Polymak®

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Polymak[®] ELECTRIC PLANER

PM82EP500E

INSTRUCTION MANUAL



 $Read\ and follow\, all\, safety\, precautions\, in\, instruction\, manual.$

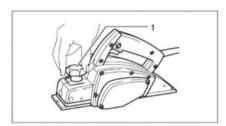
FUNCTIONAL DESCRIPTION

CAUTION:

 Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

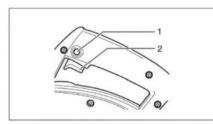
Adjusting depth of cut

Depth of cut may be adjusted by simply turning the knob on the front of the tool.



1. Knob

Switch action



- 1. Lock button
- 2. Switch trigger

CAUTION:

 Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when

released.

To start the tool, simply pull the switch trigger. Release the switch trigger to stop.

For continuous operation, pull the switch trigger and then push in the lock button.

To stop the tool from the locked position, pull the switch trigger fully, then release it.

ASSEMBLY

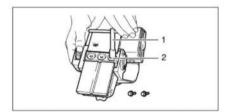
CAUTION:

 Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.

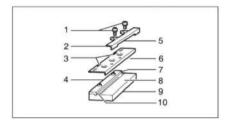
Removing or installing planer blades

CAUTION:

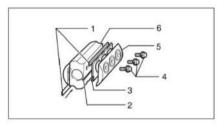
- Tighten the blade installation bolts carefully when attaching the blades to the tool. A loose installation bolt can be dangerous. Always check to see they are tightened securely.
- Handle the blades very carefully. Use gloves or rags to protect your fingers or hands when removing or installing the blades.
- Use only the LOWEN wrench provided to remove or install the blades. Failure to do so may result in overtightening or insufficient tightening of the installation bolts. This could cause an injury.



- 1. Socket wrench
- 2. Bolt



- 1. Pan head screw
- 2. Adjusting plate
- 3. Planer blade locating lugs
- 4. Gauge plate
- 5. Heel of adjusting plate
- 6. Set plate
- 7. Inside flank of gauge plate
- 8. Gauge base
- 9. Back side of gauge base
- 10. Mini planer blade



- 1. Mini planer blade
- 2. Groove
- 3. Set plate
- 4. Hex. flange head bolt
- 5. Drum plate
- 6. Drum
- 1. Remove the existing blade, if the tool has

- been in use, carefully clean the drum surfaces and the drum cover. To remove the blades on the drum, unscrew the three installation bolts with the socket wrench. The drum cover comes off together with the blades.
- To install the blades, loosely attach the adjusting plate to the set plate with the pan head screws and set the mini planer blade on the gauge base so that the cutting edge of the blade is perfectly flush with the inside flank of the gauge plate.
- 3. Set the adjusting plate/set plate on the gauge base so that the planer blade locating lugs on the set plate rest in the mini planer blade groove, then press in the heel of the adjusting plate flush with the back side of the gauge base and tighten the pan head screws.
- 4. It is important that the blade sits flush with the inside flank of the gauge plate, the planer blade locating lugs sit in the blade groove and the heel of the adjusting plate is flush with the back side of the gauge base. Check this alignment carefully to ensure uniform cutting.
- 5. Slip the heel of the adjusting plate into the groove of the drum.
- 6. Set the drum cover over the adjusting plate/ set plate and screw in the three hex flange head bolts so that a gap exists between the drum and the set plate to slide the mini planer blade into position. The blade will be positioned by the planer blade locating lugs on the set plate.
- 7. The blade's lengthwise adjustment will need to be manually positioned so that the blade ends are clear and equidistant from the housing on one side and the metal bracket on the other.

- 8. Tighten the three hex flange head bolts (with the socket wrench provided) and hand rotate the drum to check clearances between the blade ends and the tool body.
- Check the three hex flange head bolts for final tightness.
- 10. Repeat procedures 1 9 for other blade.

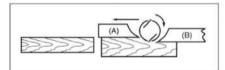
For the correct planer blade setting

Your planing surface will end up rough and uneven, unless the blade is set properly and securely. The blade must be mounted so that the cutting edge is absolutely level, that is, parallel to the surface of the rear base.

Below are some examples of proper and improper settings.

- (A) Front base (Movable shoe)
- (B) Rear base (Stationary shoe)

Correct setting



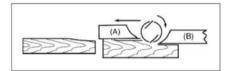
Although this side view cannot show it, the edges of the blades run perfectly parallel to the rear base surface.

Nicks in surface



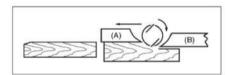
Cause: One or both blades fails to have edge parallel to rear base line.

Gouging at start



Cause: One or both blade edges fails to protrude enough in relation to rear base line.

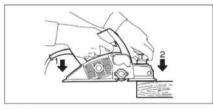
Gouging at end



Cause: One or both blade edges protrudes too far in relation to rear base line.

OPERATION

Planing operation



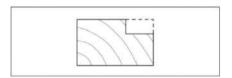
- 1. End
- 2. Start

First, rest the tool front base flat upon the

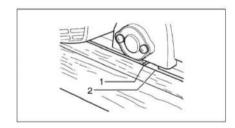
workpiece surface without the blades making any contact. Switch on and wait until the blades attain full speed. Then move the tool gently forward. Apply pressure on the front of tool at the start of planing, and at the back at the end of planing. Planing will be easier if you incline the workpiece in stationary fashion, so that you can plane somewhat downhill.

The speed and depth of cut determine the kind of finish. The power planer keeps cutting at a speed that will not result in jamming by chips. For rough cutting, the depth of cut can be increased, while for a good finish you should reduce the depth of cut and advance the tool more slowly.

Shiplapping (Rabbeting)



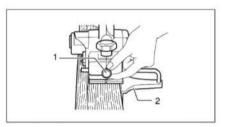
To make a stepped cut as shown in the figure, use the edge fence (guide rule).



- 1. Blade edge
- Cutting line

Draw a cutting line on the workpiece. Insert the

edge fence into the hole in the front of the tool. Align the blade edge with the cutting line.



- 1. Screw
- 2. Edge fence

Adjust the edge fence until it comes in contact with the side of the workpiece, then secure it by tightening the screw.

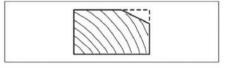
When planing, move the tool with the edge fence flush with the side of the workpiece. Otherwise uneven planing may result.

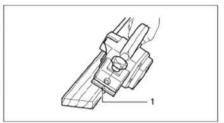
Maximum shiplapping (rabbeting) depth is 9 mm (11/32").



You may wish to add to the length of the fence by attaching an extra piece of wood. Convenient holes are provided in the fence for this purpose, and also for attaching an extension guide (optional accessory).

Chamfering





1. "V" groove

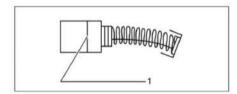
To make a chamfering cut as shown in the figure, align the "V" groove in the front base with the edge of the workpiece and plane it.

MAINTENANCE

CAUTION:

 Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

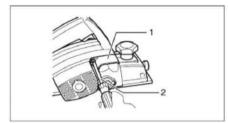
Replacing carbon brushes



1. Limit mark

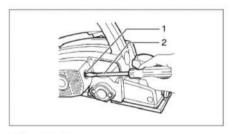
Remove and check the carbon brushes regularly. Replace when they wear down to the

limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.



- 1. Chip cover
- 2. Screwdriver

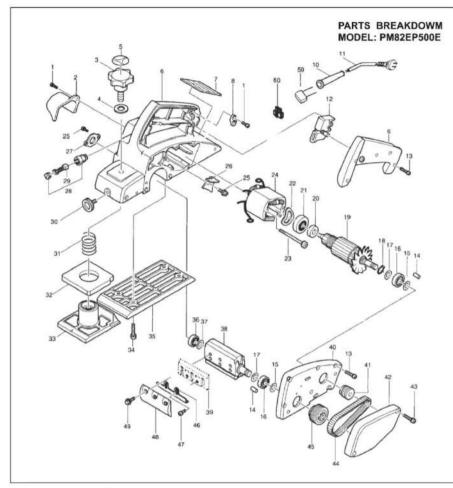
Use a screwdriver to remove the chip cover.



- 1. Brush holder cap
- 2. Screwdriver

Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by LOWEN Authorized or Factory Service Centers, always using LOWEN replacement parts.



Technical Specification:

Electric Planer				
Voltage	٧	220-230		
Power	W	500		
No-load speed	r/min	16000		
Planning capacity	mm	82x1		
Weight	Kg	2.35		

PM82EP500E ELECTRIC PLANER SPARE PARTS LIST

No	Name of parts	PCS	Part No
1	Self-tapping screw	1	
2	Splash guard	1	
3	Adjust button	1	
4	Washer	1	
5 Sticker		1	
6 Motor housing		1	
7 Name plate		1	
8	8 Cord clamp		
9	9 /		
10	Cord guard	1	
11	Power cord	1	
12	Switch	1	
13	Self-tapping screw	10	
14	Rubber pin	1	
15	Washer	1	
16	Bearing	1	
17	Washer	1	
18	Retaining ring	1	
19	Armature	1	
20	Insulation washer	1	
21	Bearing	1	
22	Wave washer	1	
23	Self-tapping screw	2	
24	Stator	1	
25	Self-tapping screw	1	

No	Name of parts	PCS	Part No
26	Shield plate	1	
27	Bearing platen	1	
28	Brush holder∩	1	
29	29 Carbon brush		
30	30 Screw		
31	Spring	1	
32	Foam-rubber cushion	1	
33	Base plate	1	
34	Self-tapping screw	4	
35	Base plate	1	
36	Bearing	1	
37	Shim	1	
38	Arbor	1	
39	Blade	2	
40	Cover	1	
41	Pulley	1	
42	42 Belt cover		
43	Plan head screw	2	
44	Belt	1	
45	Pulley	1	
46	Inside platen	2	
47	Screw	4	
48	Outer platen	2	
49	Screw	6	