



Read and follow all safety precautions in instruction manual.

WARNING: Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.

CAUTION: Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and/or property damage.

NOTICE: Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and/or property damage.

GENERAL POWER TOOL SAFETY WARNINGS

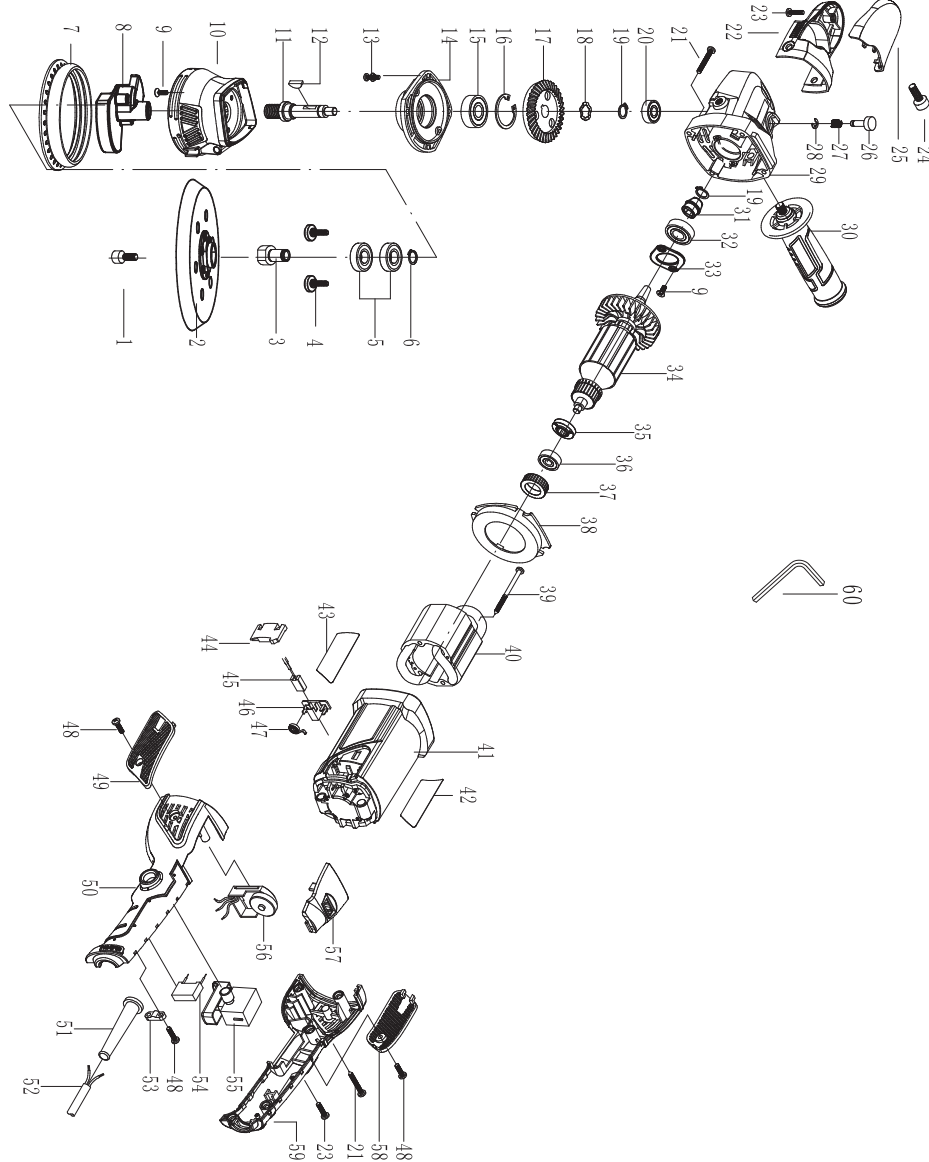
WARNING Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE.
The term power tool in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

- 1) Work area safety**
 - a) Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
 - b) Do not operate power tools in explosive atmospheres,** such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
 - c) Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.
- 2) Electrical safety**
 - a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plug with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
 - b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
 - c) Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
 - d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool.** Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

- 3) Personal safety**
 - a) Stay alert, watch what you are doing and use common sense when operating a power tool.** Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
 - b) Use personal protective equipment.** Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
 - c) Prevent unintentional starting.** Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
 - d) Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
 - e) Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
 - f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
 - g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- 4) Power tool use and care**
 - a) Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
 - b) Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
 - c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive measures reduce the risk of starting the power tool accidentally.
 - d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
 - e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
 - f) Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.



Spare Parts List

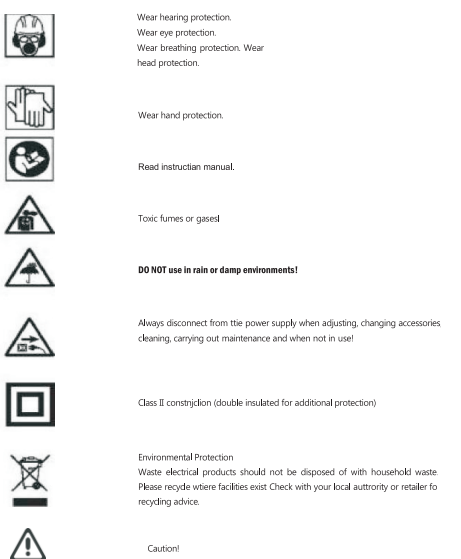
NO.	Dec	Q'ty	Remark
1	Hexagon socket screw	1	
2	Backing Pad	1	
3	Flat square output shaft	1	
4	Cross recessed large pan head screws	2	
5	Bearing	2	
6	Grinding for shaft	1	
7	Rubber ring	1	
8	Electric block	1	
9	Flat base screw	5	
10	Hex nut protective cover	1	
11	Clutch shell	1	
12	Woodruff key	1	
13	Square alum combination screw	4	
14	Protelium	1	
15	Bearing	1	
16	Grinding for hole	1	
17	Big gear	1	
18	Wave washer	1	
19	Grinding for shaft	1	
20	Bearing	1	
21	Cross recessed pan head tapping screws	6	
22	Head shell protective cover	1	
23	Cross pan head tapping screws	4	
24	Hexagon socket screw	2	
25	Head shell protective cover	1	
26	Electric pin	1	
27	Lockable air spring	1	
28	Roller wheel	1	
29	Head	1	
30	D-handle	1	
31	Small gear	1	
32	Bearing	1	
33	Bearing press plate	1	
34	Roller	1	
35	Constant speed magnetic ring	1	
36	Bearing	1	
37	Bearing cover	1	
38	Pinor shield	1	
39	Cross recessed pan head tapping screws	2	
40	Plate	1	
41	Housing	1	
42	Label	1	
43	Label	1	
44	Carbon brush frame cover plate	2	
45	Carbon brush	2	
46	Carbon brush holder	2	
47	Cut setting	2	
48	Square alum tapping screws	4	
49	Left side cover	1	
50	Left handle	1	
51	Carbon brush	1	
52	Cable	1	
53	Cable pressing plate	1	
54	Capacitance	1	
55	Switch	1	
56	Speed controller	1	
57	Speed controller cover	1	
58	Right side cover	1	
59	Right handle	1	
60	Line wrench	1	

- g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- h) Service
- i) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
- ADDITIONAL SAFETY INSTRUCTIONS**
- 1. This tool is designed to be used as a polisher. Read all the warnings, instructions, indications provided on drawings and specifications supplied with this tool.** Failure to comply with all the instructions provided may cause electrical shocks, fire and/or serious injuries.
 - 2. This tool is not intended to be used for something, mental brushing and cutting operations.** The use of this tool for unintended applications may cause hazards and injuries to people.
 - 3. The tool must be used with accessories that have been specifically designed or recommended by the manufacturer.** The fitting of the accessory to the tool does not guarantee a safe operation; read the following additional instructions.
 - 4. The rated speed of the accessories must be at least equivalent to the maximum speed specified on the tool.** Using the accessories at speeds above the rated one, may cause them to break or be projected into the air.
 - 5. The external diameter and thickness of the accessories must match the specifications of the tool.** Accessories with incorrect dimensions cannot be adequately protected or controlled.
 - 6. The configuration of accessories must match the tool.** The use of accessories that cannot be perfectly fitted on the tool may result in imbalance, excessive vibrations and in the impossibility of controlling the tool.
 - 7. Do not use damaged accessories. Before use, inspect all the accessories. Inspect the supporting pads and verify there are no cracks, tears or excessive wear. Dust and grit containing metal particles often accumulate on interior surfaces and could create an electric shock hazard.**
 - 8. Do not operate this tool for long periods of time.** Vibration caused by the operating action of this tool may cause permanent injury to fingers, hands and arms. Use gloves to provide extra cushion, take frequent rest periods and limit daily time of use.
 - a) Air vents often cover moving parts and should be avoided.** Loose clothes jewelry or long hair can be caught in moving parts.
 - b) An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety.** The smaller the gauge number of the wire, the greater the capacity of the cable, that is 16 gauge has more capacity than 18 gauge. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. When using more than one extension make up the total length, be sure each individual extension contains at least the minimum wire size. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
 - Minimum Gauge for Cord Sets**
Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals work in a well ventilated area and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.
 - c) Avoid prolonged contact with dust from polishing. Wear protective clothing and wash exposed areas with soap and water.** Allowing dust to get into your mouth, eyes or lay on the skin may promote absorption of harmful chemicals.
 - d) WARNING: ALWAYS use safety glasses. Everyday eyeglasses are NOT safety glasses. Also use face or dust mask if cutting operation is dusty. ALWAYS WEAR CERTIFIED SAFETY EQUIPMENT:**
-ANSI Z87.1 eye protection (CAN/CSA Z94.3).
-ANSI S12.6/53.19 hearing protection.
-NIOSH/OSHA/MSHA respiratory protection.
 - e) WARNING: Always wear proper personal hearing protection that conforms to ANSI S12.6 (S3.19) during use.** Under some conditions and duration of use, noise from this product may contribute to hearing loss.
 - f) WARNING: Some dust created by polishing contains chemicals known to the state of**

- cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and shock the operator.
- 11. Position the cord clear of the spinning accessory.** If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.
 - 12. Never lay the power tool down until the accessory has come to a complete stop.** The spinning accessory may grab the surface and pull the power tool out of your control.
 - 13. Do not run the power tool while carrying it at your side.** Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
 - 14. Regularly clean the power tool's air vents.** The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
 - 15. Do not operate the power tool near flammable materials.** Sparks could ignite these materials.
 - 16. Do not use accessories that require liquid coolants.** Using water or other liquid coolants may result in electrocution or shock.
- Further Safety Instructions for All Operations**
- KICKBACK AND RELATED WARNINGS**
- Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation at the point of the binding.
- For example, if a polishing mop is snagged or pinched by the workpiece, the edge of the mop that is entering into the pinch point can dig into the material causing the mop to dig out or kick out. The mop may either jump toward or away from the operator depending on direction of the mop's movement at the point of pinching. Polishing mops may also break under these conditions.
- Kickback is the result of tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:
- 1) Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces.** Always use auxiliary handles, if provided, for maximum control over kickback or torque reaction during start up. The operator can control torque reaction or kickback forces if proper precautions are taken.
 - 2) Never place your hand near the rotating accessory.** Accessory may kickback over your hand.
 - 3) Do not position your body in the area where power tool will move if kickback occurs.** Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
 - 4) Use special care when working corners, sharp edges, etc.** Avoid bouncing and snagging the accessory. Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
 - 5) Do not attach a saw chain wood/cutting blade or toothed saw blade.** Such blades create frequent kickback and loss of control.



EXPLANATION OF SIGNAL WORD



Technical Abbreviations Key

V	Volts
~	Alternating current
A	Ampere
No	No load speed
Hz	Hertz
W, kw	Watt, kilowatt
/min or min-1	(revolutions or reciprocation) per minute

ASSEMBLING THE POLISHING MOP

Press the polishing mop to attach it to the back-up pad.
CAUTION: Accessories must be rated for at least the speed recommended on the tool warning label. Accessories running over rated speed can fly apart and cause injury. Accessory ratings must always be above tool speed as shown on tool nameplate.

BEFORE STARTING THE POLISHER

Ensure that:
-the power supply cable with the characteristics of the tool (see tab "Minimum Gauge" for Cord Sets, "I");
-the power supply cable and plug are in perfect condition;
-the ON/OFF switch works properly though with the power supply disconnected;
-all the parts of the tool have been assembled in the proper manner and that there are no signs of damage;
-the ventilation slots are not obstructed.

FAILURE TO START

Should your tool fail to start, check to make sure the prongs on the cord plug are making good contact in the outlet. Also, check for blown fuses or open circuit breakers in the line.

REPLACING THE POLISHING MOP

Put the used polishing mop off and attach the new one, pressing it onto the disc pad.
CAUTION: Accessories must be rated for at least the speed recommended on the tool warning label. Accessories running over rated speed can fly apart and cause injury. Accessory ratings must always be above tool speed as shown on tool nameplate. Press the polishing mop to attach it to the back-up pad.

MAINTENANCE

Maintenance and cleaning of the inner parts, like brushes, ball bearings, gears etc. or others, must be carried out only by an authorized customer service workshop.
WARNING: To reduce the risk of injury, turn unit off and disconnect it from power source before installing and removing accessories, before adjusting or when making repairs. Be sure the switch is in the "OFF" position. An accidental start-up can cause injury.
CLEANING:
WARNING: Blow dirt and dust out of all air vents with clean, dry air at least once a week. To minimize the risk of eye injury, always wear ANSI Z87.1 performing this.
WARNING: Never use solvents or other harsh chemicals for cleaning the non-metallic parts for the tool. These chemicals may weaken the plastic materials used in these parts. Use a cloth dampened only with water and mild soap. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

Additional Specific Safety Instructions for Polishers

- Always use eye protection.** All user and bystanders must wear eye protection that conforms to Z87.1.
- Clean out your tool often, especially after heavy use.** Dust and grit containing metal particles often accumulate on interior surfaces and could create an electric shock hazard.
- Do not operate this tool for long periods of time.** Vibration caused by the operating action of this tool may cause permanent injury to fingers, hands and arms. Use gloves to provide extra cushion, take frequent rest periods and limit daily time of use.
- Air vents often cover moving parts and should be avoided.** Loose clothes jewelry or long hair can be caught in moving parts.
- An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety.** The smaller the gauge number of the wire, the greater the capacity of the cable, that is 16 gauge has more capacity than 18 gauge. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. When using more than one extension make up the total length, be sure each individual extension contains at least the minimum wire size. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
- Minimum Gauge for Cord Sets**
Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals work in a well ventilated area and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.
- Avoid prolonged contact with dust from polishing. Wear protective clothing and wash exposed areas with soap and water.** Allowing dust to get into your mouth, eyes or lay on the skin may promote absorption of harmful chemicals.
- WARNING: ALWAYS use safety glasses. Everyday eyeglasses are NOT safety glasses. Also use face or dust mask if cutting operation is dusty. ALWAYS WEAR CERTIFIED SAFETY EQUIPMENT:**
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-ANSI S12.6/53.19 hearing protection.
-NIOSH/OSHA/MSHA respiratory protection.
- WARNING: Always wear proper personal hearing protection that conforms to ANSI S12.6 (S3.19) during use.** Under some conditions and duration of use, noise from this product may contribute to hearing loss.
- WARNING: Some dust created by polishing contains chemicals known to the state of**

California to cause cancer birth defects or other reproductive harm. Some examples of these chemicals are:
-Lead from lead-based paints,
-Cryolite salts,
-Arsenic and chromium from chemically-treated lumber.
WARNING: Use of this tool can generate and/or disperse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.
CAUTION: Use extra care when working into a corner because a sudden, sharp movement of the polisher may be experienced when the polishing mop or other accessory contacts a secondary surface or a surface edge.

MODEL	
α POLISHING FOAM mm	125
α BACKING PAD mm	125
α ORBIT mm	15
POWER W	500
RPM	2000-4800
WEIGHT kg	2.4
SPEED CONTROL	
PROTECTION CLASS	II
OPERATING VOLTAGE	230V-50Hz

ON/OFF SWITCH

WARNING: To reduce the risk of injury, make sure the polisher is not resting on the workpiece when the switch is turned on. To turn the polisher on, push the lever of the switch towards the body of the tool. If the polisher is to be locked in ON position, press button at the same time and keep it pressed while releasing lever, thus locking the switch.

OPERATION

WARNING: To reduce the risk of injury, turn unit off and removing accessories, before adjusting or when making repairs. Be sure the switch is in the "OFF" position. An accidental start-up can cause injury.
WARNING: Never modify any parts of the power tool. Damage or personal injury could result.