Code 109100 Original Instructions



# **AP330ST** 330mm Surface Thicknesser





AT: 17/04/2023 BOOK VERSION: 01

## **INDEX OF CONTENTS**

What's In the Box	03
Safety	04
Assembly	05-06
Set Up	07-08-09
Operation	10
Blade Rotation/Change	11
Troubleshooting	12
Maintenance	13
Exploded Diagram/Parts LIsts	14-15-16
Wiring Diagram	17
Declaration of Conformity	18-19





Α	Benchtop Thicknesser	1
в	Table Rise & Full Handwheel Knob & Caphead Screw	1
С	Dust Extraction Outlet	1
D	Handle Torx Screwdriver TZ25 & 4mm Hex Key	1

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

2023

2003256

Axminster Tools, Axminster, Devon, EX13 5PH. United Kingdom

.

Year

Serial No

axminstertools.com



as shown.



The machine's Serial Number is

located on the specification label



Ear protection should be worn

Eye protection should be worn

Dust mask should be worn

**CE** 

UK

AXMINSTER PROFESSIONAL



Rear View



Fully read manual and safety instructions before use

2

### WHAT'S IN THE BOX



## SAFETY

The following is a list of safety precautions you must consider when using a Thicknesser:



**! ALWAYS REMEMBER TO DISCONNECT THE POWER TO THE THICKNESSER WHEN** MAKING REPAIRS OR ADJUSTING BLADES AND GUARDS.



ALWAYS REMEMBER TO READ THROUGH THE MACHINE INSTRUCTIONS SUPPLIED.

- Eve protection, ear protection, respiratory protection and chip extraction are highly recommended when operating this machine.
- Do not wear gloves, loose clothing, jewellery, or any dangling objects when operating a Thicknesser and ensure that long hair is tied up out of the way.
- All guards must be in place and fully operational. If a guard seems to be missing or damaged, adjust, replace or repair immediately.
- Ensure that all visible electrical components (cables, switches) are in good condition without damage.
- Hands and fingers must be kept clear of the blades,
- Use only the recommended blade size & type.
- Ensure all blades are sharp & in good condition.
- The blades must be adjusted in accordance with the instruction manual.

- Never thickness plane small pieces 12" in length minimum.
- Long material should be supported at the same height as the thicknesser table
- Ensure you are comfortable before you start work, balanced, not over reaching.
- Do not use the machine if you are under the influence of drugs or alcohol, tired or distracted.
- Do not allow children to operate the machine.
- Do not use the machine in an excessively damp or wet environment.
- Never leave the machine unattended when it is running.
- Keep the table top & surrounding work area free from excessive dust & debris to help prevent slipping or tripping.
- Ensure that the machine is stable on the floor, fixed to the bench and wheel bases if used are locked off.

Fig 01-02



1. Place the thcknesser (A) on a flat and lever surface and fold both front & rear extention tables down, see fig 01-02.



- 2. Remove all accessories parts from inside the machine, see fig 03.
- 3. Locate the rise and full handwheel knob and caphead screw (B). Rotate the rise & full wheel to the side of the thicknesser until the threaded hole in the wheel is in line with the elongated slot in the frame.
- assembly, introduce the Cap screw through the elongated slot from inside the machine and secure the knob in place using the supplied 4mm Hex key, see fig 04-05.



More safety information can be found at: http://www.hse.gov.uk/pubns/wis17.pdf

5. Find the dust extraction hood. Slide the extractor (C) into the space that occupied the cutter block housing see fig 06. Gently push home until the extractor inlet slots over the motor's fan outlet, see fig 07. Secure in place using the two Cap screws on either side of the extractor moulding, see fig 8.

NOTE: Dust and debris moving inside the plastic extraction hose may cause a build up of static electricity. This can cause a potential hazard especially with fine dust. The extraction outlet incorporates a 'Anti-Static' discharge cable. Secure the connector to the frame using the power cable P-Clip, see fig 8.

7. Unlock the cutter block head unit by rotating the locking lever to the left, Note: this is located above the rise and full handwheel, see fig 09-10.





**8.** Turn the rise and full wheel clockwise to raise the head sufficiently to remove the polystyrene blocks, see fig 11-12.





#### Levelling the Tables

For storage & transportation the infeed & outfeed support tables are folded in the up position, for use these tables will need to be folded down, see fig 13.



Before use the table will need to be levelled with the main planer table.

- **1.** Ensure that the planer is disconnected from its power source
- 2. Fold both tables down.
- **3.** Place a straight edge / clean spirit level through the planer & rest it on the tables, see fig 14
- **4.** Check to see if there are any large gaps underneath the straight edge, see fig 15
- 5. To reduce the gaps & align the tables first lift the tables & release the lock nuts, see fig 16
- 6. Adjust the stop screw until the folded support table appears level with the main planer table, repeat both sides for both the infeed & out feed tables, see fig 17-18





Ensure that the tables are cleaned and waxed ready for the first use









Continues over...

#### Setting the Timber Thickness Scale

- **1.** Using a scrap fairly flat piece of timber, measure the thickness of the timber at each corner, see fig 19
- **2.** Ensure that the cutter head is unlocked, then adjust the cutter head height to match your timber measurement then relock the cutter head, see fig 20.
- **3.** Switch 'ON' the thicknesser and wait until it reaches full speed.
- **4.** Feed a piece of timber through as per operation instruction on page 9, see fig 21.
- 5. Switch 'OFF' and wait until it comes to a complete stop.
- **6.** Compare the measurement on the timber with the reading on the scale, see fig 22.
- 7. If the reading is different, adjust the scales pointer by loosening the two screws & moving the scale, see fig 23.











#### Securing to the Workbench

It is recommended to secure the planer to the workbench when in use, for this we suggest mounting your planer to a baseboard, see fig 24.



- 1. Choose a board around 50% larger than the planers footprint / base size & at least 16mm thick.
- 2. Position the planer central to the baseboard & mark the four mounting holes in the planer base, see fig 25.
- **3.** Drill the four holes to suit the bolts using (70mm x M8 recommended), to ensure that the board sits flat & stable on the workbench or trestles counter bore the holes slightly from the underside, see fig 26.
- **4.** Fix the planer to the baseboard , bolting from the underside, see fig 27.
- **5.** Then simply clamp the baseboard & planer to the workbench or trestle, see fig 28.



Before using the machine you must ensure that the machine has been set up with the tables levelled & the scale set. Also ensure that the tables are clean, waxed and the extractor has been connected.

For the best results it is advisable to have the flattest side of the timber facing down on the table. If a satisfactory "flat" side cannot be found then it may be wise to flatten off one side with either a surface planer or hand plane. If the timber seems to be crowned then feed the timber through crown up, see fig 29.



 Measure the largest/thickest section of the timber, check this at all four corners of the timber, see fig 30.



#### **OPERATION**



**2.** Set the thicknesser cutter head to this dimension using the depth scale on the side of the machine and lock it off, see fig 31.



### **OPERATION**

- **3.** Press the green "on" button & wait for the machine to come up to full speed.
- **4.** Place the timber on the infeed table & slowly advance the timber towards the cutter head, see fig 32.
- **5.** The depth of cut scale will give you an indication of how much material will be removed, see fig 33.
- **6.** Allow the machine to pick up the timber & pull it through the cutter head, ensure that long lengths of timber are supported, see fig 34.
- 7. Move to the rear of the machine to support the timber as it is fed through the cut, do not pull it through, allow the feed rollers to feed the timber through, see fig 35.
- **8.** The first pass will only very lightly contact the timber, to remove more timber & completely it clean up then simply wind the head down, see fig 36.
- **9.** Once the first side is clean & planed then flip the timber over to plane the other side taking it down incrementally down to your desired width.
- **10.** It is perfectly ok to thickness the narrow edge of the timber, a minimum of 20mm is recommended, see fig 37.













IT IS IMPORTANT NOT TO OVERLOAD THE PLANER, FOR HARDWOODS & WIDE TIMBER BOARDS (150MM+) IT IS RECOMMENDED TO REDUCE THE DEPTH CUT FOR EACH PASS DOWN TO 0.5MM - 1MM.

There are 26 HSS square cutters in total each with 2 cutter edges across the 330mm cutting width, after many hours of use these cutters will need rotating or replacing



#### DISCONNECT THE MACHINE FROM THE MAINS SUPPLY BEFORE CONTINUING!

- **1.** Undo the 2 cap screws and remove the plastic extraction chute, see fig 38.
- **2.** Brush all debris from the cutter/cutters that are to be rotated or changed, see fig 39.
- **3.** Using only the tool provided undo the countersink Torx screw, see fig 40.
- **4.** Lift & twist the cutter so that the fresh sharp edge faces downwards, ensuring that there is no debris under the cutter & the cutter is **seated correctly**, see fig 41.
- **5.** Retighten the countersink Torx screw & repeat if numerous cutters seem blunt or damaged, see fig 42.
- 6. NB Each cutter has a rotation marker to help you monitor which edges have been used NB the cutting edge & marker will always face down, see fig 43.
- 7. Replace the dust chute





# **BLADE ROTATION/CHANGE**







## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION	
Grain is fussy	<ol> <li>Planing wood with high moisture content</li> <li>Blades are dull</li> </ol>	<ol> <li>Dry the wood</li> <li>Sharpen the blades</li> </ol>	
Grain is torn	<ol> <li>The cut is too heavy</li> <li>Blades are cutting against the grain</li> <li>Blades are dull</li> </ol>	<ol> <li>Review proper depth of cut</li> <li>Feed the workpiece with the grain, or turn workpiece around</li> <li>Sharpen the blades</li> </ol>	
Grain is rough/raised	<ol> <li>Blades are dull</li> <li>Cut is too heavy</li> <li>Moisture content is too high</li> <li>Cutter head bearings are damaged</li> </ol>	<ol> <li>Sharpen the blades</li> <li>Review proper depth of cut</li> <li>Dry the wood</li> <li>Replace the bearings</li> </ol>	
Uneven depth of cut from side to side	<ol> <li>Blade projection is not uniform</li> <li>Cutter head is not levelled to planer bed</li> </ol>	<ol> <li>Adjust the blade projection</li> <li>Level the cutter head to table</li> </ol>	
Board thickness does not match depth of cut scale	1. Depth of cut scale is incorrect	1. Adjust the depth of cut scale	
Chain is jumping	<ol> <li>Sprockets are misaligned</li> <li>Sprockets are worn</li> </ol>	<ol> <li>Align the sprockets</li> <li>Replace the sprockets</li> </ol>	
Machine will not start/restart	<ol> <li>Tool is not plugged in</li> <li>Motor failure</li> <li>Wire is loose</li> <li>Overload reset has failed</li> <li>Motor starter failure</li> </ol>	<ol> <li>Check the power source</li> <li>Check the motor</li> <li>Check the motor by a qualified electrician</li> <li>Allow machine to cool down and restart</li> <li>Check the motor by a qualified electrician</li> </ol>	
Circuit tripping resulting in motor stoppage	<ol> <li>Extension cord is too long or too thin</li> <li>Blades are too dull</li> <li>Low voltage running</li> </ol>	<ol> <li>Use a shorter or thicker extension cord</li> <li>Sharpen or replace the blades</li> <li>Check the voltage</li> </ol>	
Poor feeding of timber	<ol> <li>Planer table is dirty</li> <li>Feed roller is damaged</li> <li>Sprocket is damaged</li> <li>Gear box malfunctions</li> </ol>	<ol> <li>Clean off the pitch and residue, and lubricate the planer table</li> <li>Replace the feed roller</li> <li>Replace the sprocket</li> <li>Check the gear box</li> </ol>	
Workpiece is jammed	1. Inadequate blade setting height	1. Set the blade to the correct height	



DISCONNECT THE MACHINE FROM THE MAINS SUPPLY BEFORE CONTINUING!

- Clean tables ensuring that they are pitch / resin free & level.
- Check that the cutters & feed rollers are clean & free of debris
- Check cutters.
- Check power lead.
- Check drive belt, see fig 44.
- Check carbon brushes, see fig 45.
- Check & regrease elevating screws, see fig 46.

## MAINTENANCE







# **EXPLODED DIAGRAM/PARTS LISTS**



NO	DESCRIPTION	QTY	51	CLAMP CORD	1
1	SCR SEMS L/WASH	4	53	FRAME UPPER	1
2	CAP LEFT	1	54	BLOCK SUPPORT	4
3	SCALE LENGTH	1	58	INSERT	26
4	COVER UPPER	1	60	TORX SCREW	26
5	CAP RIGHT	1	61	KEY	1
6	SHAFT TRANSMISSION	1	63	RETAINER BEARING	1
7	WASHER	1	64	SCR HEX SOC CAP	3
8	NUT LOCK	1	65	PULLEY CUTTER HEAD	1
9	SUPPORT	2	66	BELT DRIVE	1
10	SCR SEMS L/WASH	4	67	GEAR LARGE	1
11	WASHER	1	68	BUSHING GEAR	5
12	SCR SOC SET CUP PT	2	69	COVER GEARBOX INSIDE	1
13	WORM ELEVATION	1	70	GEAR PINION	1
14	HANDLE	1	71	BEARING BALL	2
15	KNOB SNIPE	1	72	COVER GEAR BOX	1
16	SCR HEX SOC HD LOCK	1	73	SCR PAN CR TYTT	2
17	RING RETAINING	1	74	LOCKWASHER EXT	2
18	PLATE LOCK LEFT	1	75	NUT	1
19	SLEEVE	1	78	BUSHING	1
20	PLATE LOCK RIGHT	1	79	SCR SEMS W/WASH	9
21	PAD UPPER	2	80	COVER POINTER	1
22	M5XP0.8X12L	2	81	SCREW HEX HD	1
22A	SBG4910-216d	2	82	WASHER	1
22B	ANTI-STATIC DISCHARGE CABLE	1	84	ROD POINTER ELEVATING	1
27	SCR SEMS L/WASH	3	85	INDICATOR DEPTH	1
28	SCR SEMS L/WASH	2	86	SCREW PAN CR	2
29	COVER GEARBOX OUTSIDE	1	87	NUT HEX SPECIAL	1
30	BEARING BALL	1	88	ROD STEP	1
31	SHAFT GEAR	1	89	NUT HEX	1
32	DUST CHUTE	1	90	SCRW HEX HD	1
34	SCR HEX SOC HD LOCK	6	92	CUTTERHEAD	1
35	COVER	2	93	WORM GEAR L.H.	1
36	WORM GEAR R.H.	1	94	PULLEY MOTOR	1
37	BUSHING	2	95	NUT HEX	1
38	SCREW ELEVATING R.H.	1	96	SPRING COIL LEFT	2
39	RING RETAINING EXT	3	97	BLOCK BEARING	4
40	CHAIN	2	98	ROLLER OUTFEED	1
41	SPROCKET	4	99	SPRING COIL RIGHT	2
42	SPACER	1	100	PLATE RETAINER RIGHT	4
43	GEAR ASM SMALL	1	101	SCR HEX SOC CAP	8
43a	GEAR DRIVE	2	102	SCR HEX SOC CAP	1
44	GEAR ASM INTER	1	104	ROLLER INFEED	1
45	SPACER UNDERCUT	4	105a	HOLDER TOOL A	1
46	SPACER	2	105b	HOLDER TOOL B	1
47	SCR PAN CR	3	106	COVER TOOL BOX	1
48	PLATE DUST CHUTE	1	107	TORX WRENCH	1
49	SCR HX SOC SET CUP	1	108	WRENCH HEX'L	1
50	SCR PAN CR	1	110	COVER SIDE LEFT	1

# EXPLODED DIAGRAM/PARTS LISTS

# EXPLODED DIAGRAM/PARTS LISTS

111	ROD SUPPORT	4	144	NUT HEX SPECIAL	4
112	BASE	1	145	BOLT ADJUSTING	4
113	SCR HEX SOC CAP	1	146	BLOCK STEP	1
114	WASHER	1	147	NUT HEX	1
115	SCREW ELEVATING L.H.	1	148	PIN STEP BLOCK	1
116	SCR SEMS L/WASH	8	149	KNOB STEP	1
117	RAIL GUIDE	2	151	SCALE THICKNESS	1
118	PLATE WEAR	1	152	COVER SIDE R.H.	1
119	INFEED OUTFEED TABLE	2	153	SCR SEMS L/WASH	1
120	SCR PAN CR TYTT	1	154	LONG BAR	1
121	PLATE STIFFENER	1	155	SCR HEX SOC CAP	2
122	SPRING TORSION	1	156	SPACER	29
123	PLATE SIDE GUARD	1	156a	SPACER	1
124	COVER SIDE RIGHT	1	157	ANTI-KICK JAW	29
125	HUB HANDWHEEL	1	159	PAD	1
126	KNOB HANDWHEEL	1	196	SCR SEMS L/WASH	1
127	NUT LOCK	2	199	SCR HEX SOC FLT HD	1
128	NUT HEX	4	213	SCR PAN CR TYTT	8
129	SCREW	1	214	WASHER	3
130	SPRING FLAT	4	215	COVER GEARBOX	1
131	SCR SEMS L/WASH	8	216	WASHER WAVE	1
132	ROD PIVOT	1	217	PLUG	1
133	WORM GEAR L.H.	1	222	WASHER WAVE	1
134	SCR HEX SOC CAP	1	243	SCREW	3
135	SCREW	2	245	HOUSING POINTER	1
135A	TH-bx330p 135a	6	246	SPRING COIL	1
136	SPRING COIL	1	248	POINTER	1
137	BALL STEEL	1	600	MOTOR	1
138	BLOCK GUARD	1	188	HOLDER BRUSH	2
139	SCR HEX SOC CAP	2	189	BRUSH	4
140	SCREW HEX	4	190	CAP BRUSH	2
141	NUT HEX	4	172	WAVE FILTER	1
143	PAD BASE	2	173	SWITCH LOCKING	1





#### **DECLARATION OF CONFORMITY**



## DECLARATION OF CONFORMITY



#### Axminster Tool Centre Ltd

**UK DECLARATION OF CONFORMITY** 'original'

Name and address of the manufacturer: Axminster Tool Centre Ltd, Unit 10 Weycroft Avenue, Axminster, Devon

The object of the declaration described above is in conformity with the relevant GB legislation:

References to the relevant harmonised standards used or references to the other technical specifications in relation

ISO 19085-7:2019: Woodworking machines - Safety - Part 7: Surfaceplaning, thickness planning, combined surface/thickness

ISO 7960:1995: Airborne noise emitted by machine tools — Operating conditions for woodworking machines

ISO 12100 :2010: Safety of machinery — General principles for design — Risk assessment and risk reduction

ISO 13849-1:2015: Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design

ISO 13857:2008: Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs

EN 847-1:2013: Tools for woodworking — Safety requirements — Part 1: Milling tools, circular saw blades

EN 55014-1:2006/+A1:2009: Electromagnetic compatibility -Requirements for household appliances, electric tools & similar

EN 55014-2: 1997/+A1:2001/+A2:2008: Electromagnetic compatibility -Requirements for household appliances, electric tools

EN61000-3-2: 2006/+A1:2009/+A2 20-/+A2: 2009: Limits for harmonic current emissions (equipment input current <=16A EN61000-3-3:2008: Limitation of voltage changes, voltage fluctuations and flicker in low-voltage and flicker in low-voltage

EN61000-3-11:2000: Limitation of voltage changes, voltage fluctuations and flicker in low-voltage and flicker in low-voltage

Name and address of person authorised to compile the technical file: Axminster Tool Centre Ltd, Unit 10 Weycroft

The machinery fulfils all relevant provisions of Supply of Machinery (Safety) Regulations 2008 as amended.

#### The Axminster guarantee

Buy with confidence from Axminster! So sure are we of the quality, we cover all parts and labour free of charge for three years!



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.



Axminster Tools, Axminster Devon EX13 5PH

axminstertools.com