

# **CT-50RCK**Wall Mounted Extractor



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# **Declaration of Conformity**

#### **Copied from CE Certificate (No: CN.CE.0175.02-07/10)**

The undersigned, authorised by George N. Sifonios Authorised by Meta International Co., LTD. No. 38-46, Ya Tan Road., Ta Ya Hsiang. Taichung Hsien, Taiwan, R.O.C.

**Model Number: CT-50 (Dust Collector)** 

Manufactured Meta International Co., LTD. is in compliance with the standards determined in the following Council Directive.

Machinery Directives: 2006/42/EC

Applicable Standards: EN ISO 12100-1:2003+A1:2009

EN ISO 12100-2:2003+A1:2009 EN 60204-1: 2006+A1:2009

Low Voltage Directives: 2006/95/EC



The symbols below advise that you follow 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	ltem	Part	Model Number
			CT-50
	CT-50RCK Wall Mounted Extractor		
1 No	Extractor Assembly	1	
1 No	Filter Assembly	2	
1 No	Wall Mounted Bracket	3	
1 No	Filter Shaker Paddle Operating Handle	4	
1 No	Filter Bag Retaining Belt	5	
1 No	Filter Dust Bag	6	
6 No	M6x19mm Hex Bolts	7	
1 No	Instruction Manual		



Please read the Instruction Manual prior to using your new machine. As well as the operating procedures for your new machine, there are numerous hints and tips to help you to use the machine safely and to maintain its efficiency and prolong its life. There is also a detailed description of the parts of your Extractor, which will enable you to become familiar with terminology we will use in this manual. Keep this Instruction Manual readily accessible for any others who may also be required to use the machine.

## **General Instructions for 230V Machines**

#### **Good Working Practices/Safety**

The following suggestions 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 THE REACH OF YOUNG CHILDREN

#### **Mains Powered Tools and Machines**

#### **Primary Precautions**

These machines are supplied with a moulded 16 Amp plug and 3 core power cable. Before using the machine, inspect the cable and the plug to make sure that neither are damaged. If any damage is visible, have the damaged item inspected/repaired by a suitably qualified person. If it is necessary to replace the plug, it is preferable to use an 'unbreakable' type that will most resist damage. Only use a 16 Amp plug, and make sure the cable clamp is tightened securely. Fuse as required. If extension leads are to be used, carry out the same safety checks on them, and ensure that they are correctly rated to safely supply the current that is required for your machine. Remember, most machines or tools have handles or holding positions, the power cable is not one of them.

#### Workplace/Environment

The machine is not designed for use outside. Keep the machine clean; it will enable you to more easily see any damage that may have occurred. Clean the machine with a damp soapy cloth if needs be, do not use any solvents or cleaners, as these may cause damage to any plastic parts or to the electrical components. It is good practice to leave the machine unplugged until work is about to commence, also make sure to unplug the machine when it is not in use, or unattended. To avoid inadvertent 'start up', if your machine is not fitted with a NVR system, ensure the switch is always returned to the OFF



KEEP THE WORK AREA AS UNCLUTTERED AS IS PRACTICAL, THIS INCLUDES PERSONNEL AS WELL AS MATERIAL. UNDER NO CIRCUMSTANCES SHOULD CHILDREN BE ALLOWED IN WORK AREAS.

position. Once you are ready to commence work, remove any tools, objects or items that could inadvertently get 'sucked up' by the machine and place safely out of the way. Re-connect the machine, ensuring the power cable is not 'snagged' or routed where it could be tripped over as you move about the workshop; it is not too close to an unguarded heat source, or is laid over or around a sharp edge.

If the work you are carrying out is liable to generate flying grit, dust or chips wear the appropriate safety clothing, goggles, gloves, masks etc. If the work operation appears to be excessively noisy, wear ear-defenders. If you wear your hair in a long style, wearing a cap, safety helmet, hairnet, even a sweatband, will minimise the possibility of your hair being caught up in the rotating parts of the machine. Likewise, consideration should be given to the removal of rings and wristwatches if these are liable to be a 'snag' hazard. Consideration should also be given to non-slip footwear, etc.

**DO NOT** use this machine if you are tired, your attention is wandering or you are being subjected to distraction.

**DO NOT** use this machine within the designated safety areas of flammable liquid stores or in areas where there may be volatile gases. Above all, **OBSERVE....** make sure you know what is happening around you and **USE YOUR COMMON SENSE.** 

# **Specific Safety for Dust Extractors**

**DO NOT** use this machine as a vacuum cleaner, try to keep the waste medium to wood by products.

**DO NOT** uplift workshop floor debris (stones, nails, screws, paper etc., etc.). Be aware that wood dust is an explosive medium.

**DO NOT** allow any 'naked light' source to occur anywhere near the machine. This includes cigarettes, matches, etc, and do not place the machine near any unprotected light bulbs, that could possibly get broken.

The suction force is generated by a high speed fan unit. This has the potential to amputate fingers, grab loose clothing (ties etc) and 'bat' large chips etc, at high speeds. Keep all guarding in place, and if access to the fan becomes necessary (due to blockage etc) disconnect the machine from the mains supply and ensure the fan has come to a complete stop before putting your hands anywhere near it.

If you are not using 'clear' extraction hose, periodically remove the hose to check that the inlet to the machine is not getting restricted. The safety guard grill of the inlet duct can be particularly irksome in this way, as long strand shavings etc., can wrap around the grill fret.

Keep the particle filter clean. The machine relies on its ability to 'blow' air through the filter to generate good suction. If the particle filter starts to clog this reduces the air flow and hence the machine becomes less efficient.

The particle filter can be cleaned by using an 'M' class vacuum cleaner, clean the inside of the filter.

# **Specific Safety for Dust Extractors**

Be aware that in dry air periods or areas, the movement of the air through the machine can generate static electric fields. These are not normally a problem as the machine is bonded together via its construction and the whole is earthed back through the electrical supply; problems can occur with isolated items, such as stands or hosing that are insulated from the ground (standing on rubber feet, suspended in the air etc). If possible, try to connect everything together electrically, to eliminate static shocks.

Use the integral metal coil in flexible plastic hosing to connect units together .

Try to route the power cable and the hosing away from busy walkways.

**DO NOT** allow the inlet to become 'dead ended', or block or restrict the outlet, this puts undue strain on the motor and can lead to overheating.



ONLY USE DUST EXTRACTION BAGS WITH THIS MACHINE NOT DOMESTIC WASTE BAGES!



DO NOT PLACE DUST EXTRACTION BAGES OVER THE FILTER ASSEMBLY!

# **Specification**

Code	508483
Model	CT-50RCK
Rating	Trade
Power	750W 230V 1ph
_ Air Flow	912m³/hr
Noise Level	75dbA
Particle Size	1 micron
Hose Diameter	100mm x 1
Bag Capacity	50L
Overall L x W x H	558 x 495 x 1169mm
Weight	27kg_

# **Assembly**

Please read through the section entitled Parts Identification and Description, this will enable you to more readily identify those parts of the cyclone extractor.



Please note: some of this assembly procedure is best accomplished by two persons. Although the tasks are not impossible, some of the items are heavy and awkward, and a mishandling error could cause injury. Please think about what you are doing, your capabilities and your personal safety. We have added the 'two person symbol' to any operation that we recommend should be a two person task.

Unpack all the boxes and check all the components listed in the "What's Included" section. If any parts or components are missing, please contact our Customer Services Department using the procedures and telephone numbers listed in our catalogue.

5

Please note: on occasions the packing list is not strictly adhered to. Please check all the boxes, packets etc. to make sure that all the parts have been accounted for.



#### PLEASE RECYCLE ANY UNWANTED PACKAGING RESPONSIBLY!

Continues Over....

# **Assembly**

Having unpacked the boxes, put all components where they are readily to hand.

#### **Extractor/Filter Assembly**

- **1.** Locate the extractor unit (1), Filter (2) and six M6x19mm Hex bolts (7), see fig 01-02.
- **2.** Line up the six pre-drilled holes in the filter assembly (2) with the ones machined into the extractor outlet housing and secure both units together using the six M6 Hex bolts (7), see fig 03-04-05.

Fig 01-02



Fig 03-04-05



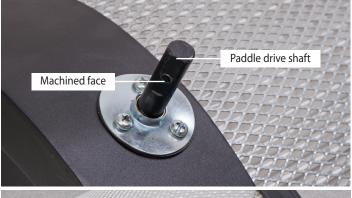




### Filter Shaker Paddle Operating Handle

Locate the filter shaker paddle (4) and loosen the clamping bolt to its base. Insert the handle mounting over the paddle drive shaft making sure the clamping bolt is positioned over the machined face on the shaft then tighten the bolt using an 10mm spanner to secure the handle in place, see fig 06-07-08.

Fig 06-07-08







0

#### **Filter Dust Bag**

- 1. Locate the filter retaining belt (5) and dust bag (6).
- **2**. Open up the dust bag and place it up and over the base of the filter assembly (2), see fig 09-10.
- **3.** Straighten the filter retaining belt (5), position the belt around the base of the filter making sure the belt slots down into the filter's machined recess. Latch it down to hold and to seal the filter assembly, see fig 11-12.

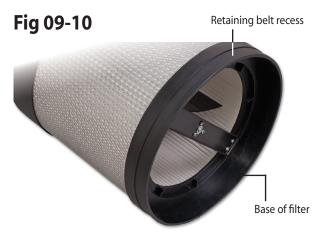




Fig 11-12





#### Mounting the Extractor to the Wall

Before mounting the extractor assembly make sure you allow sufficient clearance and height to comfortably operate the NVR's control switch and shaker paddle operating handle.

**1.** We suggest you mount the wall mounting bracket (3) at a height of 1,650mm from the workshop floor, see fig 13.

**DO NOT** mount the unit too low that the dust bag (6) drags on the workshop floor, see the 'Machine Footprint' on page 9.

Fig 13



Fig 14



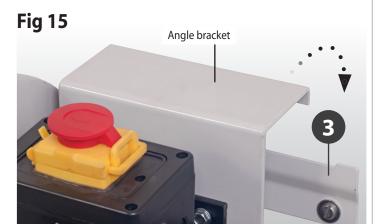
- **2.** Mark a line 1,650mm above workshop floor. Locate the wall mounting bracket (3), position the bracket against the wall with the angle section protruding out. Using a level mark the positions of the three holes in the bracket, see fig 14.
- **3.** Place the bracket (3) to one side, drill the three holes using a 8mm masonry drill bit and secure the bracket in place using three wall plugs, washers and screws (NOT Supplied).

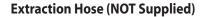
Continues Over....



# NOTE: YOU WILL REQUIRE ASSISTANCE FOR THE NEXT STEP!

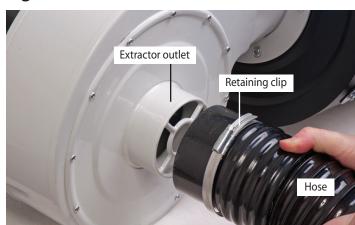
**4.** With assistance lift the extractor assembly up and hook the angle bracket, mounted to the underside of the motor assembly down over the wall mounting bracket (3), see fig 15.





**5.** Place a retaining clip over the extraction hose and introduce the hose over the dust extraction outlet. Tighten the clip to secure in position, see fig 16-17-18.

# Fig 16-17-18









**6.** Attach the other end of the hose to your wood working machine.





# **Illustration and Parts Description**





Filter bag retaining belt



Shaker paddle operating handle



NVR control switch assembly with emergency stop shroud

# **Operating Instructions**

#### **Testing the Extractor**

Connect the extraction hose/s to the extractor's outlet, if not done so already.



WARNING!! MAKESURE CHILDREN ARE KEPT AWAY FROM THE EXTRACTOR WHILE IN OPERATION.



CONNECT THE POWER SUPPLY TO THE MAINS AND SWITCH ON!



NOTE: ALWAYS TURN ON/OFF THE EXTRACTOR BY THE NVR CONTROL SWITCH NOT THE MAINS SWITCH!



WAIT UNTIL IT IS UP TO FULL SPEED AND CHECK FOR SIGNS OF VIBRATION. IF ALL IS WELL SWITCH OFF AND WAIT UNTIL THE EXTRACTOR HAS COME TO A COMPLETE STOP.



DISCONNECT THE POWER SUPPLY FROM THE MAINS!



IF THE EXTRACTOR FAILS TO START UP OR THERE ARE ANY STRANGE NOISES APART FROM VIBRATION SOUNDS, CONTACT "TECHNICAL AFTER SALES" FOR SUPPORT. Phone: 03332 406406
Email: technical@axminster.co.uk

#### **Reduced Suction Performance**

After a period of time dust, sawdust and shavings can build-up causing blockages and reduced suction performance.

Carry out the following checks to keep your extractor working at peak performance.



DISCONNECT THE POWER SUPPLY FROM THE MAINS!



**WARNING! ALWAYS WEAR A DUST MASK** 



**WARNING! ALWAYS WEAR EYE PROTECTION** 

• Check the filter for signs of build-up of sawdust and move the shaker paddle handle (4) back and forth to remove any built-up dust and debris from inside, see fig 19. Then clean the outside with a vacuum cleaner.

- Check the hoses for blockages.
- Check the dust bag and empty if full, see fig 20-21.

**Fig 19** 



Fig 20-21



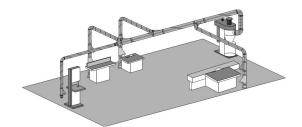


#### **General Infomation**

Many manufacturers will state the volume of air required for each machine in their manual. If not, note the size of the extraction port and use the chart below

outlet size	volume of air required
50	200 m³/hr
100	700 m³/hr
125	1100 m³/hr
150	1600 m³/hr
200	2800 m³/hr

**Example**: for a single machine with a 100mm port an extractor of a minimum of 700m³/hr will be sufficient. For multiple machines count the number of extraction ports per size, multiply the number of each size by the volume of air required. Then add the results per outlet size to give you a total volume of air required. This total is for all the machines operating at the same time. You then must decide which and how many machines will be used at the same time. Divide the total volume of air required by this number and add 500m³/hr. Choose an extractor that gives the airflow required by your calculations. Look at the main inlet size of the extractor, this is the size of the main duct to be used. In larger systems the ducting should get larger towards the extraction unit as more machines that are in use are added to maintain the correct air speed in the duct. This is very important; if the airflow is too low a build up of dust and debris will occur and is a fire and explosion risk. If the air speed is high then the system will be noisy but there will be no deposits in the ducting. Always use blastgates to close off airflow to machines that are not in use.



#### Basic design

- Keep it simple, don't over complicate the system.
- Keep it straight, ducting runs should all be straight with as few bends as possible.
- Keep transfer duct as big as required by the extractor, this should get larger towards the extractor.
- Keep flexible duct to a minimum. If the machine cannot be connected to the system by solid ducting only then should flexible ducting be used for the final connection.
- Keep branches joining the duct to a maximum of 45° When branches join the main duct ideally they must enter at the side or the top at an angle of a maximum of 45° towards the direction of flow.
- Fit blastgates to maximise efficiency and balance the system.

The negative pressure inside the ducting draws air into the system. Incorrect sizing of the duct, too many bends coupled to lots of flexible hose induces losses into the system and in badly designed systems this is akin to leaving the hand brake on in a vehicle.

## Maintenance

#### **Basic Maintenance**



#### **WARNING! ALWAYS WEAR A DUST MASK**



#### **WARNING! ALWAYS WEAR EYE PROTECTION**

#### **Daily**

• Empty the collection bag before it overflows, wear a dust mask whilst removing and emptying the bag.

#### Weekly

- Check the inlet and outlet duct and remove any accumulated sawdust.
- •Check the inlet hoses for splits and cracks, repair as necessary.
- Check the dust collection bag for wear and tear, especially around the neck of the retaining belt. If wear or fraying is occurring, replace the bag.
- Check the motor for dust, sawdust, shavings etc, build up. If this has occurred, clean with a vacuum cleaner, see fig 22.
- Move the shaker paddle handle back and forth to remove any built up dust and debris from inside the filter.

#### Monthly

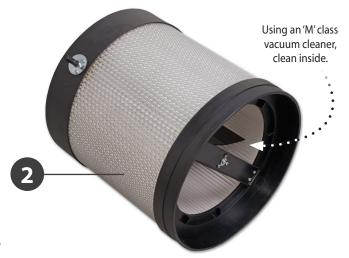
• Remove the filter securing belts (5) and remove the filter assembly (2), see fig 23-24. Using an 'M' class vacuum cleaner, clean inside the filter.

# Mannenance



Fig 23-24





# Weekly LEV System Maintenance Log

	Weekly LEV System Manitenance Log									
Week	Date	Checked by	Check all ducting for physical damage	Check inlets, clear any obstructions if found	Check operation of all blastgate controls	Check filter(s) for damage and condition	Check filter shakers (if fitted) and clean filters	Check waste collector(s) for damage and condition	Empty waste collectors if necessary	Comments
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										REMOVE AND CLEAN FILTERS
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										REMOVE AND CLEAN FILTERS
25										
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30										
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32										
33										
34										

# Weekly LEV System Maintenance Log

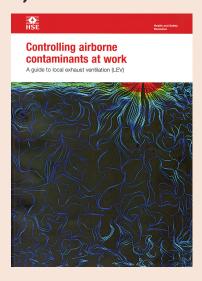
Week	Date	Checked by	Check all ducting for physical damage	Check inlets, clear any obstructions if found	Check operation of all blastgate controls	Check filter(s) for damage and condition	Check filter shakers (if fitted) and clean filters	Check waste collector(s) for damage and condition	Empty waste collectors if necessary	Comments
35										
36										REMOVE AND CLEAN FILTERS
37										CLEAN FILIERS
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										REMOVE AND
49										CLEAN FILTERS
50										
51										
52	Nearly 14 months it is now a legal requirement to have your system tested and certified									
53										
54										
55										
56										
57										
58										
59										
60										

#### Why should I bother with LEV?

The law says you must control the risks from these substances (the Control of Substances Hazardous to Health (COSHH) Regulations). Installing LEV may help you to do this.

For more information about other ways of eliminating or reducing airborne contamination at work look, at HSE's COSHH website, hse.gov.uk/coshh.

#### **Health and Safety Executive**



#### Ref Code: HSG258

The book above provides guidance on the supply of local exhaust ventilation (LEV) equipment. It describes the principles and good practice of deciding on, designing, commissioning and testing cost-effective LEV.

The guidance is written for the suppliers of LEV goods and services, but will also be helpful for employers and managers in medium-sized businesses, and trade union and employee safety representatives. All of these groups need to work together to provide, maintain and use effective LEV and to reduce exposure from inhalation of hazardous substances.

The book contains information about the roles and legal responsibilities of suppliers and of their clients as employers; competence; principles of good design practice for effective LEV hoods and their classification; ducts, air movers, air cleaners; and system documentation with checking and maintenance schedules, and the marking of defective equipment.

It also includes guidance on the specification of LEV; the supplier's quotation; commissioning; zone marking; the user manual and logbook; testing and hood labels.

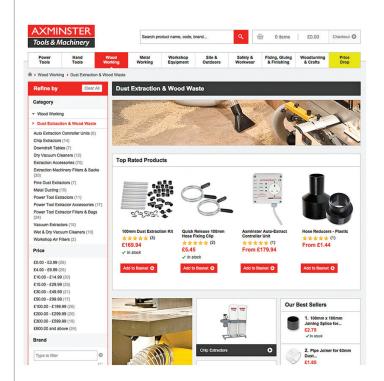
## **Extraction Accessories**

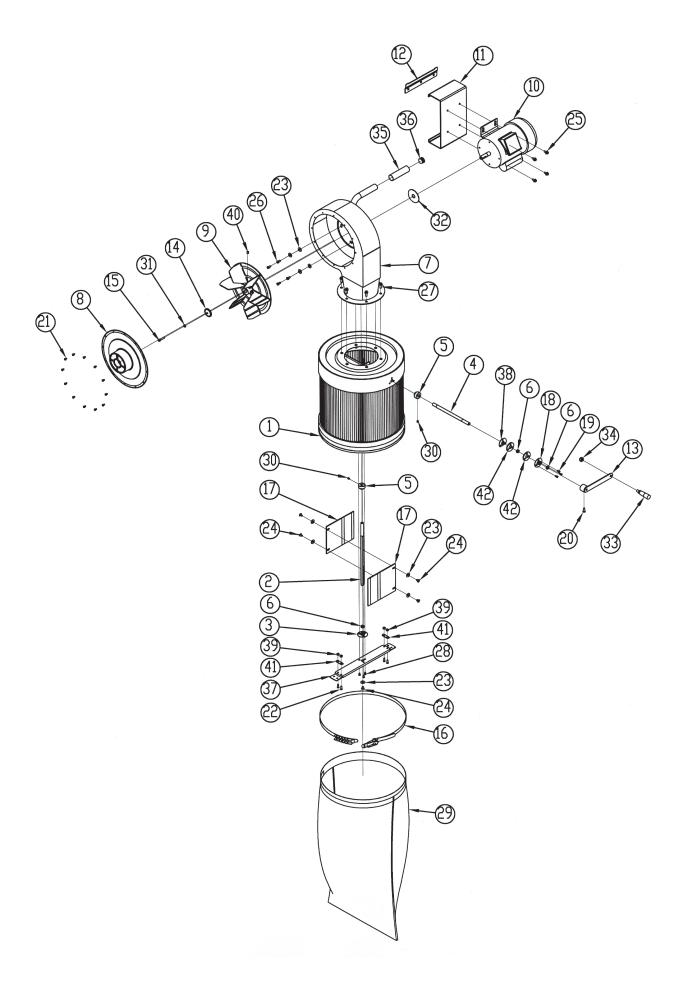
#### **Extraction Accessories**

For all of our accessories please see our catalogue or visit our website at axminster.co.uk.

Contact us on:

Call: 03332 406406 Web: axminster.co.uk

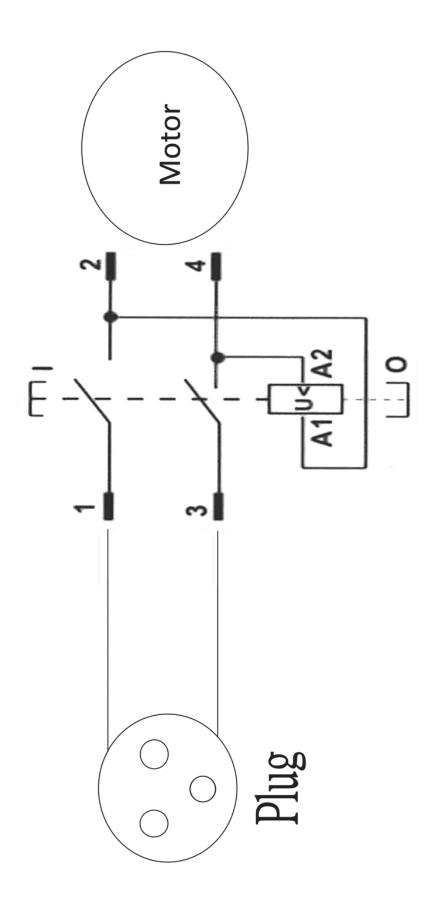




# **Exploded Diagram/Parts List**

No	Description	Qty
1	Canister Filter	1
2	Main Spindle	1
3	Bearing Fixing Plate	1
4	Connecting Spindle	1
5	Bevel Gear	2
6	Self-Iubricating Bearings	3
7	Main Housing	1
8	Inlet Cover	1
9	10"Aluminium Impeller	1
10	Motor	1
11	Motor Plate	1
12	Wall Bracket	1
13	Handle	1
14	Impeller Washer	1
15	Cap Screw M6x30 LD	1
16	Blet Clamp for Canister Filter	1
17	Flapper	2
18	Bearing Fixing Plate no tooth	1
19	Round HD screws M5x10mm	3
20	HEX Bolt M6x16mm	1
21	Round HD Screws M5x10mm	12

22	Round HD Screws M5x15mm	4
23	Flat Washers 1/4"x18	9
24	Round HD Screws M6x12mm	5
25	Flange Screw 1/4"x1/2"	4
26	Hex Bolt 1/4"x1/2"mm	4
27	Flange Screw 1/4"x3/4"	6
28	Round HDScrews M5x8mm	3
29	PE bag 58x76cm	1
30	Set Screw 1/4"x8mm	2
31	Spring Washers 1/4"	1
32	Motor Gasket	1
33	Hand Wheel	1
34	M10 Locking Nut (Thin)	1
35	Sponge Sets 1"x4"	1
36	Tube Cap 1"	1
37	Lower Fixing Plate	1
38	Bearing Fixing Plate( Special)	1
39	Nuts M5	4
40	Set Screw 5/16"x5/16"	1
41	Clip Fixing Plates	2
42	Rubber Gaskets	2



# The **Axminster guarantee** is available on Hobby, Trade, Industrial, Engineer, Air Tools & CNC Technology Series machines

It's probably the most comprehensive FREE guarantee ever- buy with confidence from Axminster! So sure are we of the quality, we cover all parts and labour free of charge for three years!

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Free Three Year Guarantee on Axminster Hobby, Trade and Industrial Series woodworking and engineering machines, Axminster Air compressors and Air Tools, and bench top grinders - no registration necessary just proof of purchase.

We will repair or replace at our discretion and will collect only from a UK mainland address, irrespective of the original delivery address.

The Guarantee assumes that you have bought the correct machine for the required operation, in accordance with our guidelines; have operated and maintained it in accordance with the instruction manual; and that all cutting machines will be used with a blade which is sharp and serviceable at all times. It does not cover consumable items purchased with the original product, including original blades or abrasives.

For more information visit axminster.co.uk/3years

Normal wear and tear; misuse, abuse and neglect are excluded and the machine should not have been modified in any way. Please do not attempt to service the product without first contacting us; we are happy to guide you but failure to do so may invalidate the guarantee.

The Guarantee is transferable from owner to owner in the first three years but you must have original proof of purchase. Should we need to replace a machine in the first three years the guarantee will still continue to be effective from the original purchase date.

Full Terms and Conditions can be found at axminster.co.uk/terms

This guarantee does not affect your statutory rights.



Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local recycling centre and place into the appropriate recycling bin.

#### **Only for EU countries**



Do not dispose of electric tools together with household waste material. In observance of European Directive 2002/96/ EC on waste electrical and electronic equipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

Axminster Tools & Machinery Ltd Weycroft Avenue, Axminster, Devon EX13 5PH

axminster.co.uk