



Code 105117

Original Instructions

AC150WSG

Wide Stone Grinder



AT&M: 14/03/2019
BOOK REF : 105798

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EU Declaration of Conformity

<p>Cert No: MD3215BL</p> <p>Axminster Tools & Machinery Ltd Axminster Devon EX13 5PH UK axminster.co.uk</p> <p>declares that the machinery described:-</p> <table border="1"> <tr> <td>Type</td> <td>Wide Stone Grinder</td> </tr> <tr> <td>Model</td> <td>AC150W5G</td> </tr> </table> <p>Signed </p> <p>Andrew Parkhouse Operations Director</p>	Type	Wide Stone Grinder	Model	AC150W5G	<p>EU Declaration of Conformity</p> <p>This machine complies with the following directives:</p> <table border="1"> <tr> <td>2006/42/EC 2014/30/EU EN 55014-1: 2006/A2:2011 EN 55014-2:2015</td> <td>EN 61000-3-2:2014 EN 61000-3-3:2013</td> </tr> </table> <p>and conforms to the machinery example for which the EC Type-Examination Certificate No E8A 17 10 55256 598 has been issued by Yancheng Baoding Electrical Tools Co., Ltd at: Between south of century avenue and west of longcheng road Yandu District 224000 Yancheng City, Jiangsu Province People's Republic of China</p> <p>and complies with the relevant essential health and safety requirements.</p>	2006/42/EC 2014/30/EU EN 55014-1: 2006/A2:2011 EN 55014-2:2015	EN 61000-3-2:2014 EN 61000-3-3:2013
Type	Wide Stone Grinder						
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Date: 24/10/2017							

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

Quantity	Item	Model no.
1	150mm Grinding machine with grinding wheels fitted	AC150WSG
2	Combined Eye Shield/ Spark guards	
complete with:-		
2	M5 Phillips Heads Screws	
2	5mm Washers	
2	5mm Spring Washers	
2	M5 Nuts	
2	Tool Rests	
complete with:-		
2	M6 Plastic Star Knobs	
2	M6 Coach Bolts	
2	6mm Washers	
2	6mm Anti-vibration Washers	
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 plug.
- 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.

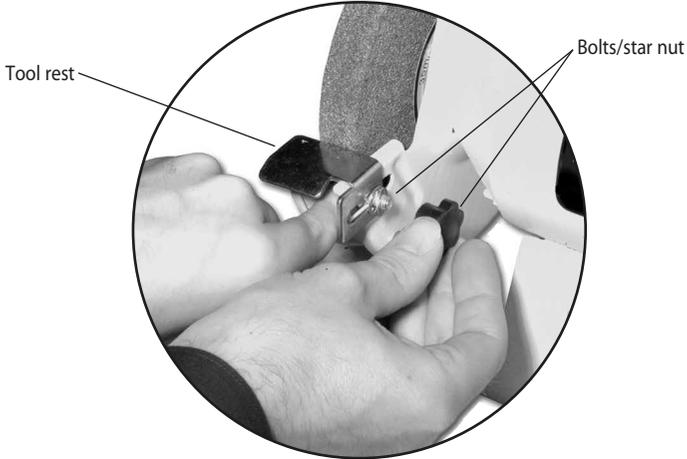
- Leave machine unplugged until work is about to commence.
- Always disconnect by pulling on the plug body and not the cable.
- Carry out a final check e.g. check the cutting tool is securely tightened in the machine and the correct speed and function set.
- Ensure you are comfortable before you start 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.**

Initial Assembly

Carefully unpack the machine and all the loose items from the box. Check the contents against the “What is in the box” list. If any items are missing please contact our technical services department using the telephone numbers that you will find in our catalogue. Having removed all the items from the box, please dispose of your unwanted packaging responsibly. A lot of the packaging is

biodegradable. Initially we suggest that you merely carry out a ‘loose’ assembly of the various parts of the grinder. After assembly has been completed we will set up the various components correctly and tighten securely. Identify the Tool Rests, both by hand and size and secure them to the inside faces of the wheel covers using the coach bolts/star nuts and washers provided. (See fig 1)

Fig 1.



Identify the Eye Shield/ Spark guards. These assemblies are sized to fit over the appropriate stone; identify them and fit to the hard point on the top of the stone cover part of the guard, using the M5 screws etc, provided. (See fig 2 & 3)

Fig 2.

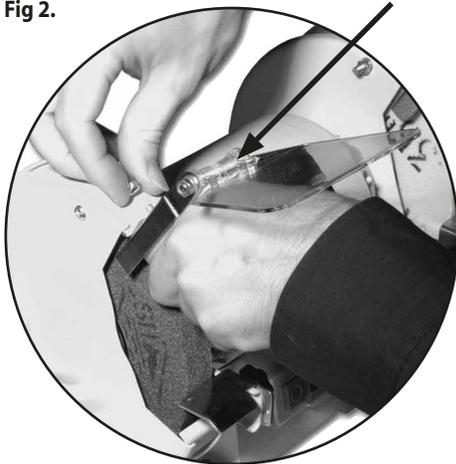
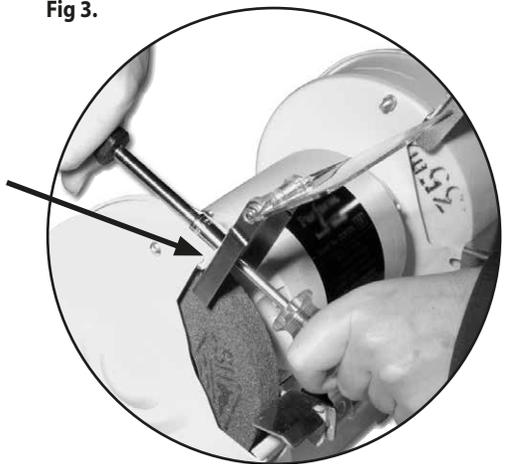


Fig 3.



Setting Up the Grinder

Please read the section entitled Illustration and Parts Description, in order for you to understand the terminology that we will use, so that you may better understand the working and capability of your grinder. Keep this manual to hand for reference for any other personnel that may be required to use the grinder.

Having assembled all the grinder attachments loosely, now the machine has to be set up correctly and all the attachments securely fastened.

Place the grinder on a flat level surface.

Position the tool rests leaving a gap of approximately one and a half millimetres between the grindstone and the rest, with the rest horizontal (preferably) tighten the star nuts securely. (See fig 4)

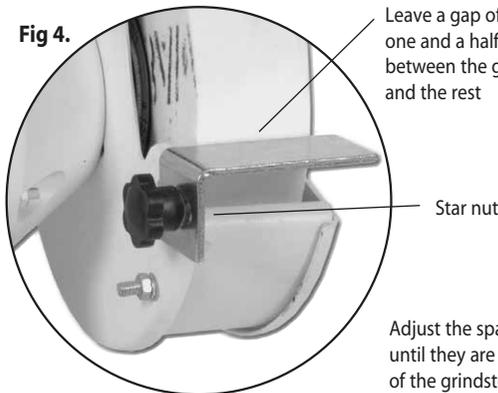


REMEMBER TO ADJUST THE TOOL RESTS AS THE GRINDSTONES WEAR DOWN.

Adjust the spark guards until they are just clear of the grindstone; fasten the fixing bolts securely. (See fig 5)



REMEMBER TO ADJUST THE SPARK GUARDS AS THE GRINDSTONES WEAR DOWN.



Leave a gap of approximately one and a half millimetres between the grindstone and the rest

Star nut

Adjust the spark guards until they are just clear of the grindstone

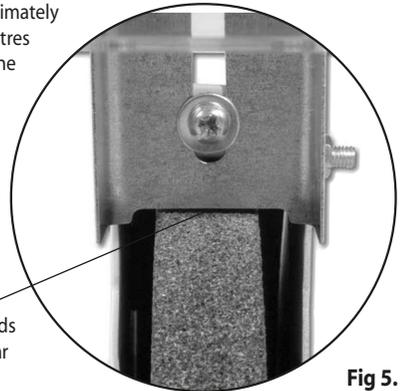


Fig 5.

Position the eye shields on their pivot bolts, (if necessary, 'nip' the clamping bolt of the eye shield clamp so that the eye shields remain in place). If there is any tendency for the grinder to move, tip or tilt while it is being operated, it should be bolted down; either to the bench or to a specific stand. It is a good idea to dress new grindstones before use, to remove any possible irregularities, and ensure the stones are running concentrically.

Carry out a final check e.g. start the machine, check it runs smoothly. On each side, check that the spark guard is adjusted down to the stone, 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, and remember safety goggles are a good investment. (you are only issued with one pair of eyes).

Code	105117
Model	AC150WSG
Rating	Craft
Motor Power	200 W
Voltage	230 V
Speed	2,800 rpm
Wheel Width	20 mm & 40 mm
Wheel Diameter	150 mm
Shaft Diameter	12.7 mm (1/2")
Weight	10 kg

Illustration and Parts Description

Grinding machine

Essentially a double ended motor, with a mounting base, the motor flanges mount the wheel guards. The motor base contains the On/Off NVR switch.

Wheel guards

Two formed metal guards that enclose the grinding wheels. They are each formed in three parts. The inner part is mounted onto the motor flange, The stone cover is 'sprung' into the lip of the inner part and the outer part is located on it. The whole assembly is bolted together. There are various 'hard point locations' that accept the fixing bolts that secure the attachments of the machine.

Tool rests

Formed metal plates that bolt onto a hard point on the inside cover of the wheel guard. There is an elongated slot in the rest which gives adjustment along the coach bolt fixing.

Eye shield/ spark guards

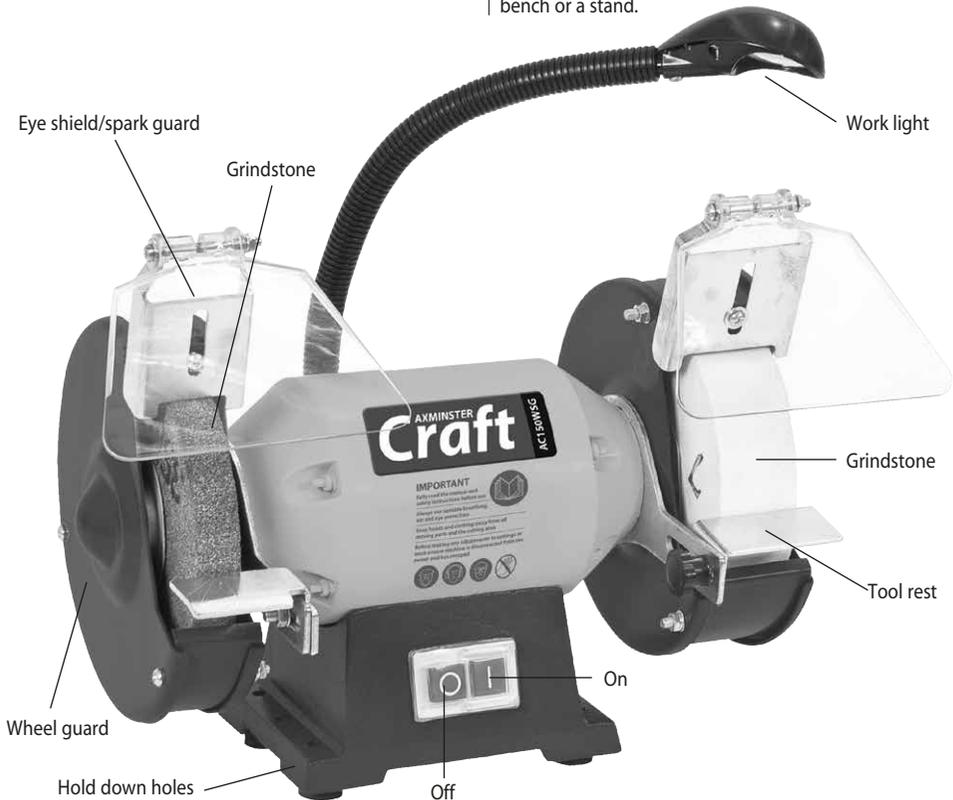
Clear protective shields that mount over the grindstone to afford a view of the workpiece, but offer protection for the eyes. They are mounted onto the spark guards making a complete assembly that bolts through a hard point on the upper part of the stone cover. The spark guard itself has an elongated slot to allow positioning and adjustment as the wheel diameter decreases. Their function is to contain any material (esp. sparks) that would be tracked around the grindstone and sprayed out of the machine esp. over the hands.

ON/OFF switch

A NVR double button switch panel, marked 'I' for On and 'O' for Off. The NVR function ensures the machine will not be left in the 'ON' condition, in the event of a power failure, and subsequent re-establishment of the supply.

Hold down holes

Four 8mm holes set in a matrix in the corner flanges of the chassis to enable the grinder to be bolted down to the bench or a stand.



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

Changing a Grinding Wheel

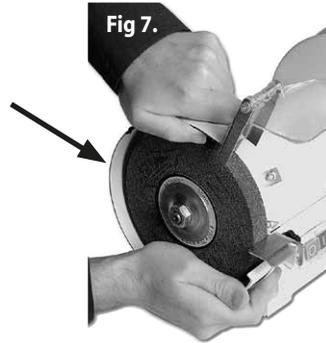


ENSURE THAT THE GRINDER IS DISCONNECTED FROM THE MAINS SUPPLY.

Undo the nuts and bolts that secure the outer shell of the wheel guard to the inner shell. Remove the outer shell and place it and the nuts, bolts and washers carefully aside. (See fig 6)



BE VERY CAREFUL THAT THE STONE COVER DOES NOT 'SPRING' OUT OF ITS LOCATION LIP ON THE INNER COVER, IT CAN SPRING OUT WITH SOME FORCE. (SEE FIG 7)



Loosen the nut holding the grinding wheel to the shaft. Carefully remove the nut, the plate flange and the soft washer that is clamping the grindstone in place. (See figs 8 & 9) Then, very carefully remove the grindstone from the shaft, take care that no damage or distortion is done to the bush (if one is fitted). (See fig 10) Now is a good time to clean out the interior of the wheel guard, removing any loose or compacted material that may have accumulated. Carefully inspect the new grinding wheel before it is fitted, check that there are no cracks, and there is no damage to either the front face or the edges. If required, fit the bush to the grindstone. Carefully mount the grindstone onto the shaft, reposition the soft washer and the wheel flange, replace the holding nut and tighten carefully. Do Not Overtighten. Refit the outside shell of the wheel guard and secure with its nuts and bolts. Refit the tool rest, positioning as in "Setting up the grinder". Fasten securely.

Fig 8.



Fig 9.



Changing a Grinding Wheel

Check that the spark guards and the tool rests are not touching the grindstone. 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, strip it down again and check that the bush (if fitted) is correctly positioned and is the correct size for the stone and the spindle. Check the bore of the stone is correct. If these all seem correct, refit and carry out the 'quick burst' procedure again. If the machine is still vibrating, discard the stone and replace with another one. Run up to speed normally. Leave the machine running for at least one minute before carrying out any work. Apply a workpiece and check that the spark guard is correctly positioned and that the tool rest is securely fixed.

If necessary dress the new stone lightly to ensure a 'good face' and good concentricity.

Fig 10.



Dressing a Stone

If the grindstones wear unevenly, producing crests, dips or rounded edges, they should be dressed out using a suitable wheel dressing tool. (A selection of stone dressing tools are available online. Please visit axminster.co.uk.)

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; 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.



THIS IS NOT A PROCEDURE THAT CAN BE RUSHED, IT MUST BE CARRIED OUT SLOWLY AND STEADILY.



Dressing the wheel using a Wheel Dressing Stick Part No. 410074

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