# **QUICK START GUIDE**

- **1.** With tool unplugged, check tightness of backing plate, by depressing the spindle lock button, and firmly turning backing plate clockwise.
- 2. Select appropriate buffing pad and compound/polish/wax to achieve objective.
- **3.** Attach appropriate pad by centering it on backing plate and firmly pressing it on.
- 4. Select appropriate tool speed:
  - Compounding: 1500-2200 (RPM) Speed Dial Setting: 3-5.
  - Swirl Removal: 800-1500 (RPM) Speed Dial Setting: 1-3
- **5.** Apply pad to surface, depress trigger, and work surface in focused 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 1-2 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.** Always follow your rotary application with one of our random orbital polishers for a guaranteed swirl-free finish.
- 9. Once entire car is complete, relax and enjoy the shine!

**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 the responsibility of the user to 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.

**EXCLUSIONS** Griot's Garage Lifetime Guarantee does not cover damage caused by failure to follow recommended maintenance, misuse, alteration, or abuse. Normal wear and tear are not considered a defect, therefore part failure which may occur as the result of ordinary use is excluded from coverage.

**DISCLAIMER** Limitation of Liability: In no event shall the monetary liability of company exceed amounts that have actually been paid to company. Company shall not be liable for consequential, indirect, special, or incidental damages under any circumstances, even if advised in advance of the possibility of such damages.

ANSWERS TO YOUR QUESTIONS To order additional pads and liquids, or for a complete selection of Griot's Garage products, please call us toll-free at 800-345-5789, email us at customerservice@griotsgarage.com, or go to griotsgarage.com





Mini Rotary Polisher

Welcome to our professional grade solution for advanced defect removal...

### ▲ SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

Please read and understand this manual. It contains information that relates to personal protection of you and others.

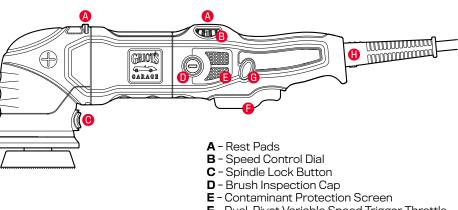


# Welcome to my life's work...

Griot's Garage has a history of offering professional grade polishers for nearly 30 years. This groundbreaking GR3 Mini Rotary Polisher offers features never seen before in a small platform rotary tool. Built from the ground up, borrowing on decades of experience polishing both fresh and OEM paint finishes, this tool makes your dreams come true. Its powerful 700-watt motor, variable speed trigger throttle, and ergonomics deliver class leading power, comfort, and control. I'm confident this advanced professional grade polisher will address intricate panels and spot repair with more precision and efficiency than ever before.



# **COMPONENTS AND FEATURES**



- **F** Dual-Pivot Variable Speed Trigger Throttle
- **G** Trigger Lock Button
- H Quick-Connect Power Cord

# **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**



# **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 GR3 Mini Rotary 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.

**c.** 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.

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

#### **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. Always keep proper footing and balance. 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. Your GR3 Mini Rotary 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, considering 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.

#### **5. 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 the 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 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.

I. 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.

#### **6. 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 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 tend to snag the rotating accessory and cause loss of control or kickback.

**e.** Keep the power cord away from rotating insertion tools. If you lose control of the appliance, the power cord could be severed or become caught and your hand or arm may strike the rotating insertion tool.

#### 7. 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.

▲ WARNING: 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 varies 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.

## ▲ 8. 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.

CAUTION: 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. 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.

Air vents often cover moving parts and should be avoided. Loose clothes, jewelry, or long hair can be caught in moving parts.

**NOTE:** If an overload or overheating occurs during operation, the power tool automatically reduces speed until the power tool adequately cools down.

#### 9. SPECIFICATIONS

Туре	GR3 Mini Rotary Polisher			
Action	Rotary – Direct Drive			
Spindle Thread Size	5/8"-11			
Revolutions Per Minute (RPM)	800-2500 (RPM)			
Voltage	110V/60HZ			
Power Output (Watts)	700			
Power Output (Amperes)	5.5			
Cord Length	10' (3 m) / Optional 25' (7.6 m)			
Tool Length	13.46" (342mm)			
Tool Weight	3.15 lbs.			
Constant Electronic Speed Control	Yes			
Variable Speed Trigger Throttle	Yes			
Compatible Backing Plates	3", 2", and 1" Mini Rotary Backing Plates			
Safety Restart Protection	Yes			

#### **10. 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

### **11. OPERATION**

A 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.

#### **12. ACCESSORIES**

▲ WARNING: To reduce the risk of injury, only Griot's Garage approved accessories should be used with this polisher. The Griot's Garage Mini Rotary Polisher is designed for use with 3", 2", or 1" Pad Systems. Use of any other size is not recommended.

#### **13. INTENDED USE**

The Griot's Garage GR3 Mini Rotary 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. It should be noted that rotary polishing is intended for experienced users only. It is intended for removal of severe paint defects including: sanding marks, severe cobweb swirls & scratches, water spots, and severe oxidation.

#### **14. SPEED CONTROL DIAL**

The maximum speed of your polisher can be changed by rotating the Speed Control Dial (B). The polisher is equipped with a constant speed control so you can adjust the speed between 6 settings to suit the objective. 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.

**PRIOR TO APPLICATION:** It is recommended 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.

#### **15. RECOMMENDED SPEED FOR APPLICATION:**

Speed Dial Setting	1	2	3	4	5	6
RPM	800	1150	1500	1850	2200	2500

**Paint Correction:** Speed 4 - 5 for moderate to severe swirls, scratches, and stains. **Paint Perfection:** Speed 2 - 3 for fine swirls, scratches, and stains.

#### Variable Speed Trigger Throttle (G)

The polisher is equipped with a variable speed trigger throttle. The more you pull the trigger the faster the motor will run. Release the Variable Trigger Throttle to stop motor. At maximum compression, the machine operates according to speed set on the speed dial (B). Polisher can be locked on for continuous use by depressing the trigger and engaging the Trigger Lock Button (G), while releasing your finger from the trigger. To shut off, depress trigger and release.

**NOTE:** The polisher is equipped with Safety Restart Protection. Should polisher become unplugged during operation with trigger lock engaged it will require trigger lock to be disengaged before normal operation will ensue.

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

#### **16. INSTALLING ROTARY BACKING PLATES**

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

#### 17. SHAFT LOCKING BUTTON (C)

**a.** Apply pressure to Spindle Locking Button to prevent tool from rotating while installing or removing accessories.

**b.** Carefully thread Mini Rotary Backing Plate to male 5/8-11 threaded shaft and turn clockwise, firmly rotating to secure.

## ▲ **CAUTION:** NEVER DEPRESS SPINDLE LOCKING BUTTON WITH TOOL RUNNING OR COASTING. SEVERE DAMAGE WILL OCCUR AND IS NOT COVERED UNDER WARRANTY.

### **18. DISPOSAL/RECYCLING**

▲ 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.

# **OPERATING YOUR MINI ROTARY POLISHER**

**1.** 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 vibration).

**2.** To apply product & prevent splatter, apply a 1" to 2" thin stripe of product to the panel. Working from right to left, approach the stripe at the 11 o'clock position of the pad with the left side of the pad just slight cocked. Work the buffing pad across the stripe from the right to the left pulling the product into the pad. Using low rpm, spread the product across your intended work zone. This technique will prevent product splatter, reduce clean-up time, and distribute product evenly onto the pad.

**3.** When you use the machine select a manageable work area on your vehicle, such as a 1' x 1' square, so you can better focus your efforts and reduce strain. Let the body panel guide your approach.

**4.** When operating the machine work in an overlapping motion using light to moderate downward pressure.

**5.** 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.

**6.** Too much pressure, the wrong angle or improper motion may cause swirl marks or burning. For detailed polishing instructions, read the instructions provided with your paint finish, compound or polish manufacturer.

7. When finished working a grid-area wipe off product residue using a clean, dry Griot's Garage microfiber towel as recommended.

**8.** For fine-polishing lower your speed setting to 2 to 3, using very light pressure and a foam finishing pad, work the surface 3-4 passes.

**9.** To ensure a 100% swirl-free finish, always finish the panel with a Griot's Garage Random Orbital Polisher, fine polish and foam pads.

## **TOOL MAINTENANCE**

For detailed product use, as well as step-by-step brush replacement instructions, please visit **griotsgarage.com** for tech sheets and helpful how-to videos. Your Griot's Garage GR3 Mini Rotary 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.

**Note:** The Contaminant Protection Screen (E) 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.

- CAUTION: 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.
- **CAUTION:** 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.

#### **1. FAILURE TO START**

**a.** 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.

**b.** If power tool persists in not starting, unplug and inspect motor brushes for excessive wear. Replace if necessary.

**c.** Inspect power cord for cuts or shorts. Remove Quick-Connect Power Cord (H), then reinsert ensuring "click" sound is audible. Should excessive wear be identified, contact Griot's Garage for replacement cords and/or service.

#### **2. BRUSH REPLACEMENT**

Brushes (Item# 10908A) are wear items and normal wear is not covered under warranty. The power tool comes with a spare set of replacement brushes. Additional brushes are available for purchase.

Note: The polisher features auto cut-off carbon brushes. When the wear limit of the auto cut-off carbon brush is reached, the polisher switches off automatically.

**a.** Remove Brush Side-Port plugs (D) from both sides of tool using a small flathead screwdriver, turning counter-clockwise.

**b.** Grasp brass brush pressure plates and retrieve brushes from tool. Discard appropriately.

c. Install replacement brushes into brush port.

**d.** Insert the Brush Side-Port plug and rotate clockwise by hand.

**e.** Turn Brush Side-Port plug clockwise using the flathead screwdriver until it bottoms out. Do not overtighten, or tool may be damaged!

#### **3. PAD MAINTENANCE**

**a.** While polishing, frequently clean pad face by using a Griot's Garage Pad Conditioning Brush (Item# 15548) with the machine operating at speed 2.

**b.** Following polishing process, remove buffing pad from machine, pre-rinse with hot water, and wring to expel polish residue.

c. Spray Griot's Garage Microfiber & Foam Pad Cleaner on the entire pad face and gently knead the pad until you create a rich lather.

d. Rinse thoroughly with warm water and wring out or machine wash.

e. Allow pad to dry completely before use. Store dry pad in poly zipper bag.

## **APPROVED ACCESSORIES**

The following accessories have been tested and proven to be effective with the Griot's Garage GR3 Mini Rotary Polisher:

Mini Rotary Backing Plates 5/8"-11

- 3" Mini Rotary Backing Plate
- 2" Mini Rotary Backing Plate
- 1" Mini Rotary Backing Plate

#### **Rotary Extension Shafts**

Our Rotary Extension Shafts extend your reach and move the tool away from the surface to better access tight spaces. The 2 inch and 3 inch shafts can either be used by themselves, or combined for a long 5 inch extension.

- 3" Rotary Extension Shaft
- 2" Rotary Extension Shaft

**Note:** To remove the extension shafts from the tool and backing plate, a 14mm or 9/16" wrench may be necessary. Apply wrench to recess machined on the extension, and turn backing plate counterclockwise.

# **RECOMMENDED PADS, LIQUIDS, AND TOWELS**

