

Polymak

SOLUTIONS PROVIDER FOR INDUSTRY AND TRADE

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ANGLE GRINDER

PMAG5-1400DMS

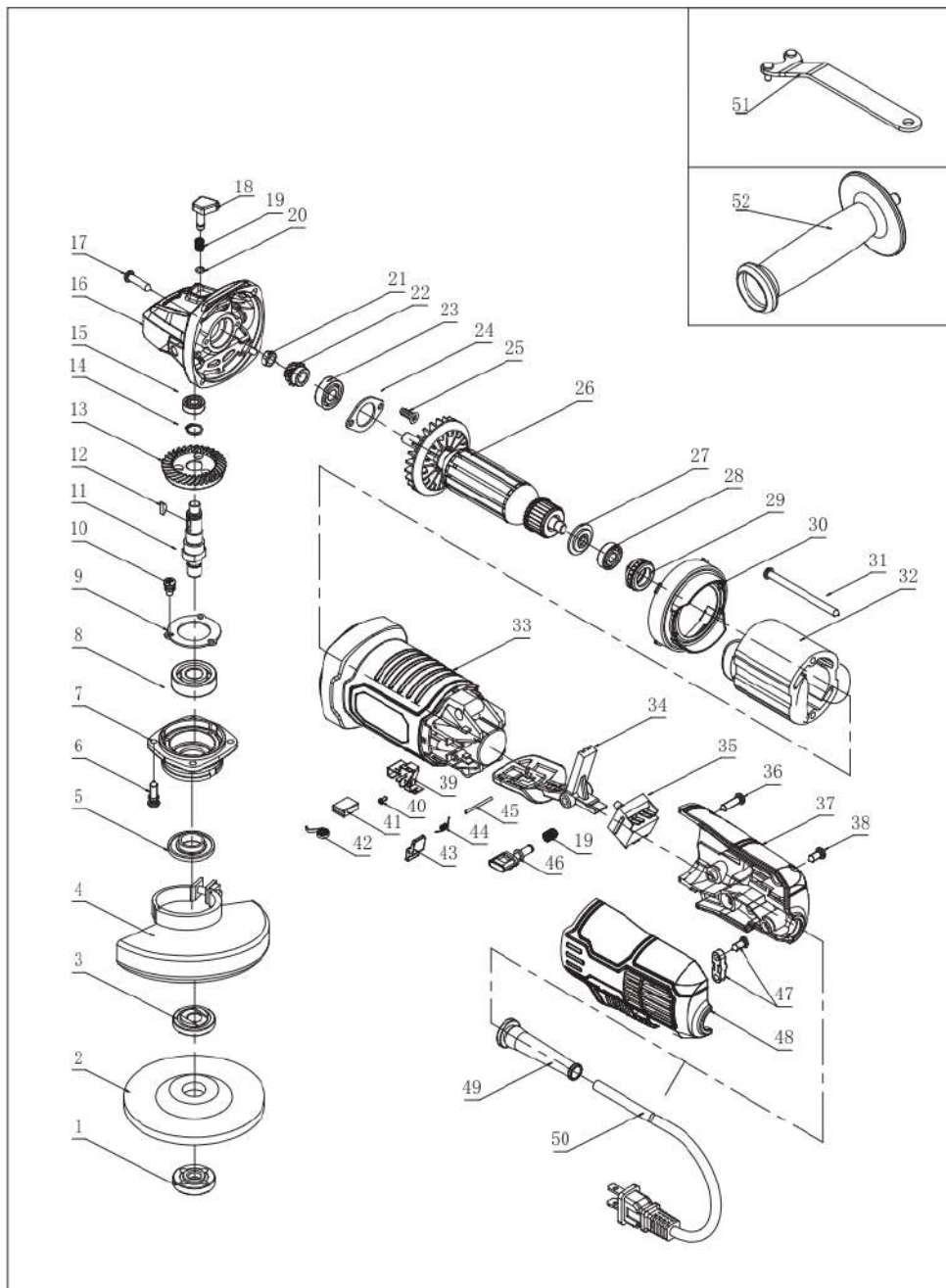
INSTRUCTION MANUAL



Read and follow all safety precautions in instruction manual.

Spare Parts list

Part No.	Description	Part No.	Description
1	Outer Flange	27	Dust ring
2	Grinding wheel	28	bearing 607-ZRST
3	Inner Flange	29	Bearing sleeve
4	Wheel cover	30	Wind baffle
5	Anti-dust cover	31	Screw ST4.8x70
6	Screw M5x14	32	Stator Assembly
7	Bearing box	33	motor housing
8	Bearing 6201-2RST	34	Trigger
9	Bearing clamp	35	Switch
10	screw M4x10	36	Screw ST4.2x28F
11	Spindle	37	Right rear cover
12	Key,3X10	38	Screw ST4.2x16F
13	Big gear	39	brush holder
14	circlip 11	40	Screw ST2.9x8
15	Bearing 609-2Z	41	carbon brush
16	Gear box	42	Coil spring
17	screw ST4.2x22	43	Trigger button
18	lock pin	44	button spring
19	lock spring	45	spring column pin $\phi 2 \times 25$
20	circlip 6	46	Switch self-locking button
21	screw M6	47	cord clamp
22	small gear	48	left rear cover
23	Bearing 608-2RST	49	cord guard
24	bear cover	50	plug
25	screw M4x12	51	Spanner
26	Armature assembly	52	Side handle



WARNING! WHEN USING ELECTRIC TOOLS, ALL THE SAFETY INSTRUCTIONS SHOULD ALWAYS BE OBSERVED TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK AND PERSONAL INJURY BEFORE ATTEMPTING TO OPERATE THE TOOL, PLEASE READ ALL THE INSTRUCTIONS AND SAVE IT FOR FURTHER REFERENCE.

BASIC SAFETY PRECAUTIONS FOR ALL ELECTRIC TOOLS

1. Keep work area clean

---Cluttered area and benches invite injuries.

2. Consider work area environment

---Don't use electric tools in damp or wet locations. Don't expose electric tools to rain. Keep work area well-lit. In particular, no inflammable liquids or gases must be present.

3. Avoid electric shock

---When you are operating tools, don't touch metal being grounded, such as pipe, radiator, freezer, etc.

4. Keep children and visitors away

---Don't let children contact tool or extension cord. All visitors should be kept away from work place.

5. Store idle tool

---When not in use, tools should be stored in dry, high, or locked-up place.

6. Don't force tool

---It will do the job better and safer at the rate for which it was intended. Avoid unnecessary overload which may put the operator at risk and impair functions of the tools.

7. Use right tool

---Don't force small tools and attachment to do the job of a heavy duty tool. Don't use tools for purpose not intended, for example, don't use electric circular saw for cutting logs or tree limbs.

8. Dress properly

---Don't wear loose clothes or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.

9. Use safety goggles

---Always wear safety goggles. If dust is produced, use the special masks.

10. Don't abuse cables

---Never carry tool by cable or yank it to disconnect it from socket. Keep cable from heat, oil and sharp edges.

11. Don't overreach

---Keep proper footing and balance at all times.

12. Maintain tools with care

---Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and replace if damaged. Keep handles dry, clean and free from oil and grease.

13. Disconnect tools

---When not in use, before servicing, and when changing accessories such as blades, bits and cutters.

14. Remove adjusting keys and wrenches

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

15. Avoid unintentional starting

---Don't carry plugged-in tool with finger on switch. Make sure switch is off when connecting the plug to the socket.

16. Use extension cord

---If an extension cord is required, always check that its cross-section measurement is equal to or greater than that of the tool capabilities and so marked.

17. Stay alert

---Watch what you are doing. Use common sense. Do not operate tool when you are tired.

18. Check damaged parts

---Before further use of the tool, a guard or other parts that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other condition that may affect its operations. A guard or other part that is damaged should be properly repaired or replaced by a qualified service center unless otherwise indicated elsewhere in the instruction manual. Have defective switches replaced by a qualified service center. Do not use tool if switch does not turn on and off.

19. Check the voltage

---Do not plug the electric tool into the mains until you have checked that the voltage shown on the data plate corresponds to the voltage available.

20. Replace parts

---The use of improper accessory or attachment other than recommended present a risk of personal injuries.

21. Have your tool repaired by an expert

---This electric tool is in accordance with the relevant safety regulations. Repairing of electric tool may be carried out only by expert. Otherwise, it may cause considerable danger of the user.

REPAIRS

Please only use accessories and spare parts recommended by the manufacturer. If the tool get malfunction, please hand over the tool to our dealer or appointed maintenance station. Don't disassemble the tool by yourself or replace the parts supplied by other factories.

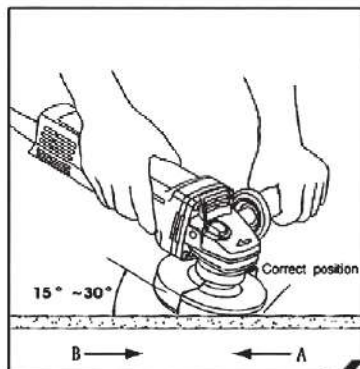
TECHNICAL SPECIFICATION

Model No.	PMAG5-1400DMS
Cutting disc size	125mm
Voltage	220V
Frequency	50Hz
Rated power	1400W
No-load speed	11000RPM

5) EFFECTIVE AND SAFELY WORKING METHOD

Warning: It is prohibited to use the tools without the protect guard. To lay down the tools, please make sure the switch is on 'OFF' position and the disc is stopped.

- Use the correct position on disc, otherwise the disc will be damaged.
- To put the strength approximately 1/2 weight of the tools itself, then you could get an satisfied effect . Using the tools with too much force will overload the tool and get the motor and disc damage.
- In order to get good result, the slope between the disc and the working surface should be tilted at the angle of $15^{\circ} \sim 30^{\circ}$. (Figure 7)
- When using new disc, don't move the tools in B direction, otherwise the work piece maybe cut off. After the disc become round, then the tools could be moved in both A and B directions.



SERVICE AND MAINTENANCE

- Always disconnect the tool before carrying out inspection or cleaning. Never use water or other liquids to clean the tool. Clean the tool by brushing it with a brush.
- The air-vent of the tool should be cleaned regularly to avoid the motor too hot due to air-vent blocked.
- Always check if the components of the tool are fixed well.
- The housing should be without trace of crack or damage.
- Always check if the cable is without damage

◆ Replacing the carbon brushes

- Replacing the carbon brushes, when the tool couldn't run or too much sparkle.
- Carbon brushes which are worn out (burned, broken or shorter than 5mm) have to be replaced by new ones.
- Always replace both carbon brushes at the same time and use the brush by original manufacturer..
- Because the carbon brush is internal, so please change the brushes by our maintenance service center.
- After placing the new carbon brushes, let the tool run for some minutes so that the brushes fit better.

STRUCTURE AND FUNCTIONS

The angle grinder is hand-held ergonomics electric power tools with design-insulated structure. Driven by single-phase series motor, and with speed reduced by a pair of spiral bevel gears, the series of tools are widely used for removing burrs from surface of metal part, beveling and finishing weld seams, cutting thin wall tubes and small size metal material , etc in the fields of machines-building, vehicle manufacturing, chemical engineering . If with its working head changed, this series of tools also is used to clean rust and polish the surface of metal and other material.

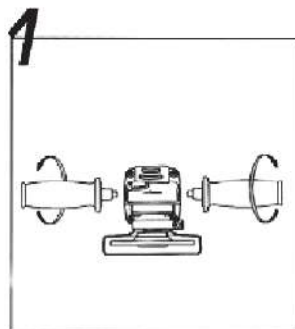
ADDITIONAL SAFETY REGULATIONS

- Operator is recommended to wear goggles when operating the tool.
- When operating, the cable of the tool and its extended wire must be placed at the back side of the tool in order to avoid the cable or extended wire being damaged.
- During operating, don't hit work piece with grinding disc. When the tool is used to cut small work piece, it mustn't vacillate to the left and right in order to avoid disc being broken. In order to get good result , the slope between the disc and the working surface should be tilted at the angle of $15^{\circ} \sim 30^{\circ}$.
- When moving the tool, the user should hold its body or its handle, never drag the tool by its cable.
- Before using the tool, the tool should be checked to make sure whether the disc guard is in good condition and is fasten tightly. The tool without guard is not allowed to be used.
- Before using the tool, please make sure that the disc-installing-disassemble button has been in "OFF" position, and whether the main spindle of disc can rotate flexibly.
- It is prohibited to use the disc- installing-disassemble button as a brake button when the tool is rotating, otherwise, the tool will be damaged and injury may occur to a person.
- It is important for you to select fiber reinforced cymbal-type disc whose safety speed is not less than the no load rated speed. It is prohibited to use the disc whose diameter is bigger than that of rated size. The no load speed of this series of tools, please see to the list attached.
- When making inspection, adjustment, and disc-changing to the tool, does make sure that the plug of the tool has been pulled out of power socket.
- Before operating the tool, please make sure whether the disc has a breakage or a crack, it shouldn't give a voice of breakage or crack when knocked slightly by a wooden hammer

OPERATION REGULATIONS

1) SIDE HANDLE

Please use side handle for safe and convenient operation. The side handle can be installed easily in one of the holes on the side of the angle grinder. (Figure 1.)

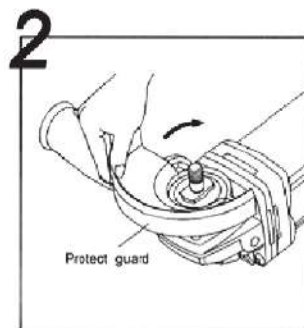


2) DISC PROTECT GUARD

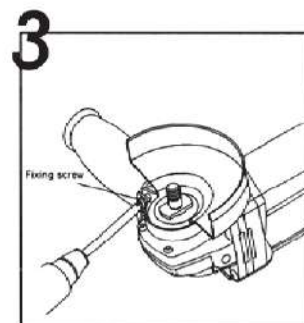
Warning: Before installing or disassembling the disc, please make sure the switch is in "OFF" position and the Plug is not connected with socket.

A. Normal protect guard

To put the protruding position of protect guard into the slot on front cover, then turning 180° clockwise or anticlockwise. (Figure 2.)

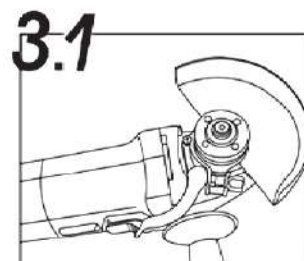


Fix the screw on protect guard until tightened. (Figure 3.)



B. Quick-mounting disc guard

First turning the fastening bolt on the disc guard until the belt cycle of disc guard fit the front cover diameter properly. Then turning the disc guard clockwise or anticlockwise to your desired position. Then push the lever forward. Then the belt cycle will be tightened to the front cover so that the disc guard is fixed well. (see Fig.3.1 and Fig3.2)

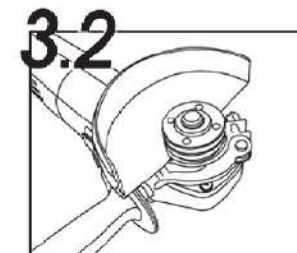


3) HOW TO CHANGE THE DISC

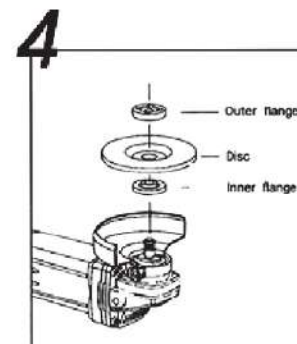
Warning: Before installing or disassembling the disc, please make sure the switch is in "OFF" position and the plug is not connected with socket.

The max speed of the disc installing $\geq 4800\text{m/min}$.

Fix the inner flange onto the spindle, then put the disc onto the inner flange. After that, put the out flange on the spindle. (Figure 4.)



Press the spindle lock on the gear box, screw the out flange with the flange spanner included in the accessories until the out flange is fastened tightly (Figure 5.)



You can also install or disassemble the disc with two spanners, with one spanner to be installed to upper part of flange to lock the main shaft, and with another spanner to disassemble the flange nut.

Warning: The spindle lock is only used to install and disassemble the disc of the tool. It is prohibited from being used as a brake button when the tool is rotating. Otherwise the tool will be damaged and injury may occur to a person.

