



**FLOOR GRINDER  
OPERATOR'S MANUAL**

**CPG80E  
Low Profile Floor Grinder**

October, 2019

Part #: 1802708



## TABLE OF CONTENTS

### Table of Contents

Introduction .....	5
CPG80E Components .....	6
CPG80E Dimensions .....	7
CPG80E Specifications .....	8
Safety .....	9
Safety Alerts .....	9
Proposition 65 .....	9
Respiratory Hazards .....	9
General Safety .....	10
Grinding Safety .....	11
Belt Safety .....	11
Transporting Safety .....	11
Lifting Safety .....	11
Operating .....	12
General Operating Precautions .....	12
Handlebar .....	12
Handlebar .....	12
Adjusting the Handlebar .....	12
Diamond Grinding Head .....	12
Inspecting the Grinding Head .....	12
Installing the Grinding Head .....	13
Removing the Grinding Head .....	13
Motor .....	14
Starting the Motor .....	14
Stopping the Motor .....	14
Vacuum Port .....	14
Water Supply .....	14
Grinding .....	15
Tasks Prior to Grinding .....	15
Dry Grinding .....	15
Wet Grinding .....	15
Edging .....	16
Edge Grinding Adjustments .....	16
Maintenance .....	17
General .....	17
Pre Maintenance Preparations .....	17
General Cleaning .....	17
Cleaning Techniques .....	17
Starter Switch Control Box .....	17
Motor .....	17
Part Lubrication .....	17
Post Cleaning .....	17
Service Schedule .....	18
Daily Service .....	19
Handlebar .....	19
Lubricate the Blade Shaft Bearings .....	19
Inspect the Drive Belt .....	19
Drive Belt Access .....	19

## TABLE OF CONTENTS

Belt Tensioning .....	19
Tensioning the Drive Belts.....	20
Replacing the Drive Belts .....	20
Motor .....	21
Disconnecting the Power to the Motor.....	21
Lifting .....	21
Transport .....	21
Prior to Transport .....	21
Transport.....	21
Storage .....	21
Disposal .....	21
Appendix A .....	23
Troubleshooting .....	23
Appendix B .....	24
Belt Tension Specifications .....	24
Power Cord Specifications .....	24
Appendix C .....	25
Additional Resources .....	25
Appendix D .....	26
Model and Serial Numbers.....	26

## INTRODUCTION

### **Introduction**

Welcome to the Diamond Products family and thank you for choosing Diamond Products equipment. At Diamond Products we are driven to ensure you are completely satisfied with your product and continually strive to improve our product line so that we can offer you the best possible equipment in the industry.

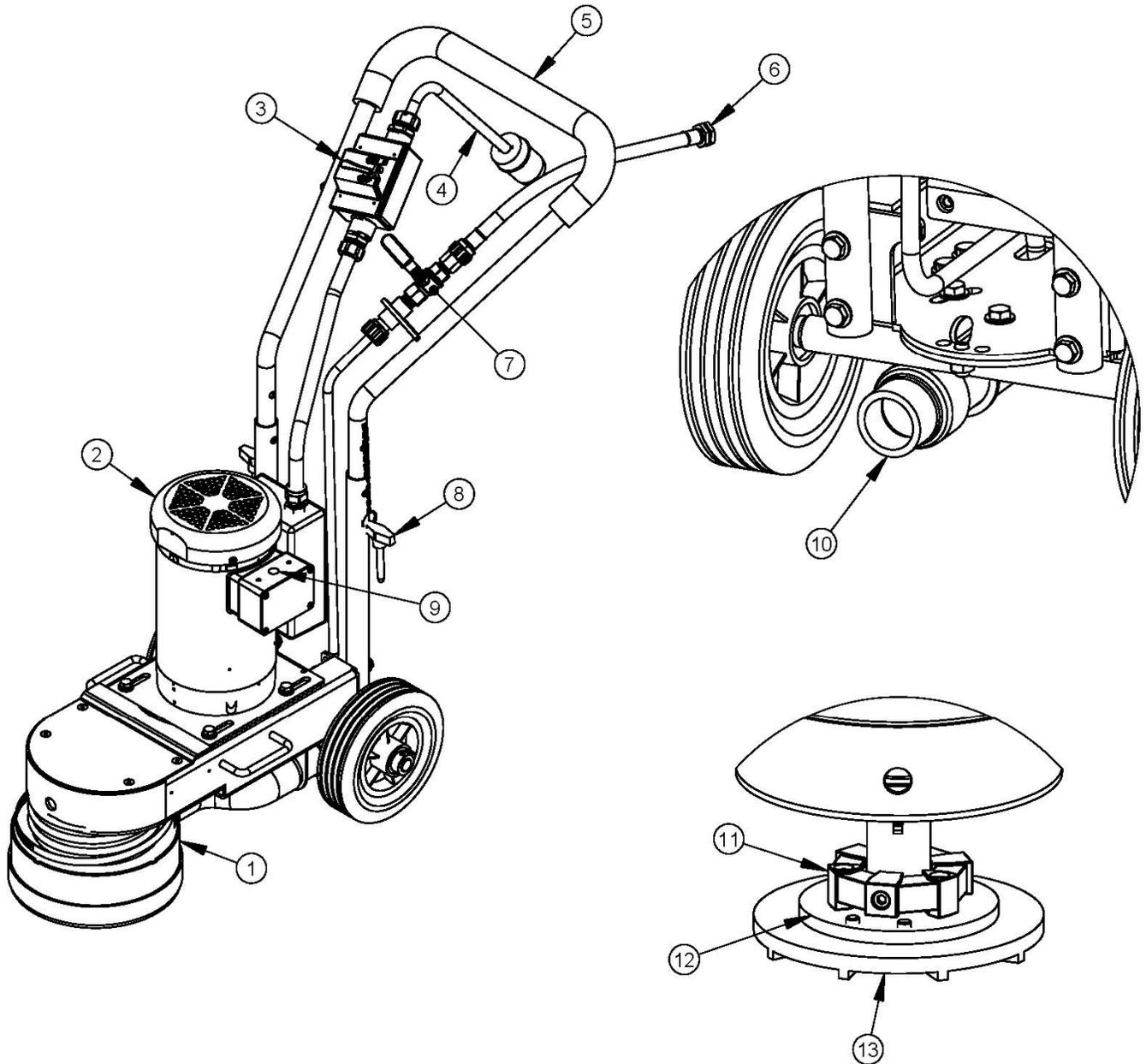
This operator's manual is a critical document that provides pertinent information regarding the safety, operation, maintenance, and care of your new equipment. Keep this manual available at all times. Operate the equipment and all of its components according to this manual. Failure to comply with and understand the following safety, operation and maintenance instructions can result in serious injuries and/or death. All operators must be properly trained or supervised by experienced personnel prior to using this floor grinder and should understand the risks and hazards involved. Diamond Products discourages improper or unintended equipment usage and cannot be held liable for any resulting damages.

Equipment modifications should be made by Diamond Products to ensure safety and design. Any modifications made by the owner(s) are not the responsibility of Diamond Products and void all equipment warranties if a problem arises as a result of the modification.

Refer to the Diamond Products Parts List for additional information and part diagrams. Refer to the motor manufacturer as the primary source for all safety, operations, and maintenance instructions regarding the motor. Prior to operating, record the floor grinder's serial number, and the motor's model and serial numbers in Appendix D.

# INTRODUCTION

## CPG80E Components

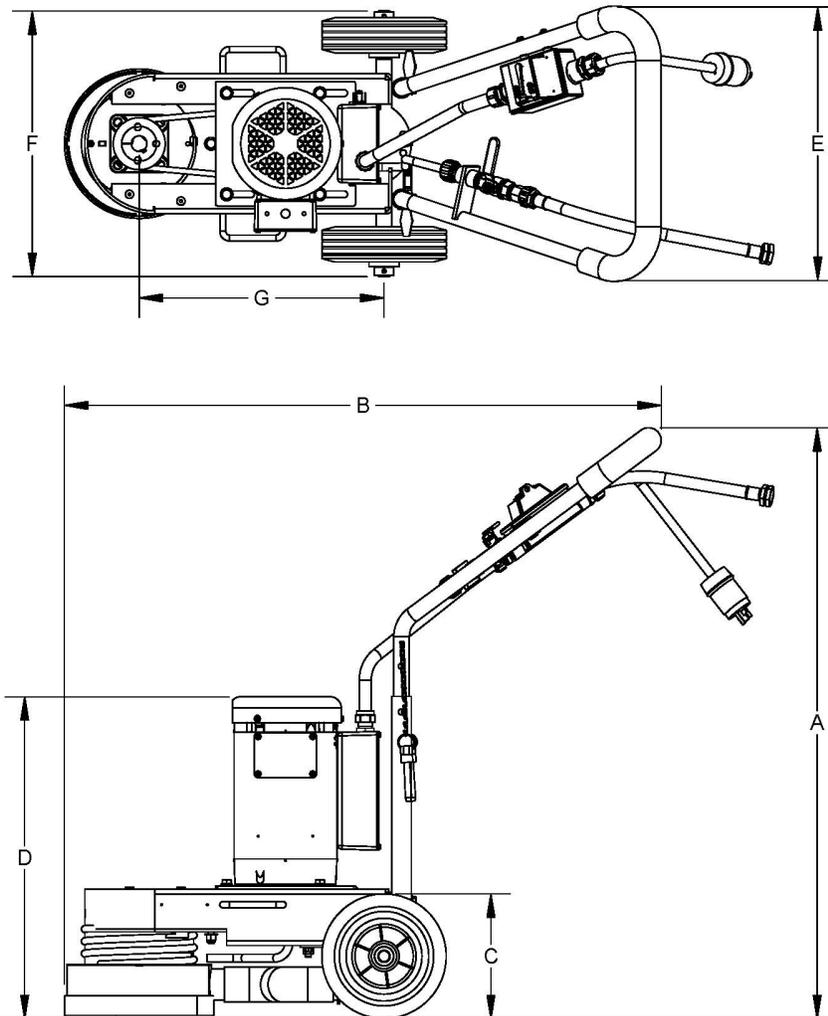


1. Front Guard
2. Motor
3. Motor Switchbox
4. Motor Power Plug
5. Handlebar
6. Water Supply Connection
7. Water Supply Valve

8. Handlebar Locking Pins
9. Motor Reset Button
10. Vacuum Attachment Port
11. Flex Coupling
12. Disc Mounting Plate
13. Grinding Head

# INTRODUCTION

## CPG80E Dimensions



CPG80E Dimensions		Inches	Millimeters
A	Grinder Height – Min. (Handlebar in lower position)	37	940
	Grinder Height – Max. (Handlebar in upper position)	40	1016
B	Grinder Length	41	1041
C	Wheel Height	8	203
D	Motor Height	20-1/2	521
E	Grinder Width	17-1/2	445
F	Rear Axle Width	17	432
G	Rear Axle to Drive Shaft Length	15-3/4	400

## INTRODUCTION

### CPG80E Specifications

Maximum Grinding Head Capacity	8"
Motor Model	Baldor 35U782T988C1
Rated Output Power	2 HP
Rated Voltage	115/230 V
Rated Speed	1725 rpm (Baldor rating)
Rated Frequency	60Hz.
Phase	1
Lubrication Type	NLGI #1 Lithium Synthetic grease
Grinding Head Shaft Size	1-3/4" OD
Grinding Head Shaft Bearings	1" Flange Bearing
Blade Shaft Drive	Motor: 2 V-Belt (3VX315)
Rear Axle Size	Rear: 1" OD pivoting
Rear Wheels	8" x 2" x 3/4" (roller ball bearings)
Handlebar Adjustment	Variable extension with 19" range

## SAFETY PRECAUTIONS

### Safety

Operate the equipment and all of its components according to this manual. Failure to comply with and understand the following safety, operation and maintenance instructions can result in serious injuries and/or death. All operators must be properly trained or supervised by experienced personnel prior to using this floor grinder and should understand the risks and hazards involved. Diamond Products discourages improper or unintended equipment usage and cannot be held liable for any resulting damages.

Equipment modifications should be made by Diamond Products to ensure safety and design. Any modifications made by the owner(s) are not the responsibility of Diamond Products and void all equipment warranties if a problem arises as a result of the modification.

Refer to the Diamond Products Parts List for additional information and part diagrams. Refer to the motor manufacturer as the primary source for all safety, operations, and maintenance instructions regarding the motor. Prior to operating, record the floor grinder's serial number, and the motor's model and serial numbers in Appendix D.

**Notice: The information in this manual may be updated at any time!**

### **Safety Alerts**



#### **DANGER**

Serious injuries and/or death will occur if these instructions are not followed.



#### **WARNING**

Serious injuries and/or death could occur if these instructions are not followed.



#### **CAUTION**

Mild and/or moderate injuries could occur if these instructions are not followed.

### **Proposition 65**

#### **PROPOSITION 65**



**WARNING:** Concrete cutting produces dust that can expose you to chemicals including Silica, crystalline (airborne particles of respirable size), which is known to the state of California to cause cancer. For more information go to:

**[WWW.P65WARNINGS.CA.GOV](http://WWW.P65WARNINGS.CA.GOV)**

### **Respiratory Hazards**



#### **WARNING**

Concrete cutting produces dust and fumes known to cause illness, death, respiratory disease, birth defects, and/or other reproductive harm. Safety protection techniques include, but are not limited to:

- Wearing gloves.
- Wearing safety goggles or a face shield.
- Using approved respirators.
- Washing work clothes daily.
- Using water when wet cutting to minimize dust.
- Washing the hands and face prior to eating/drinking.

For additional safety and self-protection information contact your employer, the Occupational Safety and Health Administration (OSHA), and/or The National Institute for Occupational Safety and Health (NIOSH).

## SAFETY PRECAUTIONS

### General Safety

- Read and understand all safety, operations, and maintenance instructions provided in this manual prior to operating or servicing the floor grinder.
- Keep equipment components clean and free of slurry, concrete dust, and debris.
- Inspect water hoses prior to operating the equipment. Clean, repair, or replace damaged components.
- Repair the equipment immediately when a problem arises.
- Replace equipment decals if unreadable.
- Dispose of all hazardous waste materials according to city, state, and federal regulations.
- Always have a phone nearby, and locate the nearest fire extinguisher and first aid kit prior to operating the equipment.
- Operate the equipment wearing flame resistant clothing.
- Underage or non-trained personnel should not operate the equipment.
- Keep all body parts away from rotating machinery.
- Replace all guards and access panels (unless stated otherwise) prior to operating the equipment.

### DO NOT:

- Assume the equipment will remain still when parking/stopping the equipment on a slope. Chock the wheels to help prevent unnecessary movement.
- Drop equipment, supplies, tools, etc., when handling to help prevent injuries.
- Lift and carry equipment, supplies, tools, etc., that are too heavy and/or cannot be lifted easily.

- Operate the equipment without using the appropriate safety equipment required for the work task.



- Operate or service the equipment with any clothing, hair, or accessories that can snag in the machinery, which could lead to serious injuries or death!
- Operate the equipment using attachments not associated with or recommended for the equipment.
- Operate the equipment around combustible materials.
- Operate the equipment with anyone near the work area.
- Operate the equipment until all unnecessary materials have been removed from the work area.
- Operate the equipment with loose nuts, screws, and bolts.
- Operate the equipment when ill or fatigued.
- Operate the equipment under the influence of drugs and/or alcohol.
- Operate the equipment on steep slopes.
- Grease the equipment with the motor running.
- Touch hot components when operating the equipment.
- Leave the equipment unattended until the motor is off and the blade has stopped.
- Place the equipment into storage until it has cooled down.
- Service the equipment until it has cooled down.
- Service the equipment with the motor running.

## SAFETY PRECAUTIONS

### **Grinding Safety**

- The direct work area should not contain buried or embedded electrical, gas, or water lines that could be damaged and/or cause personal injury while grinding.
- Turn off all electricity, gas, and water around the direct work area prior to grinding.
- Inspect the work area to ensure nothing will impede full control of the machine at all times.
- DO NOT allow any person, animal, and/or objects in and around the work area while grinding.
- Ensure the work area is adequately illuminated to ensure safe operation of the machine.
- Disconnect power when not in use, before servicing, and when changing the grinding head.

### **Belt Safety**

- Turn off the motor and let the belt cool down prior to servicing it.
- Regularly inspect the belt for fraying, stress cracks, and/or breakage and replace immediately when damaged. Always check the belt alignment prior to operating the equipment.
- Use extreme caution when working with belts and rotating machine parts to avoid entanglement.
- Over-tensioning the belt may reduce the life of the blade shaft bearings. Under-tensioning the belt may cause slippage, shorter belt life, and/or poor equipment performance.
- Squealing belts indicate looseness.

### **Transporting Safety**

- Remove the grinding head prior to transporting the equipment.
- Chock the wheels and secure the floor grinder in the truck/trailer prior to transporting.
- Ensure the grinding head does not make contact with the ground and/or other surface when transporting the floor grinder.
- Refer to the Department of Transportation (DOT) for additional transportation recommendations.

### **Lifting Safety**

- Move yourself and all others away from the lifting area when hoisting the floor grinder to prevent being crushed.
- DO NOT attempt to lift the floor grinder irresponsibly and/or improperly.



## Operating

### **General Operating Precautions**

- Prior to operating the machine, read the operator's manual thoroughly and ensure that you understand the safe and proper operation of the machine.
- Use approved personal protective equipment at all times while operating the machine.
- Ensure that there is firefighting equipment and a first aid kit nearby while operating the machine.
- Ensure the grinding area is free of obstructions, people, and or animals prior to operating the machine.
- Always operate the machine from the operator's position at the rear of the machine.
- Ensure that the proper grinding head is used for the application.

### **Handlebar**

The handlebar helps the operator guide and maneuver the floor grinder. It is important to have the handlebar set to a comfortable working height. There are two height settings for the floor grinder. The lower setting will set the handlebar at a height of 37" and the upper setting will place it at 40".



Handlebar

### *Adjusting the Handlebar*

1. Pull out the two T-handle locking pins from the handlebar support tubes.



T-Handle Locking Pins

2. Adjust the handlebar up or down to the desired working height.
3. Align the holes in the handlebar with the hole in the support tube and reinsert the two T-handle locking pins into the handlebar support tube to secure.

### **Diamond Grinding Head**



#### **WARNING**

- DO NOT use damaged grinding heads when grinding to avoid harming yourself, others, or the floor grinder.
- Always use an appropriate type of grinding head based on the type of material being ground.

Using the proper grinding head preserves the grinding head and improves grinding and operator efficiency, resulting in lower costs.

### *Inspecting the Grinding Head*

Inspect each grinding head prior to installation and discard all damaged grinding heads. Inspect all grinding heads for:

- Cracks, nicks, and dents
- A damaged and/or deformed arbor (center hole)
- A deformed blade circumference
- Segment loss and/or segment cracks
- Core wear
- Bending

## OPERATING

### Installing the Grinding Head



#### WARNING

- DO NOT install a grinding head with the motor running. Failure to properly secure the grinding head may cause parts to loosen or fall off the saw.



#### CAUTION

- Wear gloves and be alert to the surrounding environment when handling grinding heads.

1. Pull back on the handlebar and lay the floor grinder on the ground into the grinding head assembly position.



Grinding Head Assembly Position



Disk Mounting Flange

2. With the disk mounting flange exposed, place the grinding head onto the flange and align the four bolt holes.

3. Attach the grinding head to the flange by installing four 3/8"-16 flat head cap screws through the grinding head into the disk mounting flange and tighten to secure.



Grinding Head Bolts

4. Pull the floor grinder back up into the normal operating position.

### Removing the Grinding Head



#### CAUTION

- DO NOT remove a grinding head with the motor running.

1. Pull back on the handlebar and lay the floor grinder on the ground into the grinding head assembly position.



Grinding Head Assembly Position

2. Remove the four 3/8"-16" flat heat cap screws attaching the grinding head to the disk mounting flange
3. Pull the floor grinder back up into the normal operating position.

### Motor

The CPG80E floor grinder uses a 2 HP, 115/230 V, single phase electric motor rated at 1725 RPM.

The motor is controlled through a switch box assembly. The switch box allows the operator to start and stop the motor.

The motor is protected by a thermal overload. In the event that the motor overheats, the thermal protector circuit will open shutting the motor off. If this occurs, turn the motor control switch to OFF and allow the motor time to cool. When the motor has cooled, press the reset button located on the motor. A click indicates that the motor is reset and can now be restarted.



#### WARNING

DO NOT leave the saw unattended while the motor is running.

### Starting the Motor

1. Ensure the floor grinder is in the normal operation, raised, position.
2. Connect the floor grinder to a power source using a properly sized power cord in accordance with Appendix B.



#### CAUTION

Use of a wire gauge that is too small will cause loss of power or overheating and will damage the electric motor

3. Push down on the handlebar to reduce the pressure of the grinding head on the ground.
4. Move the starter switch to the ON
5. Allow the motor to come up to full operating speed.

### Stopping the Motor



#### CAUTION

DO NOT leave the grinder unattended until the motor is off and the grinding head has stopped spinning.

1. Move the starter switch to the OFF position.

2. Maintain contact between the grinding head and the ground until the grinding head comes to a full stop.
3. Disconnect the floor grinder from the power source.

### Vacuum Port

When dry grinding it is required to have a dust containment system used in conjunction with the floor grinder. A dust port is located at the back of the grinder to attach a vacuum. Connect the vacuum to the port using a 2 inch (50mm) hose.

Ensure that the vacuum filters are clean prior to use and that the rubber skirt on the front guard is in contact with the ground at all times during operation.



Dust Port

### Water Supply

The floor grinder is equipped with a water supply connection located on the left side of the handlebar. The water is metered through the water supply to the grinding head to cool the head and minimize dust.



**Water Supply Valve**

### **Grinding**

#### *Tasks Prior to Grinding*

Complete the following tasks prior to grinding

- Ensure the handlebar is securely attached and at the desired working height.
- Inspect the grinding head and shaft for damage and repair or replace as required.
- Make sure that the grinding head is suitable for the job.
- Ensure there is a water source available if wet grinding.
- Ensure there is an adequate dust collection system available if dry grinding.
- Verify that the power cord is properly sized for the job in accordance with Appendix B.
- Turn off all electricity, gas, and water around the direct work area.

#### *Dry Grinding*

1. Connect a dust collecting vacuum system to the dust port.
2. Connect the floor grinder to a power source using a properly sized power cord in accordance with Appendix B.



Use of a wire gauge that is too small will cause loss of power or overheating and will damage the electric motor

3. Start the dust collecting vacuum system in accordance with the manufacturer's instructions.
4. Push down on the handlebar to reduce the pressure of the grinding head on the ground.
5. Move the starter switch to the ON position.
6. Allow the motor to come up to full operating speed.
7. With both hands firmly on the handlebar, move the grinder from side to side ensuring not to stop in one spot too long as this will lead to grooving of the surface.
8. Keep the rubber skirt on the front guard assembly firmly on the surface to ensure proper dust collection.
9. When the grinding is complete, move the starter switch to the OFF position.
10. Maintain contact between the grinding head and the ground until the grinding head comes to a full stop.
11. Disconnect the floor grinder from the power source.
12. Turn off the dust collecting system in accordance with the manufacturer's instructions.

#### *Wet Grinding*

1. Ensure water control valve is in the shut position and connect a water supply hose to the inlet of the water control valve.
2. Connect the floor grinder to a power source using a properly sized power cord in accordance with Appendix B.



Use of a wire gauge that is too small will cause loss of power or overheating and will damage the electric motor

3. Ensure that water is available to the water control valve and open the valve to begin flow to the grinding head.
4. Push down on the handlebar to reduce the pressure of the grinding head on the ground.
5. Move the starter switch to the ON position.
6. Allow the motor to come up to full operating speed.

7. With both hands firmly on the handlebar, move the grinder from side to side ensuring not to stop in one spot too long as this will lead to grooving of the surface.
8. Keep the rubber skirt on the front guard assembly firmly on the surface to minimize slurry spray.
9. When the grinding is complete, move the starter switch to the OFF position.
10. Maintain contact between the grinding head and the ground until the grinding head comes to a full stop.
11. Shut the water control valve.
12. Disconnect the floor grinder from the power source.
13. Turn off the water supply and disconnect the supply hose to the grinder.

**Edging**

The CPG80E low profile floor grinder has the capability of edge grinding close to walls. The rear axle is designed to be adjusted to allow for both left and right hand edge grinding.

*Edge Grinding Adjustments*

1. On the rear axle, remove the thumb screw from the rear axle weldment.
2. Using a 9/16" wrench, loosen the two adjustment bolts to allow for rotation of the rear axle.



**Rear Axle Adjustment**

3. For right side edge grinding, rotate the wheels to the left.



**Right Side Edge Grinding**

4. For left side edge grinding, rotate the wheels to the right.



**Left Side Edge Grinding**

5. When the rear axle is properly aligned, tighten the two adjustment bolts.
6. Reinstall the thumb screw and tighten to secure the axle in place.
7. Operate the grinder in accordance with either the dry or wet grinding instructions called out in this manual.

## Maintenance

### **General**

Failure to read and comply with the maintenance instructions provided in this manual prior to performing maintenance may result in serious injuries and/or death, and may harm the floor grinder. DO NOT attempt to perform maintenance on the floor grinder if you are not properly trained for it, or are not supervised by an experienced person.

Refer to the CPG80E Parts List for additional information and part diagrams when performing maintenance tasks. Refer to the motor manufacturer as the primary source for all safety, operations, and maintenance instructions for the motor. Contact the floor grinder and/or motor manufacturer with any additional questions.

Remove all necessary guards and access panels prior to servicing the floor grinder. Replace prior to operating.

### **Pre Maintenance Preparations**

- Ensure the floor grinder is in a safe area to conduct maintenance.
- Maintain proper cleanliness of the work area to minimize personnel injury or equipment damage.
- Ensure the floor grinder is sufficiently cool to conduct any maintenance.
- Remove the grinding head prior to starting any maintenance.
- Place the floor grinder on a level surface with the motor turned off.
- Ensure there is adequate lighting in the work area to ensure safety.
- Ensure all equipment and tools required for the maintenance task are staged and available for use.
- Prior to any maintenance being performed, know the locations of all safety equipment such as fire extinguishers, first aid kits, etc.
- All maintenance shall be performed by qualified personnel only.

### **General Cleaning**

The floor grinder must be cleaned after each use and prior to conducting any maintenance. Ensure that the floor grinder is cool prior to

cleaning. Ensure affected electrical equipment is properly covered or de-energized prior to cleaning with water or air.

### *Cleaning Techniques*

Various cleaning options can be utilized depending on the type of cleaning required. High pressure washers and a mild detergent will work the best. Compressed air and low pressure water can also be utilized where required.



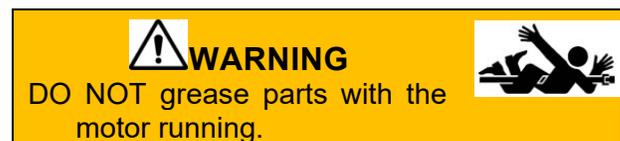
### *Starter Switch Control Box*

Do not spray water on the starter switch control box to clean. Use a damp cloth or compressed air to clean electrical components. Dry the starter box panel after cleaning.

### *Motor*

Use a mild detergent and water to clean the motor. Do not spray water forcefully on the motor to prevent damage to components.

### **Part Lubrication**



Lubricate all necessary parts on schedule for maximum floor grinder efficiency. Use one half to one full pump of NLGI No. 1 premium, lithium-based grease when lubricating all grease fittings.

### **Post Cleaning**

- Lubricate the machine as required.
- Dry all electrical components using compressed air.
- Do not start the machine until it has had time to thoroughly dry.

## MAINTENANCE

### Service Schedule

The service schedule is based primarily on the standard operating time of the machine. The frequency of the maintenance tasks can be increased based on the working environments of the machine.

Task	Cycle
	Daily
Visually inspect floor grinder for damage and repair as necessary	X
Wipe down and clean all components for dust and debris	X
Check for loose or frayed wiring. Repair/replace as necessary	X
Check for loose nuts and bolts and retighten	X
Lubricate blade shaft bearings (End of work day)	X
Inspect the drive belt for tension or wear and re-tension or replace as necessary	X <sup>1</sup>

1. Inspect the belt after the first four hours and then daily.

**Daily Service**

**Handlebar**

The handlebar generally requires little or no maintenance and, when used correctly, should remain in good, working condition. Inspect the handlebar occasionally for bending, unusual cracks, and/or breakage. Replace it immediately when damaged.

**Lubricate the Blade Shaft Bearings**

 **WARNING**  
DO NOT grease parts with the motor running. 

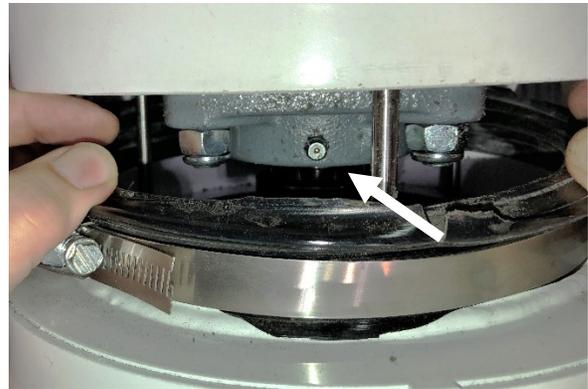
Lubricating the blade shaft bearings on schedule increases the floor grinder's efficiency and life. Use NLGI No. 1 premium lithium-based grease when lubricating parts. Use one-half to one full pump of grease when lubricating grease fittings.

At the end of each work day, lubricate the two blade shaft bearings. Locate the upper and lower blade shaft bearing grease fittings located under frame base at the front of the floor grinder. To access the lower blade shaft bearing, pull down on the flexible hose.

1. Add no more than one pump of bearing grease into each of the two blade shaft bearing grease fittings.



Upper Blade Shaft Bearing Grease Fitting Access



Lower Blade Shaft Bearing Grease Fitting  
(Flexible Hose Pulled Down)

**Inspect the Drive Belt**

Inspect the drive belt after the first four hours of use and then daily for tension or wear. Retension or replace as required.

**Drive Belt Access**

1. Remove the four 1/4"-20 flat head cap screws from the pulley shield.
2. Remove the pulley shield.



Pulley Shield

**Belt Tensioning**

When tensioning belts, DO NOT exceed the manufacturer's recommended belt tension settings as specified in Appendix B.

*NOTE: Over-tensioning belts may damage the motor. Under-tensioning belts may cause slippage, shorter belt life, and/or poor floor grinder performance. Squealing belts indicate looseness.*

## Tensioning the Drive Belts

1. Using a 9/16" wrench, loosen the four motor mounting bolts on the motor base.



Motor Mounting Bolts

2. Using a 1/4" hex drive, turn the drive belt tensioning bolt clockwise to tighten or counter-clockwise to loosen the belts.



Drive Belt Tensioning Bolt

3. Tension the belts as required and retighten the four motor mounting bolts on the motor base.

## Replacing the Drive Belts

### **WARNING**

De-energize the power to the floor grinder by unplugging the power cord prior to removing V-belts



1. Remove the four 1/4"-20 flat head cap screws from the pulley shield.
2. Remove the pulley shield.



Pulley Shield

3. Using a 9/16" wrench, loosen the four motor mounting bolts on the motor base.



Motor Mounting Bolts

4. Using a 1/4" hex drive, turn the drive belt tensioning bolt counter-clockwise and push the motor forward to loosen the belts.



Drive Belt Tensioning Bolt

4. Remove the old belts and install two new belts.
5. Push the motor backward until there is no slack in the belts.
6. Turn the drive belt adjusting bolt clockwise to tension the belts.
7. Tension the belts as required and retighten the four motor mounting bolts on the motor base.
8. Reinstall the pulley cover.

### **Motor**

**WARNING**

Let the motor cool down prior to servicing the floor grinder. DO NOT service the floor grinder with the motor running (unless stated otherwise).



**Refer to the motor manual and manufacturer for a full motor maintenance schedule and additional motor maintenance information.**

### **Disconnecting the Power to the Motor**

Whenever maintenance is being conducted on the floor grinder, disconnect the power to the motor by unplugging the power cord.

### **Lifting**

**CAUTION**

Always use a strap to lift the machine. Ensure the strap is rated high enough to handle the load.

1. Ensure the work area is clear of any obstructions and all personnel are at a safe distance prior to lifting the machine.
2. Using a properly rated strap, place the strap around the frame lift using a basket style hitch.
3. Slowly lift the machine only high enough to conduct the required work.

### **Transport**

#### **Prior to Transport**

1. Remove the grinding head.
2. Remove the T-handle locking pins from the handlebar support tubes.
3. Lift the handlebar out of the support tubes and rotate it so that the handlebar is facing forward.
4. Reinstall the handlebar into the handlebar support tubes.
5. Reinstall the T-handle locking pins into the handlebar support tubes to secure the handlebar.

#### **Transport**

- Always secure the floor grinder when transporting to avoid damage.
- Avoid exposing the floor grinder to the elements while transporting.

#### **Storage**

- Always clean the floor grinder before storing.
- Store the floor grinder in a safe area away from unauthorized personnel.
- Store the floor grinder in a dry area.

#### **Disposal**

Dispose of the floor grinder when it's no longer repairable, and/or contains safety hazards not worth repairing or maintaining.

Transport the floor grinder to a salvage yard or recycling facility.



## REFERENCES

### Appendix A

#### **Troubleshooting**

<b>Troubleshooting the CPG80E Floor Grinder</b>		
<b>Symptom</b>	<b>Problem</b>	<b>Solution</b>
1. Motor will not start.	Not connected to power source?	Connect to power source.
	Starter switch in OFF position?	Move switch to ON position.
	Thermal overload tripped?	Press the red "RESET" button on motor and restart.
2. Motor shuts off during operation.	Thermal overload tripped?	Press the red "RESET" button on motor and restart.
	Loss of power supply?	Check plug connection. Use new power supply.
3. Short belt life.	Loose belts causing slippage?	Check and adjust belt tension.
	Sheaves misaligned?	Use straightedge to check blade shaft sheave alignment. Adjust as necessary.
	Worn sheave grooves?	Check for groove wear and replace sheaves when necessary.
	Overheating of belts?	Check and adjust belt tension.

## REFERENCES

### Appendix B

#### ***Belt Tension Specifications***

	New Belt	Used Belt
Static Tension (per rib/strand)	31 to 33 lbf.	26 to 29 lbf.
Static Belt Pull (total pull)	61 to 66 lbf.	53 to 57 lbf.
Rib/Strand Deflection Distance	0.14 in.	0.14 in.
Rib/Strand Deflection Force	2.0 to 2.1 lbf.	1.7 to 1.9 lbf.
Sonic Tension Meter	137 to 147 N	117 to 127 N
Belt Frequency	110 to 114 Hz.	101 to 106 Hz.

#### ***Power Cord Specifications***

CPG80E Recommended Power Cord Gauge - 1 Phase						
Horsepower	Phase	Voltage	Amps	50ft Cord	100ft Cord	150ft Cord
2	1	115	16	#10	#8	#6
2	1	230	8	#14	#14	#12



#### **CAUTION**

Use of a wire gauge that is too small will cause loss of power or overheating and will damage the electric motor

### Appendix C

#### **Additional Resources**

1. Diamond Products ([www.diamondproducts.com](http://www.diamondproducts.com))
  - *CPG80E Floor Grinder Parts List; #1801138*
  - *A Guide for Professional Concrete Cutters*
  - *Training Manual – Introduction to Diamond Blades, Bits, and Equipment*
  - *Diamond Products' Equipment Catalog*
  - *Diamond Products' Website ([www.diamondproducts.com](http://www.diamondproducts.com))*
2. Concrete Sawing and Drilling Association ([www.csda.org](http://www.csda.org))
  - The CSDA has many helpful concrete cutting publications available to members and non-members.
3. Association of Equipment Manufacturers ([www.aem.org](http://www.aem.org))
  - The AEM has a variety of safety and technical manuals available for various types of equipment, along with a list of industry-standardized safety symbols.
4. Occupational Safety & Health Administration (OSHA) ([www.osha.gov/](http://www.osha.gov/))
  - OSHA provides information on work-related safety and health practices.
5. The National Institute for Occupational Safety and Health (NIOSH) ([www.cdc.gov/NIOSH/](http://www.cdc.gov/NIOSH/))
  - NIOSH provides information on work-related safety and health practices.

## REFERENCES

### Appendix D

#### **Model and Serial Numbers**

Record the floor grinder's serial number below for future reference and customer service purposes.

Serial Number	
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Record the motor's model and serial numbers below for future reference and customer service purposes.

Model Number	
Serial Number	

## *REFERENCES*

## **EQUIPMENT AND PARTS WARRANTY**

Diamond Products warrants all equipment manufactured by it against defects in workmanship or materials for a period of one (1) year from the date of shipment to Customer.

The responsibility of Diamond Products under this Warranty is limited to replacement or repair of defective parts at Diamond Products' Elyria, Ohio factory, or at a point designated by it, of such parts as shall appear to us upon inspection at such parts, to have been defective in material or workmanship, with expense for transportation and labor borne by Customer.

In no event shall Diamond Products be liable for consequential or incidental damages arising out of the failure of any Product to operate properly.

Integral units such as engines, electric motors, batteries, transmissions, etc., are excluded from this Warranty and are subject to the prime manufacturer's warranty.

**THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND ALL SUCH OTHER WARRANTIES ARE HEREBY DISCLAIMED.**



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