Saved from manuals.plus.
Open the live page for links to other documents and user manuals.

Chemical Guys LHR 21ES

Rupes LHR21ES Big Foot Random Orbital Polisher User Manual

Model: LHR 21ES | Brand: Chemical Guys

1. Introduction

The Rupes LHR21ES Big Foot Random Orbital Polisher is a professional-grade tool designed for automotive paint correction and finishing. It utilizes a unique 21-millimeter throw, allowing for faster defect removal and superior clarity compared to conventional orbital polishers. This manual provides essential information for the safe and effective operation, maintenance, and care of your polisher.

The larger throw of the Big Foot polisher enables smoother operation and more efficient correction of paint defects such as swirls, scratches, and holograms. It is suitable for both novice and professional detailers seeking high-performance and ease of use on single-stage and clear coat surfaces.

2. Safety Information

Always observe basic safety precautions when using electrical appliances to reduce the risk of fire, electric shock, and personal injury. Read all instructions before operating this tool.

- **Eye Protection:** Always wear appropriate eye protection (safety glasses or goggles) to shield against flying debris.
- **Hearing Protection:** Use hearing protection during extended operation to prevent noise-induced hearing loss.
- **Proper Ventilation:** Work in a well-ventilated area to avoid inhaling dust or chemical fumes from polishing compounds.
- **Secure Workpiece:** Ensure the vehicle or workpiece is stable and secure before beginning work.
- **Electrical Safety:**
  - Do not operate in wet conditions or expose to rain.
  - Inspect the power cord for damage before each use.
  - Always unplug the tool before changing accessories or performing maintenance.
- **Keep Clear:** Keep hands, hair, and loose clothing away from moving parts.
- **Tool Handling:** Do not force the tool. Use the correct tool for your application.

3. Components

The Rupes LHR21ES Big Foot Random Orbital Polisher typically includes the following main components:

- Polisher Unit
- 6-inch Hook and Loop Backing Plate



Figure 3.1: Overall view of the Rupes LHR21ES polisher.



Figure 3.2: Close-up of the polisher head, showing the "Big Foot" branding and orbital mechanism.



Figure 3.3: Top-down view of the polisher's head, highlighting the large orbital throw.

4. Setup

Before operating your polisher, ensure it is properly set up:

1. **Attach Backing Plate:** Securely screw the 6-inch hook and loop backing plate onto the polisher's spindle. Ensure it is tightened firmly but do not overtighten.
2. **Attach Polishing Pad:** Align your desired 6-inch polishing pad (e.g., foam or microfiber) with the hook and loop surface of the backing plate and press firmly to secure it.
3. **Power Connection:** Plug the polisher into a grounded electrical outlet. Ensure the power cord is routed safely to avoid tripping hazards or contact with the work surface.

5. Operating Instructions

Follow these steps for effective and safe polishing:

1. **Prepare Surface:** Ensure the vehicle's paintwork is clean, decontaminated, and dry. Mask off any trim or sensitive areas that should not be polished.
2. **Apply Polish:** Apply a small amount of polishing compound (e.g., Chemical Guys V34 Optical Grade Hybrid Compound) directly onto the polishing pad. Typically, 3-4 pea-sized drops are sufficient for a 2x2 foot section.
3. **Spread Polish:** Place the pad flat on the paint surface. With the polisher set to a low speed (e.g., speed setting 1 on the variable dial), gently spread the polish over the working area before turning up the speed. This prevents sling and ensures even distribution.
4. **Begin Polishing:**

   ▶ **Watch video online**
   RUPES LHR21ES Big Foot Random Orbital Polisher

   Video 5.1: Demonstration of spreading polish and initial polishing technique with the Rupes LHR21ES.

   Increase the polisher's speed to your desired working speed (e.g., speed setting 4-5 for compounding). Maintain even pressure and move the polisher in overlapping passes (cross-hatch pattern) over the section. The large throw of the Rupes polisher allows for efficient coverage.

   Tip: Keep the pad flat on the surface to maximize contact and prevent uneven results. Avoid tilting the polisher.
5. **Monitor Progress:** Work a section until the polish becomes clear or breaks down, indicating that the abrasives have done their work.
6. **Wipe Off Residue:** Turn off the polisher and lift it from the surface. Use a clean, soft microfiber towel to gently wipe away any polish residue. Inspect the results.
7. **Repeat:** Continue working in small sections until the entire desired area is corrected.



Figure 5.1: The variable speed dial, typically ranging from 1 to 6, allows precise control over the polisher's RPM.

6. Maintenance

Regular maintenance ensures the longevity and optimal performance of your polisher:

- **Clean Pads:** After each use, clean your polishing pads thoroughly. Dirty pads can scratch paint and reduce polishing effectiveness.
- **Clean Polisher Body:** Wipe down the polisher body with a damp cloth to remove any polish residue or dust. Do not use harsh chemicals.
- **Inspect Cord:** Periodically check the power cord for cuts, fraying, or other damage. Replace if necessary.
- **Brush Replacement:** Over time, the motor brushes may wear down. Consult a qualified service technician for brush inspection and replacement if the tool experiences reduced power or intermittent operation.
- **Storage:** Store the polisher in a clean, dry place, away from direct sunlight and extreme temperatures.

7. Troubleshooting

If you encounter issues with your Rupes LHR21ES polisher, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Polisher does not turn on.	No power to outlet; damaged cord; worn motor brushes.	Check power source; inspect and replace cord if damaged; consult service technician for brush replacement.
Pad stops rotating/oscillating.	Too much pressure applied; worn backing plate/pad; internal mechanical issue.	Reduce pressure; replace worn pad/backing plate; consult service technician.
Excessive vibration or noise.	Unbalanced pad; damaged backing plate; internal bearing issue.	Ensure pad is centered; replace damaged backing plate; consult service technician.
Poor polishing results (hazing, swirls).	Incorrect pad/polish combination; insufficient working time; dirty pad; improper technique.	Ensure correct pad/polish for defect; extend working time; clean/replace pad; review operating instructions.

For issues not listed or if solutions do not resolve the problem, contact Chemical Guys customer support or a certified service center.

8. Specifications

Feature	Detail
Model	LHR 21ES
Brand	Chemical Guys (Manufacturer: Rupes)
Power Source	Corded Electric
Voltage	220 Volts (AC)
Maximum Power	500 Watts
Item Weight	7.8 pounds (approx. 3538 Grams)
Product Dimensions	20.98 x 8.39 x 8.31 inches (approx. 21"D x 8.4"W x 8.3"H)
Included Components	Polisher, Backing Plate
Material	Stainless Steel
Color	Black

9. Warranty & Support

For warranty information, product support, or to purchase additional accessories, please visit the official Chemical Guys Store or contact their customer service directly. Protection plans may also be available for extended coverage.

© 2025 Chemical Guys. All rights reserved.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

https://manuals.plus/asin/B00F5MCF3S

More documents and user manuals: **https://manuals.plus/**