

# DiamaPro SYSTEMS HGP-5 Variable Speed Grinder and Polisher Owner's Manual

Home » DiamaPro SYSTEMS » DiamaPro SYSTEMS HGP-5 Variable Speed Grinder and Polisher Owner's Manual <sup>™</sup>

#### **Contents**

- 1 DiamaPro SYSTEMS HGP-5 Variable Speed Grinder and Polisher
- **2 Product Usage Instructions**
- **3 Frequently Asked Questions**
- **4 INTRODUCTION**
- **5 SAFETY INSTRUCTION**
- **6 GUIDELINES BEFORE USE**
- **7 SPECIFICATIONS**
- **8 OPERATION**
- 9 PACKAGE INCLUDES
- **10 CALIFORNIA PROPOSITION 65**
- 11 SPEED ADJUSTMENT
- 12 Schematic & Parts List
- 13 Customer Acknowledgment and Assumption
- 14 Documents / Resources
  - 14.1 References



DiamaPro SYSTEMS HGP-5 Variable Speed Grinder and Polisher



# **Specifications**

• Model: HGP-5

• Product Type: Variable Speed Grinder/Polisher

• Power Source: Corded

• Speed Settings: Variable Speed

# **Product Usage Instructions**

#### **General Safety Guidelines**

Before using the Variable Speed Grinder/Polisher, it is essential to follow these general safety guidelines:

- Read and understand all safety warnings and instructions provided in the manual.
- Ensure the work area is well-lit, clean, and free from flammable materials.
- · Keep children and visitors away from the working area.
- Check and remove any wrenches or keys from the tool before operation.
- Avoid overreaching and maintain a comfortable posture during tool usage.
- Keep loose clothing, body parts, and hair away from the tool.

# **Power Tool Safety & Care**

Follow these guidelines to ensure the safe and proper use of the grinder/polisher:

- Do not exert excessive force on the tool; let it achieve optimal performance naturally.
- Do not use the tool if the switch is faulty; have it repaired by an authorized service center.
- Always unplug the tool before storing or performing maintenance.
- Maintain the tool in a safe place inaccessible to children when not in use.
- Regularly inspect the tool for any damage or misalignment before each use.

# **Electrical Safety**

Ensure electrical safety by following these precautions:

- Use a compatible outlet with the power tool plug; do not modify plugs or use adapters.
- Regularly check the power cord for any damage or wear and replace if necessary.

# **Frequently Asked Questions**

Q: Can I use this grinder/polisher for wet applications?

A: No, this model is designed for dry applications only. Using it with water or liquids can damage the tool and pose a safety risk.

Q: How do I adjust the speed settings on the grinder/polisher?

A: To adjust the speed, locate the variable speed control knob on the tool and turn it to set your desired speed. Refer to the manual for specific speed settings based on your application.

Q: What maintenance tasks should I perform regularly?

A: Regular maintenance tasks include cleaning the tool after each use, inspecting for any loose parts, and lubricating moving components as recommended in the manual.

#### INTRODUCTION

DiamaPro Systems® HGP-5 Grinder/Polisher is designed and engineered to provide handymen with a pleasant experience which results in efficient productivity. Safety, performance, and durability have been given top priority in the design of this polisher to maintain quality standards.

# Disclaimer:

DiamaPro Systems® and its affiliates take no responsibility for any damage, injury, or death resulting from the incorrect or unsafe use of this product. Use of this product should be undertaken by competent persons only. It is the operator's responsibility to ensure that the following safety procedures are followed. If you are unsure, do not operate this product.

## **SAFETY INSTRUCTION**

#### **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**

- Keep the working space well-lit, clean, and adequate for power tool usage. Inadequate light and cluttered workspaces can invite hazards.
- 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. The presence of these materials in the working
  environment may cause sparks which can result in fire hazards.
- Keep children and visitors away from the working area and your power tools and equipment to avoid any accidents.

#### **ELECTRICAL SAFETY**

- Ensure that the outlet is compatible with the 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.
- 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.
- Never expose power tools to rain or water and never store them in damp areas. Moisture entering your power tool will pose an increased risk of electrocution.
- Never abuse the electrical cord of the tool. Do not pull it to unplug the tool. Keep the cord away from heat, oil, sharp corners, and moving parts. Entangled or damaged cords increase the chances of electrocution hazards.
- 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.
- If you must operate a power tool in a wet or damp work area, use a Ground Fault Circuit Interrupter (GFCI) power supply. It will decrease the risk of electrocution.
- Ensure that your extension cord is in good condition and use an adequate 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**

- Be on 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 cause serious hazards when operating
  power tools.
- Always use appropriate personal protective equipment. Use eye protection, dust masks, non-skid safety shoes, hard hats, and/or hearing protection when conditions warrant them. This will significantly reduce the risk of personal injury.
- 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.
- Make it a habit to check and remove wrenches or keys from the tool before turning it on. Mounted keys or wrenches can cause serious damage.
- Never try to overreach. Keep your posture comfortable and balanced at all times so you can manage unexpected situations.
- Keep loose clothing, body parts, and hair away from the parts of the tool. It's recommended to use protective hair covering.

• If there are devices provided for dust extraction and collection, make sure they are properly connected and functional. The use of dust collection systems can decrease the risk of dust-related hazards.

#### **POWER TOOL SAFETY & CARE**

- 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.
- Never use the tool if its switch doesn't work. Get it repaired or replaced by an authorized service center. An
  unreliable switch can prove to be dangerous.
- Before storing the tool, make any replacements or periodical mainte-nance, and unplug the tool from the power source. This minimizes the risk of accidental starts.
- 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 an open invitation to accidents.
- 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 them when necessary.
- Always use the power tool and its accessories according to the instructions provided in this manual, the 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.

### **TECHNICAL SAFETY**

- All the accessories to be used with this tool must be rated for at least 3000 RPM.
- Before operating the tool, always inspect the backing pad and polishing discs and replace the damaged pads/discs if necessary.
- When operating the polisher, always wear eye protection.
- Never use the polisher with blades that are meant for cutting wood or metal.
- · Keep your grip firm on the tool at all times.
- Keep your body parts away from the moving parts of the polisher to prevent personal injuries.
- Ensure that the work piece is well-supported and stable.
- Never touch the workpiece right after polishing, it may be extremely hot.
- To prevent electrocution, use rubber gloves and boots.
- Take care of the tool and do not let water or moisture seep into the motor.
- Always use a Ground Fault Circuit Interrupter (GFCI) with this tool.

## **GUIDELINES BEFORE USE**

- Familiarize yourself with the power tool before using it. Learn how to use it and its limitations along with the
  potential risks and hazards associated with its use. Always read the instruction manual thoroughly and
  carefully.
- Always use the proper eye protection. Regular glasses are only impact resistant; they don't provide an adequate level of safety as safety glasses do.

- If dust is being produced during operation, wear a dust mask to prevent lung disease.
- During long periods of polishing it is recommended to use ear protection to prevent hearing loss.
- Check your tool cords from time to time and, if necessary, get them repaired or replaced by an authorized service center.
- Before every use, make it a habit of checking the tool for any damage especially parts intended for safety. If
  necessary, repair or replace the damaged parts before continuing the operation. Following this instruction will
  decrease fire, electrocution, and injury hazards.
- Keep this instruction manual accessible and make every person read this carefully who intends to use this tool.

#### **SPECIFICATIONS**

• MODEL: HGP-5

• POLISHING DISC DIAMETER: 5" Max

• NO LOAD SPEED: 700-3000 RPM

• POWER: 800W

• WEIGHT (NET/GROSS): 5.7 / 6.4 lbs.

#### **DISC CAPACITY**

This DiamaPro Systems® Hand Grinder/Polisher can accommodate disc sizes up to 5 inches (127mm). Don't use discs larger than 5 inches with this tool.

## **OPERATION**

- Don't exert force on the polisher. The weight of the polisher is enough to supply an adequate amount of
  pressure to get the best results. Let the pad and polisher do their work. Exerting extra force will put a strain on
  the motor, wear off the polishing pad quickly, and reduce the polishing speed. Additional strain on the motor can
  cause overheating, thus damaging the polisher.
- Never polish a specific area for long periods, otherwise 50 and 100-grit polishing pads will remove more material than you intend to, making the surface uneven.
- Don't apply extra force as it may overheat the motor, causing damage to the tool.
- If the motor heats up, switch off the polisher and wait until the motor comes to a complete halt. Then remove it from the workpiece. Take your hand away from the venting duct, remove the polishing disc switch it back on, and run the polisher free without any load until the motor cools down.

# POLISHING PADS SELECTION

- Selecting the right polishing pad with the correct grit for the task at hand plays an important role in achieving a high-quality finish. DiamaPro Systems® has developed polishing pads for the HGP-5 model bonded to achieve excellent results when polishing concrete or stone.
- Generally, when using diamond polishing pads, coarse grit removes the most material and fine grits produce
  the best finish. The condition of the surface to be polished determines which grit will do the best job. If the
  surface is rough, start with coarse grit and grind until the surface is uniform. Then use medium grit to remove
  scratches left by the coarser grit.
- At last, use finer grits to finish the surface. Always continue polishing with each grit until the surface is uniform.

### **PACKAGE INCLUDES**

Your polisher packaging includes:

- HGP-5 Grinder/Polisher
- Shaft Wrench
- Side Handle
- · Owner's Manual

## **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 dust masks that are specifically designed to filter out microscopic particles.

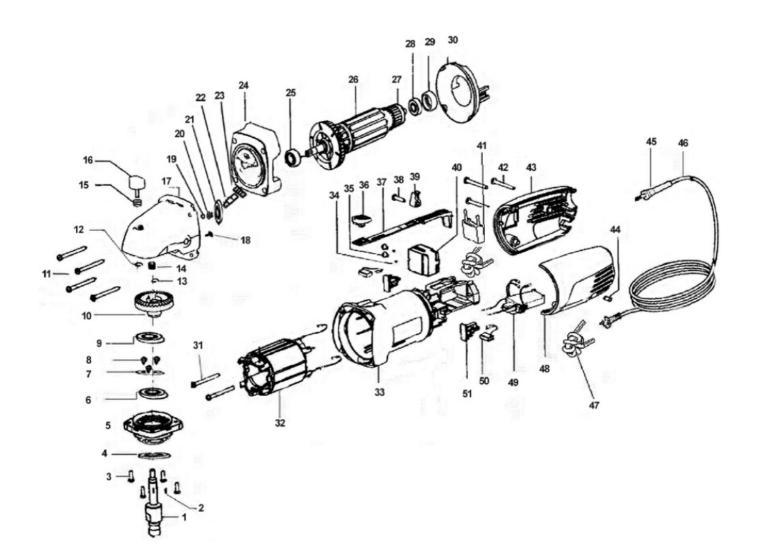
## **SPEED ADJUSTMENT**

On the back end of the polisher, there is a dial for speed adjustment. Refer to the speed chart below for settings.

Speed Adjustment vs. RPM				
Number Approximate	RPM			
1	700			
2	1100			
3	1600			
4	2100			
5	2500			
6	3000			

Don't operate the tool at low speeds under a heavy load for extended periods of time. This may cause the motor to overheat, posing damage to your tool.

## **Schematic & Parts List**



S. No.	Description	Qty.	S. No.	Description	Qty.
1	Output Shaft	1	27	Magnet-Wheel	1
2	Woodruff Key	1	28	Bearing	1
3	Screw	4	29	Bearing-Housing	1
4	Dust Cap	1	30	Wind Cover	1
5	Front Cover	1	31	Screw	1
6	Bearing	2	32	Stator	1
7	Gland	1	33	Housing	1
8	Gland Screw	3	34	Flat Washer	1
9	Flat Washer	1	35	Screw	1
10	Gear (big)	1	36	Switch Lever Button	1
11	Screw	1	37	Switch Lever	1
12	Bearing	1	38	Screw	1
13	Clamp	1	39	Cable Disc	1
14	Roller Pin	1	40	Switch	1
15	Self-Lock Spring	1	41	Capacitor	1
16	Self-Lock	1	42	Screw	1
17	Gear Cap	1	43	Rear Cover	1
18	Screw	2	44	Screw	2
19	Clamp	1	45	Cable Sleeve	1
20	Gear (small)	1	46	Cable	1
21	Bearing	1	47	Inductor	2
22	Small Shaft	1	48	Rear Cover	1
23	Spur Pinion	1	49	Speed Control Switch	1
24	Bearing Retainer	1	50	Carbon Brush	1
25	Bearing	1	51	Copper Brush Holder	1
26	Rotor	1			

# **Customer Acknowledgment and Assumption**

# Customer Acknowledgment and Assumption of Responsibility for Modification to any Product.

Customer expressly acknowledges that modification of any equipment, machines, or other products purchased from Niagara Machine, Inc. ("Niagara"), including but not limited to DiamaPro Systems Products (collectively, "Products") through the attempted or actual use or misuse, adjustment, alteration, application of additional components, removal of provided components, repairs or attempted repairs by Customer (collectively, "Modifications") can lead to Product malfunction causing serious risks. Such risks include, but are not limited to,

Product damage, bodily injury, death, or loss of or damage to property. Customer agrees that Customer is solely responsible for any Modifications Customer performs on any Product purchased from Niagara, and that Niagara is not responsible and will not be held liable for any claims, damages, or injury arising from Modifications by Customer, including Customer's employees, subcontractors, agents, representatives, affiliates, and assigns, to any Product purchased from Niagara. Customer further acknowledges and agrees that any Modification(s) to a Product may, at DiamaPro Systems' and/or Niagara's election, void any warranty applicable to the Product.

Customer agrees that, to the greatest extent permitted by law, Customer shall indemnify, hold harmless and, at Niagara's request, defend (with counsel reasonably approved by Niagara), Niagara, Niagara's parent, subsidiaries, affiliates, and the officers, directors, employees, and agents of Niagara (individually and collectively "Niagara Indemnitees") from and against, and pay or reimburse them for any and all third-party claims, losses, damages, liabilities, lawsuits and expenses (including reasonable attorneys' fees) relating to bodily injury, death, or loss of or damage to property caused by or arising from any Modification to a Product by Customer, its employees, subcontractors, agents, representatives, affiliates, and assigns (individually and collectively, "Customer Group"), with respect to the Products Customer purchases from Niagara.

Customer acknowledges that Customer has read and understands these terms, and voluntarily assumes full and sole responsibility for any and all effects arising from any Modification to a Product by Customer Group.

## DiamaPro® Systems

3343 Peachtree Road NE Suite 145 #24 Atlanta, GA 30326
 470-977-2323

## **Documents / Resources**



<u>DiamaPro SYSTEMS HGP-5 Variable Speed Grinder and Polisher</u> [pdf] Owner's Manual HGP-5 Variable Speed Grinder and Polisher, HGP-5, Variable Speed Grinder and Polisher, Speed Grinder and Polisher, Grinder and Polisher, Polisher

#### References

User Manual

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.