



# **AC140OSS**Oscillating Spindle Sander





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# TECHNICAL SPECIFICATIONS

Motor Power	1/2Hp, 370W		
Voltage	230V~,50Hz		
No-load Speed	1420 rpm		
Work Table Size	370x370 mm		
Work table Tilt	0-45°		
Bobbin Size	19x90mm,38x140mm 50x140mm,76x140mm		
Bobbin Travel	24 mm		
Noise	<=85dB		

#### **SAFETY INSTRUCTIONS**

## GENERAL SAFETY INSTRUCTIONS

Read and understand all these instructions before attempting to operate this product and keep them in a safe place for future reference.

/!\Warning!

When using electric power tools the following basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury.

#### SAFETY INSTRUCTIONS

Before attempting to operate this machine, it is important that you read, understand and follow these instructions very carefully.

They are designed for the safety of yourself and others ensuring a long and trouble free service life from your machine.

#### SAFE OPERATION KNOW YOUR POWER TOOL

It is important that you read and understand our instruction manual and any label attached to the power tool. Learn its applications as well as its limitation and the potential hazard associated with this power tool.

#### **WORK AREA**

Cluttered benches and work areas invite accidents. Workbenches should be kept tidy. Floors should be kept clean and free from rubbish. Special care should be taken where the floor is slippery due to sawdust or wax.

#### **WORK ENVIRONMENT**

Do not expose your power tool to rain, or use in damp or wet locations. Keep the work area well lit .Do not use power tools in areas where is a risk of explosion or fire from combustible materials, flammable liquids, paint, varnish, petrol etc. flammable gases and dust of an explosion nature. As a precaution it is recommended

that you consult an expert on a suitable fire extinguisher and its use.

#### **GUARD AGAINST ELECTRIC SHOCK**

Avoid body contact with earthed or grounded surfaces (e.g. pipes, radiators, ranges, and refrigerators).

#### **BEWARE CHILDREN AND PETS**

Children and pets should be kept out of the work area. Children not be allowed to touch or operate machinery or touch extension cords. All power tools should be kept out of the reach of children, preferably stored or locked in a secure cabinet or room when not in use.

#### DO NOT FORCE THE POWER TOOL

The power tool will be do a better and safer job and give you much better service if it is used at the rate for which it was designed.

#### **USE THE RIGHT TOOL**

Select the right tool for the job .Do not use a tool for a job for which it was not designed. Do not force a small tool to do the job of a heavy-duty tool. Do not use tools for purposes not intended; for example do not use a circular saw to cut tree limbs or logs.

## PERSONAL SAFETY CLOTHING

Do not wear loose clothing, jewellery or anything that could get caught in moving machinery.

#### **EYE PORTECTION**

The use of safety goggles is a mandatory requirement (normal glasses are not sufficient for eye protection). Prescription spectacles do not have safety lenses.

#### **FOOTWEAR**

Where there is a risk of heavy objects damaging feet or if there is a risk of slipping on wet or slippery floors suitable non-slip safety footwear should be worn.

#### HAIR

Long hair should be tied back or contained in a protective covering.

#### **HEAD PROTECTION**

Where there is a risk of falling objects or hitting your head on protruding or low level Obstructions a hard hat should be worn

#### RESPIRATORY PROTECTION

When the machining operation creates dust wear a dust mask. When machining concrete, man made fibre boards, especially MDF (Medium Density Fibre Board) the resin used in these materials can be hazardous to your health. Use an approved face mask with replaceable filter.

#### **DUST EXTRACTION EQUIPMENT**

If the machine is fitted with dust extraction and collection facilities ensure that these are properly connected and used.

#### DO NOT ABUSE THE POWER CORD

Never yank or pull on the power cord to disconnect it from the mains supply socket.

Never carry your power tool by its power cord. Keep the power cord away from heat, oil, solvents and sharp edges. If the power cord becomes damaged have it replaced by an authorized service facility.

#### **SECURE THE WORK PIECE**

Wherever possible secure the work piece using clamps or a vice. It is safer than using your hand and leaves both hands free to control the power tool.

#### DO NOT OVER-REACH

Do not over-reach, keep proper footing and maintain your balance at all times.

#### **MAINTAIN TOOLS WITH CARE**

Keep cutting tools sharp and clean for better and safer performance.

Follow the instructions for lubricating and changing accessories.

Check the tool power cord periodically

4

and if damaged have it replaced by an authorized service facility.

Inspect extension cords periodically and if damaged replace it.

Keep handles dry clean and free from oil and grease.

Ensure that ventilation slots are kept clean and free from dust at all times. Blocked ventilation slots can cause overheating and damage to the motor.

#### **DISCONNECT POWER TOOLS**

Ensure that power tools are disconnected from the mains supply when not in use, before servicing, lubricating or making adjustments and when changing accessories such as blades, bits and cutters.

## REMOVE ADJUSTING KEYS AND WRENCHES

Form the habit of always checking to see that keys and adjusting wrenches are removed from the power tool before turning it on.

#### **AVOID UNINTENTIONAL STARTING**

Ensure that the switch is in the OFF position before plugging the power tool into the mains supply.

#### **EXTENSION CORDS AND REELS**

Do not use 2 core extension cords or reels on power tools with an earth path. Always use a 3 core extension cord or reel with the earth core connected to earth.

When the power tool is to be used outdoors, use only extension cords intended for outdoor use and are so marked.

Always unwind any extension cords fully.

For extension cords up to 15 meters use a wire cross section of 1.5mm<sup>2</sup>. For extension cords over 15 meters but less than 40 meters use a wire cross section of 2.5mm<sup>2</sup>.

Always replace a damaged extension cord before using it.

Protect your extension cord from sharp objects, excessive heat and damp or wet locations.

#### STAY ALERT

Watch what you are doing, use common sense.

And do not operate the power tool when you are tired, if taking medication that causes drowsiness, when having consumed alcohol or taken drugs.

#### **CHECK DAMAGED PARTS**

Before using the power tool it should be carefully checked to determine that it will operate properly and perform its intended function.

Check for the correct alignment of moving parts ensuring they do not bind. Check for broken or missing parts and have them replaced or repaired at an authorized service center. If the power tool requires mounting make sure it is securely attached to a suitable work bench. Check any other condition that may affect the operation of the power tool.

A guard or any other part of the power tool that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated in this instruction manual.

Any switch that does not operate correctly must be replaced by an authorized service center.

Do not use the power tool if the ON/OFF switch does not turn the power tool ON and OFF.

Do not attempt to modify the power tool in any way. The use of any attachment or accessory other than those recommended in this instruction manual could result in damage to the

power tool and injury to the operator.

Have your power tool repaired by a qualified person.

This electric power tool complies with national and international standards and safety requirements. Repairs should only be carried out by qualified persons to do so may result in considerable danger to the user.

#### PROTECT FURNISHINGS

If using the power tool inside your house protect furnishings with a suitable dust sheet.

#### **FIRE PRECAUTIONS**

When using certain power tools your house or workshop general fire precautions should be observed. As a Precaution, it is recommended that an expert is consulted on obtaining and using a suitable fire extinguisher.

## SPECIFIC SAFETY INSTRUCTION

#### **EXTREME CAUTION REQUIRED**

Be aware that the paint on old wood could contain high levels of lead. Extreme care should be taken when sanding painted surfaces. The dust may contain LEAD which, if touched, ingested or inhaled will cause poisoning and can be fatal.

Any pre 1960's building may have had paint containing lead on wood or metal structures and surfaces.

#### STOP!

If you suspect paint in your house contains lead seek professional help.

Once lead is in the body it is retained until a fatal level is reached. Small amounts of exposure can cause irreversible brain and nervous system damage. The young and unborn are particularly at risk.

## **\_\_\_\_\_**Warning!

Some wood and type products especially MDF (Medium Density Fibre-board) can produce dust that can be hazardous to your health. We recommend the use of an approved face mask with replaceablefilters when using this machine in addition to using the dust extraction facility. Ensure that power tools are disconnected from the mains supply when not in use, before servicing, lubricating or making adjustment and when changing accessories such as table inserts and sanding belts.

This machine has been designed for sanding wood, wood type products and plastics. It must not be used for sanding metal as the sparks could ignite sawdust and wood shavings.

It is not recommend that this machine be used for sanding fiberglass or similar materials as the particles generated can cause under ware on bearings etc.

**D**o not attempt to use for sanding operations as a fatal electric shock could occur. This machine is to be use for dry sanding only.

**E**nsure that the sanding drum is the correct size for the bobbin being used.

**D**o not start the machine whilst it is in contact whit the work piece.

Check the work piece for any protruding nails, screw heads or anything that could tear or damage the sanding drum.

Replace the sanding drum as soon as it becomes worn or if it is torn, torn sanding drums can cause deep scratches that are difficult to remove.

Always start sanding with a coarse grade of sanding drum working through the grades to the finest grade.

**N**ever try to modify the machine or fit accessories other than those recommended in this manual.

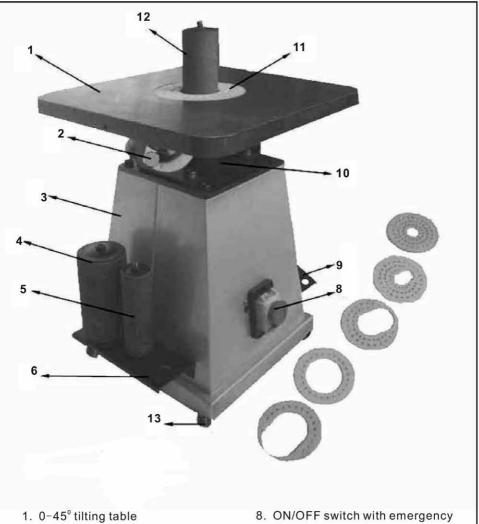
Regularly clean the machine and remove any build up of sawdust inside and around the machine. A build up of sawdust can be a fire hazard.

**N**ever leave the machine unattended while it is still running.

#### TIP

An acceptable filler which could be a good colour match can be made by mixing the sanding dust with PVA glue.

#### **GET TO KNOW YOUR MACHINE**



- 2. 0-45° securing knob
- 3. Machine body
- 4. 50mm(2") sanding drum
- 5. 22mm(3/4")sanding drum
- 6. Tool holder for sanding drum

- stop
- 9. Tool holder for table insert
- 10. Main motor spindle and sanding attachment point
- 11. Table insert
- 12. 38mm(1-1/2") sanding drum
- 13. Rubber feet

#### **ASSEMBLY**



## THE MACHINE IS HEAVY AND MAY REQUIRE TWO PERSON LIFTING

Remove the Bobbin Sander from the packaging. The machine comes ready assembled apart from the sanding attachments and the rubber feet.

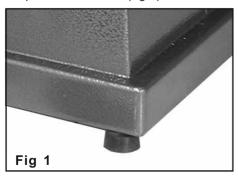
## ATTACHING THE RUBBER FEET

Lower the machine onto its side.

Remove the feet from the plastic wrapping.

Remove the nut and washer from the thread.

Locate the four mounting points on the underneath of the machine. Insert the thread into the hole so that the rubber foot points downward (fig 1).



Put on the washer followed by the nut. Tighten with a spanner.

Repeat operation for the other three feet.

Site the machine at a suitable height enabling sanding operation to be carried out comfortably and in a safe manner.

TO INSTALL THE SANDPAPER ONTO THE RUBBER CYLINDER OR BOBBINS



# MAKE SURE THE MACHINE IS ISOLATED FROM THE SUPPLY BEFORE ANY MAINTENANCE, CLEANING OR ADJUSTMENTS ARE UNDERTAKEN.

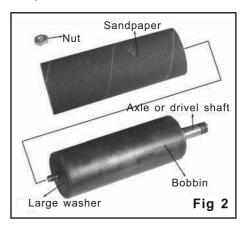
The sander has been supplied with a 50mm, 38mm and 22mm rubber cylinder or bobbins (fitted with sanding drum installed).

If you want to change the grade of sanding paper already attached to the bobbins proceed as below.

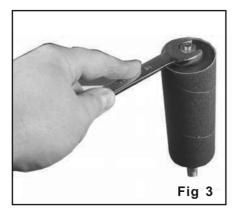
The bobbin consists of a rubber body with a metal axle passing through the center (fig2). The axle has a key which locates into a keyway in the rubber body.

Normally these should need not be disturbed unless the rubber body is damaged.

At either end of the body are two large compression washers.



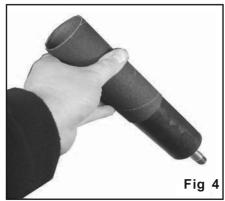
At the top is a nut and washer to secure the cylindrical sandpaper. The low part of the axle is threaded which locates into the motor drive Remove the nut using a suitable spanner (fig 3), lift away the washer and slide the sanding drum clear of the bobbin.



If removal was difficult sprinkle a small amount of talcum powder onto the rubber to aid fitting the new sandpaper drum.

Various grades of sanding drum are available for different jobs. See your stockist for replacement of sanding drum.

Offer the sanding drum to the rubber body (fig4). Slide onto the rubber body so it fits centrally with no edge overhanging.



Replace the washer and nut. With a spanner tighten the nut to expand the rubber body. This will grip the sanding drum.

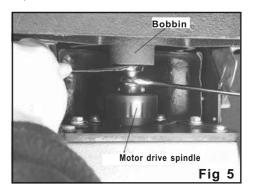
Do not over-tighten as this will distort rubber body.

## INSTALLING THE BOBBIN ONTO THE MACHINE

Lower the bobbin down through the top of the machine.

Locate the thread on the bobbin spindle into the thread on the motor drive spindle.

Hold the motor drive spindle with your hand and tighten the bobbin into the motor drive spindle.
Select two open ended spanners (fig 5).



With one spanner hold the motor drive spindle and with the other spanners tighten the bobbin spindle. Do not overtighten.

#### SELECTING TABLE INSERT

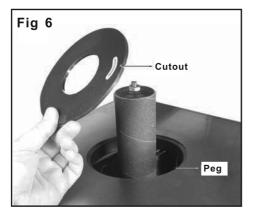
The machine comes with two table inserts.

There is one with a round cutout and one with oval cutout.

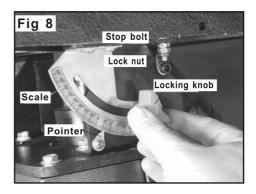
For normal sanding choose the insert with the round cutout (fig 6).

Notice the cutout on the edge of the table insert. This aligns the peg in the recess on the table (fig 6). Lower into position making sure the table insert locates in the recess and is flush with the table.

To remove simply push with your finger from underneath to dislodge the table insert.



Locate the pointer and scale. Slacken the pointer screw. Align with the  $0^{\circ}$  position on the scale and re-tighten screw.



## CHECKING THE TABLE TOP ALIGNS WITH ZERO DEGREES

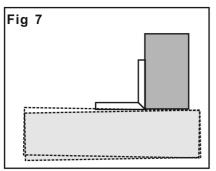
The table top has the facility to tilt between 0° and 45°.



#### Note!

Check that the table is set to 0° with respect to the bobbin. Using a suitable 90° square placed on the table top, move the square to the bobbin.

It should measure 90° (fig 7).



If the table is not square an adjustment can be made. Located under the work table is a stop bolt which adjusts the level of the table (fig 8).

Loosen the lock nut and raise or lower the stop bolt. Take note of when table is at 90° with the bobbin. Tighten the lock nut.

## OPERATING INSTRUCTIONS

#### **TILTING THE TABLE**



Remove the table insert with the round cutout before tilting the table otherwise it will break.

The table will tilt 0° - 45°. Once the desired angle has been reached tighten the two locking knobs (fig 8).

Locate the table insert with the oval cutout and place into the table top (fig 9).



#### STARTING AND STOPPING

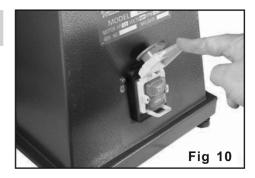
The machine is with a no volt switch. In the event of a power failure, the motor will not start once the power is restored.

Located on the front of the machine is the ON/OFF button incorporating the emergency stop button.

Insert the machine plug into a suitable 13 amp outlet socket.

Lift the emergency stop cover to reveal the ON/OFF buttons (fig 10).

Press the green button to start. Close the emergency stop cover. Do not close by pushing the large red button as the motor will stop.



#### **EMERGENCY STOP BUTTON**

This is the large red button (fig 11). Simply hit the button and the machine will stop.

There is no need to lift the cover to access the stop button underneath. To start the machine see starting and stopping. In the event of power failure the machine will not restart when the power is restored.



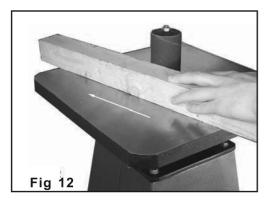
#### USING THE BOBBIN SANDER

Start the machine and wait the motor has build up to full speed. It can be seen that the bobbin moves up down traveling 24mm in total.



NEVER START THE MACHINE WITH WORK IN CONTACT WITH THE BOBBIN

Looking from the front of the machine the motor turns in a clockwise direction (fig 12).



Feed the work across and with the direction of rotation.

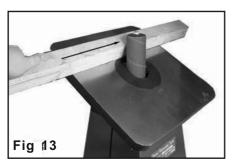
**NEVER** feed the work into the machine and stand with your body directly behind it. The machine could force the work into the operator and cause serious injury.

#### USING THE BOBBIN SANDER AT ANGLES 0° - 45°

Take out the round insert and store carefully. Put in the oval insert (refer to selecting table insert, page 10) Slacken the table securing knobs either side of the machine.

Tilt the table to the desired angle and re-tighten the locking knobs.

Feed the work into the machine always with the direction of rotation (fig 13).



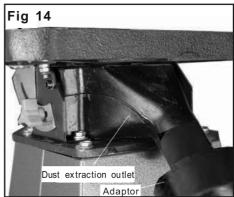
## **∧** Note!

Always bear in mind that when the table is tilted to a particular position the angle will only remain constant if the work is run parallel to the bobbin.

#### **DUST EXTRACTION**

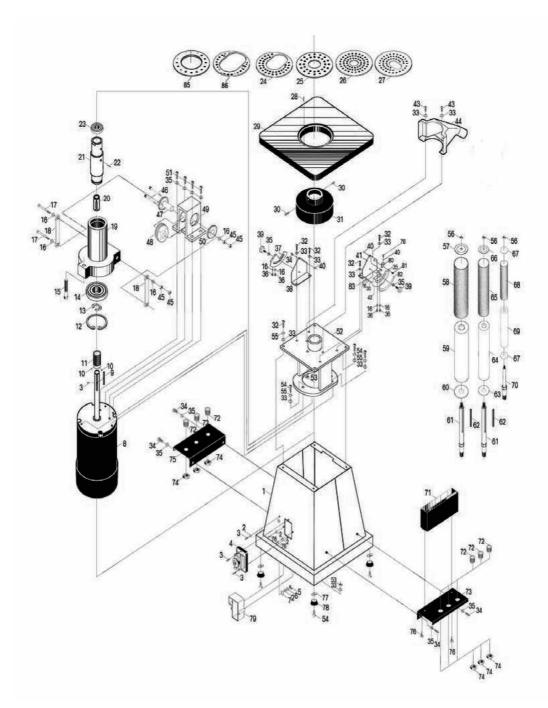
The machine is fitted with a 50mm diameter dust extraction outlet, and an adaptor from 50mm to 100mm.

This is located at the rear of the machine (fig 14) and should be attached to a suitable extractor / collector.



## **PARTS LIST & DIAGRAM**

No	Description	No.	<u>Description</u>		
1	Base	44	Dust collect cover		
2	Washer 4mm	45	Hexgagon nut M5		
3		46	Hexagon socket can head screw		
	Cross recessed pan head screw M4x12		Hexagon socket cap head screw M5x30		
4	switch	47	Right core shaft		
5	Hexagon nut M4	48	Worm wheel		
6	Spring washer 4mm	49	Worm wheel frame		
7	Lock washer external teeth 4mm	50	Left core shaft		
8	Motor	51	Hexagon head screw M6x16		
9	Key 5x5x50	52	Motor frame		
10	Hexagon socket set screw w/flat point M6x5	53	Hexagon nut M8		
		54	Hexagon head screw M8x25		
11	Worm	55	Spring washer 8mm		
12	Circle for hole 55	56	Hexagon nut M8 left		
13	Circle for shaft 32	57	2" convex washer		
14	Bearing 80106	58	2" sand sleeve		
15	Hexagon head screw M8x75	59	2" rubber drum		
16	Washer 5mm	60	2" rubber drum washer		
17	Rock arm dowel	61	Connecting rod		
18	Rock arm parts	62	key 5x5x50		
19	Guide column	63	1-1/2" rubber drum washer		
20	Inner sleeve for bobbin shaft	64	1-1/2" rubber drum		
21	Bobbin shaft sleeve	65	1-1/2" sand sleeve		
22	Parallel pin 4x30	66	1-1/2" convex washer		
23	Bearing 61804	67	Big washer		
24	2" center board	68	3/4" sand sleeve		
25	2" long hole center board	69	3/4" rubber drum		
26	1" center board	70	3/4" connecting rod		
27	1" long hole center board	71	Insert parts house		
28	Spring-type staright pin 3x8	72	Cone sleeve		
29	Work table	73	right sand drum frame		
30	Cross recessed pan head screw M5x6	73 74	Cone sleeve nut		
	M5x6	74 75			
31	Dust cover		Left snad drum frame		
32	Hexagon head screw M8x20	76	Cross recessed pan head screw ST3.5x12		
33	Washer 8mm	77	Washer nut		
34	Cross recessed pan head screw M6x20	78	Rubber washer		
35	Washer 6mm	79	Bottom plate for switch box		
36	Cross recessed pan head screw	80	Support board		
	M5x10	81	Hexagon socket cap head screw M6x12		
37	Rotating disc	0.0			
38	Left frame	82	Dial scale		
39	Dial knob	83	Point		
40	Hexgon nut M6	84 85	Hexagon head screw M6x14		
41	Right frame		3" center board		
42	Dial	86	3" long hole center board		
43	Cross recessed pan head screw M8x16				
	IVI 8 X 1 O				



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#### **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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