## ROTOMAC



# Powerwand HIEH EFFIGENEY ROTARY CLEANER Owners Mannal 

Revised 8/18/11

## Rotovac Powerwand

# IMPORTANT! BEFORE USING YOUR ROTOVAC, PLEASE <br> - Read Your Owner's Manual <br> - Watch Your Training Video <br> - Call For Important Instructions <br> TOLL FREE - U.S. and CANADA <br> 1-888-768-6822 <br> OUTSIDE NORTH AMERICA <br> 1-425-883-6746 <br> Hours: 8:00 am to 5:00 pm Pacific Time 

## CALL BEFORE USING FOR THE FIRST TIME

Before using the Power Wand for the first time, read the owners manual, watch the training video, write down any questions that you may have and then call Rotovac toll-free for valuable tips and pointers.

1-888-768-6822. (8:00 a.m. to 5:00 p.m. Monday - Friday P.S.T.) Training video is available on line at: www.rotovac.com

## Rotovac Powerwand

## *FREEZING WARNING*

> * Allowing your equipment to freeze will void your warranty * Thoroughly remove as much moisture from all lines and tanks in the equipment and flush with antifreeze.

Equipment should never be stored where it can freeze.
Excess water can freeze during storage and crack the internal components of powered equipment and accessories, damaging them and voiding the warranty.

An unheated vehicle will not protect your equipment.

## Rotovac Corporation Standard Return Policy

Rotovac Corporation guarantees, as a courtesy, an unconditional full purchase price refund for the return of an undamaged Power Head within the seven (7) days following receipt of equipment purchased.

A $25 \%$ restocking fee will be assessed to the return of any equipment where the operator has not completed required telephone training associated with the proper use of the Rotovac. Replacement boxes for returns, if needed, will be provided for a $\$ 50.00$ charge.

Under exceptional circumstances, equipment may be returned after the seven (7) day period, only with prior approval by Rotovac Corporation and will be subject to a $25 \%$ restocking fee. Issues of defect should be addressed within the warranty process.

Rotovac Corporation also extends a full purchase price refund on the return of undamaged "Business Start Up Packages" returned within thirty (30) days following receipt of equipment purchased. This refund does not apply to special order items or equipment not normally stocked by Rotovac Corporation.

Rotovac Corporation does not accept returns on chemicals, or equipment manufactured by other companies that is not purchased as part of standard equipment included in the "Business Start Up Package".

The purchaser is responsible for the cost of all freight charges.

Congratulations on your purchase of a new Rotovac Powerwand. The Rotovac is the most thorough carpet cleaning tool ever developed. With its patented counter rotating extraction heads, your Rotovac produces unparalleled cleaning results while greatly reducing operator fatigue.

As with all powered equipment, proper operation and maintenance play a vital role in the performance of your Rotovac. It is, therefore, extremely important to read and understand this operations manual before cleaning with your Rotovac.

The Rotovac is designed for cleaning carpet installed over pad and most glue-down commercial carpet. The Rotovac works well on residential and most commercial carpet where there is a rubber backing or enough nap to provide some cushion. The Rotovac is also effective on most area rugs and Oriental carpets. The heads need to glide smoothly in order to clean effectively. Certain types of direct glue-down carpets, which are "hard" or are installed on uneven surfaces, may cause the rotary cleaning heads to "skip" or "chatter". In these instances proper adjustment of the front pile height adjustment wheel is crucial to proper performance. If you cannot get the heads to run smoothly after adjustment, you may choose not to use the Rotovac on that particular carpet.

When operating the Rotovac for the first time we recommend cleaning the most heavily soiled carpet you have available. Clean with your wand first and then next to it with the Rotovac for a direct comparison.

## Cleaning Heads

To familiarize yourself with your Rotovac Powerwand, the first thing to learn is how to remove and replace your two stainless steel rotary cleaning heads. This is the single most important element of daily maintenance.

IMPORTANT: To remove the cleaning heads, unscrew each of them in the same direction that they rotate during operation. To install the cleaning heads on the Rotovac simply screw them on by hand. Remember that the left and right heads screw on and off in opposite directions. (The left head is reverse threaded)

With the handle in the locked upright position, lay the machine back onto the floor. The bottoms of the cleaning heads are now accessible. If you are on a hard surface, be sure to place a cloth under the male quick connect for the solution line to prevent any damage to the floor or to the quick connect. Remove the cleaning heads one at a time by giving them a sharp blow against the vacuum slot using a rubber mallet. If the head has not been removed regularly and has seized onto the machine, do not hammer away on the head. This can cause damage to both the gearbox and to the head. Place a $7 / 8$ " open end wrench on the brass reducer bushing and allow the wrench to butt against the machine in the direction you are trying to remove the vacuum head. This will protect the gears from the impact. Now you can use a steel hammer and a wood block to apply the blows necessary to remove the heads.


## Maneuvering and Adjusting Your Rotovac Powerwand

The Rotovac maneuvers with the ease of an upright vacuum cleaner where cleaning occurs in each direction, forward and back. The cleaning heads should move freely while the motors are running and meet some resistance when the motors are turned off. The small gray wheel in the front of the machine has been designed to allow adjustment while the heads are resting on the carpet.

For operation on a very plush thick carpet or where you have very strong vacuum motors, the front wheel should be adjusted to take some of the weight off of the vacuum heads for easier operation. The lower black knob is used to lock the direction of the wheel. The upper black knob is used to adjust the threaded shaft up or down. Turn the upper knob until the heads rest firmly in the carpet pile while the machine is off and glides when turned on.

## Carpet Types

The Rotovac is designed to clean any carpeting installed over pad, most plush oriental and area rugs, and most commercial glue-downs. A quick test run is the best way to determine whether you are able to use your Rotovac on a particular carpet.

The stainless steel rotary vacuum heads on your Rotovac require a small amount of cushion in order to run smoothly and to clean evenly. The Rotovac may not always work well on a few types of no-nap (hard), direct glue-down carpeting. Carpet with no cushion may cause the rotary vacuum heads to jump and skip. This may cause the Rotovac to clean unevenly.

## Preparation for Cleaning

For best results, carpeting and rugs should always be vacuumed thoroughly prior to any hot water extraction cleaning. Your rotary vacuum heads are tough and durable; but they are designed to extract liquids, not solids.

Before beginning any job, inspect the carpeting for tears, de-lamination and weak or torn seams. Always inspect the area to be cleaned for hard objects or obstacles against which the rotary vacuum heads could impact (such as door stops, floor air vent registers, screws, nails, etc.). If possible, remove them or make note of their location so that you can avoid them during the job.

Your Rotovac Powerwand has been designed to operate while you are standing upright and using one hand. With the solution valve open, make your cleaning passes in a slow forward and back motion, allowing the Rotovac to do your work. Overlap your passes to assure coverage of the "gap" area between the two heads. On more soiled carpet, slower cleaning passes will allow the Rotovac to perform a more thorough injection, agitation and extraction.


After cleaning an area of approximately 4 by 4 feet you will often want to go back over the same area with quick vacuum only dry passes to ensure maximum fluid extraction. Most carpets will benefit from a dry pass while others may not. You can determine this by feeling the wetness of the carpet.


To clean along a threshold, on top of the horizontal tread of a stair step or along an edge, you can "choke down" on the wand and move the head in a lateral motion, left to right.

CAUTION: NEVER permit your rotating stainless steel vacuum heads to strike any hard or sharp objects!! Floor heat registers, wood or metal thresholds and hidden door stops, etc., should be noted and avoided

## Precautions

## The following instructions should be observed while cleaning with your Rotovac Powerwand:

1. Do not allow the rotating stainless steel extraction heads to strike heat registers, tile edges, wood or metal thresholds, or any other object that could impact or scar the metal cleaning heads.
2. Do not operate the machine on any hard surface such as a wood or tile floor, unless you have the optional brush heads.
3. Do not operate the machine across any loose or unraveled carpet seams. The cleaning head may catch and cause further damage.
4. Do not operate your Rotovac on concrete floors. It will cause sharp edges to develop on the extraction cleaning heads, which will damage carpet fibers.
5. Do not clean past the edge of a loose carpet or area rug. Instead, clean only up to its edge.
6. Regularly inspect the cleaning heads for any nicks or burrs. Grind or sandpaper away any sharp edges, nicks or burrs before use.

## Daily Maintenance:

Vacuum Heads: remove and clean.
Vacuum Hoses: inspect / repair clogged debris or breaks.

## Other:

Felt Seals: inspect / replace both after 500 to 600 hours of use.
Carbon Brushes: (located on the side of the housing, front and back) replace two per motor after 1000 to 1200 hours of use.
Power Cord: inspect / repair cuts and breaks.

## Vacuum Heads

Remove and wash the cleaning heads under a garden hose or faucet. Check the area inside the machine where the heads screw in for any possible clogs of lint or debris. Back flush the machine periodically by placing a garden hose in the top end of the wand (where the vacuum hose normally connects) and turn on the water. The water should flush freely out of both heads.

## Vacuum Hoses

Inspect vacuum hoses for breaks or tears. Repair or replace as needed. Regularly check vacuum hoses for clogs of lint or debris.

## Felt Seals

Check the felt seal on each vacuum head for damage or wear. When you are screwing the vacuum heads back on to the machine you should be able to feel the seal tighten down on the last rotation. If the felt seal has become too worn you will not be able to feel this "sandwich effect" when replacing the head. A good felt seal is vital for maximum vacuum extraction performance. A worn or torn felt
 seal acts like a torn or punctured vacuum hose and results in excess water being left in the carpet.
(Always allow your Rotovac to run for 10 minutes after installing new felt seals and before beginning to clean).

## *Replace your carbon brushes with every other set of new felt seals*

## WARRANTY REPAIR POLICY

When requesting warranty information, call or write providing the following information:

1. When and where the equipment in question was purchased.
2. The model and serial number of the machine.
3. The part number and description of the part.
4. A description of the failure or defect.

Upon receipt of the above information, Rotovac Corporation will issue a Return of Merchandise authorization number.
All packages are to be prepaid and clearly marked with the Material Return Authorization number on the outside of the box. If these conditions are not met, shipment will be refused.

After evaluation, the item(s) will be repaired or replaced at the discretion of our claims department.

If failure or defect is the result of physical abuse, or if the warranty period has expired, repairs will be charged to the customer.


ROCK MT.


EASTERN

Monday through Friday • 8:00 am To 5:00 pm Pacific Time
(425) 883-6746
or
(888) 768-6822

## Rotovac Powerwand



## Rotovac Powerwand Parts Reference list

|  | PART \# | DESCRIPTION | QTY |
| :---: | :---: | :---: | :---: |
| 1 | V-052 | Valve Hanger | 1 |
| 2 | V-055 | 1/4" Male Quick Connect Brass | 1 |
| 3 | V-054 | 45 Degree Elbow Brass Fitting | 1 |
| 4 | V-800 | Brass Valve 800psi | 1 |
| 5 | V-0521 | Ball Valve | 1 |
| 6 | C-003 | Power Cord | 1 |
| 7 | G-002 | Wand Handle | 2 |
| 8 | W-050 | Wand Tube | 1 |
| 9 | H-018 | High Pressure Hose Assembly | 1 |
| 10 | C-011 | Wand Base | 1 |
| 11 | C-010 | Hook Latch | 1 |
| 12 | S-057 | Yoke Screw | 2 |
| 13 | S-058 | Yoke Nut | 3 |
| 14 | S-036A | Spring Handle Latch | 1 |
| 15 | T-053 | T-Tube 1 1/2" | 1 |
| 16 | F-043 | Rotovac Top Plate | 1 |
| 17 | F-042 | Rotovac Main Frame | 1 |
| 18 | H-015 | 1 1/4" Grey Vacuum Hose | 2 |
| 19 | B-1763A | Rotary Union | 2 |
| 20 | W-016 | Rear Wheel | 2 |
| 21 | K-026 | Top Knob for RVPW Front Wheel | 1 |
| 22 | RP-321 | Front Wheel Caster Bracket | 1 |
| 23 | W-015 | Front Wheel W/ Axel | 1 |
|  | 0-111 | Gearbox O-Ring | 2 |
|  | A-006 | All Thread Motor Screw | 4 |
|  | A-2329AL | Left Hand Male Shaft | 1 |
|  | A-2329AR | Right Hand Male Shaft | 1 |
|  | B-002 | Armature Base Bearing | 2 |
|  | B-003 | Gearbox Shaft Bearing | 4 |
|  | B-004 | Armature Top Bearing | 2 |
|  | B-009 | Oil Plug | 2 |
|  | B-010 | Drive Shaft Bushing | 2 |
|  | B-2313 | Large Drive Gear | 2 |
|  | B-2314 | Intermediate Drive Gear | 2 |
|  | B-2330AL | Female Left Hand Shaft | 1 |
|  | B-2330AR | Female Right Hand Shaft | 1 |
|  | C-016 | Carbon Brush Holder | 4 |
|  | C-017 | Carbon Brush Clip | 4 |
|  | C-018 | Carbon Brush | 4 |
|  | C-020 | Carbon Brush Cap | 4 |
|  | C-051 | 6 ft Power Cord with Male Plug | 1 |
|  | C-111 | Insulator Nylon Wire Joint | 2 |
|  | C-2309 | Vacuum Chamber Box | 2 |


| Part \# | Description | QTY |
| :--- | :--- | ---: |
| C-2316 | Power Switch Box | 2 |
| C-2318 | Motor Housing - Cap | 2 |
| D-043 | $3 / 16 \times 1$ 1/2 Dowel Pin | 2 |
| D-044 | $1 / 8 " \times$ 3/8" Dowel Pin | 4 |
| D-2319 | Bottom Plate - Gearbox | 2 |
| D-2322 | Spacer - Gearbox | 2 |
| D-2323A | Distributor Spray Jet (hub) | 2 |
| D-2324 | Upper Housing - Gearbox | 2 |
| D-2325 | Vacuum Head Shroud - Black Plastic | 2 |
| D-2345 | Stainless Steel Vacuum Head | 2 |
| E-001 | 90 degree Elbow 1/8" Brass | 6 |
| K-025 | Keyway | 2 |
| L-001 | Latch Screw | 1 |
| L-002 | Rotovac Top Plate Decal | 1 |
| MA-110 | Powerwand Armature 115 volt | 2 |
| MF-110 | Powerwand Motor Field Coil 115 | 2 |
| R-040 | Rivet | 12 |
| RP-269 | Check Plug | 2 |
| RP-271 | Front Wheel Alignment Decal | 1 |
| S-001 | Top Plate Lock Washer | 2 |
| S-002 | Top Plate Washer | 2 |
| S-023 | O - Ring | 2 |
| S-024 | Snap Ring - Drive Gear | 2 |
| S-026 | Spray Jet 1.5 - Brass Flood Je | 6 |
| S-027 | Felt Seal | 2 |
| S-028 | Drive Shaft Seal | 4 |
| S-029 | Oil Seal - Gearbox to Armature | 2 |
| S-037 | Power Switch for PW \& DHX | 1 |
| S-039 | Front Wheel Bolt | 1 |
| S-040 | Main Frame Screw | 6 |
| S-041A | Rear Wheel Bolt | 2 |
| S-044 | Short Vacuum Chamber Screw | 4 |
| S-046 | Vacuum Chamber / Gearbox Nut | 10 |
| S-049 | Rear Wheel Nut | 2 |
| S-050 | Switch Washer | 1 |
| S-052 | Switchbox Lock Washer | 1 |
| S-053 | Bottom Plate Screw | 6 |
| S-054 | Switchbox Screw | 4 |
| S-055 | Wand Hinge Bolt | 1 |
| S-056 | Long Vacuum Chamber Screw | 6 |
| V-053 | $1 / 4 "-1 / 4 "$ Double Threaded Brass | 1 |
| W-014 | Wheel Washer | 2 |
|  |  | 2 |
|  |  | 2 |

ROTOWAC SCHEMATIC


## WARRANTY

Rotovac Corporation products are warranted to be free of defects in material for 1 year as noted below:

During this warranty period, we will repair or replace, at our sole option, free of charge, any parts shown to be defective in either material or workmanship. Said parts must be returned with postage or freight pre-paid. Specific parts, such as rotary unions, valves, fittings, etc., are also warranted for a period of 1 year from date of original purchase.

This warranty is for replacement of defective parts or workmanship only. IT DOES NOT PROVIDE FOR REPLACEMENT OF COMPLETE UNITS DUE TO DEFECTIVE PARTS. It does NOT cover normal wear items such as hoses, power cords, bumpers, carbon brushes, gaskets, etc., which require replacement as a result of ordinary usage. Also, failures caused by abuse, neglect, alterations or operation contrary to manufacturer's recommendations are not warranted.

Replacement parts are warranted only for the remainder of the original warranty period.
This warranty does not cover labor or other charges in connection with replacement parts. NO LOCAL SERVICE OR REPAIR CHARGES ARE ALLOWED UNLESS PRIOR AUTHORIZATION IS OBTAINED.

There are no other warranties, expressed or implied, made with respect to this equipment. The manufacturer assumes no responsibility for damages resulting from the use or misuse of this equipment. NOTE: This warranty is not transferable.

## Rotovac Corporation

For questions on your Powerwand or to order parts \& accessories call:
(888)-768-6822
or
(888)-ROTOVAC
www.rotovac.com

## Thank You!

