

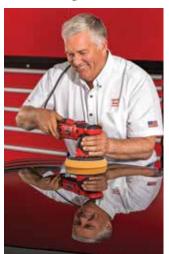
G9 | 6" RANDOM ORBITAL POLISHER

User Manual and Care Instructions



Welcome to my life's work...

We introduced our first Random Orbital in 1992 and what you are holding in your hands is four generations of refinements that embody the Griot's Garage mantra of



"striving for perfection." I have worked tirelessly on perfecting and refining the correct combination of machine, pads, and liquids to produce results far better than you could do by hand or with other paint correcting systems. Our full array of products is designed to help you create an effective, satisfying, and most importantly, fun car care experience. Let me say "thank you" for putting your trust in us to deliver spectacular results. You'll soon be creating a mirror-like finish with little to no prior experience... and having a lot of fun in the process. Thank you for your purchase... and as always,

Have fun in your garage!*

Richard Griot

A SAVE ALL WARNING AND INSTRUCTIONS FOR FUTURE REFERENCE

Please read and understand this manual. It contains information that relates to personal protection of you and others. The symbols printed throughout this manual are used to help you recognize this information. Please see page 2.

Have fun in your garage!

SAFETY GUIDELINES



The definitions below describe the level of severity for each signal word. Please read the manual and pay close attention to symbols.

▲ WARNING Description of hazard and possible resulting injuries or death.

▲ CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

EXPLANATION OF SIGNAL WORD CONSEQUENCES



"Class II" Construction





Do Not Discard In Household Waste



Read And Follow Use Instructions



Wear Proper Eye Protection





Wear Gloves



GENERAL POWER TOOL SAFETY WARNINGS

▲ WARNING: To reduce the risk of injury read instruction manual. Failure to follow the warnings and instructions may result in electric shock, fire, and/or serious injury. The term "power tool" in the warnings refers to your G9 Random Orbital Polisher.

1. WORK AREA SAFETY

- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) Do not operate power tool 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.
- Keep children and bystanders away while operating power tool. Distractions can cause you to lose control.

2. ELECTRICAL SAFETY

- a) Power tool's plug must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Proper, 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 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 power tool in a damp location is unavoidable, use a Ground Fault Circuit Interrupter (GFCI) protected power supply. Use of a GFCI reduces the risk of electric shock.

3. PERSONAL SAFETY

a) Stay alert, watch what you are doing, and use common sense when operating power tool. Do not use power tool while you are tired or under the influence of

- drugs, alcohol, or medication. A moment of inattention while operating power tool may result in serious personal injury.
- b) Use personal protective equipment. Always wear eye protection. Use of protective equipment such as a dust mask, gloves, or hearing protection under appropriate conditions will reduce the chance of personal injury.
- c) Prevent unintentional starting. Ensure the switch is in the "Off" position before connecting to power source, picking up, or carrying the tool. Carrying power tools with your finger on the switch or energizing 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 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 jewelry. Keep hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- g) Do not let familiarity gained from frequent use of power tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

4. POWER TOOL USAGE AND CARE

- a) Do not force the power tool. This Griot's Garage G9 Random Orbital Polisher is intended to function as a buffer, polisher, and wax/sealant application tool.
- 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 power tool plug from the power source before making any adjustments, changing accessories, or storing power tool. Such preventive safety 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 power tool operation.
 If damaged, repair power tool before use. Many accidents are caused by poorly maintained power tools.
- f) Use the power tool and accessories, in accordance with these instructions, taking into account the working conditions and the task to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

SAFETY INSTRUCTIONS FOR POLISHING

- a) This power tool is intended to function as a polisher. Please read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed herein may result in electric shock, fire, and/or serious injury.
- b) Do not use this power tool to perform work such as roughing, fine sanding, brushing, or abrasive cutting. Operations for which the power tool was not designed may create a hazard and cause personal injury.
- c) Never use accessories that were not specially developed and designed for this power tool. Just because an accessory part can be fitted on your machine does not guarantee safe or optimum performance.

- d) The rated speed of the accessory must be at least equal to the maximum speed communicated on the power tool. Accessories that rotate faster than the permissible level can break and fly apart.
- e) The outside diameter and thickness of your backing plate must be within capacity rating of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled.
- f) Threaded mounting of accessories must match the power tool's spindle thread. For accessories mounted by flanges, the arbor hole of the accessory must fit the locating diameter of the flange. Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
- g) Do not use a damaged accessory. Before each use inspect the accessory such as backing plate for cracks or tears. If power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute. Damaged accessories will normally break apart during this test time.
- h) Wear personal protective equipment. Depending on application, use face shield, safety goggles, or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves, and a workshop apron capable of stopping small abrasives or flying fragments. The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtrating particles generated by your operation. Prolonged exposure to high-intensity noise may cause hearing loss.
- i) Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of material or pieces of a broken accessory may fly away and cause injury beyond the area of operation.
- j) Hold power tool by insulated gripping surfaces only, when performing an operation where the accessory may contact hidden wiring or its own cord. A spinning accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and shock the operator.
- k) 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 in causing injury.
- 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.
- m) Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory may snag clothing, pulling the accessory into your body.
- n) 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 or overheating.
- o) Do not operate the power tool near flammable materials. Sparks could ignite these materials.
- p) Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.

KICKBACK AND RELATED WARNINGS

Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing plate, 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 pad is snagged or pinched by the trim, the edge of the pad that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The tool may either jump toward or away from the operator, depending on direction of the pad's movement at the point of pinching. Rotating accessories 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:

- a) Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. The operator can control torque reaction or kickback forces, if proper precautions are taken.
- b) Never place your hand near the rotating accessory. Accessory may kickback over your hand.
- c) Do not position your body in the area where the 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.
- d) Exercise extreme caution when working corners, sharp edges, etc. Avoid bouncing and snagging the rotating accessory. Corners, sharp edges, or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.

SAFETY WARNINGS SPECIFIC FOR POLISHING OPERATIONS

Do not allow any loose portion of the polishing pad to spin freely. Tuck away or trim any loose attachment strings. Loose and spinning attachment strings can entangle your fingers or snag on the area being worked on.

MARNING: Refer to polish manufacturer's Safety Data Sheet (SDS) to ensure the components are not listed under Proposition 65. Some older paint finishes may contain lead, polishes may contain crystalline silica, and other potential known carcinogens. The risk to these exposures vary depending on how often you do this type of work. Work in a well-ventilated area and wear an approved respirator or dust mask. Wash hands after handling.

▲ 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 to dust exposure. When possible, direct particles away from face and body.

ADDITIONAL SPECIFIC SAFETY INSTRUCTIONS FOR POLISHERS

▲ CAUTION Always use eye protection. All users and bystanders must wear eye protection that conforms to ANSI 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 tool for long periods of time. Vibration caused by the operating
 action of 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.

TECHNICAL SPECIFICATIONS

Power Tool Specifications

Туре	Random-orbit, dual-action polisher		
Orbit	9mm (³ / ₈ ")		
Backing Plate Size	6" (152.4mm) / Optional 5" (127mm)		
Spindle Thread Size	⁵ / ₁₆ "- 24		
Orbits Per Minute (OPM)	2,000 - 6,400 (free speed)		
Power Output (Watts)	1,000		
Power Output (Amperes)	8.5		
Cord Length	10' (3 meters) / Optional 25' (7.6 meters)		
Weight (Without Cord)	5.0 lbs /2.27 kg		
Optional Backing Plates	5" & 6" Vented		
Constant Speed Control	Yes		
Safety Class	□/II		

EXTENSION CORD USE

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 such that 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. 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. Never use two extension cords together.

Extension Cord Length	25'	50'	100'	150'	
Cable Size (AWG)	16	16	16	14	
Only use UL- and CSA-certified extension cords.					

⚠ CAUTION: Dispose of tool in accordance with local law. Recycle machines, accessories, and packaging at an environmentally responsible recycling center to reduce the risk associated with environmental contamination.

OPERATION

▲ WARNING: To reduce the risk of serious personal injury, turn off power tool and unplug from power source before making any adjustments or removing/installing accessories or attachments.

ACCESSORIES

▲ WARNING: Since accessories, other than those offered by Griot's Garage, have not been evaluated with this polisher, use of such accessories could be hazardous. To reduce the risk of injury, only Griot's Garage approved accessories should be used with this polisher. The Griot's Garage G9 Random Orbital Polisher is designed for use with 5" or 6" Pad Systems. Use of any other size is not recommended.

TOOL COMPONENT DIAGRAM

INTENDED USE

The Griot's Garage G9 Random Orbital Polisher is designed for polishing paint, glass, unfinished metal, fiberglass, and composite surfaces. Common examples of use include but are not limited to auto, marine, RV, and motorcycle detailing.

FUNCTIONAL COMPONENTS

▲ WARNING: Never modify the power tool. Damage or personal injury could result.

A. Rest Pads

E. Contaminant Protection Screen

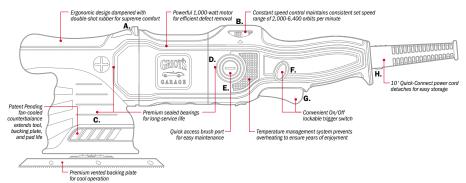
B. Speed Control Dial

F. Trigger Lock Button

C. Premium Sealed Bearings

G. On/Off Trigger Switch

D. Brush Inspection Cap H. Quick-Connect Power Cord



Speed Control Dial (B)

The maximum speed of your polisher can be changed by rotating the Speed Control Dial. The polisher is equipped with a constant speed control so you can adjust the speed to suit the objective. The machine operates from 2,000 - 4,800 opm. The Constant Speed Control circuitry will ensure consistent speed regardless of downward pressure or lack thereof. This feature delivers optimal performance, regardless of user technique and body panel shape.

Recommended speed for application:

Paint Correction: Speed 4 - 5 for light to moderate swirls, scratches, and stains.

Paint Perfection: Speed 3 - 4 for fine swirls, scratches, and stains.

Paint Protection: Speed 2 - 3 for wax or sealant application.

On/Off Trigger Switch (G)

The polisher is equipped with an on/off trigger. Once engaged the machine will operate in accordance with speed set on Speed Control Dial. The machine operates from 2,000 - 6,400 opm.

Polisher can be locked on for continuous use by depressing the trigger and engaging the Trigger Lock Button, while releasing your finger from the trigger. To shut off, depress trigger and release.

▲ CAUTION: The backing plate and pad will continue to rotate briefly after the polisher is turned off.

Orbital Polisher Operation

DETERMINING THE CONDITION OF YOUR PAINT

- 1. Your paint must be free of bonded surface contaminants prior to polishing and waxing. To judge cleanliness, run your hand over the surface. If you experience light friction and it feels rough, use our Brilliant Finish™ Synthetic Clay, Paint Cleaning Clay, Surface Prep Mitt, or Surface Prep Pad to remove embedded and bonded contaminants.
- 2. Evaluate your paint for scratches, blemishes, or hazing by using the sun's reflection or a Griot's Garage THE BOSS™ LED Swirl-Finder Light to visualize the surface of the paint. The depth of the scratches and the intensity or abundance of swirl marks will dictate the aggressiveness of the polish/compound and pad combo you'll need to use.
- 3. Always select the least-invasive method, test your procedure, and, based on the results, either reapply the chosen polish again (preferred) or, if the defects are still present, increase the aggressiveness of the liquid or pad.
- 4. Please note that some Griot's Garage paint care products like Liquid Wax 3-In-1 and One-Step Sealant deliver all-in-one removal of fine defects and the application of durable protection in a single step. We also offer multi-step systems that will produce optimal results on paint with more severe defects.

OPERATING YOUR GRIOT'S GARAGE G9 RANDOM ORBITAL

- 1. The magic of our Random Orbital Polisher is how the pad oscillates in an orbit as it is spinning.
- Attaching the buffing pads is easy. They use a hook-and-loop system, just center the pad on the backing plate (off-center pads may cause additional vibration).
- 3. Apply your liquid product in a spiral pattern from the center out to ensure even application on your pad and reduce sling at start up.
- 4. When you use the machine select a manageable work area on your vehicle, such as a 2' x 2' square, so you can better focus your efforts and reduce strain.
- 5. When operating the machine work in a cross-hatch grid pattern, as illustrated and described on page 12.
- 6. To apply the product, set the variable speed dial to 2 to minimize sling and ensure even product distribution, turn tool on, spread product over working surface, then increase speed according to product use instructions.
- 7. To correct defects, increase the speed to 3 to 5, depending on the severity of the defect, and follow the grid pattern using light downward pressure. Random Orbitals are all about pad rotation, so excess pressure on the tool can steal away effectiveness. Start with virtually no pressure on the tool, let the tool's weight and your pad do the work. Make 3 to 4 passes (back and forth = 1 pass), wipe off the product, and evaluate the results. Also be aware that the speed in which you move the tool impacts its effectiveness so be slow, deliberate, and consistent as you work the grid. For protecting with a wax or sealant, use a speed of 2 to 3.
- 8. When finished working a grid area wipe off product residue using a clean, dry Griot's Garage microfiber towel as recommended.
- Use at least two pads per process when detailing a vehicle to maintain pad/ product effectiveness, ensure consistent results, and prolong pad life.

POLISHING

Note: Prior to application, it is recommend that all plastic and metal trim on vehicle be taped off using Professional Masking Tape for protection from incidental engagement with backing plate and/or pad.

PAD MAINTENANCE

- 1. While polishing, frequently clean pad face by using a Griot's Garage Pad Conditioning Brush with the machine operating at speed 2.
- 2. Following polishing process, remove buffing pad from machine, pre-rinse with hot water, and wring to expel polish residue.
- 3. Spray Griot's Garage Microfiber & Foam Pad Cleaner on the entire pad face and gently knead the pad until you create a rich lather.
- 4. Rinse thoroughly with warm water and wring out or machine wash.
- 5. Allow pad to dry completely before use. Store dry pad in its sealable poly bag.

POWER TOOL MAINTENANCE

For detailed backing plate installation/changing procedures, as well as step-by-step brush replacement instructions, please visit **griotsgarage.com** for tech sheets and helpful how-to videos. Instructions can be found on page 11 of this manual.

Your Griot's Garage G9 Random Orbital Polisher has been designed to operate over a long period of time with minimum maintenance. To maintain optimal performance and long-life, proper tool care and regular cleaning must be employed.

▲ WARNING: To reduce the risk of serious personal injury, turn off power tool and unplug from power source before making any adjustments or removing/installing accessories or attachments.

▲ WARNING: Blow dirt and dust out of all air vents with dry compressed air at least weekly. Wear proper ANSI Z87.1 (CAN/CSA Z94.3) eye protection and proper NIOSH/OSHA/MSHA respiratory protection when performing this.

The Contaminant Protection Screen may be removed for more thorough cleaning by gently prying it out with your fingers. Reinstall by aligning vent grilles and pressing screen back into place.

▲ WARNING: Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. These chemicals will attack and weaken the nylon composite materials used in these parts. Griot's Garage Citrus Multi-Surface Cleaner is a safe and effective option. Apply liberally, agitate with a soft nylon bristle brush, then wipe tool down with a damp, microfiber towel.

LUBRICATION

Your G9 Random Orbital Polisher gearbox is factory filled with Mobil Mobilux High Performance Gear Grease which will last the life of the polisher. All internal bearings are sealed to last the life of the polisher.

MOTOR BRUSHES

Be sure tool is unplugged prior to inspecting brushes. The High-Carbon brushes should be regularly inspected for wear. To inspect brushes, carefully unscrew the Brush Port Side-Caps (located on the side of the polisher body) using a flat screwdriver turning counterclockwise. Should wear meet the brush wear-line at the bottom, the machine will automatically shut down, requiring replacement. (Note: A set of replacement brushes are supplied with tool.)

RECOMMENDED PADS, LIQUIDS, & TOWELS





Microfiber Edgeless Towels This versatile towel quickly removes polish, wax, spray detailers, and more.



Microfiber Plush Edgeless Towels Ensure nothing but supple, plush-nap microfiber touches your paint.



PFM® Dual Weave Wax Removal Towels Remove wax and buff in a safe, efficient manner.



PFM® Terry Weave Towels An all-around towel that excels at drying, wax/ polish wipe downs, & more.

STEP-BY-STEP PROCESS GLIDE

PROCESS GUIDE

(Note: Work on a cool and smooth paint surface that is free of contaminants.)

Single-Step Process

When Dealing With Minor Blemishes

This simple, time-saving process adds carnauba/polymer or polymer protection and removes light stains and swirls in one quick and easy step. It requires Liquid Wax 3-in-1 or One-Step Sealant and an Orange Foam Correcting Pad. Refer to the Quick Start Guide on page 12 for instructions on how to use your random orbital. Be sure to set tool speed to 2 or 3 for waxing/sealing.

Advanced Multi-Step Process

When Dealing With Moderate Defects

This process uses specialized formulas and different types of buffing pads to remove light to moderate defects, restore the finish to a deep gloss, and impart intense water-beading protection.

STEP 1: Correction

Removing light to moderate scratches, swirls, and stains requires **Complete** Compound and a Microfiber Fast Finishing Pad. Refer to the Ouick Start Guide on page 12 for instructions on how to use your random orbital. Be sure to set tool speed to 4 or 5 for correction. Repeat process if minor defects remain.

STEP 2: Perfection (Optional)

Choosing to refine the finish by restoring a brilliant high-gloss luster requires Complete Polish and a Black Foam Finishing Pad. Refer to the Ouick Start Guide on page 12 for instructions on how to use your random orbital. Be sure to set tool speed to 3 or 4 for perfection.

STEP 3: Protection

Creating a long-lasting brilliant shine and durable protection requires Best of Show® Wax or Liquid Gloss Poly Wax and a Red Foam Waxing Pad. Refer to the Ouick Start Guide on page 12 for instructions on how to use your random orbital. Be sure to set tool speed to 2 or 3 for protection.

BACKING PLATE ASSEMBLY INSTRUCTIONS



on counterbalance nut.



Put supplied 14mm wrench Thread backing plate into counterbalance of tool.



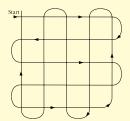
Spin plate tight with fingers, then tighten a 1/4 turn.



G9 6" RANDOM ORBITAL POLISHER

Easily achieve professional results on your car's paint!

QUICK START GUIDE -



- **1.** Check tightness of backing plate with the supplied 14mm wrench.
- 2. Select appropriate buffing pad and polish/wax to achieve objective. (See Process Guide on page 11)
- **3.** Attach pad by centering it on backing plate and pressing it on. Thoroughly "butter" face of fresh pad with polish/compound, wax, or sealant.
- **4.** Select appropriate tool speed: Correction: 4-5, Perfection: 3-4, Protection (Waxing/Sealing): 2-3.
- **5.** Apply pad to surface, depress trigger, and work surface in 2' x 2' overlapping passes using slow, steady arm movement and minimal downward pressure.
- **6.** Work section with four or five passes, then wipe off using a quality microfiber towel. Apply 3-4 drops of product on pad for secondary applications.
- 7. Evaluate the condition of the surface. If the result is satisfactory, move on to next panel until all painted surfaces are completed. If desired result has not been achieved, repeat identical process, or introduce different pad/abrasive combination until desired result is achieved.
- 8. Once entire car is complete, relax and enjoy the shine!