



# 6" Random Orbital

*Safely achieve professional results on your car's paint!*



## USER MANUAL & CARE INSTRUCTIONS



**Please carefully read, understand, and follow all safety information in this manual prior to and during use of this tool. Keep these instructions handy for future reference.**

As lifelong car lovers we're always seeking tools that make it easier to produce a flawless finish. That's why we design our own Random Orbitals. The Griot's Garage® 6" Random Orbital is powerful enough for a professional, yet safe enough for a first timer to use and get professional-looking results. This machine is ideal for...

- **Correcting** - Removing major scratches and blemishes with a polish or compound
- **Perfecting** - Removing minor scratches and swirl marks with a mild polish
- **Protecting** - Shielding the paint finish from the elements with a wax or sealant

Please forgive the following legal jargon... hang with us, tips and tricks on how to get busy using your Random Orbital await on page 5.

### **INTENDED USE:**

The Griot's Garage 6" Random Orbital is designed to be used as a polisher. It is designed to be used with Griot's Garage accessories, including backing plates, microfiber and foam buffing pads as well as Griot's Garage compounds, polishes, waxes, and sealants.

*Have fun in your garage!®*

## EXPLANATION OF SIGNAL WORD CONSEQUENCES



**WARNING:** Indicates a potentially hazardous situation which, if not avoided, may 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.



“Class II”  
Construction



**WARNING -**  
Hazardous Voltage



**Do Not Discard In**  
Household Waste



**Read And Follow**  
Use Instructions



**Wear Proper Eye**  
Protection



**Wear Respiratory**  
Protection



**Wear Gloves**



**Wear Proper**  
Hearing Protection



**WARNING:** Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire, and/or other serious injury. The term “power tool” in the warnings refers to your Griot’s Garage 6” Random Orbital.

### 1. WORK AREA SAFETY

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- 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.
- Keep children and bystanders away while operating power tool. Distractions can cause you to lose control.

### 2. ELECTRICAL SAFETY

- The power tool’s plug must match the outlet. Never modify the plug in any way. Proper, unmodified plugs and matching outlets will reduce risk of electric shock.
- 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.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- 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.
- When operating power tool outdoors, use an extension cord suitable for outdoor use.
- If operating power tool in a damp location is unavoidable, use a Ground Fault Circuit Interrupter (GFCI) protected power supply.

### 3. PERSONAL SAFETY

- 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.
- 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 personal injuries.
- 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.
- 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.
- Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. For additional control, use included D-Handle or BOSS™ Right-Angle Handle

accessory (sold separately). Maintain firm grip with two hands for maximum control over kickback or torque reaction during start-up. The operator can control torque reactions or kickback forces if necessary precautions are taken. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

- f) 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.

## 4. POWER TOOL USAGE SAFETY

- a) This power tool is intended to function as a buffer/polisher/scrubber. NEVER perform operations such as grinding, sanding, wire brushing, or cutting-off with this power tool. Read all safety warnings, instructions, illustrations, and specifications provided with this power tool. Failure to follow all instructions may result in electric shock, fire, and/or serious injury.
- b) Do not use accessories which are not specifically designed and recommended by Griot's Garage. Just because the accessory can be attached to the power tool does not assure safe operation.
- c) Do not use damaged pads and accessories on power tool. Compromised accessories can fail and cause injury.
- d) Disconnect the power tool plug from the power source before making any adjustments, changing accessories, or storing the power tool. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- e) Hold power tool by insulated gripping surfaces when performing an operation where the spinning accessory may contact hidden wiring or its own cord. A spinning accessory contacting an energized wire may make exposed metal parts of the power tool live and shock the operator.
- f) 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.
- g) Never lay the power tool down until the spinning accessory has come to a complete stop. It may grab the surface and pull the power tool out of your control.
- h) Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag your clothing and pull the accessory into your body.
- i) 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.

## POWER TOOL SPECIFICATIONS

Type	6" Random Orbital
Orbit	8mm
Backing Plate Size	6" (Included), 5" or 3" Available (Optional)
Spindle Thread Size	5/16"-24
Orbits Per Minute (OPM)	2,500 - 6,800 (free speed)
Power Output (Watts)	850
Power Output (Amperes)	7.0
Cord Length	10' or 25'
Weight	6.0lbs /2.72 kg
Optional Backing Plates	3" Heavy-Duty, 5" & 6" Vented
Electronic Speed Control	Yes

## TOOL MAINTENANCE

- Prior to use, ensure backing plate is secure by inserting supplied wrench into counterbalance assembly and firmly turning backing plate clockwise. Once bottomed out, firmly tighten an additional 1/4 turn.
- Never use brake fluids, gasoline, petroleum based products, or any strong solvents to clean your Random Orbital.
- Utilize compressed air to blow out air vents and wipe tool down with mild cleaner like Griot's Garage Interior Cleaner.
- 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.

## FAILURE TO START

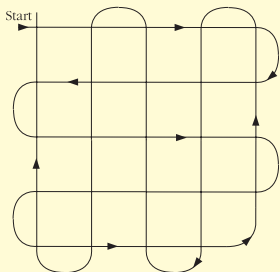
- Should your tool fail to start, check to make sure the prongs on the cord plug are making good contact within the outlet. Also check for blown fuses or open circuit breakers in the line.
- Inspect power cord for cuts or shorts. Should excessive wear be identified, contact Griot's Garage for replacement cords and/or service.
- Should tool begin to cease operation over time, it is likely the motor brushes need replacement. Unplug and inspect motor brushes for excessive wear. Replace if necessary, additional brushes are included.

If you answer **YES** to one or more of the questions below, it is likely that the carbon brushes in your Random Orbital have worn out and require replacement.

1. Is your Random Orbital not powering on?
2. Is your Random Orbital only powering on intermittently?
3. Does your Random Orbital randomly turn off during use without turning off the power switch?
4. Are you experiencing intermittent speed control issues when changing speeds on the dial?

A brush installation guide is available for download at [www.griotsgarage.com](http://www.griotsgarage.com) or contact our Customer Service at 1-800-345-5789 for further guidance.

## QUICK START GUIDE



The Random Orbital keeps the pad rotating in an orbit as it's spinning so you can't over-polish your paint. Just maneuver the machine in a cross-hatch grid pattern, shown in the accompanying diagram.

- Attach the recommended pad
- Apply product in a spiral around pad
- Put pad on paint, set dial to 2, turn tool on, then adjust speed according to product use instructions
- Work 2'x2' area via grid shown at left

See page 5 at right for more concise quick start-up directions, expanded Random Orbital usage tips, and surface evaluation and paint prep advice.

## **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 it feels rough use our Paint Cleaning Clay, Surface Prep Mitt, Surface Prep Pad, or Brilliant Finish Synthetic Clay to remove embedded contaminants. After claying, run your hand over the surface and you will feel a world of difference.
2. Evaluate your paint for scratches, blemishes, or hazing. 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 correct your paint.
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 prevalent, increase the aggressiveness of the liquid or pad to achieve desired results.
4. Please note that some Griot's Garage paint care products like Liquid Wax 3-In-1 and BOSS Finishing Sealant provide both removal of fine imperfections and the protection of a sealant in a single application.
5. See Griot's Garage Liquids on next page for a better understanding of the defect removal capabilities of our liquids and Griot's Garage Random Orbital Pad System on page 8 & 9 to help determine which pad will work best on your paint.

## **OPERATING YOUR GRIOT'S GARAGE 6" RANDOM ORBITAL**

1. The magic of our Random Orbital is how the pad rotates in an orbit as it is spinning. This is both a safety and an effectiveness feature as it generates an intense buffing action yet keeps the pad moving even if the tool is held still.
2. Attaching the buffing pads is easy. They use a hook-and-loop system, just do your best to center the pad on the backing plate (off center pads may cause additional vibration).
3. Apply your liquid product in a spiral from the inside out on your pad. This will reduce sling at start up and evenly apply the product. Our bottle caps are designed so you can easily wipe any leftover product from the cap onto the pad and work the product into the pad to further reduce sling.
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.
5. When operating the machine work in a cross-hatch grid pattern, as illustrated and described on page 4.
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 at speed 2, then adjust speed according to product use instructions.
8. To correct defects, increase the speed to 4 or 5 and follow the grid pattern. 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 pad do the work. After a few laps on the grid take a lap or two with moderate pressure. 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 waxing, a tool speed of 2 to 3 is recommended.
9. When finished working a grid area wipe off product residue using a clean, dry Griot's Garage microfiber towel as recommended.
10. Use at least two pads per process when detailing a vehicle to prolong pad life.
11. Frequently clean your pad during use with a Foam Pad Conditioning Brush (15548), or with compressed air via a regulatory approved air nozzle.

## CORRECTING - DEFECT REMOVAL



### **BOSS™ Fast Correcting Cream**

BOSS Fast Correcting Cream quickly removes severe defects while adding depth and clarity to your paint. For use with both BOSS™ Microfiber and Foam Correcting Pads.

16oz. B110P / Gallon B110G



### **BOSS Correcting Cream**

Eliminate moderate defects like light scratches and swirl marks while adding depth and clarity to your paint. Delivers a pristine last-step-ready finish. For use with both BOSS™ Microfiber and Foam Correcting Pads.

16oz. B120P / Gallon B120G



### **BOSS Perfecting Cream**

BOSS Perfecting Cream has the light touch needed to easily eliminate fine swirls, scratches, and hazing holograms delivering a flawless finish. For use with both Microfiber and BOSS™ Perfecting Pads or Foam Finishing Pads.

16oz. B130P / Gallon B130G



### **Complete Compound**

Removes moderate to severe defects, like swirls, scratches and oxidation, and wipes off in one easy pass. For use with BOSS™ Microfiber Fast Finishing Pad or Correcting Pad.

16oz. 10862



### **Complete Polish**

Removes light defects, like swirls, halos, and paint haze, and wipes off in one easy pass. For use with Microfiber Fast Finishing Pad or Correcting Pad for a wax-ready finish.

16oz. 10876

## ALL-IN-ONE (CORRECT, PERFECT, PROTECT)



### **BOSS™ Finishing Sealant**

A two-for-one, that removes light imperfections and creates rich, deep, durable protection. This versatile product can be used with all Griot's Garage microfiber or foam pads. For a perfect finish apply with a BOSS™ Black Foam Finishing Pad.

16oz. B140P / Gallon B140G



### **One-Step Sealant**

An effective all-in-one that gently corrects the finish to remove light scratches and swirls, reviving your paint's finish. One-Step Sealant also provides long-term synthetic protection. Performs best with our Orange Foam Correcting Pad.

16 oz. 11075



### **Liquid Wax 3-In-1**

Use for the removal of minor imperfections, delivering deep, rich gloss, while safeguarding your finish with carnauba-based protection. Use with our Orange Foam Correcting Pad.

16 oz. 11013

## PROTECTING - WAXES & SEALANTS



### **Best of Show® Wax**

For defect-free paint finishes, Best of Show® Wax delivers maximum color, depth, and clarity with the durable protection of premium carnauba wax. Performs best with our Red Foam Waxing Pad.

Red Foam Waxing Pad.

16 oz. 11171



### **Liquid Gloss Poly Wax**

Formulated for defect-free paint finishes, Liquid Gloss Poly Wax offers insane gloss, our most durable paint protection, and effortless wipe-off. Performs best with our Red Foam Waxing Pad.

16 oz. 10916

## PICKING THE BEST BUFFING PAD

Our standard microfiber and foam pads are 1" thick so they work better on curvy body panels and are appropriate for less-experienced users. Microfiber pads are more aggressive and deliver moderate to advanced paint correction, while foam pads always finish better. The aggressiveness of the pads you use can increase or decrease the aggressiveness of the liquid you are using.



### Microfiber Fast Finishing Pads

This pad's unique foam interface conforms to the surface of your car, increasing pad contact, delivering superior defect removal and finishing capabilities.

10458 5.5" Pad • 10426 6.5" Pad

### Orange Foam Correcting Pad

This dense, firm foam pad promotes even application and can be used with our entire line of polishes and sealants for removal of light to moderate defects.

10523 5.5" Pads, Set of 3 • 10633 6.5" Pads, Set of 3



### Black Foam Finishing Pads

This soft, multi-purpose foam pad is ideal for removal of light scratches and mild defects or the application of wax on the most delicate paint finishes.

10524 5.5" Pads, Set of 3 • 10630 6.5" Pad, Set of 3

### Red Foam Waxing Pads

This ultra-soft foam pad is great for the even application and smooth removal of waxes and sealants to deliver deep vibrant colors and durable paint protection.

10527 5.5" Pads, Set of 3 • 10620 6.5" Pads, Set of 3



### BOSS™ Microfiber Fast Cutting Pads

Our most aggressive plush-nap microfiber pad increases the effectiveness of polishes and compounds and removes the deepest scratches and the most stubborn oxidation.

BMFC5 5" Pad • BMFC6 6" Pad



## STEPPING UP TO BOSS™ BUFFING PADS

These top-of-the-line pads come in two designs: BOSS™ Microfiber or BOSS™ Foam. The 5/8" thin design of BOSS™ Pads delivers high pad rotation for advanced correcting and finishing abilities and are recommended for more experienced users. BOSS™ pads can be identified by their cooling holes that help the pads resist heat buildup, extending pad life and allowing more run time so you change pads less often. BOSS™ pads can be used on all Griot's Garage Random Orbitals



### BOSS™ Microfiber Pads (Black & Red)

An aggressive BOSS™ pad, period, this pad amplifies the effectiveness of BOSS™ Correcting and Perfecting Creams for rapid removal of moderate to severe defects.  
BMF5 5.5" Pads, Set of 2 • BMF6 6.5" Pads, Set of 2

### BOSS™ Fast Correcting Foam Pads (White)

Our most aggressive foam pad, this ultra-firm pad works with BOSS™ Correcting Creams or other Griot's Garage polishes to remove moderate to severe defects.  
B110F5 5.5" Pads, Set of 2 • B110F6 6.5" Pads, Set of 2



### BOSS™ Correcting Foam Pad (Orange)

This workhorse of a pad is a popular choice. Use it with our Correcting Creams to eliminate the light to moderate scratches and defects most commonly seen on daily drivers.  
B120F5 5.5" Pads, Set of 2 • B120F6 6.5" Pads, Set of 2

### BOSS™ Perfecting Foam Pads (Yellow)

This medium firmness, multi-purpose foam pad is for use with Perfecting Cream to remove light defects like swirl marks, micro hazing, and water spots.  
B130F5 5.5" Pads, Set of 2 • B130F6 6.5" Pads, Set of 2



### BOSS™ Finishing Foam Pads (Black)

Made from ultra-soft foam, use this pad with Perfecting Cream or Finishing Sealant for optimal color, depth, and clarity on the most delicate paint finishes.  
B140F5 5.5" Pads, Set of 2 • B140F6 6.5" Pads, Set of 2

### BOSS™ Innerflex Pads

This foam interface accessory reduces the aggressiveness of any pad you use it with while adding a cushioning effect that helps the pad conform to body panel contours.  
BIP5 5" Innerflex Pad • BIP6 6" Innerflex Pad



Griot's Garage offers three pad systems for this machine. The backing plate is the foundation of each system. Your 6" Random Orbital is outfitted with our 6" System right out of the box.



Our 3" System delivers the highest level of paint correction and a comfortable user experience. Additionally, it enables the user to address tight spaces and improves tool control.

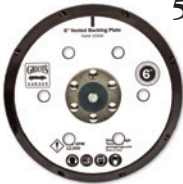


Our 5" System delivers the highest level of paint correction and a comfortable user experience. Additionally, it enables the user to address tight spaces and improves tool control.



The 6" System covers more ground per pass and offers the least amount of relative correcting ability, contributing to improved safety.

## 5" & 6" VENTED BACKING PLATES



These plates feature our exclusive heat management system with vertical and horizontal cooling ports that deliver smoother operation, longer pad life, and better results. The plates feature high-density urethane foam with chamfered edges for flexibility and improved contouring around body panels.



5" Vented Orbital Backing Plate - 10550 • 6" Vented Orbital Backing Plate - 10560

## 3" HEAVY-DUTY BACKING PLATE



Convert your 6" Random Orbital into a powerful 3" spot repair tool to better address isolated defects, tight spaces, bumpers, and side panels.  
3" Heavy Duty Orbital Backing Plate - 10563

## SECURING A BACKING PLATE

Caution: Ensure power tool is unplugged from power source.

1. With tool resting on its back, secure counterbalance spline with supplied wrench.
2. With fiber washer intact, align  $\frac{5}{16}$ "-24 thread with counterbalance hub and rotate clockwise until it bottoms out. Firmly tighten with an additional 1/4 turn.

## INSTALLING BUFFING PAD AND USAGE RECOMMENDATIONS

1. Inspect your microfiber or foam pad prior to installation.
2. Caution: Do not use torn or worn out pads.
3. Caution: Unplug power tool prior to buffing pad installation.
4. Center pad on backing plate and press firmly around pad.
5. Never run machine when pad is not resting on the vehicle's surface or engaged with a Foam Pad Conditioning Brush.
6. Frequent cleaning of buffing pad is essential to reduce product build up, which can potentially lead to excessive pad weight and a subsequent increase in vibration. Ideally, brush clean following every buffing cycle by running a Foam Pad Conditioning Brush across pad with machine speed set at 3.

## BUFFING PAD MAINTENANCE

1. Remove pad from your orbital and pre-rinse with warm water following each use.
2. Spray Griot's Garage Microfiber & Foam Pad Cleaner on the entire pad face.
3. Gently knead the pad until you create a rich lather. This cleaning action frees the pad of any compound or wax residue. Allow to dwell for 10 minutes.
4. Rinse thoroughly with warm water and wring out, or machine wash.
5. Allow pad to air dry completely prior to use. Store dry pad in the supplied bag.

## PRODUCT USE

All statements, usage recommendations, and technical information contained in this manual are based on tests or development that Griot's Garage has deemed reliable. However, many factors beyond Griot's Garage's control can affect the use and performance of this Griot's Garage product in a certain application, including conditions under which the Griot's Garage product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely in the user's knowledge and control, it is critical that the user evaluate the Griot's Garage product to determine whether it is suitable for a particular purpose and the user's method of application.

## WARRANTY

- Griot's Garage Lifetime Guarantee - Griot's Garage will repair or replace any defective tool, without charge, due to faulty materials or workmanship for the working life of the tool, subject to certain exclusions below.
- Six Month Satisfaction Guarantee - We want you to enjoy our quality product and have fun with it! If you're not 100% satisfied for any reason within six months of purchase, return it to point of sale with proof of purchase for a full refund or credit.
- Two Year Comprehensive Warranty - With online warranty registration, Griot's Garage will facilitate replacement of worn parts caused by normal use, without charge, anytime during the two years from date of purchase. We will either repair it or replace it or credit your purchase price if we are able to do neither.

## EXCLUSIONS

- The Two Year Comprehensive Warranty is void should your tool experience damage caused by failure to follow the recommended maintenance, misuse, alteration or abuse.
- Griot's Garage Lifetime Guarantee does not cover damage caused by failure to follow recommended maintenance, misuse, alteration or abuse. Normal wear and tear is not considered a defect, therefore part failure which may occur as the result of ordinary use is excluded from coverage.
- Griot's Garage is not responsible for any incidental or consequential damages.

For training videos, go to [youtube.com/griotsgarage](https://www.youtube.com/griotsgarage) Click and search keyword "Orbital".



## **ANSWERS TO YOUR QUESTIONS**

To order additional Griot's Garage® Random Orbital products, or for a complete selection of Griot's Garage products, please call us toll-free at **800-345-5789**, email us at **sales@griotsgarage.com**, or visit us at **griotsgarage.com**

***Have fun in your garage!\****

GRIOT'S GARAGE, INC. | 3333 SOUTH 38<sup>TH</sup> STREET | TACOMA, WA 98409  
**800-345-5789 • griotsgarage.com**

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