



EBONITE POWERHOUSE RESURFACER OPERATIONS MANUAL

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EBONITE POWERHOUSE RESURFACER OPERATIONS MANUAL

Congratulations on your purchase of the Ebonite Powerhouse Resurfacer! Ebonite would like to thank you for your purchase of the world's finest bowling ball refinishing machine.

Powerhouse Resurfacer Receiving

Your new Ebonite Powerhouse Resurfacer was crated and packaged in a wooden crate to insure that it arrives at your location un-damaged. If you noticed damage to the wooden crate upon delivery, do not remove the machine from the crate. This is **important** as the **freight company** should be contacted **immediately** if damage is found.

The wooden crate your Ebonite Powerhouse Resurfacer is packaged in is approximately 2' x 3' x 3'. The wooden crate will typically not fit through your door with the proper side up. While the machine is secured to the base of the crate, **DO NOT** turn the crate on its side to move the machine through a doorway.

Remove all of the Phillips head screws from the top of the crate and discard them. After removing the top, find the water pump and hose kit and remove it from the machine.





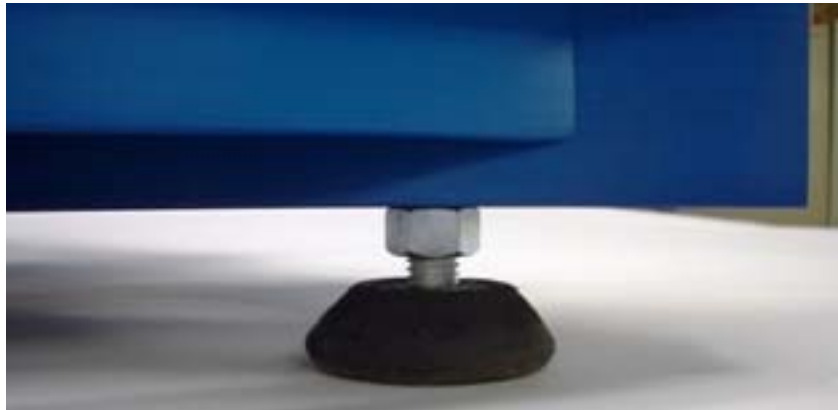
Your Powerhouse Resurfacer is secured to the base with tie-down straps. Cut these straps **carefully** with a knife, being careful not to damage the Resurfacer. Lift the Powerhouse Resurfacer out of the wooden crate and place it on your workbench for installation.

WARNING:

The Resurfacer is heavy. Use Extreme Caution when moving this machine!

Powerhouse Resurfacer Set-Up

Make sure that you are installing the machine on a sturdy workbench or table. Using the (3) adjusting feet, level the resurfacing machine. Lock these feet into position using the jam nuts provided.



Locate the hose clamps from the water pump and hose kit. Using the larger 5/8" diameter vinyl hose, attach the drain hose to the bottom of the drain pan. The drain hose should be secured by a hose clamp.





Place the smaller 1/2" diameter vinyl hose over the outflow tube on the water pump. Using a hose clamp, gently secure the vinyl hose to the water pump. Be sure not to tighten down on this hose clamp too much. Tightening down too much will result in cracking the plastic outflow tube.



Attach the water pump hose to the brass fitting on the resurfacing machine. Be sure not to remove the vinyl hose from the machine once you have attached it. If you need to remove this hose from the machine for any reason, make sure to cut 3-4" off the end of the vinyl hose before you reattach it. This will insure that the tube does not leak water on the machine or the table.



Place the water pump and drain hose into a 5-gallon bucket (not provided). Fill this bucket with approximately 3-4 gallons of water. DO NOT use bleach, soap, or any other detergents in your water. Doing so can cause damage to your machine and is NOT recommended for use with bowling balls.

Your water pump will plug into the silver electrical controller box on the machine. Next, plug in the resurfacing machine power supply cord to your wall outlet. No special electrical requirements are needed for your machine's operation.



Without a bowling ball in the machine, point the water supply tube towards the drain and turn the timer switch past ten minutes. Check to make sure that all 3 motors are operating and that water is flowing through the tube. Your water supply tube does have a control valve. If you do not see water coming from the tube, check to make sure that the valve is open.



Powerhouse Resurfacer Abrasives and Polishes

Ebonite recommends that you use Abralon pads in combination with diamond pads on your Powerhouse Resurfacing machine. Diamond pads can be used for your rough grade cutting which may be needed when smoothing ball plug or on heavily damaged bowling balls. Ebonite offers two different grades of diamond pads for your Powerhouse Resurfacer. Diamond pads that have a black colored backing are the rougher grade pad. Diamond pads that have a yellow colored backing are slightly less abrasive and are included with your Powerhouse Resurfacer. Abralon pads provide the best refinishing job available for your Powerhouse Resurfacer. Abralon pads are available from Ebonite in 180, 360, 500, 1000, 2000, and 4000 grit. All Ebonite bowling balls are finished at the factory with Abralon abrasive pads. Ebonite performance bowling balls are polished with Ebonite Powerhouse Factory Finish Polish at the factory.



Powerhouse Resurfacer Operations

When resurfacing or refinishing a bowling ball on your Powerhouse Resurfacer, start with lower grit abrasives to make sure that you completely sand the track area or ball plug down. If you are sanding a plugged bowling ball, make sure that the outside edge of the plug is completely sanded down before moving to the finer grit Abralon.

Also realize that it's possible to sand the logos completely off of a bowling ball. Check the depth of the engraving before putting the ball in the Resurfacer, and consult with your customer if the logos are shallow enough to be sanded off.

When sanding down ball plug, start with 180-grit Abralon on your Powerhouse Resurfacer. If you are resurfacing a ball for a customer, start with 360-grit Abralon. After sanding the ball for approximately 5 minutes (or however long it takes the ball to fully oscillate on the machine), switch to the next finest grit of Abralon pads. Continue working through each grit of Abralon pad until the bowling ball has the desired sanding finish.

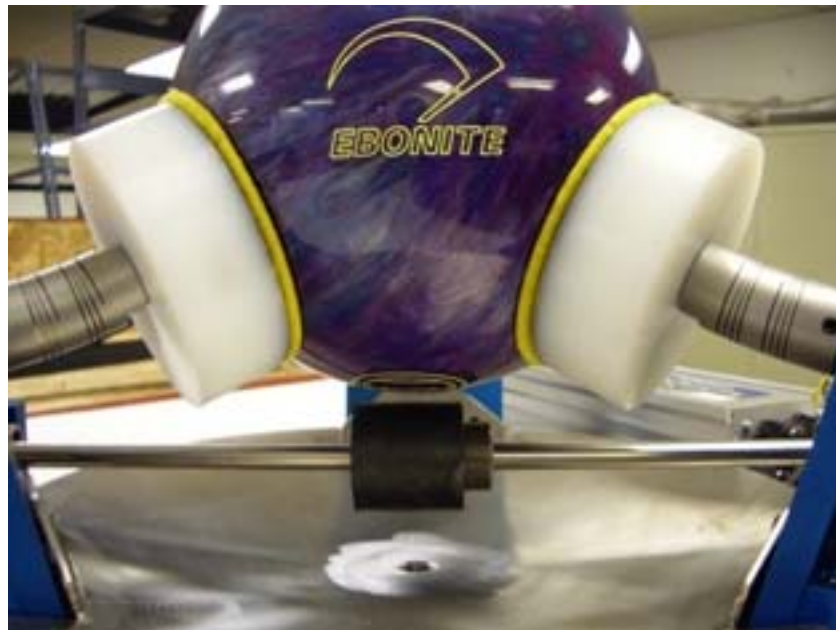
Abralon provides a very smooth finish that can sometimes give the bowling ball a shiny finish without any polish being applied. This is especially apparent when working the ball up to 4000-grit Abralon on your Powerhouse Resurfacer. While this finish may be appropriate for the majority of your customers, some bowlers require polish on the bowling ball to delay the ball reaction. If you or your customer desires polish on the surface of the bowling ball, we recommend



Ebonite's Powerhouse Factory Finish Polish. Apply this polish only after cleaning the water and slurry off of the bowling ball when it comes out of the Powerhouse Resurfacer. Polishing a ball without cleaning the surface off will trap the sanding slurry in the pores of the coverstock, reducing the performance of your bowling ball.

Finally, notice that the Abralon grit from one level to the next never increases by more than double the previous grit. Never use more than double the grit of the previous abrasive used on the bowling ball. Doing so will leave deep scratches on the surface of the bowling ball.

To begin resurfacing a ball on your Powerhouse Resurfacer, start by placing your selected abrasives on the floating heads. Prime the abrasives with water by using the switch on the silver electrical controller box. After the abrasives are wet, place the ball inside the machine, making sure that the edges of the abrasives have not folded underneath the surface of the ball. Turn the 4th axis adjusting knob counter-clockwise so that the arm assembly does not contact the surface of the ball.





Turn the Powerhouse Resurfacer on using the timer switch. Again, usually 5 minutes is long enough for each level of abrasive, but you want to make sure that the ball performs a full oscillation. Adjust the water stream so that the ball remains wet during operation. Make sure that you do not have too much water building up in the drain pan to prevent overflow.



To guarantee the full oscillation of the ball inside the machine, adjust the 4th axis so that the drive wheel touches the ball. Turn the knob clockwise until the wheel touches the ball, and then continue one more full turn.





Powerhouse Resurfacer Maintenance

Maintenance on your Powerhouse Resurfacer is very simple, but should be done often to maximize the life span and effectiveness of the machine.

Keeping your machine clean is the easiest way to guarantee the performance of your machine. Clean your machine often, making sure that the sanding slurry does not build up in the drain pan, on the floating heads, and on the 4th axis drive wheel. Also remember to replace the water in your 5-gallon bucket at least once a week. This water will full of sanding slurry or sediment, so make sure to dump it in an environmentally friendly place.

Occasionally the vinyl hoses will need cleaned and disinfected. After cleaning your machine thoroughly, refill you water bucket with 2-3 gallons of water and add a cup of bleach. Point your water supply hose directly at the drain of the machine, and turn your timer switch past 10 minutes. Run the water through the machine for several minutes, allowing the bleach to run through the hoses. After completing this, replace the water with fresh water that does not contain any bleach.

You should lube the threaded rod underneath the adjusting knob periodically to make sure this continues to move properly. Some simple WD-40 will be fine on the threads, and you should work the lubricant up and down the entire threaded rod at least once a month. Be careful not to overspray the lubricant anywhere else on the machine. Using a towel or a piece of paper as a guard is highly recommended.



Powerhouse Resurfacer Repairs

Never attempt to make any repairs on your Powerhouse Resurfacer without first contacting the service department. Your Powerhouse Resurfacer is designed and engineered by industry professionals, and they should be consulted before attempting to make any repairs on your own. Please see the final sheet of this booklet for information on contacting the service department.



Powerhouse Resurfacer Consumables Ordering Information

Replacement Abrasives

Product	Model #	Size/Pkg
180-Grit Abralon	EQUIP073EA	Set of 3
360-Grit Abralon	EQUIP074EA	Set of 3
500-Grit Abralon	EQUIP075EA	Set of 3
1000-Grit Abralon	EQUIP076EA	Set of 3
2000-Grit Abralon	EQUIP077EA	Set of 3
4000-Grit Abralon	EQUIP078EA	Set of 3
400-Grit Diamond Pads	EQUIP079EA	Set of 3
800-Grit Diamond Pads	EQUIP081EA	Set of 3

Powerhouse Polishes and Cleaners

Product	Model #	Size/Pkg
Ball Cleaner	EQ125PBCEA	Quart
Energizer Ball Cleaner	EQ130EBCEA	Quart
Factory Finish Polish	EQ140FBPEA	Quart
Extender Polish	EQ135EBPEA	Quart
Particle Polish	EQ158PBPEA	Quart
Sand Blaster	EQ147SBPEA	Quart
Matte Finish	EQ144MFPEA	Quart

Powerhouse Resurfacer Parts

Product	Model #	Size/Pkg
Replacement Water Pump	EQUIP082EA	Each



Powerhouse Resurfacer Service Contact Information

For Customer Service and Technical Information, please contact:

**Vantage Bowling Corporation
870 Parfet Street
Denver, CO 80215**

1-800-255-7401