

G-290

Operator's Manual



CPS

Concrete Polishing Solutions

Contents

| | |
|--|-----------|
| Contact Information..... | 4 |
| 1.0 GENERAL INFORMATION | 5 |
| 1.1 Warranty Information | 5 |
| 1.2 Return Policy | 5 |
| 1.3 Damaged Shipments | 5 |
| 1.4 Liability..... | 6 |
| 1.5 Customer Service and 24/7 Technical Support..... | 6 |
| 1.5.1 Contact Information and Additional Support: | 6 |
| 2.0 SAFETY | 7 |
| 2.1 Special Symbols | 7 |
| 2.2 Safety Rules | 7 |
| Warning | 8 |
| 8 | |
| • Training is required before operating this machine..... | 8 |
| Concrete Polishing Solutions machines should be used only in the manner CPS recommends. | 8 |
| Proper Personal Protective Equipment (PPE): | 8 |
| Precautions:..... | 8 |
| 3.0 TRANSPORTATION OF YOUR MACHINE..... | 9 |
| 3.1 Storage | 9 |
| 4.0 MACHINE INFORMATION..... | 10 |
| 4.1 Machine Diagram..... | 11 |
| 5.0 PREPARING THE MACHINE | 13 |
| 5.1 General..... | 13 |
| The following information is intended to provide you with general instruction on how to properly operate your G-290 Propane machine. Be sure to follow all workplace safety regulations and rules when operating the machine. Training in proper techniques and methods is available through CPS and its distributors. To find a training near you and more visit www.go2cps.com | 13 |
| 5.2 Adjusting The Handle | 13 |
| 13 | |
| 5.3 Attaching Tooling | 14 |
| 5.4 Attaching the Dust Skirt | 15 |
| 5.5 Attaching the Vacuum Hose | 16 |
| 5.6 Attaching the Propane Tank | 17 |
| 6.0 OPERATING THE MACHINE | 18 |
| 6.1 Control Panel..... | 18 |
| 6.2 Starting The Machine..... | 19 |
| 6.3 Grinding Weights | 20 |
| 20 | |
| 7.0 MAINTENANCE..... | 21 |
| 7.1 Cleaning The Machine..... | 21 |
| 21 | |

| | |
|--|-----------|
| | 21 |
| 7.2 Before Beginning Work | 21 |
| 7.3 Every 100 Hours of Operation | 21 |
| 7.4 Every 200 Hours of Operation | 22 |
| 7.5 Every 300 Hours of Operation | 22 |
| 8.0 TROUBLESHOOTING | 23 |
| 8.1 Repairs | 24 |
| 8.2 Replacement Parts | 24 |
| 9.0 ACCESSORIES..... | 25 |
| 9.1 Plates..... | 25 |
| 25 | |
| 9.2 Tooling..... | 25 |
| 10.0 MAINTENANCE INDEX..... | 26 |
| 10.1 Rebuilding Flex Heads..... | 27 |
| 28 | |

Contact Information

Concrete Polishing Solutions

PO Box 520

Norris, TN 37828

877.472.8200

www.go2cps.com

1.0 GENERAL INFORMATION

1.1 Warranty Information

Concrete Polishing Solutions (CPS) warrants to the purchaser that under normal use and service, the G-290 grinder purchased hereunder shall be free from defects in material and workmanship for a period of 1 year, or 300 hours. Expendable or consumable items or parts are not covered under this warranty. This warranty does not cover equipment or parts which have been misused, altered, neglected, handled carelessly, or used for purposes other than which they have been manufactured. Further, this warranty does not cover loss, damages resulting from accident, or damages resulting from an unauthorized service

1.2 Return Policy

Please open and inspect your order promptly upon receipt. Should you find an issue with the contents, please contact a member of the CPS sales and technical staff first, so they can resolve the issue as quickly as possible.

Any returns must be made within 30 days of delivery and must be accompanied by a return authorization number, as well as a copy of the original invoice. CPS will then review the complaint and inspect the merchandise before a credit can be processed.

Any items that are returned because of obvious misuse will be shipped back to the sender at their expense and no credit shall be issued.

Any returned items, including items under warranty, must be sent at the customer's expense. No authorization number is necessary if you are returning an item for repair that will be returned back to you after said repairs.

Before you return an item, CPS asks that you first call a member of the sales and technical staff at 877.472.8200 and provide your company name, address, telephone number, and a brief statement explaining the problem.

If an item was delivered to you in error, please let CPS know and the item will be picked up at CPS' expense. If your order contains a shortage, report the shortage no later than 24 hours after receiving your shipment. Shortage claims will be honored only when reported promptly.

CPS cannot accept any products that have been either modified to a customer's specifications, or is a non-stocking special order item. Any products, such as machines or other equipment that sustain aftermarket alterations not pre-approved by CPS are not returnable.

1.3 Damaged Shipments

CPS carefully inspects all orders prior to shipment and then packs shipments as carefully as possible. CPS advises that you thoroughly check all cartons before you sign for the order. Any claims for merchandise damaged in transit must be filed with the delivering carrier, not CPS.

1.4 Liability

Important Notice:

The following is made in lieu of all warranties, expressed or implied. CPS and/or manufacturer's only obligation shall be to replace such quantity of product proved to be defective, provided that such guarantees or replacements are a stated policy of the manufacturer. CPS and/or manufacturers shall not be liable for any injury, loss, or damage whether direct, incidental, or consequential, arising from the negligence or misuse of the product. Before using, user shall determine the suitability of the product for its intended use and the user assumes all risk and liability whatsoever in connection therewith. The foregoing may not be altered, except by an agreement signed by at least two of the officers of Concrete Polishing Technologies, Inc. CPS will not be liable for delays in shipping due to circumstance beyond the control of CPS. Warranties will be null and void if after-market alterations, changes, or modifications have been made to the equipment.

1.5 Customer Service and 24/7 Technical Support

Concrete Polishing Solutions has a well-trained service department, as well as an exceptional sales and technical staff, who have extensive knowledge on how to service our equipment. Being the manufacturer, CPS best understands its equipment and already stock parts to service equipment. CPS can send you the parts to help you service your own equipment over the phone. In many locations, CPS can provide the information of a service person in your area who will be happy to assist you with parts and service.

If you do need to contact the Service Department, you will need to provide the product model and serial numbers to the person assisting you. You can reach the CPS Service Department 24/7 by calling 877.472.8200 or via email at info@go2cps.com.

CPS provides technical support to our customers twenty-four hours a day, seven days a week. Trained representatives will be happy to help you with any questions you may have. Please feel free to contact CPS any time of day or night for assistance by calling 877.472.8200 or emailing info@go2cps.com.

This operator's manual provides instruction for safe, trouble-free operation of your machine. Anyone who will be operating or maintaining your machine are required to read and understand the information herein.

This manual provides insight into safety messages and controls to help you operate the machine safely. It also provides answers to specific questions about operation and servicing. There is an index located in the back of the manual that will assist you in finding information quickly within this manual.

Owners and operators must keep the owner's manual available for frequent reference. Contact CPS for assistance, information, or additional copies of this manual.

1.5.1 Contact Information and Additional Support:

If you are in need of assistance, contact CPS Customer Service, day or night:

By phone: 877.472.8200

By email: info@go2cps.com

For informational videos on CPS equipment, including instructional videos and tips for bidding and more, visit CPS on YouTube by searching Concrete Polishing Solutions and clicking 'Subscribe'. Follow us on Facebook at <http://www.facebook.com/concretepolishingsolutions>.

2.0 SAFETY

This operator's manual provides instructions for safe, efficient, and trouble-free operation of your machine. You and anyone else who will be using or maintaining the machine are required to read and understand the information contained in this manual. Owners and operators must keep the owner's manual available for frequent reference. Contact Concrete Polishing Solutions if you need any assistance, information, or additional copies. The G-290 machines are designed to be used by a professional. The user is expected to have good knowledge and understanding of the user and safety instructions before operating, inspecting, or adjusting the machine.

2.1 Special Symbols

The symbols below represent a need for extra consideration when using the G-290 Propane Machine.

Special Symbols

Throughout this manual, you will see symbols that accompany important information at a glance, including warnings to prevent machine damage, injury, or death. Please pay close attention to warnings.



Use Caution

This symbol and text highlights potential hazards or death to the operator or bystanders and/or property damage if proper procedures are ignored.



Tip

Text following this symbol indicates advice on operating the machine most effectively.

2.2 Safety Rules

It is imperative to follow all safety instructions herein, as well as ensuring that safety guidelines are followed by anyone in the vicinity of work being done with the G-290, along with any current workplace safety regulations or rules.

Work should only be performed by a trained professional. Each operator of the machine should be familiar with the manual and should be aware of the risks of incorrect use or operation.



Warning

- **Training is required before operating this machine.**
- **Keep machine out of the vicinity of children.**
- **Do not allow children on or near the machine.**
- **Those with impaired mental, physical, or sensory abilities should not operate the machine.**

Concrete Polishing Solutions machines should be used only in the manner CPS recommends. Anyone using the G-290 should know about:

- Machine Functions
- Emergency Stop Procedure
- Workplace Safety Rules

The operator of the machine:

- Should ensure that no unauthorized person is in the area when the machine is started.

The workplace:

- Should be suitable to using a propane grinder, including proper ventilation
- Should be free of debris and loose objects that could potentially be thrown out by the machine
- Should be free of exposed bolts or other implements that could damage the machine or cause injury.

Proper Personal Protective Equipment (PPE):

- Safety Goggles
- Protective Gloves
- Steel Toe Safety Shoes
- Hearing Protection
- Respiratory Mask
- Do not wear clothing that is loose-fitting, as it could become caught or snagged by the machine, including scarves, bracelets, or rings.

Precautions:

- Be sure that propane tank and hose are free of holes and leaks and is properly attached to the grinder at all times.
- Maintenance and service should only be performed by qualified personnel or certified servicers.
- Access to a clearly marked fire extinguisher should be provided at all times.
- Do not perform maintenance or service on live or operational machines. Machine should be turned off before any service or maintenance is completed.

3.0 TRANSPORTATION OF YOUR MACHINE

To transport the G-290:

1. Place the handle in the upright position and lock the handle pin.
2. Carefully pull the machine back, using a foot placed on the weights to gain leverage.
3. Transport the machine using the wheels, with the machine tipped back.



Warning

- **Strap down equipment securely (across non-moving parts) when transporting from jobsite. Unsecure or unanchored equipment can cause property damage, injury, or death.**
- **Be sure to place hands in the center of handlebars when lowering and raising the machine. The placement increases stability and reduces the risk of machine tilting**



Tip

- **Make sure machine weights are in their upright position when attempting to transport the machine. The weights exert 150 pounds of downward pressure when engaged, making tilting back the machine for transport much more difficult and dangerous.**

3.1 Storage

Store your CPS grinder in an area that is dry. Long exposure to cold or damp conditions can damage the grinder.

4.0 MACHINE INFORMATION

Your G-290 machine was carefully inspected and protectively packaged to prevent damage in shipment. We suggest that upon removing the unit from its carton, you carefully inspect it for any possible damage in transit. Immediately notify the transportation company who delivered your machine.

CPS grinders are equipped to handle various types of jobs, including surface preparation, grinding, and polishing of concrete flooring. The G-290 is equipped with three grinding heads upon which plates and tooling for different applications can be attached. For more information on CPS tooling visit <http://www.go2cps.com/tooling.html>

The following items should be included with the delivery of your machine. Please notify CPS if anything is missing:

1. One (1) G-290 D Propane Grinder
2. One (1) Dust Skirt
3. One (1) Propane Tank
4. One (1) Operator's Manual

| G-290 Propane | |
|---------------------------|-------------------------|
| Power: | 850 lbs |
| Grinding Pressure: | 550-700 lbs |
| Grinding Width: | 32" |
| Power Required: | Vapor Draw Propane Tank |
| Engine: | 31 HP |
| RPM: | 1400-3500 |

| G-290 Electric | |
|---------------------------|--------------------|
| Weight: | 655lbs |
| Grinding Pressure: | 400-470lbs |
| Grinding Width: | 29" |
| Power Required: | 3-Phase/230v/30amp |
| Engine: | 10 HP |

4.1 Machine Diagram

G-290 Propane

- 1. Grinding Head Assembly
- 2. Kawasaki Engine
- 3. Safety Shroud
- 4. Two Dust Exhaust Ports
- 5. Chassis
- 6. Water Tank
- 7. Control Box (Start/E-Stop)
- 8. Weights
- 9. Adjustable Handlebars
- 10. Propane Tank



G-290 Propane

- 1. Grinding Head Assembly
- 2. Kawasaki Engine
- 3. Safety Shroud
- 4. Two Dust Exhaust Ports
- 5. Chassis
- 6. Water Tank
- 7. Control Box (Start/E-Stop)
- 8. Weights
- 9. Adjustable Handlebars
- 10. Propane Tank



5.0 PREPARING THE MACHINE

5.1 General

The following information is intended to provide you with general instruction on how to properly operate your G-290 Propane machine. Be sure to follow all workplace safety regulations and rules when operating the machine. Training in proper techniques and methods is available through CPS and its distributors. To find a training near you and more visit www.go2cps.com

5.2 Adjusting The Handle



When adjusting the handle, first, locate the pin (circled on the drawing above). While holding the handle bars with one hand, press the lock in and pull the pin out fully. Raise or lower the handlebars as needed, being sure to secure the handle with the pin when the handlebars are in the desired position.



Warning

- Whenever moving the handle of the machine, be sure that it locks into position. Failure to lock the handle can lead to injury.



Tip

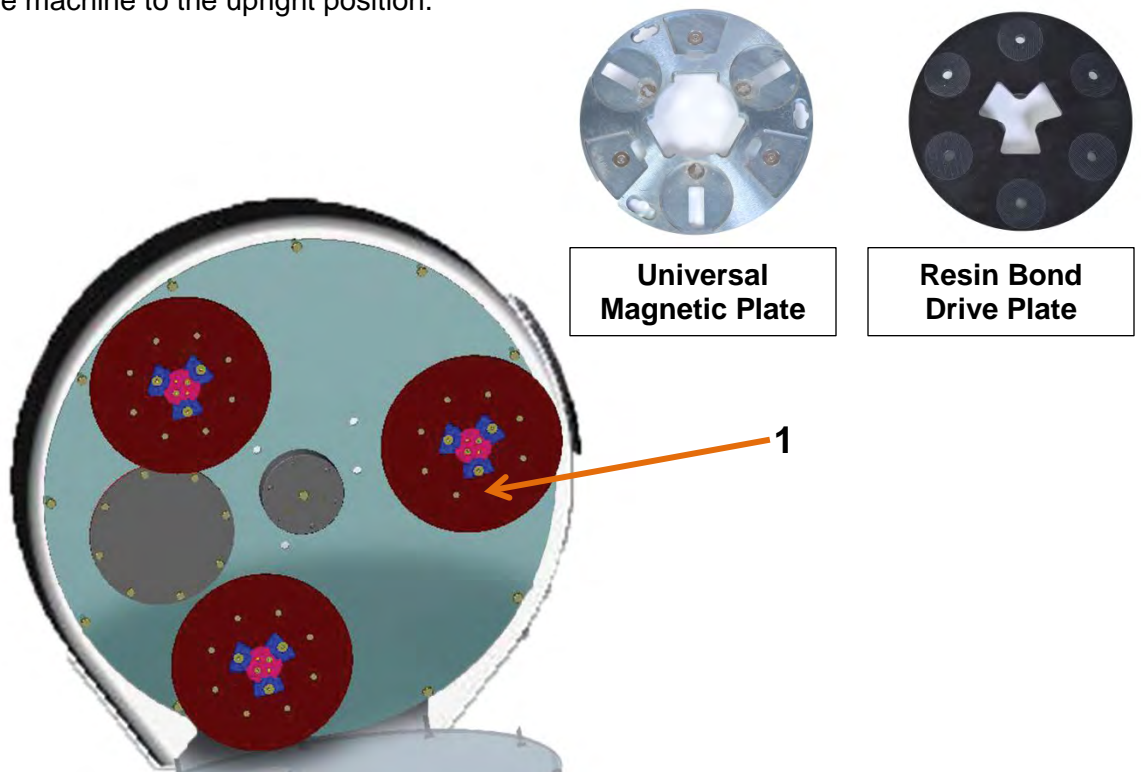
- When adjusting handlebars, be sure to find a handlebar position that will give you adequate and comfortable control of the machine.

5.3 Attaching Tooling

The G-290 Machine is fitted with three cross-completes inside the grinding head assembly for attaching plates and tooling.

To attach the appropriate grinding tools to the G-290Pro:

1. Make sure the handle is in the upright “locked” position. Place hands in the center of the handlebars when lowering and raising the machine. This method increases the control you have when maneuvering the machine.
2. Lay the machine on its back with the handle lying on the floor. This exposes the driving plate on the underside of the machine.
3. From a standing position at the side of the upended machine, put metal bond plate or resin plates on the cross-complete (1). Turn the cross-complete in either direction to lock the plate onto the machine.
4. Place the tooling of choice securely onto the plates.
5. Return the machine to the upright position.



Warning

- **Never kneel in front of the machine when attaching tooling or replacing tooling.**
- **Increased heating of the tooling and equipment may occur due to grinding speed, increase of pad diameter, or grinding with or without water. Wear heat-resistant gloves when changing tooling.**

5.4 Attaching the Dust Skirt

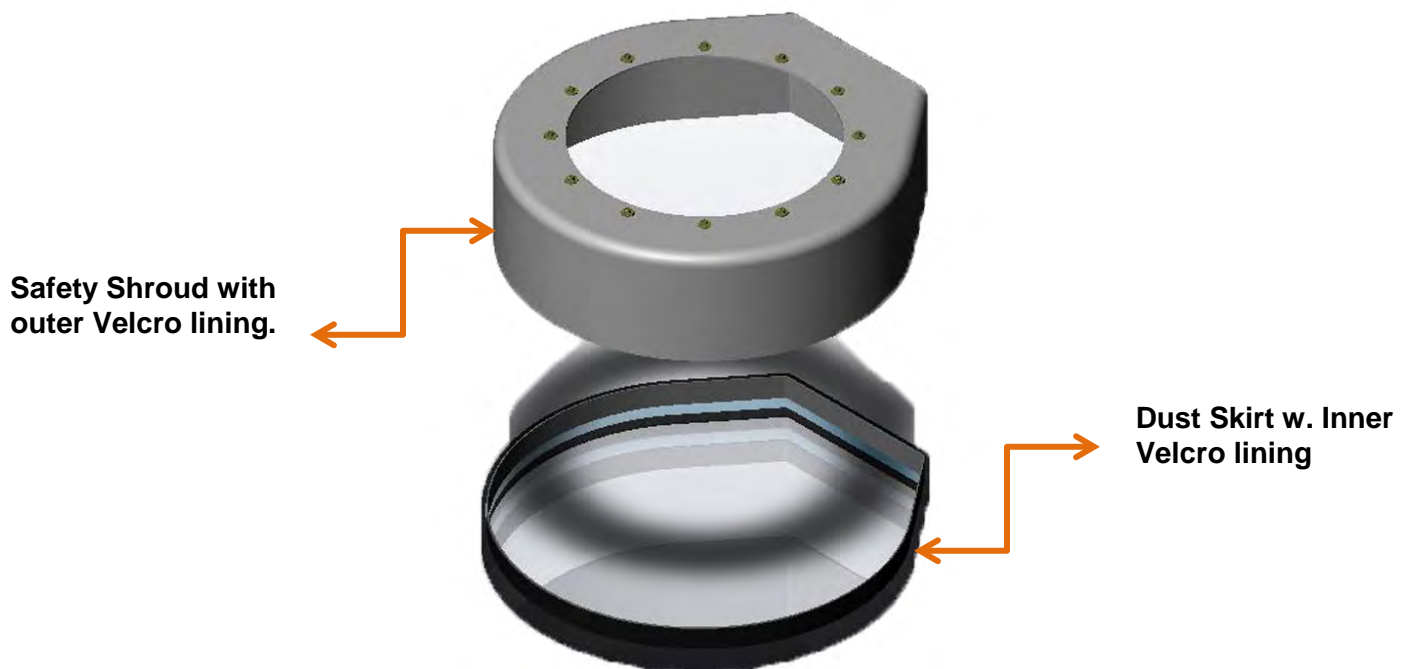
Your G-290 machine includes a dust skirt that should be placed on the machine before machine operation. The dust skirt is lined with Velcro for easy attachment and removal from the bottom of the safety shroud.

1. To attach the dust skirt, first locate the strip of Velcro around the bottom of the safety shroud. (See diagram on p.9)
2. Working from one side of the machine to the other, line up inner Velcro on dust skirt with Velcro on safety shroud and attach the dust skirt.



Tip

- **Make sure that the dust skirt is not placed too tightly around the safety shroud. The machine can lose suction if the dust skirt is too tight.**



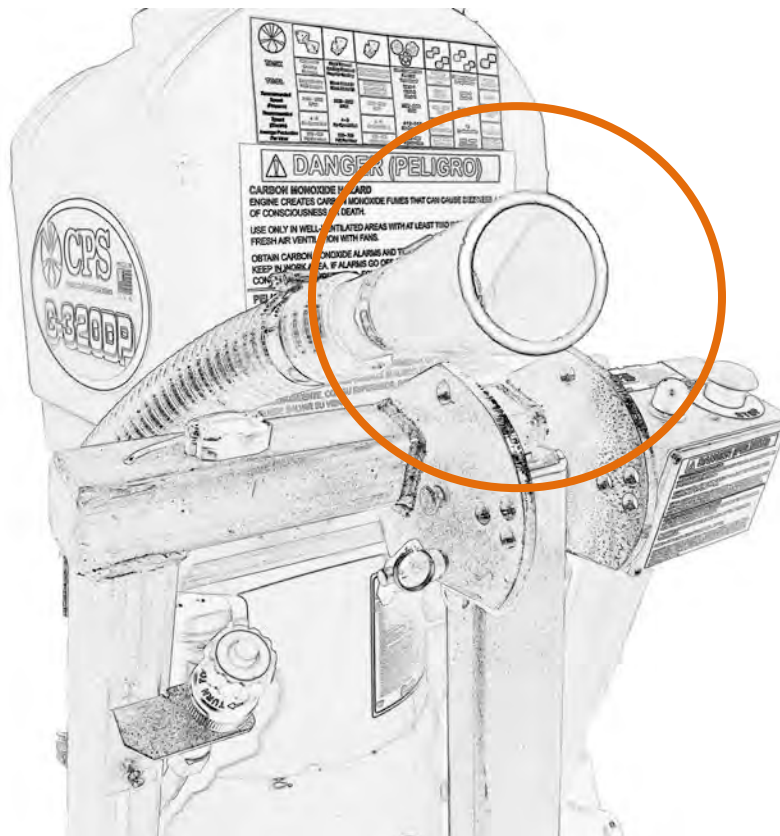
5.5 Attaching the Vacuum Hose

If dry-grinding, be sure to attach the vacuum hose to your G-290 machine before beginning any work. Follow all workplace safety requirements when wet or dry-grinding.



WARNING

- **Dust from grinding can be dangerous and damaging to the lungs. Be sure to wear proper protective equipment to prevent inhalation.**
- **If wet grinding, be sure to have a slurry containment system in place.**



To attach a dust interceptor/vacuum, locate the hose on the upper frame of the machine. (See above diagram). Be sure to connect hoses firmly for most efficient dust interception.

5.6 Attaching the Propane Tank

Each G-290 is shipped with a vapor draw propane tank. To connect the propane tank to the machine, be sure the propane tank is secure in its location between the safety swing arms.

1. After securing the propane tank on the machine, locate the connection hose with brass-fitting.
2. Press down on the brass fitting connector to release any residual vapor that may be in the line before connecting to the propane tank.
3. Tightly connect the brass fitting of the propane hose to the valve on top of the propane tank.
4. Turn the knob to open the valve on the tank.



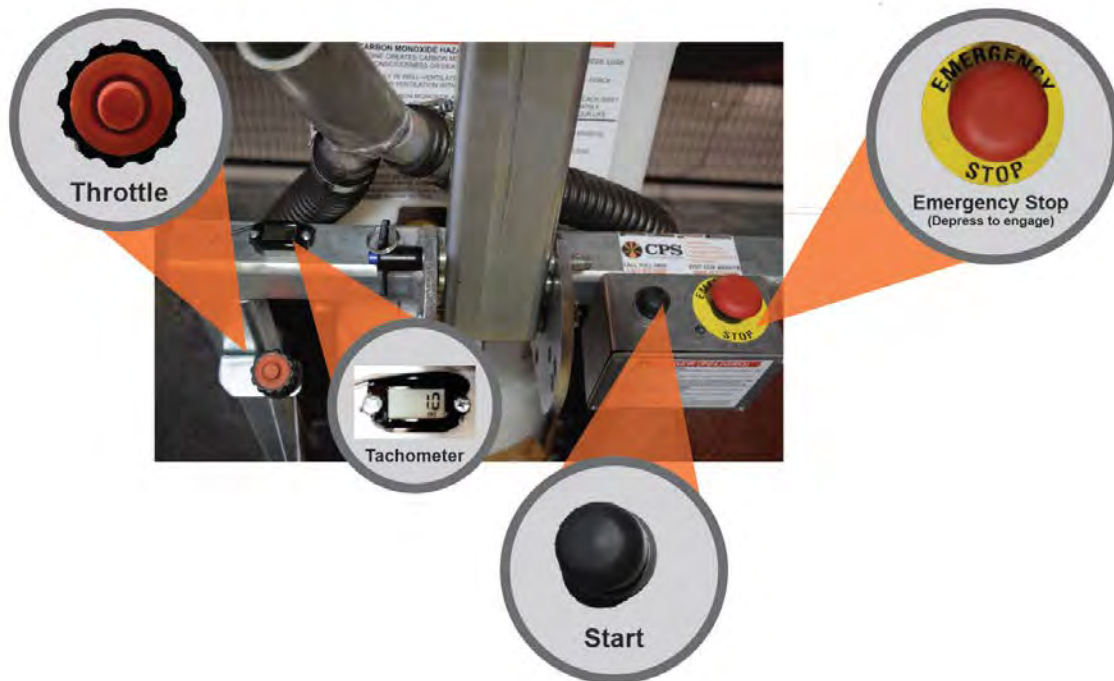
WARNING

- **Only refill vapor draw tank to 80%. Overfilling can cause the machine to draw liquid, causing damage.**
- **Be sure to check all hoses for cracks and leaks. Propane is an odorless gas with a sulfur additive. If you recognize a strong odor, immediately turn off the valve on your tank and contact CPS.**
- **Only operate in well-ventilated areas.**

6.0 OPERATING THE MACHINE

G-290 Machines are designed to be simple to operate. Below is a diagram of the G-290 control panel. Familiarize yourself with the controls and operating procedures before starting any work.

6.1 Control Panel



The Start Button

The Start Button should be pressed after disengaging the emergency stop button. Upon pressing the start button, begin to turn the throttle slowly counterclockwise until desired RPM is reached.

The Emergency Stop Button

The emergency stop button must be disengaged before starting the machine. When stopping the machine, turn the throttle down to lower the RPM and depress the Emergency Stop button. This button should also be depressed in case of emergency necessitating stopping the machine.

The Throttle

The throttle is located on the upper left hand side of the machine frame. When starting the machine, the throttle must be turned slowly counterclockwise to engage the engine. Continue to turn the throttle until the machine reaches the desired RPM.

The Tachometer

The tachometer, located on the upper frame of the grinder displays both machine hours and RPM of the machine. The button located on the right of the face of the tachometer allows toggling between the machine hours and RPM.

6.2 Starting The Machine

Before starting the machine, be sure to check that your work area is free of debris or other material that could be run over by the machine.

Starting the Propane Machine

1. Adjust handlebars to desired height and grasp firmly.
2. Stand behind the machine with feet planted firmly on even ground.
3. Pull up on the '**Emergency Stop**' button, making sure it is disengaged.
4. Press the '**START**' button to engage the engine, while slowly turning the throttle counterclockwise.
5. Turn the throttle to desired RPM, which is displayed on the tachometer (located on the frame) for your convenience.
6. Weights can be lowered to increase grinding pressure, though weights need to be returned to their upright position when attempting to change tooling or to transport.
7. To stop machine, decrease RPM by turning the throttle counterclockwise, then depress the "**Emergency Stop**" button on the machine.
8. Return weights to upright position after shutting machine off. Be sure to return the weights to their original position any time the machine needs to be laid back or transported, such as during tooling changes.
9. Turn propane valve to the off position when finished with work and store machine as is appropriate.



WARNING

- Be sure to run machine in a well-ventilated area. Lack of ventilation can cause machine issues and are dangerous for operators and bystanders.
- Do not start machine with grinding head in the upright position.
- Be sure the dust skirt is attached before starting the machine.



Tip

- Do not let machine idle for more than a minute. Extended idling can cause damage to centrifugal clutch.
- Over-torqueing the throttle in either direction can cause throttle damage.

6.3 Grinding Weights

The grinding weights on the CPS G-290 Grinder are designed to maximize grinding pressure when necessary. Weights are located above the shroud on both sides of the machine (See p.9) and are approximately 75 lbs per weight for a total of 150 lbs additional grinding pressure. Weights may be lowered when needed by grasping the handle on the weights and pulling them forward.

To replace weights, lift by handle and return to original position.



WARNING

- **Weights are pinch-points. Be careful when moving to keep fingers from being smashed.**
- **Do not attempt to transport the machine with weights engaged.**

7.0 MAINTENANCE

CPS Machines are meant to be low-maintenance for the owner/operator, though there are some important routine maintenance that should be done. See the Maintenance Checklist below for more information.

Be sure to follow all workplace safety procedures when performing maintenance.

7.1 Cleaning The Machine

The CPS G-290 should be cleaned after each use to ensure continued functionality.



WARNING

- **Do not use chemicals or solvents to clean the machine. Harsh chemicals can cause damage to the inner workings of the machine.**

7.2 Before Beginning Work

Your machine should be checked before beginning each new project.

- **Check oil levels.** Oil should read as full before beginning work. See Maintenance Guides, p.
- Use only SAE 30W Engine Oil in the G-290 machine.
- **Check the belt.** Examine the belt for any signs of wear and tear. See Maintenance Index p.
- **Check that the cooling system air inlet is clean.** Located on the engine, the cooling system air inlet should be checked every before operation to clear it of debris and dust.

7.3 Every 100 Hours of Operation

- **Change the oil.** Oil should be changed after the first 8 hours of use and every 100 hours after that. Use only SAE 30W Engine Oil in the G-290 machine. Instructions for changing the oil are located on p.
- **Change the spark plugs.** See Maintenance Index p.
- **Clean the cooling system.** The engine cooling system should be free of debris and dust. See p.
- **Clean oil cooler fins.** The oil cooler fins should be cleaned every 100 hours to ensure they are free of debris and dust and cooling effectively. See p.
- **Tighten nuts and screws.** The engine should be checked for loose nuts and screws regularly, with special attention to tightening every 100 hours of operation. See p.

7.4 Every 200 Hours of Operation

- **Change the oil filter.** The oil filter should be checked regularly to ensure it is not dirty. If filter appears dirty, replace with new clean filter. Filter should not be cleaned for reuse. See p. for instructions.
- **Change the fuel filter.** The fuel filter should be changed every 200 hours. If the filter appears dirty, replace with a new clean filter. The filter cannot be disassembled, so new parts must be ordered for replacement. See p.
- **Change the primary air filter element.** The air filter primary element should be replaced after 200 hours of use. The secondary element should be replaced when dirty, or after 500 hours, whichever comes first. See p.
- **Change the belt.** The belt should be replaced with a new belt every 200 hours, or when wear and tear becomes apparent. See p.

7.5 Every 300 Hours of Operation

- **Grease the ring gear.** The ring gear should be greased after 300 hours of operation. See p. for instructions

8.0 TROUBLESHOOTING

The G-290 grinder from Concrete Polishing Solutions is designed to be inherently low-maintenance and to perform for long periods without extensive troubleshooting in the field. If difficulty is encountered, refer to the following:

| Symptoms | |
|---|--|
| Failure to Start | <ul style="list-style-type: none">• Ensure there is adequate propane in the tank• Ensure the E-Stop button is disengaged.• Check the battery for a charge.• Check to ensure the oil level is correct.• Check the speed you are starting at. Start at a low speed and slowly build to higher RPMs. |
| Stops Suddenly | <ul style="list-style-type: none">• Ensure there is adequate propane in the tank• Make sure the tank is not overfilled. (80% full maximum)• Make sure you are using a vapor draw tank. CPS machines will not function with any other propane tank.• Be sure that exhaust is not covered or blocked.• Ensure there is adequate ventilation. |
| Vacuum Not Working | <ul style="list-style-type: none">• Check that hoses are fastened securely and that vacuum is functional. |
| Head Does Not Turn | <ul style="list-style-type: none">• Check belt tension.• If the engine is running and the head does not turn, contact CPS for certified service providers who can assist you. |
| Heads Spin, Housing Doesn't | <ul style="list-style-type: none">• If the heads spin, but the housing doesn't, it's likely that a pinion gear shear pin has broken.• Test to see if shear pin has broken by turning one of the heads while the machine is shut off. The housing should turn if the machine is functional. If it isn't call CPS to find a certified service provider to assist you. |
| Machine is Vibrating or Running Unevenly | <ul style="list-style-type: none">• Turn machine off.• Tilt machine to check evenness of heads.• If the heads are not running evenly, rebuild heads.• Check for uneven wear on diamonds.• Check that the grinding tools are not worn down and that they are properly positioned on the wheel.• A concentration of dirt causes the driving plates to become hard and inelastic. Clean the machine between the housing and heads. |

Should you still have difficulty, contact CPS at 877.472.8200 for assistance, 24/7.

8.1 Repairs

All repairs for CPS machines must be completed by a CPS authorized service technician. Contact CPS or your retailer to locate certified service centers. Repairs must be completed by trained specialists, authorized by CPS to complete machine repairs. Failure to use a certified service technician may result in a voided machine warranty.

8.2 Replacement Parts

Replacement parts are available for routine maintenance on your machine.

| Part # | |
|----------|------------------------|
| APMF0254 | Belt for G-290 |
| GPPT0392 | Flex Head Assembly |
| GPPT0077 | Dust Skirt for G-290 |
| APMF1239 | Filter Kit |
| MTMC0047 | Safe Fill Propane Tank |

9.0 ACCESSORIES

The G-290 machine is ideal for use with CPS products and accessories. Below are some of CPS' most popular items for use with the G-290 machine.

9.1 Plates

There are several plates by CPS that fit the G-290 machines.



Universal Magnetic Plate

GPPT0601



Recessed Cup Resin
Plate

MTPT0138K



Thick RD Driver Plate

MTPT0130K



Metal Bond Plate

APMF1477

9.2 Tooling

There are many applicable tools for the G290 machine. From tools perfect for surface prep to polishing resins, CPS has you covered. Visit www.go2cps.com/tooling.html for more.

10.0 MAINTENANCE INDEX

In this section, you will find instructions for the most common routine maintenance procedures. For any other issues or maintenance your machine requires, call CPS or your retailer to find a certified service technician in your area.

10.1 Rebuilding Flex Heads

Rebuilding Flex Heads

Rebuilding heads after extended periods of use is one important way to maintain grinding consistency and the consistency of the final product. Flex heads should be rebuilt when they aren't seeming to run "true", that is, they are warped or off-kilter.

Parts Needed

- AMPF1818: One (1) 1/4" Polycord
- AMPF1039: One (1) Inner Polycord Holder
- AMPF1145: Eight (8) 1/4" x 20 x 3/4" Flat Head Socket Screws
- Loctite
- APMF0313: One (1) Mounting Plate
- APMF0317: One (1) Die Spring
- APMF0316: One (1) Drive Shaft
- APMF0310: One (1) Backing Plate with Studs
- APMF1038: One (1) Outer Polycord Holder
- APMF.....: Eight (8) 1/4" x 20 Nylon Lock Nuts
- APMF.....: Eight (8) 5/16" Flat Washers

Tools Needed

- Manual Press
- Socket
- 7/16" Wrench



Step 1:



Place the inner polycord holder on the polycord with the countersink holes facing up. Be sure the inner polycord holder is placed such that four holes are in one line from bottom to top. (See photo)

Step 2:



Place the inner polycord holder on the polycord and push through 8 flat head screws dipped in Loctite. The screw heads should be flush with the surface of the inner polycord.

Step 3:



Place the mounting plate on the screws, ensuring that the three holes on the mounting plate line up with the three holes on the polycord holder. The above picture shows the way plate should be lined up when placed on screws.

Step 4:



Tighten the 8 flat head socket screws to a snug fit by tightening screws across from each other (criss-cross method). Only do one full turn of the wrench before moving onto the next screw, until snug. After all screws are snug, tighten all screws in the same pattern to 6 foot lbs of torque.

Step 6:



Place the main mounting plate with the studs facing up. Place the grinding shaft in the center slots. Then place the spring in the center hole of the grinding shaft. The prongs on the grinding shaft should be aligned to the mounting slots as well.

Step 7:



Place the first assembly (inner polycord holder) onto the grinding shaft making sure the holes are aligned with the main mounting plate.

Step 8:



Place the outer polycord holder on top of the inner polycord assembly. Move the loosely fit assemblies to the press, making sure to keep the two assemblies properly aligned.

Step 9:



Place the assembly on the manual press. Apply downward pressure. Studs from below should protrude through the inner polycord holder, polycord, and outer polycord holder. Place a flat washer and nut on studs. Do not tighten nuts.

Step 10:



Tighten nuts to snug with a 7/16" wrench. Remove assembly from the press. Torque all nuts to 6 foot lbs.

