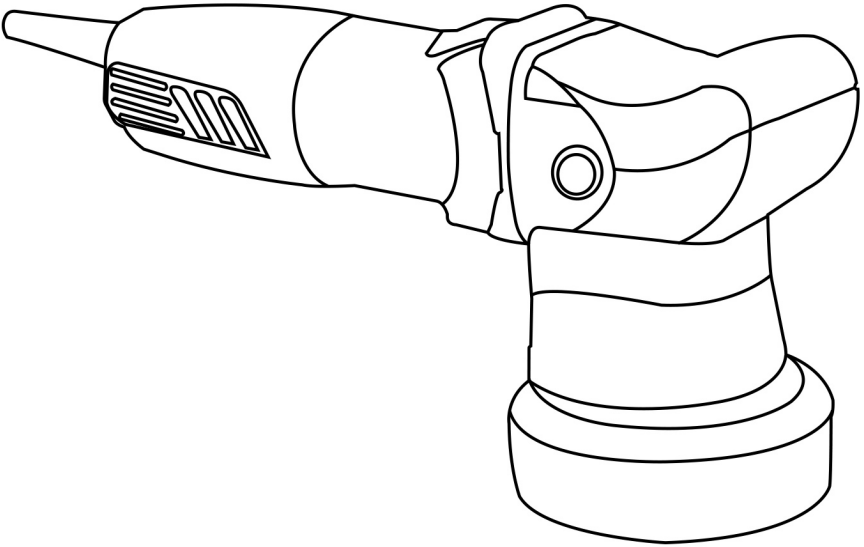




RANDOM ORBITAL **POLISHER**

OPERATING MANUAL



HVRO-38

Voltage: 120V, 60Hz

Amp: 7 Amp

Power: 800 Watts

Speed: 1800-7000 RPM

WARNING

Read, understand and follow these instructions carefully before installing, operating, servicing or repairing this tool. Keep the instructional manual in a safe accessible place.

SPECIFIED APPLICATIONS

Use this tool for car cleaning, polishing and waxing. This polisher removes swirls, oxidation, scratches and water spots; adds a deep gloss and rich dark color, adds protection and gives a shiny look.

CAUTION!

To avoid personal injury, follow the instructions given below:

- Using this polisher may expose the operator to dust and/or microscopic particles containing chemicals that can cause cancer, birth defects or other reproductive harm. Always wear appropriate safety equipment when using this polisher.
- Operators and bystanders, if any, should wear protective glasses when polisher is being used.
- Never use this polisher for any job other than specified applications.
- Only use those accessories that are designed for this tool.
- Never alter or modify the polisher in any way.
- Improper operation, modification and/or maintenance of the polisher, or using it with incompatible accessories may result in serious injury or death.
- Always use the polisher with compatible accessories that have the right size and design.

UNPACKING

During unpacking, inspect the part diagram and part number list on page 6 of this manual to ensure all parts are included. In case of any missing or damaged parts, contact your distributor immediately.

PRODUCT FEATURES

- Professionally manufactured for the automotive paint care industry
- Ergonomic slim body designed to reduce fatigue during long operation
- Unit provides several different hand-held positions which facilitates polishing at various angles
- Design to maintain constant output speed
- Provides 2 times the torque of a single gear set polisher

SPECIFICATIONS

Voltage: 120V | 60Hz

Power: Rated 800W

Amperage: 7 Amps

Free Speed: 1800-7000 RPM

GENERAL SAFETY

Read all safety warnings and instructions. Failure to follow the warnings and/or instructions may result in electrocution, fire hazard and/or serious personal injury. The term POWER TOOL in this manual refers to all corded and cordless power tools.

WORK AREA

- a) Keep the working space well lit, clean and adequate for power tool usage. Inadequate light and clutter work spaces can invite hazards.
- b) Make sure that there aren't any flammable or combustible liquids or gases in the work environment such as lacquer, paint, benzene, thinner, gasoline and adhesive agents. Presence of these materials in the working environment may cause sparks which can result in fire hazard.
- c) Keep children and visitors away from the working area and your power tools and equipment to avoid any accidents.

ELECTRICAL SAFETY

- a) Ensure that outlet is compatible with power tool plug. Do not modify the plug to make it work and never use any adapter plugs with grounded power tools. Compatibility between outlet and plug will minimize the risk of electrocution.
- b) Don't let your body parts get in contact with parts of the power tool or equipment including radiators, pipes, ranges and refrigeration enclosures. If your body is earthed or grounded, the risk of electrocution becomes high.
- c) Never expose power tools to rain or water and never store them in damp areas. Moisture entering your power tool will pose increased risk of electrocution.

- d) Never abuse the electrical cord of the tool. Do not pull it to unplug the tool. Keep cord away from heat, oil, sharp corners and moving parts. Entangled or damaged cords increase the chances of electrocution hazard.
- e) When working outdoors, you may need extension cords to increase your tool's reach. In such situations, only use cords made and marked for outdoor usage.
- f) If you must operate a power tool in wet or damp work area, use a Ground Fault Circuit Interrupter (GFCI) protected power supply. It will decrease the risk of electrocution.
- g) Ensure that your extension cord is in good condition and use the adequate enough cord that can carry the current your polisher will draw. An inadequate cord will cause a drop in in-line voltage which may result in loss of power and overheating.

PERSONAL SAFETY

- a) Be on the alert during power tool operation and always know what you are doing. Never use a power tool under the influence of drugs, medication or alcohol. Momentary lack of focus can invite serious hazards when operating power tools.
- b) Always use appropriate personal protective equipment. Use eye protection, dusk mask, non skid safety shoes, hard hat and/or hearing protection when conditions warrant them. This will significantly reduce the risk of personal injury.
- c) Never roam around with the tool plugged in and your finger on the trigger to avoid accidental starts. Switch it off after every use. Before picking up or connecting your tool to a power source, ensure it is turned off.
- d) Make it a habit to check and remove any wrenches or keys from the tool before turning it on. Mounted key or wrench can cause serious damage.
- e) Never try to overreach. Keep your posture comfortable and balanced at all times so you can manage unexpected situations.
- f) Keep loose clothing, body parts and hair away from the parts of the tool. It's recommended to use protective hair covering.
- g) If there are devices provided for dust extraction and collection, make sure they are properly connected and functional. Use of dust collection systems can decrease the risk of dust related hazards.

POWER TOOL SAFETY & CARE

- a) Don't try to extract additional performance from the tool by exerting force. Let the power tool achieve its optimal performance naturally. Always use the power tool that is appropriately powerful and adequate for the job at hand.
- b) Never use the tool if its switch doesn't work. Get it repaired or replaced from an authorized service center. Unreliable switch can prove to be dangerous.
- c) Before storing the tool, making any replacements or periodical maintenance, unplug the tool from the power source. This minimizes the risk of accidental starts.
- d) Power tools that are not in use shall be kept in a safe place where they are not accessible to children. Never allow any person to operate a power tool who is unfamiliar with these instructions. Power tools in the hands of untrained operators are open invitation to accidents.
- e) Check your tool for alignment and binding of moving parts, damaged parts, mounting and any other flaws that might affect the operation of your tool. Maintain your tools with care and repair or replace when necessary.
- f) Always use the power tool and its accessories according to the instructions provided in this manual, nature of your job and working conditions. Using a power tool that's not compatible with any of the aforementioned criteria may result in a hazard.

SERVICE

Get your power tool serviced by an authorized service center or a qualified person. When servicing, only use identical replacement parts. This will ensure the safe and efficient operation of your power tool.

INSTRUCTIONS FOR POLISHING OPERATIONS

Installation and removal of accessories:

1. Unplug the polisher and place it on tool rest with spindle in upright position.
2. Using an open-ended wrench hold the shaft and screw the backing plate onto spindle. Turn the plate clockwise to tighten it back.
3. Put a premium polishing pad centrally aligned and attach it to the backing plate. The polishing pad should come with Velcro as they work with hook and loop backing plates. To the remove the backing pad, pull off the polishing pad first. Then hold the spindle by using a wrench and turn the pad anticlockwise to remove.

CONTROLLING THE POLISHER

The polisher features a dial speed control which controls the polisher's maximum rotations per minute. The speed can be controlled with the chosen dial setting which ranges from 1 to 6. The higher the number you crank the dial up to, the higher the speed and vice versa. Generally lower speeds are recommended for tight work areas and higher speeds are ideal for large surface area. Use the setting that best suits your job. To control the speed, set the dial to the desired number. Switching on/continuous activation: Push switch forward. For continuous activation, tilt downwards until it engages. To switch the polisher off, press the rear end of the slide switch and release.

PREPARING THE SURFACE

- For optimal results, the surface that needs to be polished must be clean, dry and free from contamination.
- Most high gloss surfaces can be cleaned with a mild solution of soap and water. To remove stubborn dirt such as road tar, tree sap and bug remains, you might need to use detailing clay and lube. Before using any cleaning product, check the label for specified applications and follow the directions.
- Never apply cleaner directly onto the surface to be polished. Soak a clean cloth with it and then gently rub the surface with it.
- Don't use any kind of abrasive cleaners or pads as it may damage the surface.

USING THE POLISHING PAD

- Most polishes are available in liquid form. Before using any polish, read all directions about specified applications and proper usage.
- For regular polishes, apply 4-6 small spots of polish about 5mm diameter in a ring half way from the center of the pad. After the first application, the pad will not absorb as much polish. So apply just 3-4 small spots using half of the initial quantity.
- Use medium density pad for polishing and soft density pad for waxing and finishing.

POLISHING

Dab the pad of the polisher over the section you wish to polish. While holding the polisher against the surface, turn on the polisher to start with speed 1. Always start and stop the polisher on or against the surface being polished. Begin by polishing larger flat surfaces, such as bonnet, boot or roof. Don't exert force downwards on the surface with the polisher. Move the polisher back and forth in long, smooth strokes. Too much pressure, wrong angle or improper motion may cause swirl marks or burning.

CAUTION! To reduce the risk of injury, keep the electrical cord away from the path of the polisher. Otherwise the cord may get caught in the polishing pad wrapping around the spindle which may cut through the cord. This will expose live wires or make the gearbox electrically conductive which is extremely dangerous.

PREVENT BURNING THROUGH PAINT

While polishing, it's easy to burn through the paint of the surface. This can occur if you are polishing at a very high speed or you keep the polishing pad in one spot even for a short time. To prevent burning through paint, use very light pressure and keep the polisher moving at all times, especially when working near edges or where there are abrupt variations in the contour of the work surface.

PREVENTING SNAGGING

Snagging occurs when polishing pads get caught in rough edges of a work surface. Snagging can cause the tool to suddenly kick back and it may cause the pad to burn through the paint to reduce the risk of snagging. Use the polisher at low speeds when polishing rough surfaces. For tricky areas such as near trim or between a mirror and window on a car, do not take chances with a polisher. Polish these surfaces by hand. Or use the coast down technique to avoid snagging. To coast down, turn the motor ON for few seconds, then turn it OFF and apply the polishing pad to the surface. This way when the pad touches the work surface, it will be rotating more slowly than it is when the motor is ON. Use coast down when working in areas where crevices or pockets are present.

MAINTENANCE

Keep your tool in good shape by inspecting and maintaining it regularly. Before every use, examine your tool and look for any apparent defects. Inspect switches, electrical cord and extension cord for any damage. Check for loose screws, misalignment, binding of moving parts, improper mounting, broken parts and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, turn the tool off immediately and have the problem corrected before further use. Never use a damaged tool. Tag damaged tool "DO NOT USE" unless they are repaired. Under normal conditions, re-lubrication isn't necessary until the carbon brushes need to be replaced. After 6 months to a year, depending on usage, take your tool to the nearest authorized service facility for:

- Lubrication
- Brush inspection and replacement
- Mechanical inspection and cleaning (gears, spindles, bearings, housing etc.)
- Electrical inspection (switch, cord, armature etc.)
- Testing to assure proper mechanical and electrical operation

CAUTION! To reduce the risk of injury, always unplug your tool before engaging in any maintenance. Never disassemble the tool or try to rewire the tool's electrical circuit.

CLEANING

Clean dust and debris from the tool vents regularly. Keep the tool grip clean, dry and free of oil or grease. Use only mild soap and a damp cloth to clean your tool since certain cleaning agents and solvents are harmful to plastics and other insulated parts. Some of these include: gasoline, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia, and household detergents containing ammonia. Never use flammable or combustible solvents around tool.

CAUTION! To reduce the risk of injury, electrocution and damage to the tool, never immerse your tool in liquid or allow a liquid to seep into the tool.

PRECAUTIONS

Only use the manufacturer recommended polishing pads.

Never use the grinding wheels or cut-off wheels with this tool.

Ensure that maximum operating speed of the pad is higher than the polisher's rated speed.

Always wear ear and eye protection for safety when polishing. Gloves and protective clothing are also recommended.

Personal protection and dust collection systems shall be chosen according to the application and material being polished. Consult the manufacturers of the devices.

Release the start and stop device in case of power supply failure.

Only use the manufacturer recommended lubricant.

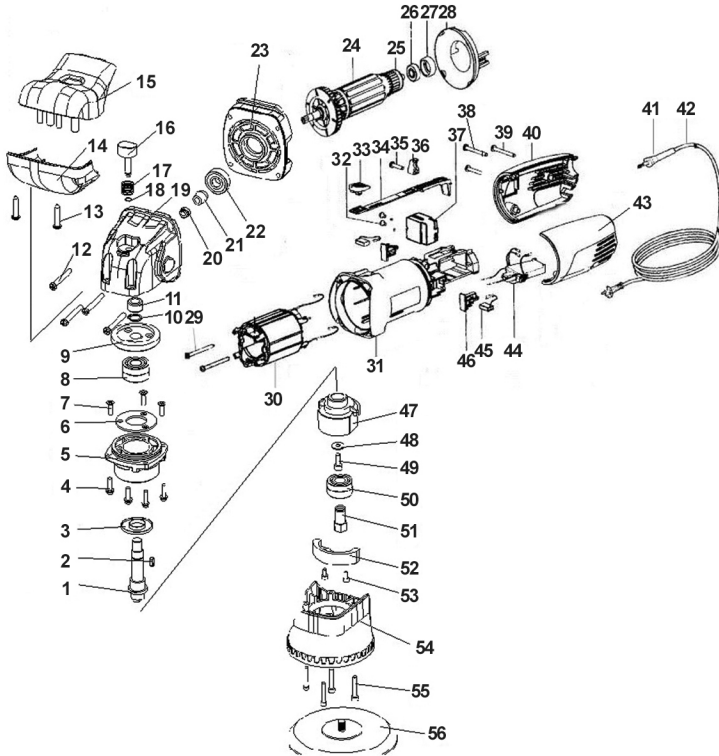
CALIFORNIA PROPOSITION 65

Some dust produced by power polishing, sawing, grinding, drilling, and other construction activities 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
- Crystalline silica, from bricks and cement and other masonry products
- Arsenic and chromium, from chemically treated lumber

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 specifically designed to filter out microscopic particles.

Schematic & Parts List



S.No.	Description	Qty.	S.No.	Description	Qty.
1	Output Shaft	1	30	Stator	1
2	Woodruff Key	1	31	Housing	1
3	Dust Cap	1	32	Screw	4
4	Screw	4	33	Thumb Button	1
5	Front Cover	1	34	Push Lever	1
6	Gland	2	35	Screw	2
7	Screw	3	36	Cable Disc	1
8	Bearing	2	37	Switch	1
9	Gear (big)	1	38	Screw	1
10	Clamp	1	39	Screw	1
11	Quill Roller	1	40	Back Framer (right)	1
12	Screw	4	41	Cable Sheath	1
13	Screw	2	42	Cable	1
14	Gear Cap Housing (down)	1	43	Back Frame (left)	2
15	Gear Cap Housing (up)	1	44	Speed Controller	2
16	Self-lock Pin	1	45	Carbon Brush	1
17	Spring	1	46	Brush Holder	1
18	O-Ring	1	47	Upper Eccentric Mounting	1
19	Gear Cap	1	48	Washer	1
20	Screw	1	49	Screw	1
21	Gear (small)	1	50	Bearing	1
22	Bearing	1	51	Shaft	1
23	Bearing Retainer	1	52	Lower Eccentric Mounting	1
24	Rotor	1	53	Screw	2
25	Magnet Ring	1	54	Protective Cover	1
26	Bearing	1	55	Screw	4
27	Bearing Housing	1	56	Rotating Plate	1
28	Wind Cover	1			
29	Screw	1			