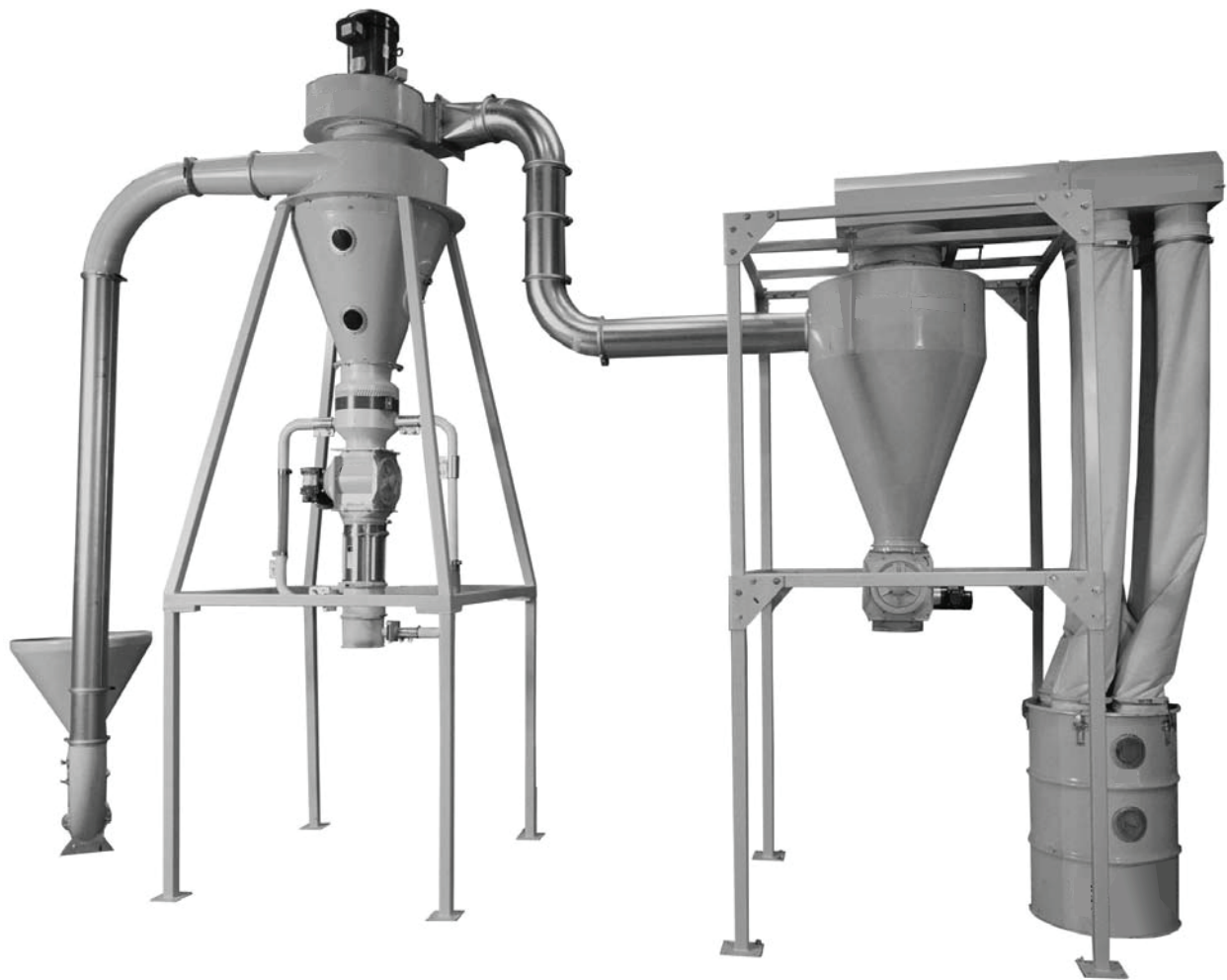




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USER GUIDE  
UGG037-0714

# ***Air Wash 50/100/150***



**Operation Manual**

## Air Wash Operating Instructions:

Thank you for purchasing a Conair Granulator Air Wash System. Please read these instructions prior to operation.

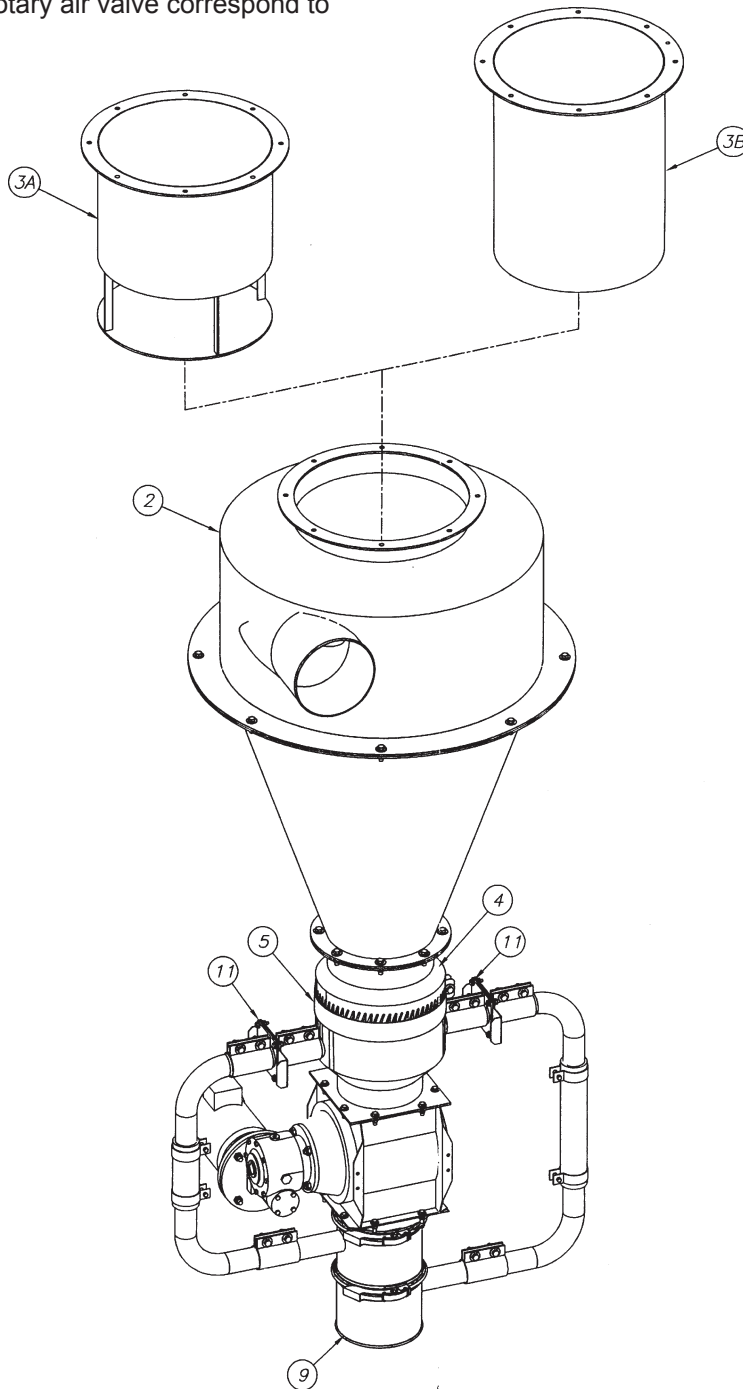
The Air Wash System has been designed to effectively remove finer and/or lighter materials from denser or heavier materials utilizing traditional cyclonic technology.

Please refer to the parts manual for the correct set up of your Air Wash. Ensure the rotation of the top mounted blower and the rotary air valve correspond to their directional arrows.

## Method of operation:

There are 6 integral parts of the Air Wash system which work together to maximize the systems performance:

- Cyclone Basket (3A) and (3B)
- Cyclone (2)
- Adjustable air inlet (5)
- Air Wash Diffuser (4)
- Air Wash Slide gates (11)
- Air Wash Cascaders (9)



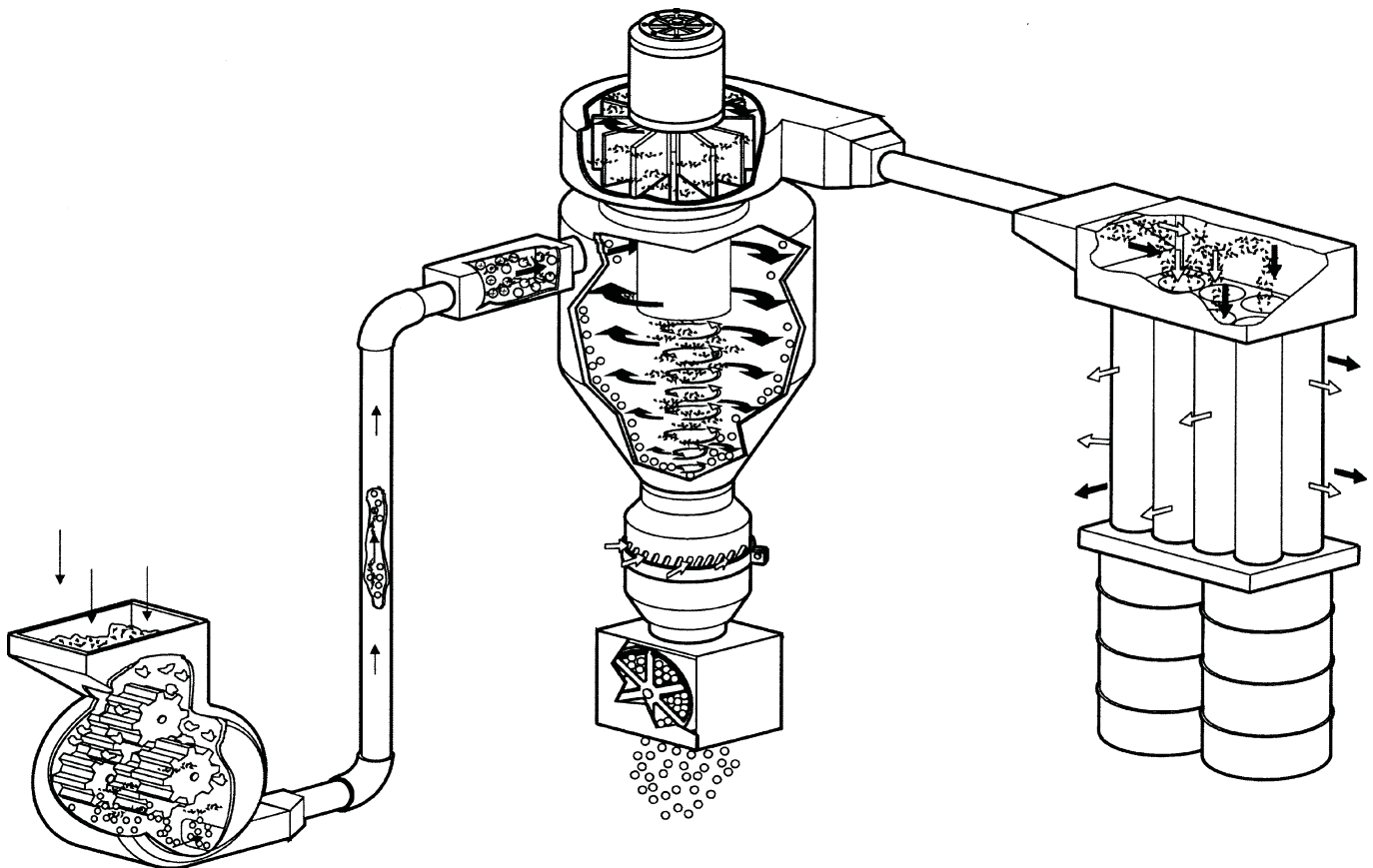
## How The Air Wash Works

The top mounted blower provides the required vacuum to convey the material from grinder/and or bin to the cyclone.(2) The material enters the cyclone tangential-ly. The heavy materials are carried to the outside of the cyclone by centrifugal force. At the same time gravity is pulling the material down creating a spiraling vortex. After about 2 to 3 revolutions most of the material reaches the discharge airlock.

The lighter material doesn't have enough momentum to follow the outside contours of the cyclone and has a tendency to remain airborne in the center of the cyclone. With any cyclone an inner vortex is created travel-ling in the upward direction.

The patent pending diffuser (4) allows air to be injected at a variable rate at the bottom of the cyclone. By injecting air 360 degrees around the diffuser (4) the upward traveling vortex can be enhanced both in diameter and speed. The more air introduced at the diffuser the faster and wider the inner vortex.

Since the fine and light material are lingering in the center area of the cyclone the induced air from the difuser assists the fines to take an upward path through the cyclone basket and to the blower.



## Primary and Secondary Cleaning

The cyclone and diffuser combination assist with the primary cleaning. As discussed, the more air introduced at the diffuser the stronger the inner vortex and the more fines are removed. The adjustable air inlet (5) can be easily adjusted up and down which will cover the air slots on the diffuser. We suggest that the initial covering of the slots start from the bottom. For example, when the slots are totally open on the diffuser, the adjustable air inlet (5) should be positioned below the slots.

## Cyclone Basket Options

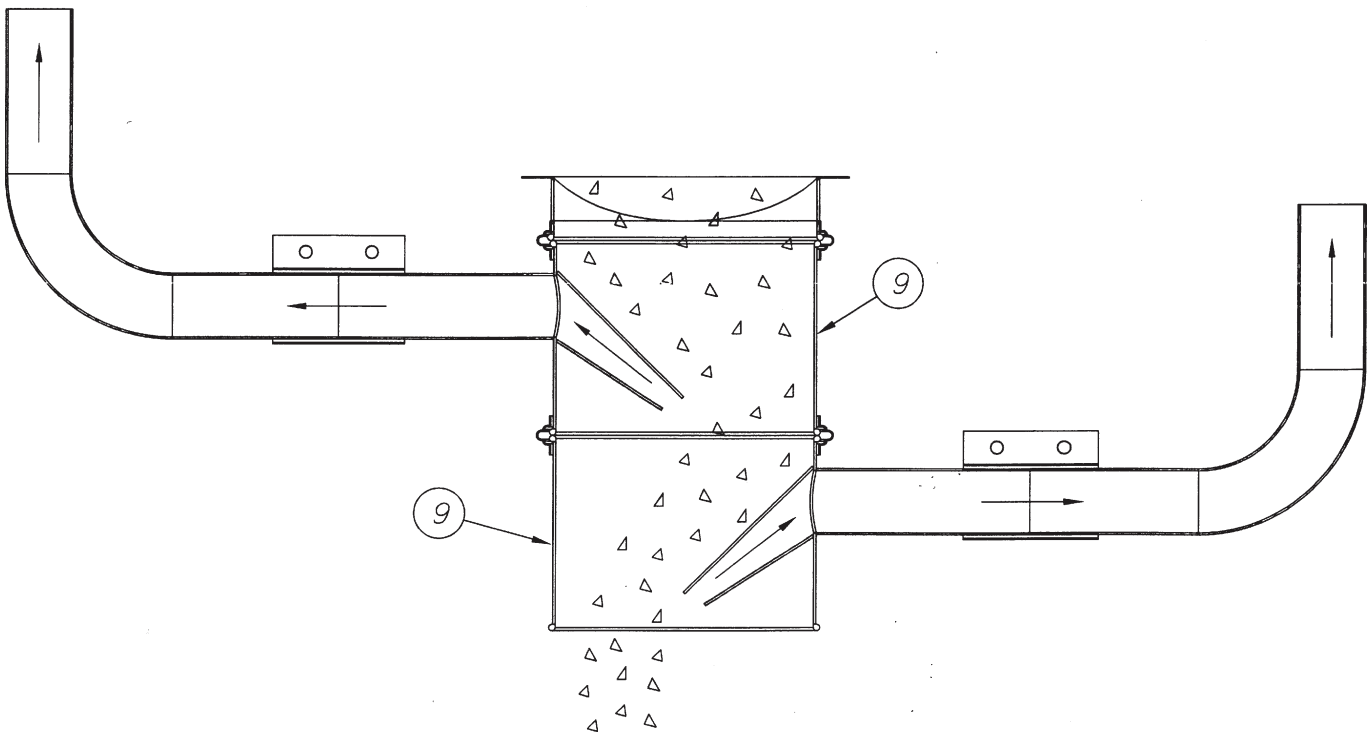
For maximum cleaning the open cyclone basket (3B) is recommended. This basket allows a free passage for the lighter material to discharge. It should be noted that some of the heavier material may become entrained in the upward vortex and exits with the lighter material. The result is a very clean regrind with some useable material existing to the dust drum. The closed cyclone basket (3A) has been designed to minimize any carry over of useable material to the dust drum. Any large particulate that becomes entrained in

the upward vortex hits the bottom plate and falls back down. The lighter material travels around the bottom plate and exits to the dust drum. Conair will advise you on the best cyclone basket for your application

## Secondary Cleaning:

The Air Wash System provides secondary cleaning after the airlock. Directly underneath the airlock are two cascaders (9). The rotary airlock volumetrically feeds the primary cleaned material through a set of cascaders. The cascaders have a set of baffles in them that deflect the material over a slight vacuum. The fines are vacuumed off the particulate as they pass over the baffle plates.

A set of slide gates (11) positioned at the bottom of the diffuser allow the operator to open or close the slide gates. When secondary cleaning is not required the slide gates are to be closed. We recommend that the slide gates be fully open or fully closed. Partially closing the slide gates could lead to material settling in the pipes which will eventually block off the required vacuum.



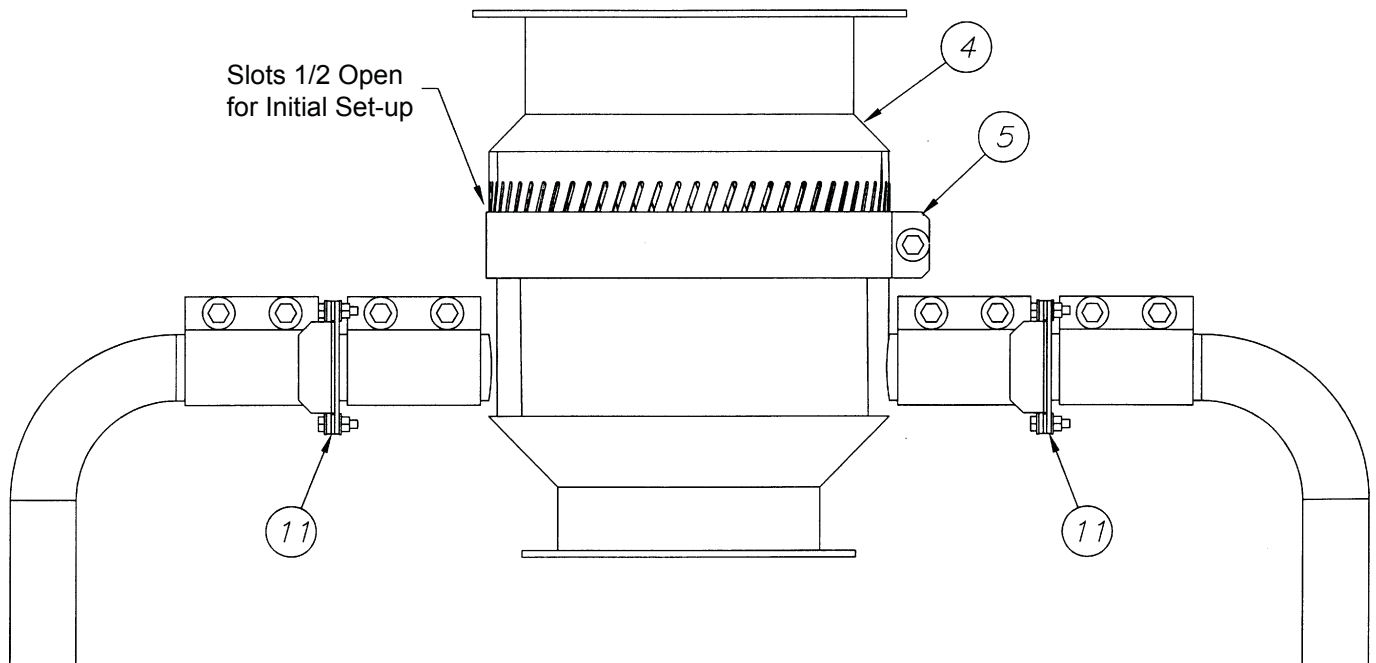
## Initial Set Up:

Once all the components of the Air Wash are installed properly and all the motors are turning in the correct rotation, we recommend the initial settings of your airwash be the following;

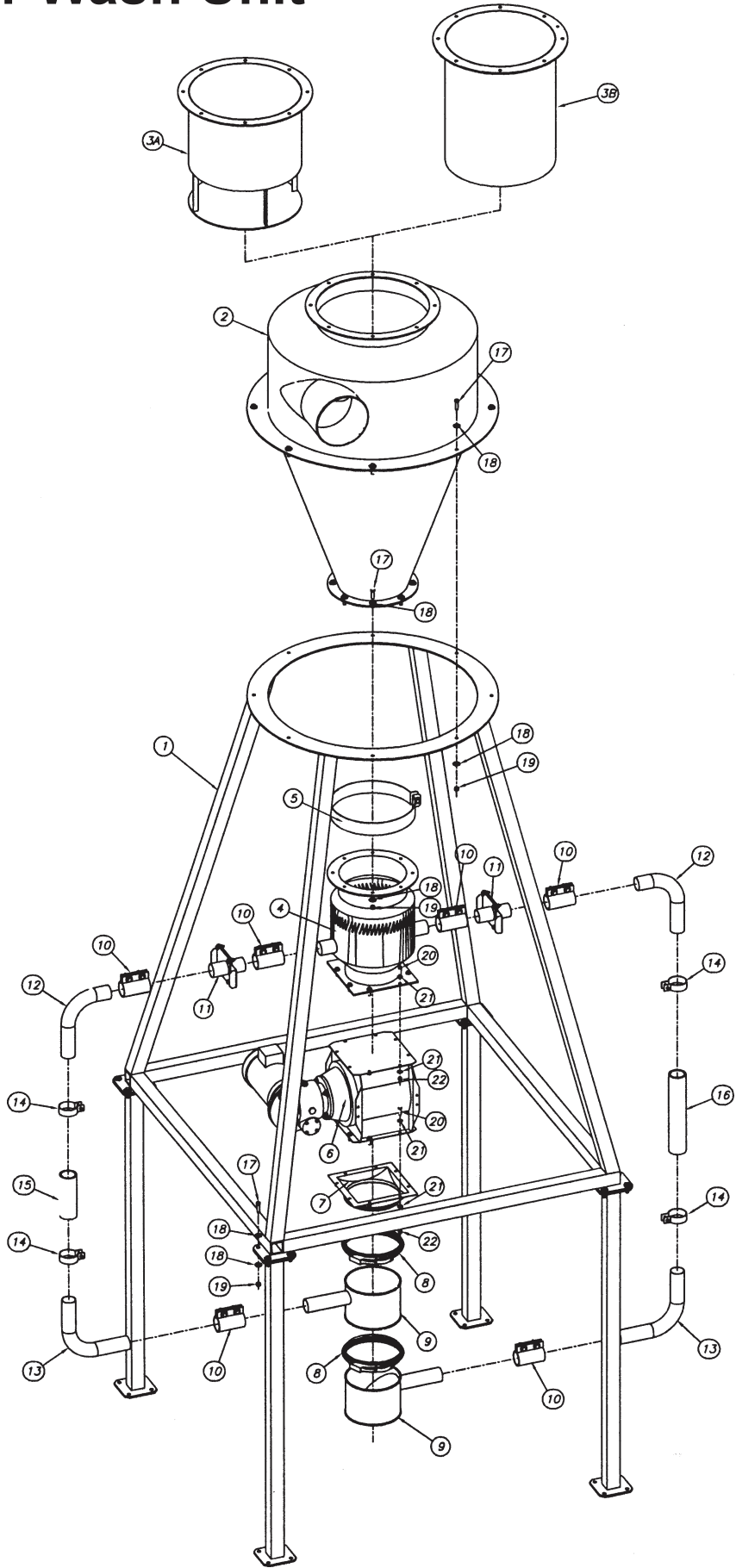
- 1) The adjustable air inlet (5) cover 1/2 of the diffuser slots
- 2) The cascader slide gates (11) be fully open

Ensure there is sufficient suction at the grinder and run some material. The more consistent the feed to the Air

Wash, the better the cleaning of the regrind. Observe the material being discharged underneath the cascaders and the dust drum. Caution the drum will be under pressure during operation, shut down equipment prior to opening the dust drum lid. If the material is satisfactory, set the position of the adjustable air inlet. If more fines are to be removed, allow more air in at the diffuser. If useable material is present in the dust drum close off the air slots on the diffuser in 1/4 inch intervals. When fine tuning your Air Wash, be sure to change one variable at a time.



# Basic Air Wash Unit





## We're Here to Help

Conair has made the largest investment in customer support in the plastics industry. Our service experts are available to help with any problem you might have installing and operating your equipment. Your Conair sales representative also can help analyze the nature of your problem, assuring that it did not result from misapplication or improper use.

## How to Contact Customer Service

To contact Customer Service personnel, call:



Additional manuals and prints for your Conair equipment may be ordered through the Customer Service or Parts Department for a nominal fee.

Most manuals can be downloaded free of charge from the product section of the Conair website.

[www.conairgroup.com](http://www.conairgroup.com)

**NOTE:** Normal operating hours are 8:00 am - 5:00 pm EST. After hours emergency service is available at the same phone number.

**From outside the United States, call: 814-437-6861**

You can commission Conair service personnel to provide on-site service by contacting the Customer Service Department. Standard rates include an on-site hourly rate, with a one-day minimum plus expenses.

## Before You Call...

**If you do have a problem, please complete the following checklist before calling Conair:**

- Make sure you have all model, control type from the serial tag, and parts list numbers for your particular equipment. Service personnel will need this information to assist you.
- Make sure power is supplied to the equipment.
- Make sure that all connectors and wires within and between control systems and related components have been installed correctly.
- Check the troubleshooting guide of this manual for a solution.
- Thoroughly examine the instruction manual(s) for associated equipment, especially controls. Each manual may have its own troubleshooting guide to help you.

## Equipment Guarantee

Conair guarantees the machinery and equipment on this order, for a period as defined in the quotation from date of shipment, against defects in material and workmanship under the normal use and service for which it was recommended (except for parts that are typically replaced after normal usage, such as filters, liner plates, etc.). Conair's guarantee is limited to replacing, at our option, the part or parts determined by us to be defective after examination. The customer assumes the cost of transportation of the part or parts to and from the factory.

## Performance Warranty

Conair warrants that this equipment will perform at or above the ratings stated in specific quotations covering the equipment or as detailed in engineering specifications, provided the equipment is applied, installed, operated and maintained in the recommended manner as outlined in our quotation or specifications.

Should performance not meet warranted levels, Conair at its discretion will exercise one of the following options:

- Inspect the equipment and perform alterations or adjustments to satisfy performance claims. (Charges for such inspections and corrections will be waived unless failure to meet warranty is due to misapplication, improper installation, poor maintenance practices or improper operation.)
- Replace the original equipment with other Conair equipment that will meet original performance claims at no extra cost to the customer.
- Refund the invoiced cost to the customer. Credit is subject to prior notice by the customer at which time a Return Goods Authorization Number (RGA) will be issued by Conair's Service Department. Returned equipment must be well crated and in proper operating condition, including all parts. Returns must be prepaid.

Purchaser must notify Conair in writing of any claim and provide a customer receipt and other evidence that a claim is being made.

## Warranty Limitations

**Except for the Equipment Guarantee and Performance Warranty stated above, Conair disclaims all other warranties with respect to the equipment, express or implied, arising by operation of law, course of dealing, usage of trade or otherwise, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.**