

RHINOVAC RV8

USER MANUAL

Equipment Uses

- ✓ Concrete leveling, grinding and polishing
- ✓ Terrazzo grinding and polishing
- ✓ Stone grinding and polishing
- ✓ Hardwood grinding, sanding and polishing
- ✓ Glue, Thinset and mastic removal

Address:

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1-888-467-0242
sales@newgrind.com

Assembled in Canada using only the highest-quality USA components

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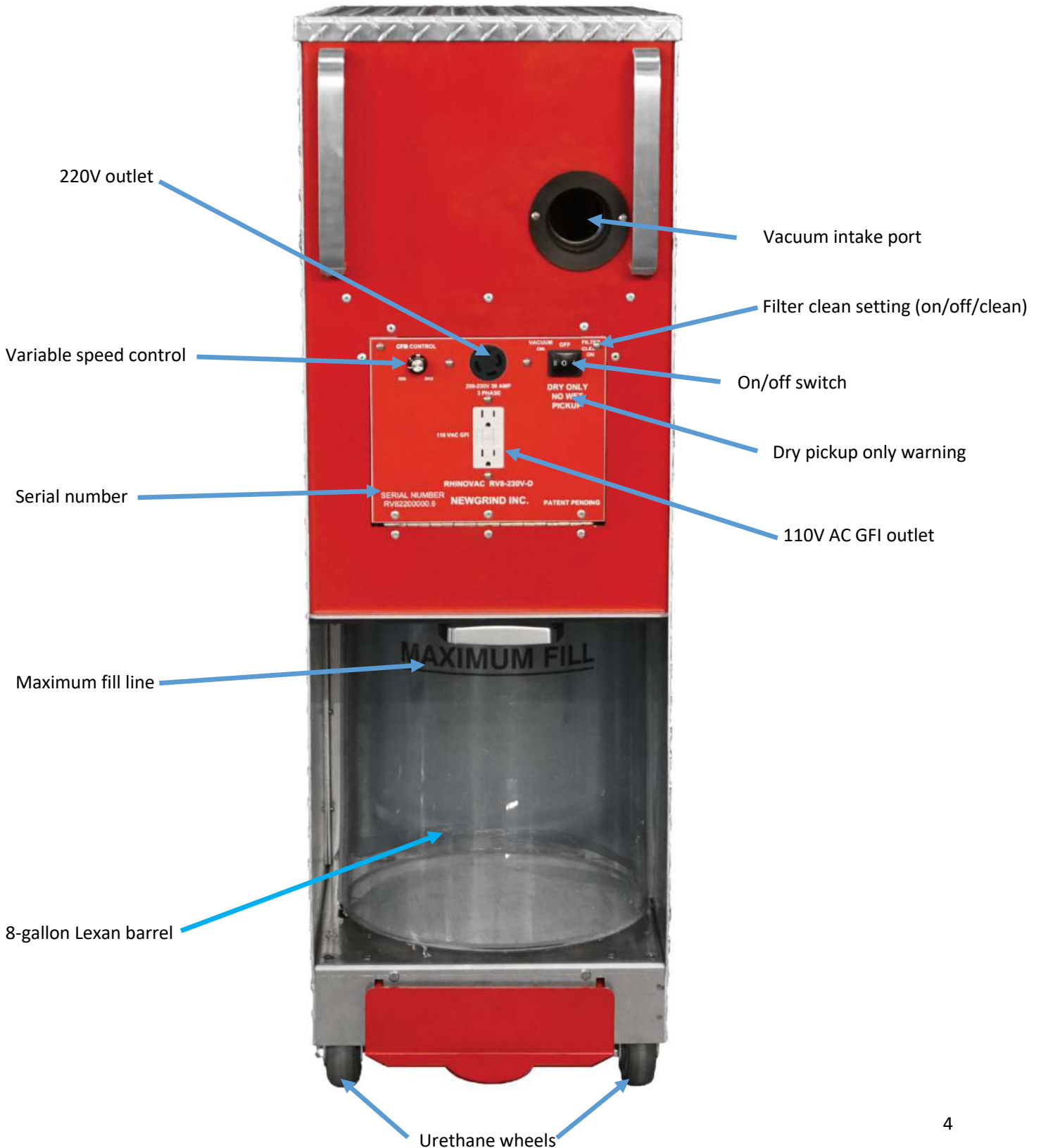
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RHINOVAC RV8 Diagram



Machine Specifications

Power	220V/3 Phase
Pass-through power outlet	220V
Maximum watts draw	-----
110V GFI outlet	YES
Machine weight	lbs
Variable speed control	YES
8 Gallon Lexan Barrel	YES
Built-in pre separator	YES
.3-micron HEPA filter	YES
Vacuum port	2.5 inches
Vibrating motor	YES
Urethane wheels	YES

SAFETY INSTRUCTIONS

 **WARNING! Read and understand all instructions.** 

Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury. **SAVE THESE INSTRUCTIONS.**



Work Area Safety

1. Keep your work area clean and well lit. Cluttered floors and dark areas invite accidents.
2. Do not operate equipment in explosive environments, such as in the presence of - flammable liquids, gases or dust. Grinding can create sparks which may ignite the dust or fumes.
3. Keep bystanders, children, and visitors away while operating equipment. Distractions can cause you to lose control.




Electrical Safety

1. Do not abuse the cord. Never use the cord to pull the equipment or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
2. Make sure cord is clear of wheels and cutting discs. Do not wrap cord around your arm or wrist. If control of equipment is lost, cord may become wrapped around you and cause personal injury.

3. When operating equipment outside, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.
4. Avoid accidental starting. Be sure stop button is depressed before plugging in. Starting equipment with your finger on the start buttons or plugging in equipment that has the buttons depressed invites accidents.
5. **USE THE PROPER EXTENSION CORD.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.
For the RHINOVAC RV8 use 10-gauge cord or larger.

Personal Safety

1. DO NOT let comfort or familiarity with  product (gained from repeated use) replace strict adherence to equipment safety rules. If you use this equipment unsafely or incorrectly, you can suffer serious personal injury.
2. Stay alert, watch what you are doing and use common sense when operating equipment. Do not use equipment while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating equipment may result in serious personal injury.
3. Adequate ventilation of your work area is very important when using equipment. Use a dust mask or appropriate respirator. Due to the dusty nature during use of
4. Do not overreach. Always keep proper footing and balance. Proper footing and balance will enable better control of the equipment in unexpected situations.
5. Use safety equipment. Always wear eye protection, dust mask, non-skid safety shoes, hard hat and hearing protection.
Ordinary eye or sunglasses are NOT eye protection.
6. DO NOT Turn on equipment while the machine is tilted back. Any tooling fastened to the machine can eject and become a lethal projectile.

Equipment Safety and Care

1. The equipment is designed to remove excess surface material. To prevent damage to the equipment and/or serious personal injury, beware of protruding objects or other debris on or embedded in the surface being finished.

2. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing equipment. Such preventive safety measures reduce the risk of starting the equipment accidentally.
3. Maintain equipment with care. Keep tools and accessories in good condition. Properly maintained tools are less likely to fail.
4. Check for binding of moving parts, breakage of parts, and any other condition that may affect the equipment's operation. If damaged, have equipment serviced before using. Many accidents are caused by poorly maintained equipment.
5. Use only tools and accessories that are recommended by the manufacturer for your equipment. Tools and accessories that may be suitable for style of equipment, may become hazardous when used on another style of equipment.
6. Due to the dusty nature during use of this equipment, be sure to clean equipment often to remove dust accumulations. Carefully blow the dust out of the motor, and dust covered areas frequently.
7. Do not leave the equipment running unattended.

Service Safety

1. DO NOT modify the machine. Modifications will void warranty and could result in unsafe operation of equipment.
2. Equipment service should be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
3. When servicing equipment, use only identical replacement parts. Use of unauthorized parts may create a risk of electric shock or injury.



WARNING: Misuse or failure to follow the safety rules stated in this instruction manual may cause serious personal injury. **SAVE THESE INSTRUCTIONS.**



OPERATING THE VACUUM



WARNING: The RV8 is designed for dry pick-up only. Using the machine for wet pickup could expose the user to hazardous conditions and will void the warranty.



Electrical

1. Plug end for electrical connection is a 30-amp 250-volt 3 phase twist lock

plug.

Input power should be 208-230 Volt single or 3 phase



Caution: exceeding voltage range will cause immediate damage to components



For 3 phase use:

- Always use the correct male plug to attach to power source. i.e. 30-amp 250-volt 3 phase twist lock
- Minimum power is 15-amp 3-phase 208-230 volt. Ideally you should use a 30-amp breaker. A higher amperage breaker (up to 100amps) may also be used as the vacuum motor, GFI outlet and Rhino grinding machine all have current limiting features (they cannot draw more than their maximum rated amperage without tripping off).
- Plug wiring configuration for 3 phase is as follows: X= Black, Y= White, Z= Red and G= Green for Ground.
- For single-phase operation always drop the red wire, using black and white for power.
- If wired incorrectly the vacuum motor and/or filter vibrating motor will not work.
- After power is properly connected, test the vacuum motor, filter clean feature and 110V GFI accessory outlet to make sure that they are all in good working order.

Filter

Filter: The filter chamber door seal should be in good condition to maintain performance.

To replace use sticky backed foam weather stripping 1/2" wide by 1/4"thick.

- Check filter chamber for excess dust buildup and clean if needed.

Light buildup can be cleaned by turning on the vibrating motor on the switch located on the top right hand of the control panel. Turn the filter clean to on position, with the filter chamber door closed, allow the vibrator to run for a few minutes.

Heavy buildup: use a shop-vac or similar vacuum. Turn on the vibrating motor and gently pinch the pleats on the filter with one hand, while holding the shop-vac wand or hose in the other hand. Aimed at catching the airborne dust being released. After this step is complete, turn off filter vibrating motor and empty dust tray. Vacuum up dust buildup around filter chamber door opening to allow the filter door to be seated properly, so that once closed it forms a tight seal.

Optional Filter Clean:

1. Release filter from carriage by loosening knobs at bottom or releasing quick release latches if so equipped.
2. Carefully lift filter out of carriage and place inside of a clean garbage bag. Fold top of bag into filter to prevent dust from entering the inside of filter
3. Gently pinch pleats from outside of bag and lightly tap base of filter on a smooth surface to free loosened buildup. Repeat if necessary.
4. Carefully remove filter from bag and place back in carriage. Evenly tighten knobs or engage quick release latches making sure that filter is centered in carriage.
5. Close door and then turn on vibrator for a minute or two.

Always be careful not to damage filter in any way as this will result in dust leaking through and cause the vacuum to blow out dust, resulting in airborne dust which is hazardous to breathe in.



Caution: Do not wash filter and/or blow out with compressed air. This will damage filter material and shorten the life of the filter.



Cyclone

The RhinoVac is equipped with a built-in cyclonic pre-separator which, when used properly, will catch up to 95% of incoming dust.

- In order for the cyclone to work properly the dustbin must be securely engaged and centered. Any air leaking in will drastically reduce cyclone efficiency.
- When functioning correctly you will notice a swirling motion from the dust entering the bin.
- Do not allow the dustbin to fill more than 3/4 full. This will cause the cyclonic action to stop and all dust entering the vacuum will go directly to the filter chamber causing premature dust buildup

Blockage:

1. If the cyclone becomes blocked with debris, or a rag, etc. it can be removed by opening the access lid taking out the screws retaining the cyclone to the 2 1/2 " vac inlet as well as the screws on the 2 1/2 " white PVC vac pipe leading to the filter chamber.
2. Wiggle the 2 1/2 " vac pipe out of the 2 1/2 " PVC elbow on top of the cyclone first and then wiggle the cyclone out of the 2 1/2" vac inlet port and the rubber grommet at the base of the cyclone where it enters the dust bin.

3. Carefully hook out debris or rag using a small piece of wood or coat hanger. Do not force debris or bang cyclone, as damage may occur.
4. Once blockage has been removed re-install cyclone by reversing the above procedures.

NOTE: A small amount of grease can be applied to allow easy insertion.



Caution: All connections must be square and properly inserted before installing retaining screws. Cyclone entry into dustbin must be flush and not catch when dustbin is removed.



Dustbin

The dustbin is made of clear Lexan. It has an 8-gallon capacity but should not be filled past approximately 6 gallons.

1. To release bin, turn off vac and step on the black knob at base of vacuum. Ease knob down and to the left.
2. Barrel lift mechanism will disengage and allow the bin to drop. Grasp handle and slide out until rim clears vac housing. Gently tip barrel forward so that it's resting on the vac base at the back and the floor at the front.
3. Take a garbage bag and slide over top of barrel. Gently tip barrel forward while holding bag snug against dustbin and empty dust into bag.
4. Gently remove barrel and discard bag.
5. Clean barrel chamber of any dust which may have fallen from cyclone
6. Slide barrel back in making sure that barrel lifting screws are not sticking up but rather seated flush with deck. Barrel must be centered and up against the back of the barrel chamber.
7. Once centered step on knob and push down and to the right to lock into the barrel up position.



Caution: Dropping barrel, banging on floor or otherwise handling roughly may cause damage and/or air leakage, which will affect cyclone performance.



2 1/2 "Vacuum Port

The RhinoVac comes Standard with a 25ft flexible 2 1/2 "vac hose.

To use on the machines with a 2" vac port. A reducer cuff or insert must be used to ensure maximum suction.

- For large areas it is better to use a 50ft hose or join 2 25ft hoses together to allow for greater mobility.

1 1/4" Auxiliary Vac Port

The RhinoVac has an auxiliary 1 1/4 " vac port for attaching to a hand grinder or sander.

- There is an optional 25ft 1 1/4 " hose available, or any standard 1 1/4 " hose may be used.
- It should be noted that the 1 1/4" port does not go through the cyclone but rather enters the filter chamber directly. Heavy grinding will result in the filter needing to be cleaned more often due to dust buildup on the filter.

110V GFI

- The 110V GFI is available for any 110V accessory such as hand grinder, power tools, lights, phone or battery chargers, etc.
- The GFI outlet will trip if there is a ground short or the load exceeds 15 Amps.

CFM Control

- The CFM control knob is located on the upper left corner of the control panel. When first turning on the RhinoVac the CFM control must be in the max position. This allows the vac motor to start and once running the speed can be turned down.
- Min = +/- 70CFM
- Max = 325 CFM

Damp Grinding: When damp grinding, turn down CFM so as to not suck up water but still prevent airborne dust.

Overheating: If vacuum motor trips off due to overheating, open lid and allow to cool down for 10-15 minutes. If working in a hot environment the lid can be left open to facilitate cooling.

Mobility: The RhinoVac can be tilted back on its rear tires to allow for rough terrain, slopes, and stairs. It is recommended that the front casters be only used to roll the vacuum on smooth floors.

Warranty: Removal or modification of any components will void warranty.

Prior to using the RV8

1. Check that the plug is properly connected to the extension cord and inspect the cord for wear and tear.
2. Plug the machine into an appropriate 3 phase power source

Starting the RV8

1. Turn the CFM control to max
2. Turn the power switch to the on position

Adjusting the speed

1. Use the knob, located on the left side of the control box to adjust speed of equipment.

Stopping the equipment

1. To stop the equipment, turn the power switch to the off position

Parts and accessories

A full range of parts and accessories for all of our equipment is available on our website:
www.newgrind.com

RV8 MAINTENANCE



WARNING: Disconnect power before performing any maintenance, cleaning, or repair to your equipment!



General Maintenance

- When the equipment is not in use, make sure that RV8 is stored in a location that will not expose it to extreme heat or cold. Keep it clean and dry.

Daily Maintenance

- Wipe down the equipment after every job.
- Wash Lexan barrel with soap and water to avoid build-up.
- Inspect HEPA filter
- Inspect plug ends for signs of carbon deposits or arcing.
- To protect diamond plate spray with WD-40 and buff with a microfiber cloth.

TROUBLESHOOTING

RhinoVac will not start:

1. Check plug to make sure it is properly inserted

2. Ensure that power-source is 220V/3 phase
3. Check the breaker panel to make sure that the breaker has not blown.
(**NOTE:** if breaker has blown – it may be overloaded – in that case select a different outlet/power supply)

RhinoVac suction is low:

1. Check the Lexan barrel to make sure it is not full
2. Check the pre-separator to make sure it is not plugged
3. Check the vacuum hose for obstruction
4. Adjust the CFM dial to a higher setting

LIMITED EQUIPMENT WARRANTY OF SALE

NewGrind Inc. warrants that each new unit manufactured by NewGrind Inc. to be free from defects in material and workmanship in normal use and service for a period of (3) three years from date of shipment to the original owner. Accessories or equipment furnished and installed on the product by NewGrind Inc. but manufactured by others, including, but not limited to engines, motors, electrical components, transmissions etc., shall carry the accessory manufacturers own warranty.

NewGrind Inc. will, at its option, repair or replace, at the NewGrind Inc. factory or at a point designated by NewGrind Inc. any part which shall appear to the satisfaction of NewGrind Inc. inspection to have been defective in material or workmanship. NewGrind Inc. reserves the right to modify, alter and improve any part or parts without incurring any obligation to replace any part or parts previously sold without such modified, altered or improved part or parts.

This warranty is in lieu of and excludes all other warranties, expressed, implied, statutory, or otherwise created under applicable law. In no event shall seller or the manufacturer of the product be liable for special, incidental, or consequential damages, including loss of profits, whether or not caused by or resulting from the negligence of seller and/or the manufacturer of the product unless specifically provided herein.

In addition, this warranty shall not apply to any products or portions there of which have been subjected to abuse, misuse, improper installation, maintenance, or operation, electrical failure or abnormal conditions and to products which have been tampered with, altered, modified, repaired, reworked by anyone not approved by seller or used in any manner inconsistent with

the provisions of the above or any instructions or specifications provided with or for the product.

FORCE MAJEURE

Seller's obligation hereunder are subject to, and Seller shall not be held responsible for, any delay or failure to make delivery of all or any part of the product due to labor difficulties, fires, casualties, accidents, acts of the elements, acts of God, transportation difficulties, delays by a common carrier, inability to obtain product, materials or components or qualified labor sufficient to timely perform part of or all of the obligations contained in these terms and conditions, governmental regulations or actions, strikes, damage to or destruction in whole or part of manufacturing plant, riots, terrorist attacks or incidents, civil commotions, warlike conditions, flood, tidal waves, typhoon, hurricane, earthquake, lightning, explosion or any other causes, contingencies or circumstances within CANADA not subject to the Seller's control which prevent or hinder the manufacture or delivery of the products or make the fulfillment of these terms and conditions impracticable. In the event of the occurrence of any of the foregoing, at the option of Seller, Seller shall be excused from the performance under these Terms and Conditions, or the performance of the Seller shall be correspondingly extended.

This document sets forth the terms and conditions pursuant to which the purchaser ("Purchaser") will purchase and New Grind Inc. ("Seller") will sell the products, accessories, attachments (collectively the products ") ordered by the Purchaser. These terms and conditions shall govern and apply to the sale of Seller's products to Purchaser, regardless of any terms and conditions appearing on any purchase order or other forms submitted by Purchaser to Seller, or the inconsistency of any terms therein and herein.

LIABILITY LIMITATIONS

The remedies of the user set forth under provisions of warranty outlined above are the exclusive and total liability of New Grind Inc. with the respect to their sale or the equipment and service furnished hereunder, in connection with the performance or breach thereof, or from the sale, delivery, installation, repair or technical direction covered by or furnished under the sale, whether based on contract, warranty, negligence, indemnity, strict liability, or otherwise shall not exceed the purchase price of the unit of equipment upon which such liability is based. New Grind Inc. will not in any event be liable to the user, any successors in interest or any beneficiary or assignee relating to this sale for any consequential, incidental, indirect, special or punitive damages arising out of this sale or any breach thereof, or any defects on, or failure of, or malfunction of the equipment under this sale based upon loss of use, lost profits or revenue, interest, lost goodwill, work stoppage, impairment of other goods, loss by reason of shutdown or nonoperation, increased expenses of operation of the equipment, cost of purchase or replacement power of claims of users or customers of the user for service interruption whether

or not such loss or damage is based on contract, warranty, negligence, indemnity, strict liability, or otherwise. New Grind Inc. reserves the right to modify, alter and improve any part or parts without incurring any obligation to replace any part or parts previously sold without such modified, altered or improved part or parts. No person is authorized to give any other warranty or to assume any additional obligation on New Grind Inc.'s behalf unless made in writing and signed by an officer of New Grind Inc.

TERMS & CONDITIONS

1. PRICE

All prices set forth on any purchase order or other document are F.O.B. Sellers facility or distribution point, as may be determined by Seller (F.O.B. Point). All prices are exclusive of any and all taxes, including, but not limited to, excise, sales, use, property or transportation taxes related to the sale or use of the products, now or hereafter imposed, together with all penalties and expenses. Purchaser shall be responsible for collecting and/or paying any and all such taxes, whether or not they are stated in any invoice for the Products. Unless otherwise specified herein, all prices are exclusive of inland transportation, freight, insurance and other costs and expenses relating to the shipment of the Products from the F.O.B. point to Purchaser's facility. Any prepayment by Seller of freight insurance and other costs shall be for the account of Purchaser and shall be repaid to Seller.

2. PAYMENT TERMS

Payment terms are as follows: New Grind Inc. Machines - Payment prior to delivery.

*All past due accounts are subject to a late payment fee of 1.5% per month or a maximum allowed by law if different, along with the expenses incidental to collection including reasonable attorney's fees and costs.

*Seller reserves the right to hold shipments against past due accounts.

*Seller reserves the right to alter payment terms.

3. FREIGHT TERMS

All shipments will be made F.O.B. shipping point as designated in these Terms and Conditions, and title shall pass at the F.O.B. point. Delivery to the initial common carrier shall constitute delivery to the Purchaser. Any claims for loss or damage during shipment are to be filed with carrier by the Purchaser.

Seller will not assume responsibility for the performance of the carrier. Backorders will be shipped in the most practical fashion with charges consistent with our freight policy established with the original order. UPS, FED EX, MAIL or shipments by other couriers are subject to the same terms and conditions as outlined in paragraph #3 "Freight Terms".

4. DELIVERY, DAMAGES, SHORTAGES

Seller shall use reasonable efforts to attempt to cause the Products to be delivered as provided for in these Terms & Conditions. Delivery to the initial common carrier shall constitute the delivery to the Purchaser. Seller's responsibility, in so far as transportation risks are concerned ceases upon the delivery of the Products in good condition to such carrier at the F.O.B. point and all the Products shall be shipped at the Purchaser's risk. Seller shall not be responsible or liable for any loss of income and/or profits, or incidental, special, consequential damages resulting from Seller's delayed performance in shipment and delivery.

5. RETURN OF DEFECTIVE PRODUCTS

Defective or failed material shall be held at the Purchaser's premises until authorization has been granted by Seller to return or dispose of Products. Products that are to be returned for final inspection must be returned Freight Prepaid in the most economical way. Credit will be issued for material found to be defective upon Seller's inspection based on prices at time of purchase.

6. PRODUCTS ORDERED IN ERROR

Products may be returned, provided that claim is made, and Seller is notified within 7 days of receipt of Products, and the Products are in original buyer's possession not more than 30 days prior to return, subject to Seller's approval. If Products are accepted for return, they must be Freight Prepaid and buyer will be charged a minimum of 15% restocking charge, plus a charge back for outbound freight charges if the original order was shipped prepaid. Returns are not accepted for any Products that are specifically manufactured to meet the buyer's requirement of either specifications or quantity.

AGREEMENTS

These Terms and Conditions constitute the entire agreement between Seller and Purchaser as it relates to terms and conditions of sale and supersedes any and all prior oral or written agreements, correspondence, quotations or understandings heretofore in force between the parties relating to the subject matter hereof.

There are no agreements between Seller and Purchaser with respect to the Product herein except those specifically set forth in and made part of these terms and conditions.

Any additional terms, conditions and/or prices are rejected by Seller. These terms and conditions may be modified, cancelled or rescinded only by a written agreement of both parties executed by their duly authorized agents.