Code 107824

Original Instructions

AW1502WSG

Wide Stone Bench Grinder



AT: 29/05/2025
BOOK VERSION: 3

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EU DECLARATION OF CONFORMITY

Cert No: HBG620HA

Axminster Tool Centre Ltd
Axminster Devon
EX13 5PH UK

axminstertools.com

declares that the machinery described:-

Type	**Bench Grinder**
Model	**AW1502WSG**

Signed

Andrew Parkhouse
Operations Director

Date: **19/03/2020**

EU Declaration of Conformity

This machine complies with the following directives:

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

and conforms to the machinery example for which the
EC Type-Examination Certificate No SHES190802201801TLC, SHEM200100029301PTC
has been issued by **Wendeng Allwin Motors Manufacturing Co., Ltd.**
at: No. 15 Sichan Road Wendeng, Shandong 264400 P.R.China

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

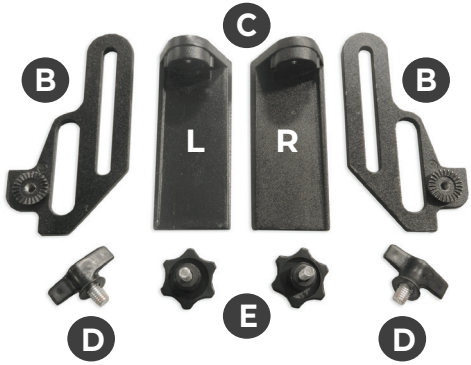


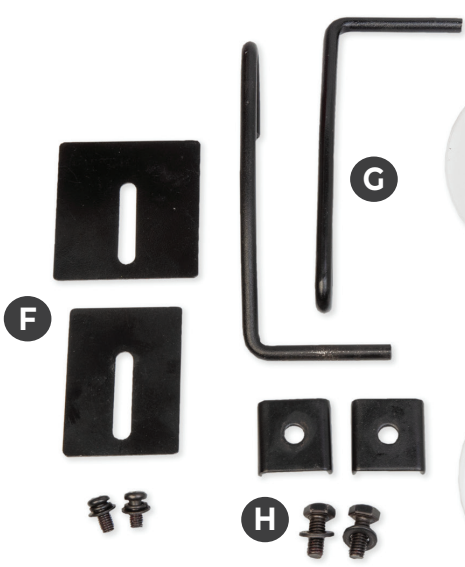
HAZARD Motor gets hot

WHAT'S INCLUDED

Quantity	Item	Part	Model Number
			AW1502WSG
1	Wide Stone Bench Grinder	**A**	
2	Left/Right Hand Tool Rest Mounting Brackets	**B**	
2	Left/Right Hand Adjustable Tool Rests	**C**	
2	Butterfly Knobs & Washers	**D**	
2	Tool Rest Clamping Knobs & Washers	**E**	
2	Spark Guard Brackets with Screws/Washers	**F**	
2	Eye Shield Mounting Bars	**G**	
2	Mounting Bar Square Brackets with Bolts & Washers	**H**	
2	Eye Sheilds, with One Magnifying Glass	**I**	
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.

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

SPECIFIC SAFETY PRECAUTIONS FOR GRINDING MACHINES

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.

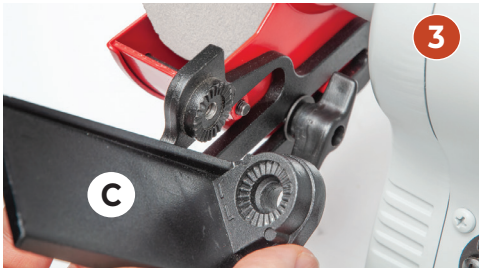
18. Do not use any attachments that causes the machine to vibrate. If, after changing grinding wheels or adding attachments, the machine does vibrate, remove the recently replaced item and change again.

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

ASSEMBLY





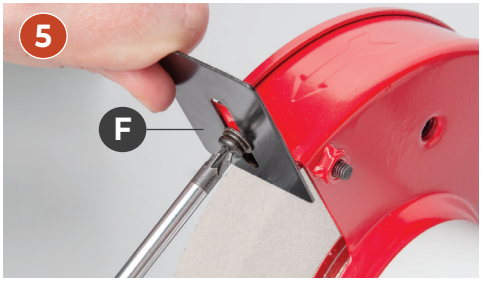




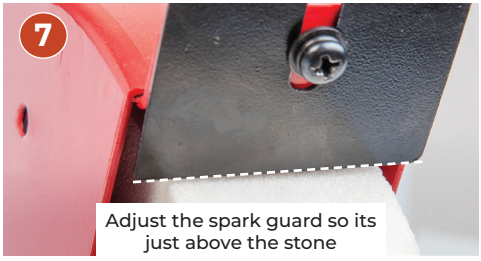
Locating pin



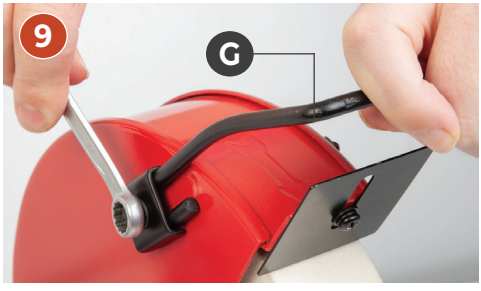
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5
F


6

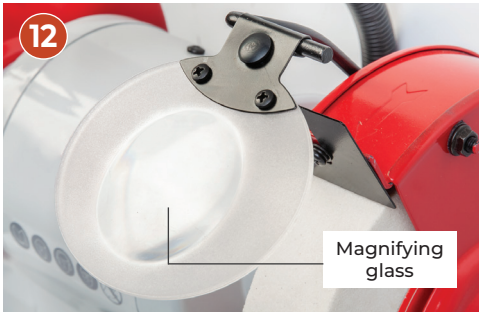

7
Adjust the spark guard so its just above the stone


8
H
G

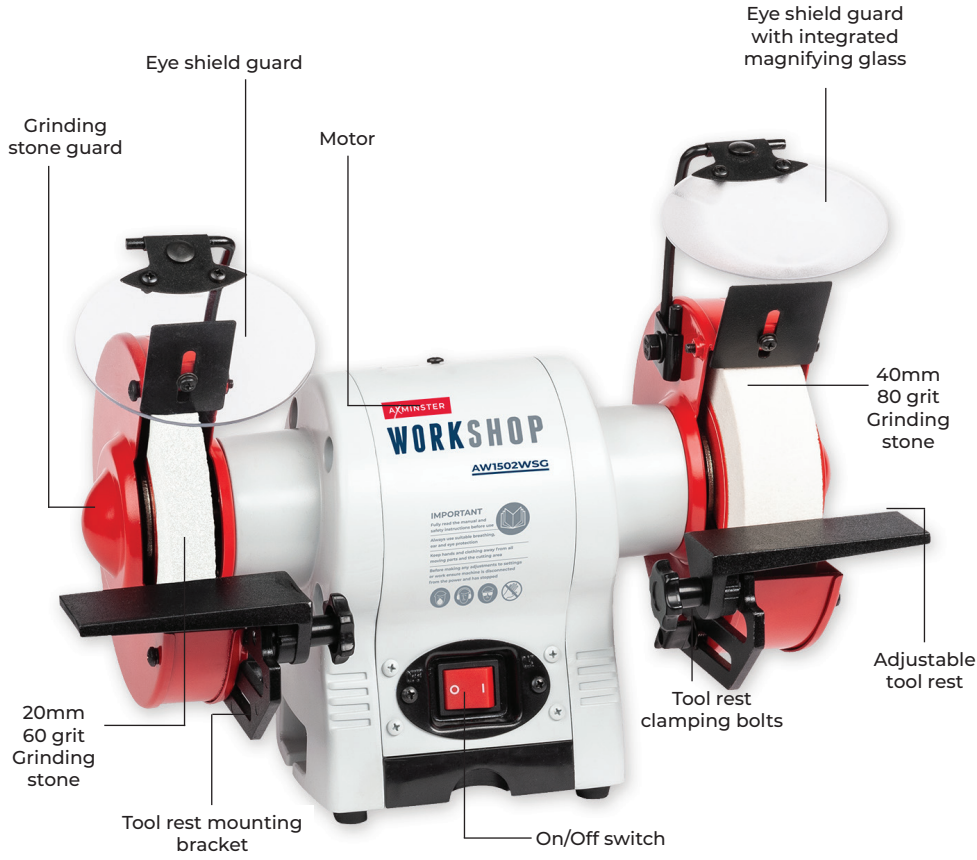

9
G


10
I


11
Nip-up the eye sheild


12
Magnifying glass


13


Eye shield guard with integrated magnifying glass
Eye shield guard
Grinding stone guard
Motor
40mm 80 grit Grinding stone
AXMINSTER
WORKSHOP
AW1502WSG
IMPORTANT
Adjustable tool rest
20mm 60 grit Grinding stone
Tool rest clamping bolts
Tool rest mounting bracket
On/Off switch


Storage drawer

SPECIFICATION



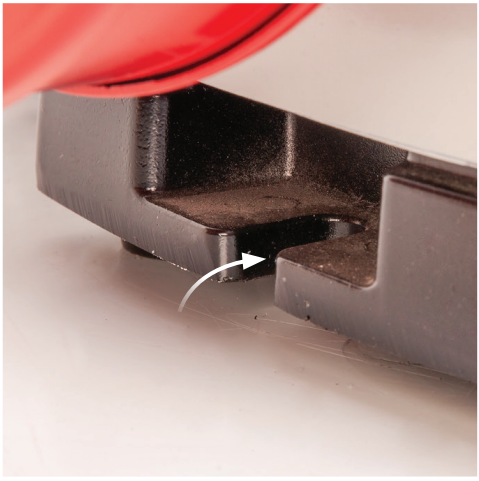
Code	107824
Model	AW1502WSG
Power	250W 50Hz 230V 1Ph
Duty Cycle	S1 180W
Wheel Width	20 mm & 40 mm
Grit	20mm 60 grit & 40mm 80 grit
Wheel Diameter	150 mm
Shaft Diameter	12.7 mm (1/2")
Overall L x W x H	310 mm x 270 mm x 215 mm
Weight	9.8 kg

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



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





Unscrew the three screws from the inner guard and remove the outer stone guard cover. Place safely to one side.

Step 3



Step 4

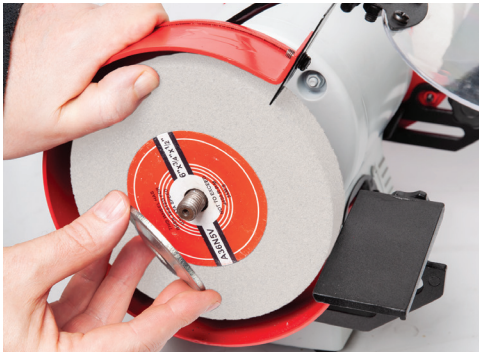


Grasp the stone using a cloth, use a 19mm spanner to loosen the nut, remember undo the nut in the direction of the stone's rotation as indicated by the arrow on the guard cover.

Continues Over...

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

Fig 12



diameter; 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.

Changing the Light Bulb

Step 13-14

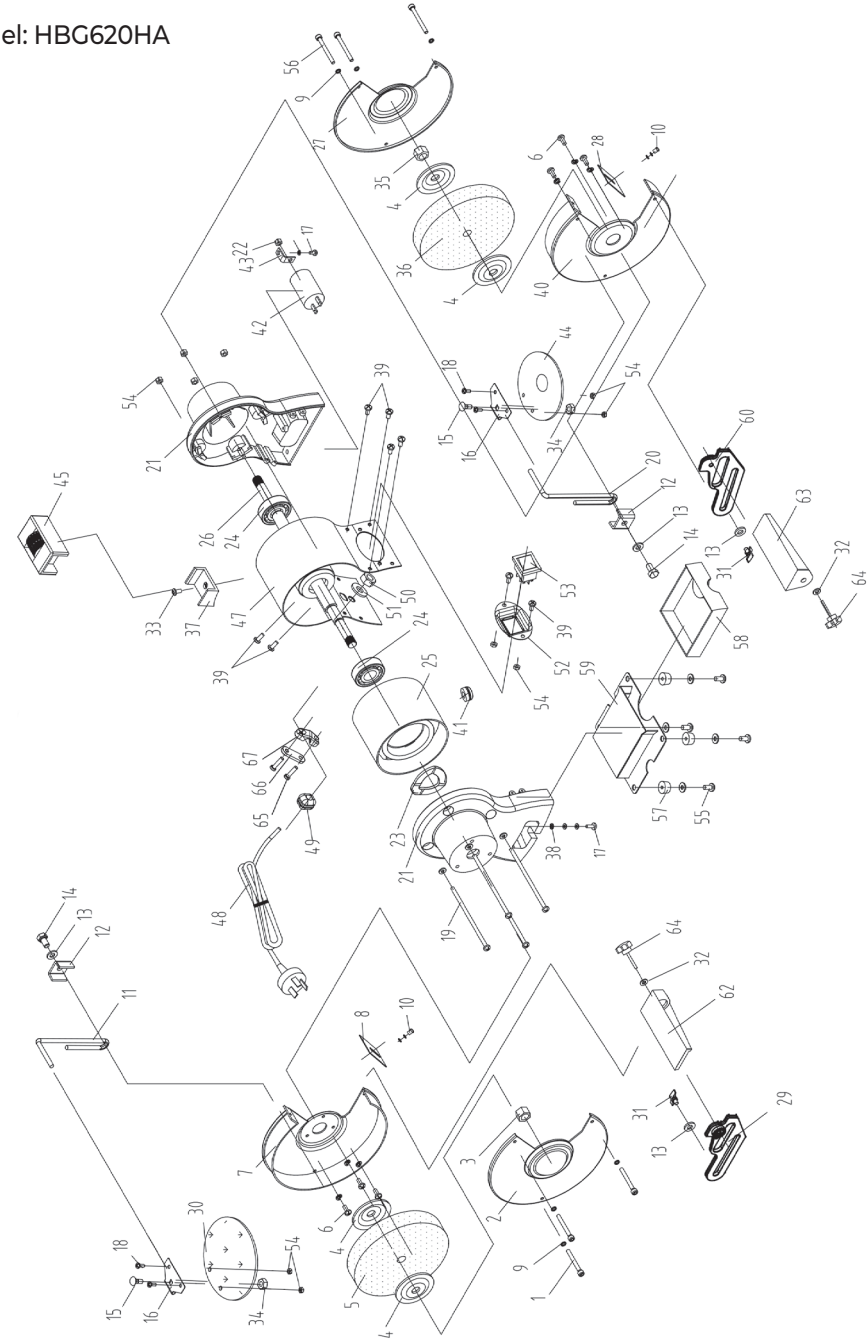


The flexible light has a 12V 0.36W screw threaded LED bulb. Unscrew the blown bulb and replace.



EXPLODED DIAGRAMS/LISTS

Model: HBG620HA



Model: HBG620HA

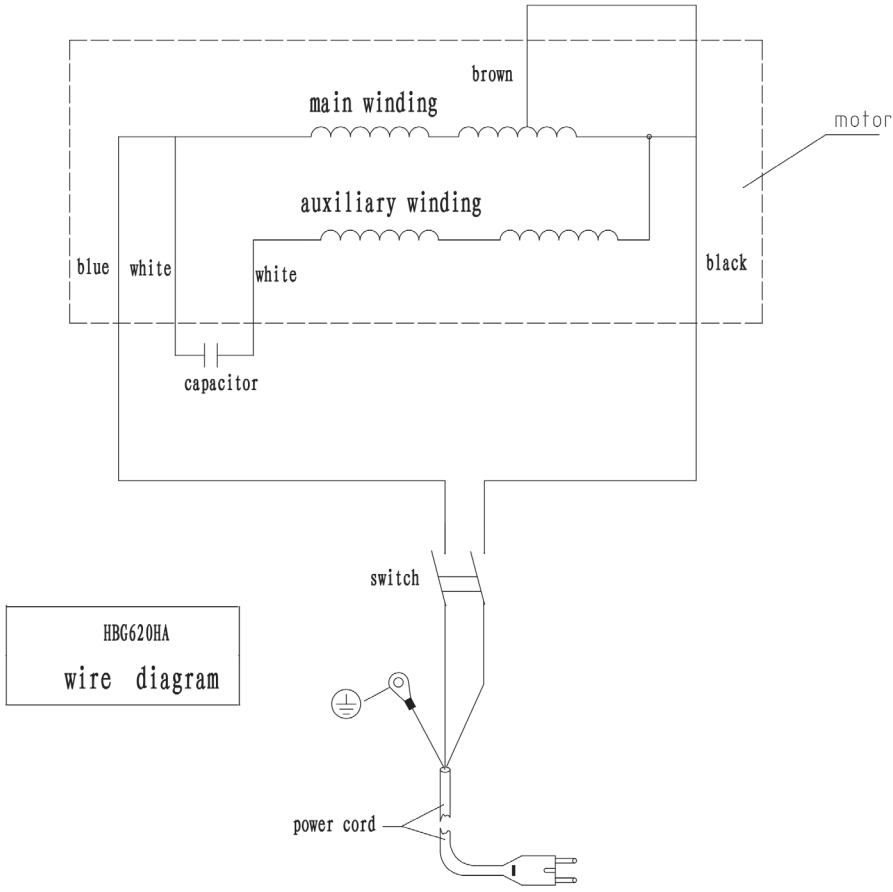
No.	Description	Specification	QTY
1	Type TZ Philips screw	M5 x 42	3
2	Left wheel guard cover		1
3	Type I hex nut	M12 Left	1
4	Flange		4
5	White wheel	150 x 20 x 12.7mm 60#	1
6	Philips screw + spring washer assembly	M5 x 10	6
7	Left wheel inner cover		1
8	Left spark deflector		2
9	Spring washer	D5	6
10	Philips screw + spring washer + flat washer assembly	M5 x 8	2
11	Left eyeshield support		1
12	Eyeshield support fix plate		2
13	Flat washer	D8	4
14	Hex bolt	M8 x 14	2
15	Half round head lower square neck screw	M6 x 18	2
16	Eyeshield fix plate		2
17	Philips screw+spring washer+flat washer assembly	M4 x 8	2
18	Philips screw	M4 x 10	4
19	Philips screw+flat washer assembly	M5 x 124	4
20	Right eyeshield support		1
21	End cap		2
22	Type I hex nut	M8	1
23	Wave washer	D35	1
24	Bearing	180202	2
25	Stator		1
26	Rotor		1
27	Right wheel guard cover		1
28	Right spark deflector		1
29	Left fix work rest		1
30	Eyeshield		1
31	Locking knob	M8 x 9	2
32	Flat washer	D6	2
33	Philips screw	M5 x 8	1
34	Hex flange face nut	M6	2

Continues Over...

Model: HBG620HA

35	Nut	M12	1
36	White wheel	150 x 40 x 12.7mm 80#	1
37	Wheel dresser base		1
38	External teeth lock washer	D4	1
39	Cross pan head screw	M4 x 8	10
40	Right sheel inner guard		1
41	Cable sleeve		1
42	Explosion-proof capacitor	6μF/450V	1
43	Capacitor stand		1
44	Eyeshield with magnifier		1
45	Wheel dresser		1
47	Motor housing		1
48	Power cord with plug		1
49	Cable clip		1
50	Nut	M10 x 1	1

51	External teeth lock washer	D10	1
52	Switch plate		1
53	Switch		1
54	Hex flange face nut	M4	8
55	Philips screw + flat washer	M4 x 16	4
56	Type TZ Philips screw	M5 x 65	3
57	Rubber foot		4
58	Coolant tray		1
59	Base		1
60	Right fix work rest		1
62	Left moveable work rest		1
63	Right moveable work rest		1
64	Locking knob for work rest	M6 x 21	2
65	Philips screw	M4 x 16	2
67	Cable fix plate		1


brown
main winding
motor
auxiliary winding
blue
white
white
black
capacitor
switch
HBG620HA
wire diagram
power cord

For more information visit **axminstertools.com/3years**



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.

CE UKCA

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