EU DECLARATION OF CONFORMITY

Cert No: HBG825HL

Axminster Tool Centre Ltd
Axminster Devon
EX13 5PH UK
axminstertools.com

declares that the machinery described:-

Type	Bench Grinder
Model	AW200WSG

Signed



Andrew Parkhouse
Operations Director Date: 19/10/2021

EU Declaration of Conformity

This machine complies with the following directives:

2006/42/EC	EN 61000-3-3: 2013+A1: 2019
2014/30/EU	EN 55014-2: 2015
EN 55014-1: 2017	EN 62841-1: 2015
EN IEC 61000-3-2: 2019	EN 62841-3-4: 2016+A11: 2017+A12: 2020

and conforms to the machinery example for which the EC Type-Examination Certificate No SHEM201000845601, SHES200801665601 has been issued by **Wendeng Allwin Motors Manufacturing Co., Ltd.** at: No. 15 Sichan Road Wendeng, Shandong, China 264400

and complies with the relevant essential health and safety requirements.

The symbols below advise the correct safety procedures when using this machine.



Fully read manual
and safety instructions
before use



Ear protection
should be worn



Eye protection
should be worn



Dust mask
should be worn



HAZARD
Motor gets hot

WHAT'S INCLUDED

Quantity	Item	Part	Model Number
1	Wide Stone Bench Grinder	A	AW200WSG
2	Adjustable Tool Rests & Mounting Brackets	B	
2	Butterfly Knobs & Washers	C	
2	Tool Rest Clamping Knob & Washers	C1	
2	Spark Guard Brackets with Screws/Washers	D	
2	Eye Shield Mounting Bars	E	
2	Mounting Bar Square Brackets with Bolts & Washers	F	
2	Eye shields, with one Magnifying Glass	G	
1	Instruction Manual		



GENERAL INSTRUCTIONS FOR 230V MACHINES

The following will enable you to observe good working practices, keep yourself and fellow workers safe and maintain your tools and equipment in good working order.



WARNING!! KEEP TOOLS AND EQUIPMENT OUT OF REACH OF YOUNG CHILDREN



KEEP WORK AREA AS UNCLUTTERED AS IS PRACTICAL. UNDER NO CIRCUMSTANCES SHOULD CHILDREN BE ALLOWED IN WORK AREAS.

Mains Powered Tools

- Tools are supplied with an attached 13 Amp UK 3 pin plug, fitted with 5 amp fuse.
- Inspect the cable and plug to ensure that neither are damaged. Repair if necessary by a suitably qualified person.
- Do not use when or where it is liable to get wet.

Workplace

- Do not use 230V a.c. powered tools anywhere within a site area that is flooded.
- Keep machine clean.

- Leave machine unplugged until work is about to commence.
- Always disconnect by pulling on the plug body and not the cable.
- Carry out a final check e.g. check the cutting tool is securely tightened in the machine and the correct speed and function set.
- Ensure you are comfortable before you start work, balanced, not reaching etc.
- Wear appropriate safety clothing, goggles, gloves, masks etc. Wear ear defenders at all times.
- If you have long hair wear a hair net or helmet to prevent it being caught up in the rotating parts of the machine.
- Consideration should be given to the removal of rings and wristwatches.
- Consideration should also be given to non-slip footwear etc.
- If another person is to use the machine, ensure they are suitably qualified to use it.
- Do not use the machine if you are tired or distracted.
- Do not use this machine within the designated safety areas of flammable liquid stores or in areas where there may be volatile gases.
- Check cutters are correct type and size, are undamaged and are kept clean and sharp, this will maintain their operating performance and lessen the loading on the machine.
- **OBSERVE....** make sure you know what is happening around you and **USE YOUR COMMON SENSE.**

SPECIFIC SAFETY PRECAUTIONS FOR GRINDING MACHINES

1. Do not operate your machine until it is completely assembled and installed according to the instructions.

2. If you are not familiar with the operation of grinding machines obtain advice from your supervisor or instructor or another qualified person.

3. Only use grinding wheels or attachments rated higher than 3600 rpm with a 5/8"(16mm) arbor on this machine.

4. Never use a chipped or cracked wheel. Always inspect each wheel before mounting it on the grinder. If during inspection you discover a damaged grinding wheel, replace it immediately.

5. Do not over tighten wheel nuts.

6. Always maintain a distance of 2mm or less between the wheel and the tool rest. Adjust the tool rests as the wheels decrease in size.

7. Ensure the tool rests are tightened so they cannot move while in use.

8. Never grind on a cold wheel. The grinder should always be run for at least one minute before applying work to it.

9. Never grind on the side of the wheel. Always grind on the face of the wheel only.

10. Never apply coolant directly to a grinding wheel, it may cause the bonding to fail. If the work piece becomes hot, dip it into a water pot to cool it down.

SPECIFIC SAFETY PRECAUTIONS FOR GRINDING MACHINES

11. Hot sparks are a hazard! Never carry out grinding operations near flammable gas or liquid.

12. Always make sure the spark guards and eye shields are in place, that they are properly adjusted and secured.

13. Keep the spark guards close to the wheels and re-adjust them as the wheels wear.

14. Ensure the soft washer and the flanges furnished with the grinder are used to mount any attachments (grinding wheels, wire brushes, buffing wheels, etc) onto the shaft.

15. Always stand to one side of the grinder when starting the machine.

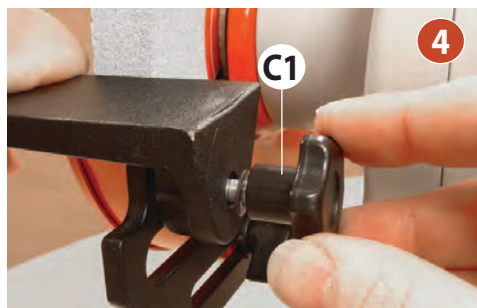
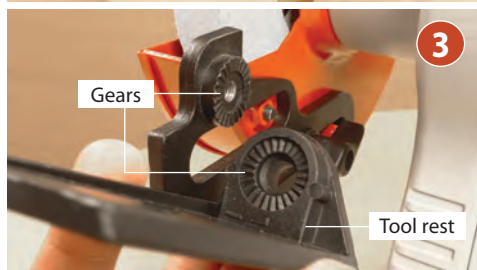
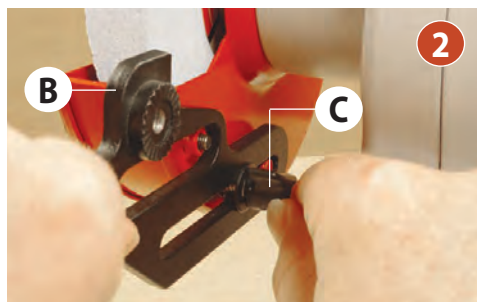
16. Avoid awkward hand positions where a sudden slip could cause the hands to come into contact with a grinding wheel, wire brush etc.

17. If the wheel requires dressing, dress only the front of the wheel, do not dress the sides.

18. Do not use any attachments that causes the machine to vibrate. If, after changing grinding wheels or adding attachments, the machine does vibrate, remove the recently replaced item and change again.

19. Grinding creates heat. Do not touch the work face of the work piece until you are sure it has cooled down sufficiently.

ASSEMBLY



ASSEMBLY

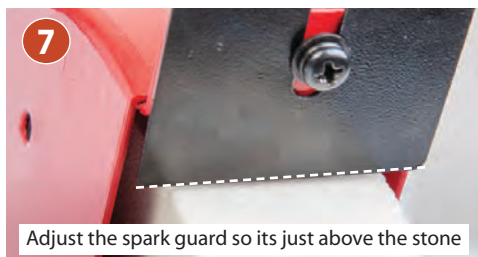


ILLUSTRATION AND PARTS DESCRIPTION



SPECIFICATION



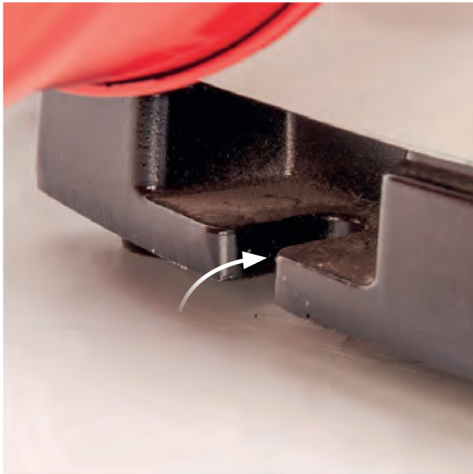
Code	107685
Model	AW200WSG
Rating	Home Workshop
Power	370W 230V 50Hz 1Ph
Speed	2,980 rpm
Wheel Diameter	200 mm
Wheel Width	25mm & 40 mm
Grit	25mm 60 grit & 40mm 80 grit
Bore	15.88 mm
Overall L x W x H	420 x 310 x 315 mm
Weight	18 kg

SETTING UP THE GRINDER

Place the grinder on a flat level surface. There are two machined slots to either side of the grinder housing to bolt the machine onto a work bench if required, see fig 01.

Adjust the two tool rests leaving a gap of approximately 1.5mm clearance between the grinding stone and the tool rest, see fig 02

Fig 01



NOTE: ADJUST THE TOOL RESTS AS THE GRINDING STONE WEARS DOWN.

Fig 02



SETTING UP THE GRINDER



CONNECT THE GRINDER TO THE MAINS SUPPLY.



ALWAYS WEAR EAR DEFENDERS AND SAFETY GOGGLES.

Carry out final checks e.g. check the gap between the tool rest and the stone is correct, check the stone is not badly deformed (rounded edges, grooved face, etc; unless you have specifically shaped the stone to these profiles), check the eye shield is correctly positioned. Have a cooling pot to hand if you need it. Start the machine, wait until it reaches full speed. Check it runs smoothly, no knocking or scraping noises for example. If all ok, switch off the grinder and wait until it comes to a complete stop. Disconnect the machine from the mains supply.

CHANGING THE GRINDING STONE



DISCONNECT THE GRINDER FROM THE MAINS SUPPLY.

Step 1-2



Using a spanner remove the three nuts and washers from the stone guard cover and place to one side.

Step 3



Remove side cover and place safely to one side.

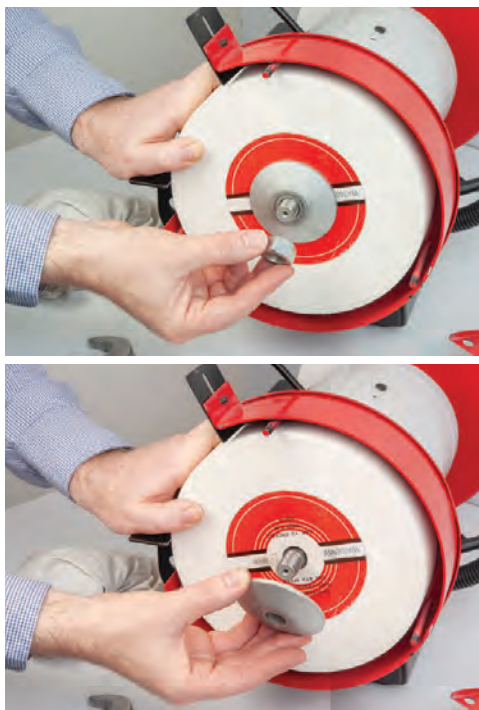
Step 4



Grasp the stone using a cloth, use a 24mm spanner to loosen the nut, remember undo the nut in the direction of the stone's rotation as indicated by the arrow on the guard cover.

CHANGING THE GRINDING STONE

Step 5-6



Remove plate flange and carefully remove the stone. Clean the interior stone guard, inspect the new stone for cracks and damage to either the front face or the edges before fitting. Carefully slide the stone on the shaft, replace the plate flange, the nut and tighten against the rotation of the stone. **DO NOT OVERTIGHTEN.**

Step 7



Step 8-9-10



**CONNECT THE GRINDER
TO THE MAINS SUPPLY.**

Reconnect the grinder to the mains supply, give the grinder a 'short burst', by switching it on and off quickly. Check the grinder is not subject to any undue vibration. If the grinder does vibrate, switch off immediately and disconnect from the mains supply. Remove the guard cover and check stone and plate flange is fitted correctly. Check again, if the grinder is still vibrating the stone/s may need dressing. Dress the new stone lightly to ensure a 'good face' and good concentricity.



**CONNECT THE GRINDER
TO THE MAINS SUPPLY.**

Switch on the grinder, wait until it reaches full speed and leave the machine running for at least one minute before carrying out any work. Apply a work piece and check that the spark guard is correctly positioned and that the tool rest is securely fixed. Switch off and wait until the grinder comes to a complete stop.



**DISCONNECT THE GRINDER
FROM THE MAINS SUPPLY.**

After a period of time uneven wear on the stones including, crests dips or rounded edges will appear. They will need to be dressed out using a suitable wheel dressing stick. See our website and in our catalogue for details, see fig 10-11.

Fig 10-11

Code 410074



Wheel Dressing Stick for coarse carborundum and dressing worn or unbalanced wheels.

Code 410057



Diamond Dressing Block useful for dressing across the width of the grinding wheels or to produce flatter surfaces than single point dressers.



**CONNECT THE GRINDER
TO THE MAINS SUPPLY.**

Switch the grinder on and allow it to run for at least one minute. Rest the dressing tool on the tool rest and advance it to the stone until it touches the maximum diameter;

Fig 12

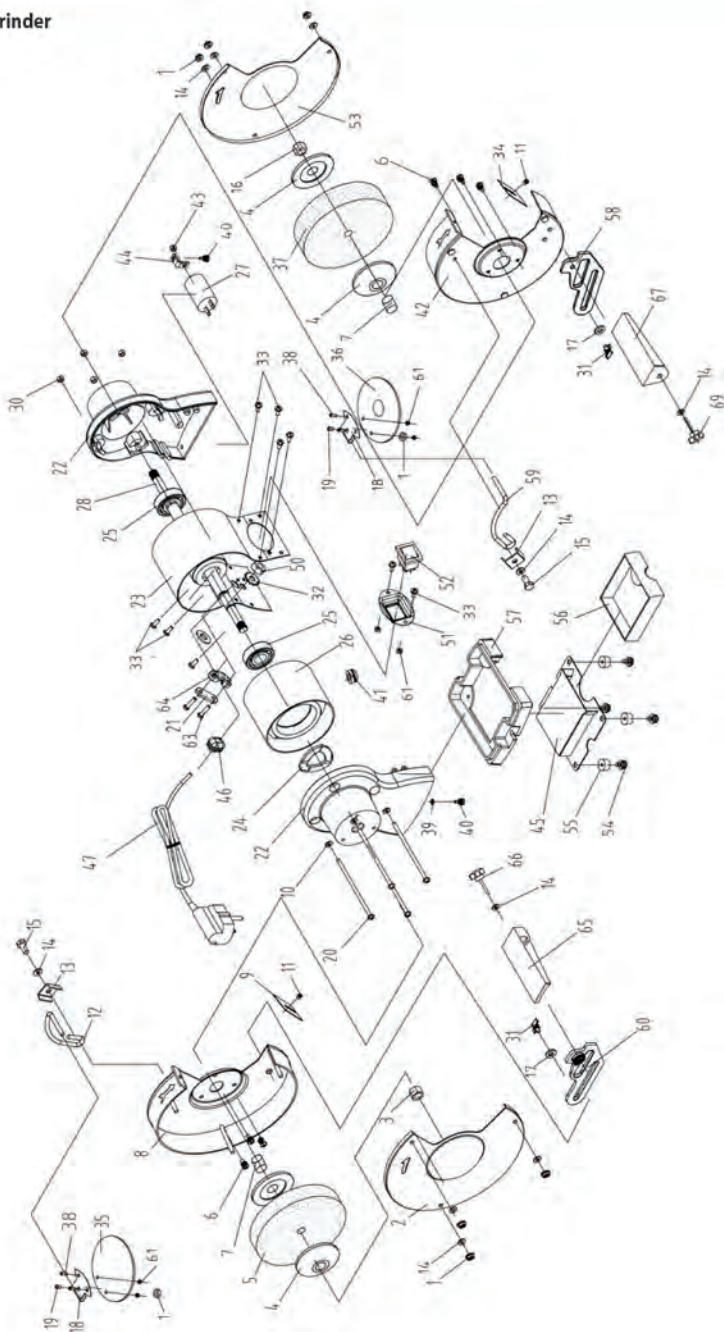


gently move the dresser back and forth across the face of the stone until all irregularities have been removed and the edges of the stone are nice and sharp, see fig 12.

AW200WSG Bench Grinder

27.07.2020

HBG825HL PARTS DIAGRAM

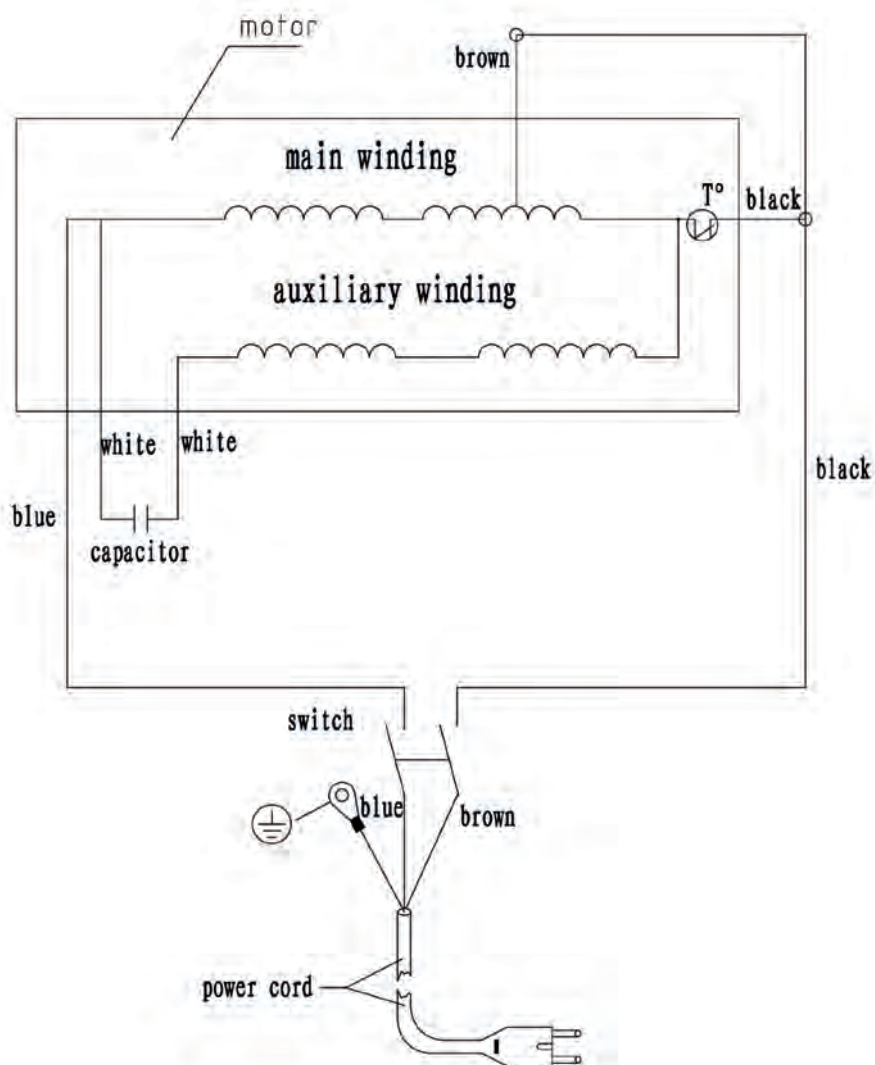


EXPLODED DIAGRAMS/LISTS

NO.	Specification		QTY
1	Hex flange nut	M6	8
2	Left shield cover plate		1
3	Hex nut Type I	M16 Left	1
4	Wheel plate flange		4
5	Left Wheel WA 60#	200x25x 15.88mm	1
6	Phillips screw+spring washer+flat washer	M5x10	6
7	Sleeve		2
8	Left shield inner cover		1
9	Left spark deflector		1
10	Flat washer	D5	4
11	Phillips screw+spring washer+flat washer	M5x8	2
12	Left eyeshield support		1
13	Press plate		2
14	Flat washer	D6	10
15	Hex bolt	M6x14	2
16	Hex nut Type I	M16	1
17	Flat washer	D8	2
18	Eyeshield press plate		2
19	Screw	M6x16	2
20	Phillips screw	M5x155	4
21	Wire subplate		1
22	Motor end cover		2
23	Motor housing		1
24	Washer	D39	1
25	Bearing	6203-2RZ	2
26	Stator	with Thermal insulation	1
27	Anti-explosion capacitor	10µF/450V	1
28	Rotor		1
30	Hexagon flange nuts	M5	4
31	Locking knob	M8x12	2
32	Washer	M10	1
33	Phillips screw	M4X8	10

NO.	Specification		QTY
34	Right spark deflector		1
35	Flat Eyeshield		1
36	Eyeshild with Magnifier		1
37	Right Wheel WA 100#	200x40x 15.88mm	1
38	Phillips screw	M4x10	4
39	Wahser	D4	1
40	Phillips screw+spring washer+flat washer	M4x8	2
41	Cable sheath		1
42	Right shield inner cover		1
43	Hex nut Type I	M8	1
44	Capacitor stand		1
45	Base plate		1
46	Power cable clip		1
47	Power cable with plug		1
50	Nut	M10x1	1
51	Switch base board		1
52	switch	HY12	1
53	Right shield cover plate		1
54	Phillips screw+ big flat washer assy	M5x45	4
55	Rubber		4
56	Tool box		1
57	Base		1
58	Right fixed work rest		1
59	Right eyeshield support		1
60	Left fixed work rest		1
61	Hex flange nut	M4	6
63	Phillips screw	M4X16	2
64	Wire fix plate		1
65	Left moveable work rest		1
66	Locking knob for moveable work rest	M6X21	2
67	Right moveable work rest		1

WIRING DIAGRAM



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The packaging is suitable for recycling.
Please dispose of it in a responsible manner.



EU Countries Only

Do not dispose of electric tools together with household waste material.
By law they must be collected and recycled separately.



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