

## REQUIRED MAINTENANCE

### FILTERS:

(Procedures below must be performed regularly or as needed to protect dryer warranty status.)

**FILTER CLEANING:** Both the external and internal filters of the **CHALLENGAIR 2000EV™** should be kept clean. If the filters become heavily coated with dirt or debris, it will reduce the air output of your dryer and can cause damage to the motor or cause the motor to overheat.

**\*Never operate the dryer without all filters in place.**

**To clean the internal motor filter of the CHALLENGAIR 2000EV™:**

1. Unplug dryer.
2. Slide off the back cover of the dryer. This is a compression fit and will come off with a little effort.
3. Remove the filter from the internal filter housing.
4. Clean motor filter disk by vacuuming off hair and dirt, or wash filter gently in cool water. Shake off excess water and allow to air dry completely.  
(Replace filter if necessary)
5. Place the filter back in the filter housing.
6. Replace dryer back cover.

Any maintenance not explained in this manual should be performed by **Double K Industries** or an Authorized Service Center. Call **Double K Industries** for the name of an Authorized Service Center nearest you. All warranty service must be performed by an Authorized Service Center (or **Double K Industries**) to protect your warranty status.

### Attachment List

Attachment	P/N	Description	Qty.
	2005-8	8' - 1 1/4" Hose Black on Blue	1
	2031	1 1/4" Hose to Dryer Locking Adapter	1
	2003	1 1/4" Air Sweep Nozzle	1
	2076	1 1/4"-1 1/2" Vacuum Tool Adaptor	1
	2070	Super Hi-Velocity Nozzle	1
	2190	Vacuum Bag (5-pk)	1
	2074	12" Claw Nozzle	1
	2075	10" Crevice Tool	1
	2055	1 1/4" Black Swivel Nozzle	1
	2059	Brush, Curry Pin Vacuum	1
	2093	Shoulder Strap	1

# DOUBLE K INDUSTRIES CHALLENGAIR 2000EVAC™

## DRYER/VACUUM FOR HORSES



## INSTRUCTION MANUAL

**PLEASE READ ALL INSTRUCTIONS AND SAFETY PRECAUTIONS BEFORE OPERATING PRODUCT!**

**SAVE FOR FUTURE REFERENCE; WARRANTY PERTINENT CONTENT.**

### Product Specifications: Model - 2000EV™

Voltage: 115v	Voltage: 230v
Amperage: 9.40	Amperage: 4.56
Horse Power: 3	Horse Power: 3
Wattage: 1048	Wattage: 1048
Hertz: 60	Hertz: 50/60
Motor Air Volume: 124 CFM	Motor Air Volume: 124 CFM

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## IMPORTANT SAFEGUARDS

### WARNING: IMPORTANT SAFETY PRECAUTIONS! PLEASE READ COMPLETELY BEFORE USING PRODUCT!

When using electrical appliances, especially in the presence of children and animals, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including but not limited to the following:

DO NOT TURN ON DRYER WITHOUT FIRST HOLDING THE DRYER HOSE, as the air volume from the dryer can cause the hose to whip or move rapidly and may cause injury.

1. Do not leave dryer OR animal unattended while in use.
2. Unplug unit when not in use.
3. Do not use extension cords with dryer.
4. Do not unplug unit by pulling on cord.
5. Do not expose dryer to rain or water.
6. Do not use or store dryer where it can fall or be pulled into tub, sink or standing water. If dryer falls into water . . . UNPLUG IT . . . Do not reach into the water!
7. Unplug unit before attempting any maintenance or service.
8. Do not put any object into dryer openings.
9. Keep loose clothing, jewelry and hair away from dryer intake.
10. Do not direct dryer air towards eyes or ears of people or pets.
11. Never use dryer if it has a damaged cord or plug, has been dropped, damaged or exposed to rain or water. Return to **Double K Industries** or an Authorized Service Center for service.
12. When using the cage attachment, do not leave the animal unattended.
13. This product is for use on animals only.
14. Recommended operation by adults only. Use caution when working around children.
15. Do not use attachments not recommended by **Double K Industries**.
16. Do not operate without filters in place. Keep filters clean, as dirty filters limit air intake and may damage the motor or cause overheating.
17. Only plug into a properly grounded receptacle. Always make sure the amperage of the electrical outlet is sufficient for the amperage rating of the product. (See Product Specifications on front page for amperage rating of this product).
18. Do not use product for anything other than its intended purpose.
19. Do not attempt to perform any service or maintenance not outlined in instruction manual.
20. Do not attempt any product modifications or alterations. Do not use, if any parts or switches are damaged. Send to an Authorized Service Center or **Double K Industries** for service.
19. When servicing, use only **Double K Industries** parts.

## BRUSHES

Your **CHALLENGAIR 2000EV™** has one brush-type motor. The brushes should be checked for wear after approximately 600 hours of use. If the carbon brushes are worn shorter than 1/4 inch, the brushes should be replaced. Brushes may be ordered from **Double K Industries** or an Authorized Service Center. Please be sure to specify that your dryer is a **2000EV™**, as the brushes are slightly different from one dryer model to another.

### To check and/or replace brushes:

1. Unplug electrical cord from wall outlet.

### Disassembly:

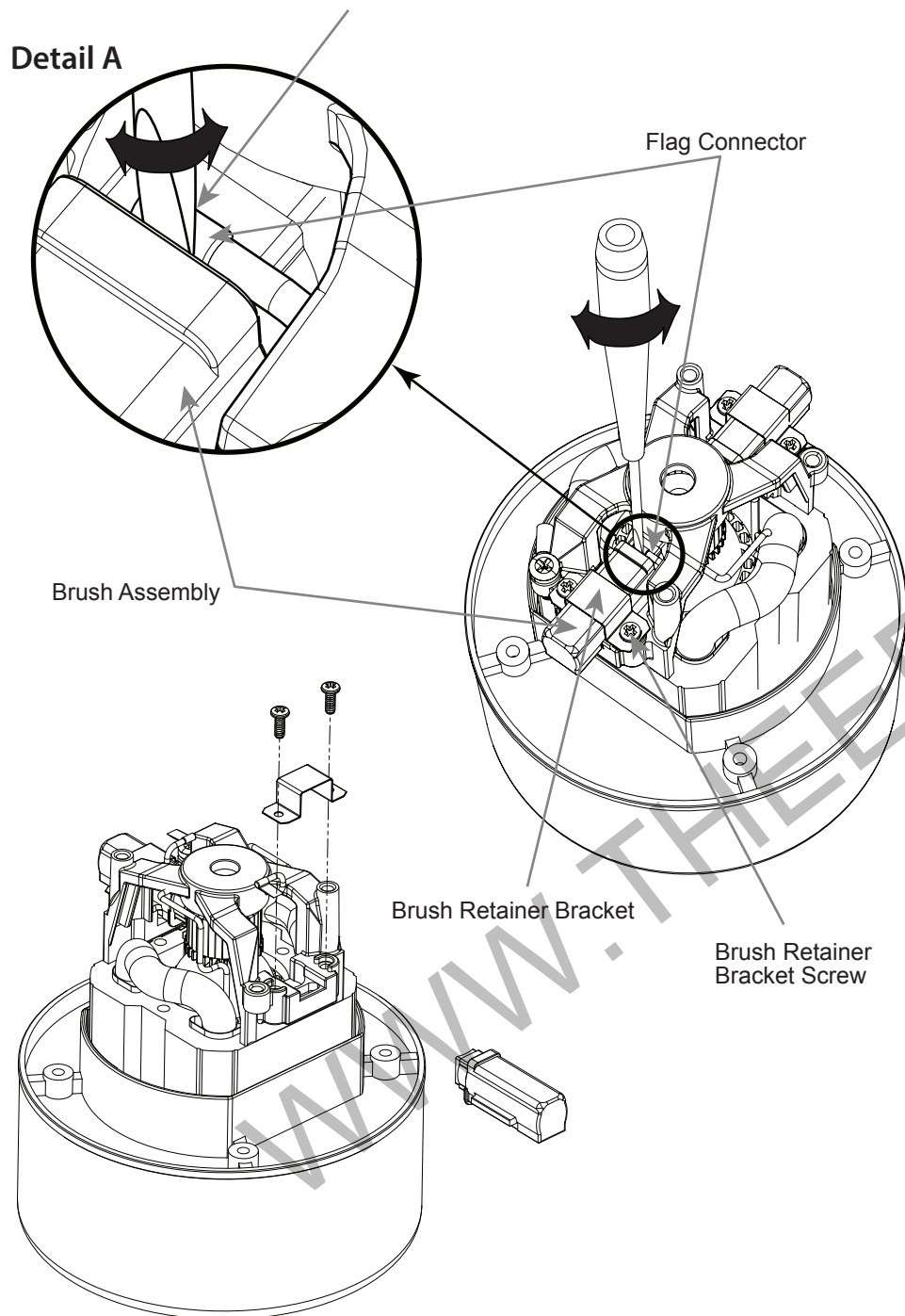
2. Slide off the back cover from the dryer. This is a compression fit and will come off with a little effort.
3. Remove all screws on the outside of the dryer that hold the two halves of dryer housing in place. Lay the dryer on its side while removing these screws. Remove the O-ring on the snout of the dryer and lift the top half.
4. Each motor will be sitting in place inside the rubber silicone motor mounts. Removing the rubber silicone motor mounts from the motor is not necessary to replace brushes. The internal filter frame fits into slots on the inside of the dryer housing. This piece can remain while changing brushes.
5. Disconnect motor power wires (see wiring diagram). Note where wires connect.
6. Motor: (a) Find the flag connector on the top of the brush assembly. There is a wire leading to this connector. (b) Place a flathead screwdriver with a fine tip between the flag connector and the plastic brush housing. (c) Rock the screwdriver back and forth and gently wedge the flag connector out of the brush assembly. (d) Loosen the two brush assembly retainer bracket screws. (e) Remove the brush assembly. (f) Replace the brush assembly with the new one, making sure that the small tab on the bottom is fitted onto the corresponding slot on the motor frame. (g) Replace the brush assembly retainer bracket and tighten the screws which hold it in place. (h) Attach the flag connector to the new brush in the same position as the previous brush. (i) Repeat these steps for the brush on the other side of the motor.

### Reassembly:

7. Inspect the motor mount for cracks or damage -- replace if necessary. Set the motor back into its original position in the dryer housing. The motor mount has slots that fit over corresponding alignment tabs on the inside of the dryer housing. These slots and tabs must match up for proper fit and function. (Note: In the event that the motor mount is removed from the motor, simply replace it by being mindful to align the contours of the motor mount with corresponding contours on the motor housing.) Make sure that the internal filter housing is in its appropriate slot before putting the halves together.
8. Reattach the screws around the outside of the dryer making sure the two halves are matching up.
9. After the two halves of the dryer housing have been put together, replace internal filter and push the back cover onto the rear of the dryer. Always make sure all filters are in place before operating dryer. Replace o-ring on snout.

Place Screw Driver Tip Between Clip and Plastic Brush Body. Rotate to Separate Tab from Brush.

## Detail A



## Congratulations!

You've just purchased the Double K **CHALLENGAIR 2000EV™** Forced Air Dryer & Vacuum, which produces warm, high velocity air under pressure, to allow you to dry your animal perfectly. Your new dryer is designed to provide long, reliable service.

Please read this manual carefully and completely before beginning operation of your dryer and keep in a convenient and safe place for future reference.

A warranty card is included with your dryer and should be filled out completely and mailed to **Double K Industries** within 30 days of the purchase date of your dryer to validate your warranty. Online registration available at [www.DoubleKIndustries.com](http://www.DoubleKIndustries.com)

Your **CHALLENGAIR 2000EV™** has a two-year warranty covering the unit against defects in materials and workmanship. Regular maintenance items such as brushes and filters are NOT included (see warranty card for complete warranty information). It is also important to retain your sales receipt as proof of purchase should service ever be needed.

Your **CHALLENGAIR 2000EV™** has one brush-type motor. It is important that the brushes be changed when they become worn down to prevent damage to your dryer motor (brushes are maintenance components and are NOT covered under the warranty). We suggest checking the motor brushes after every 600 hours of dryer use. Please see section on BRUSHES in this manual for instructions.

A NOTE ABOUT HEAT: Your **CHALLENGAIR 2000EV™** has no heating element. The **CHALLENGAIR 2000EV™** produces heat by a "flow-thru" motor system, meaning the air is pushed through the motor and is warmed by the natural heat of the motor that occurs during operation. This means greater electrical savings and efficiency for you. The dryer will reach its maximum air temperature after about 2-4 minutes of operation. (Note: The higher the room temperature, the warmer the air from the dryer will be.)

## ASSEMBLY

To attach hose to dryer: Your dryer hose has a black hose adapter that will screw onto the hose in a counter-clockwise motion. The adapter with hose attached then fits onto the dryer with a half-twist motion that locks the adapter onto the dryer.

First, place the adapter inside the snout of the dryer by aligning the slots on the adapter to the bolt that runs through the inside of the dryer snout. Turn the adapter until it locks in place and cannot be pulled out. Reverse this process to remove the adapter from the dryer.

To use the dryer as a vacuum, remove the adapter from the front of the dryer and insert it into the hole at top center of the black end cap. Turn the adapter until it locks into place and cannot be pulled out.

To remove hose from adapter: Turn the hose clockwise (reverse threading).

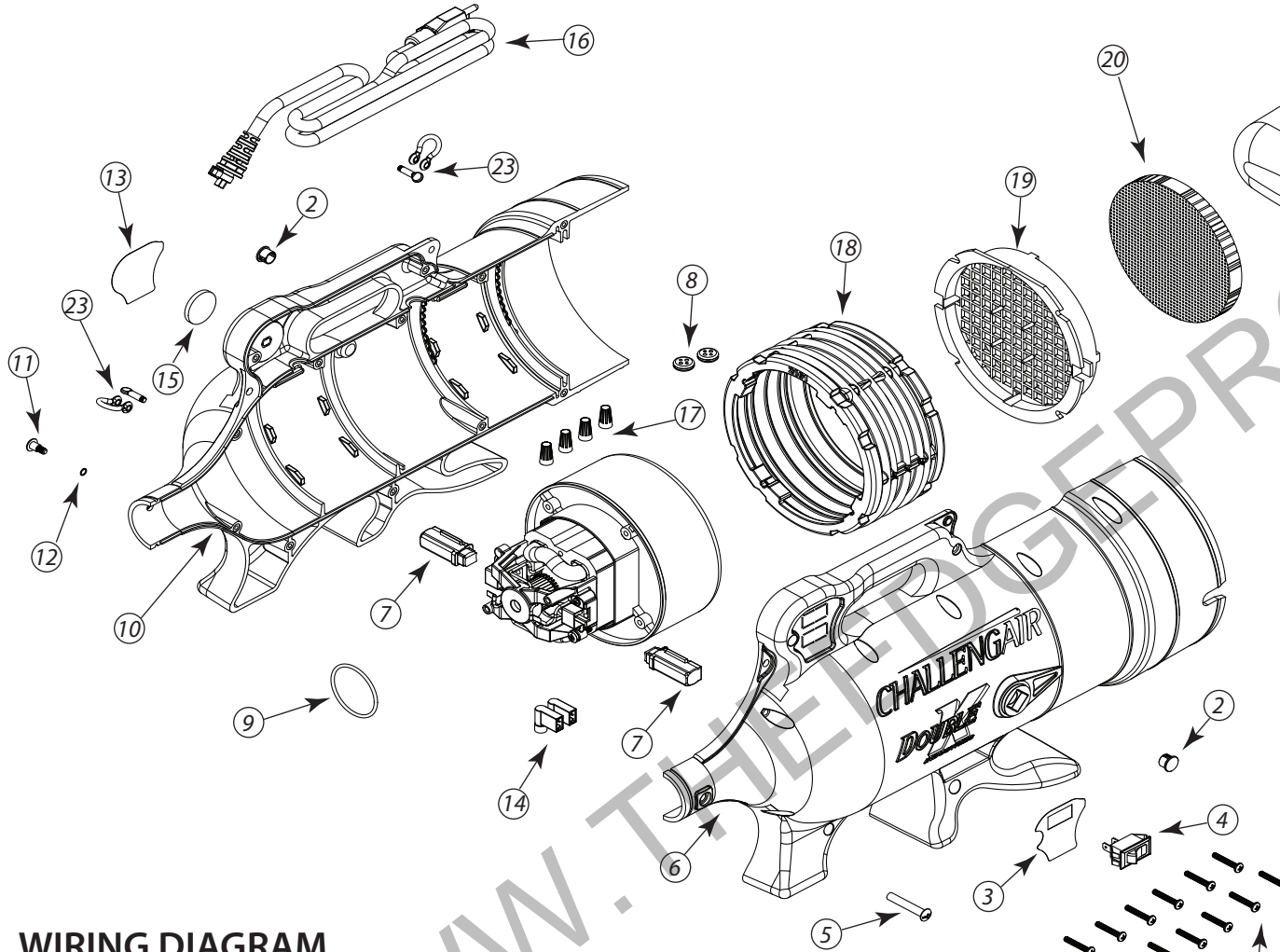
**ATTACHMENTS:** Your dryer is equipped with one hose, 2 twist-on nozzles, 1 nozzle extension and 1 compression fit nozzle. To attach nozzles to hose, twist the nozzles counter-clockwise. Twist clockwise to remove. See Attachment Guide on page 8.

## OPERATION

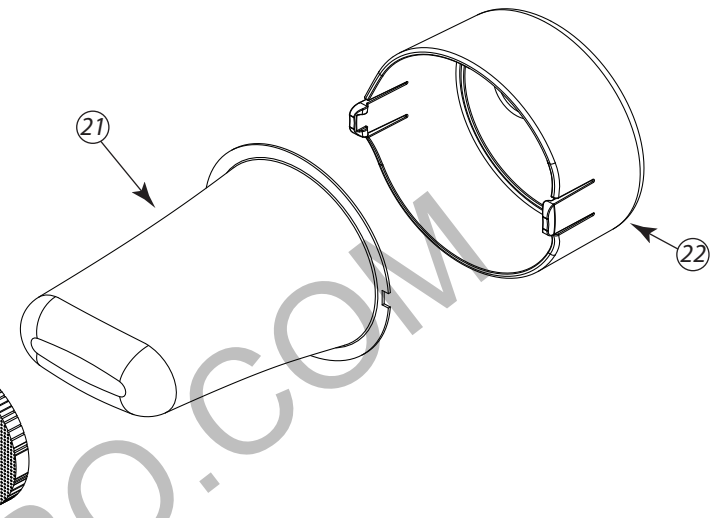
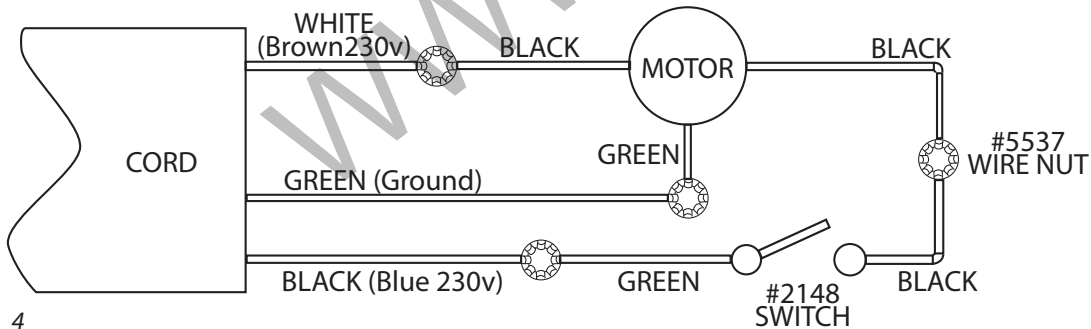
### Switches and Controls:

1. **2-Speed:**
  - a. **Low Speed / Standard Heat** - Turn on the top motor switch.
  - b. **High Speed / High Heat** - Turn on both motor switches.
2. **Variable Speed (optional)**
  - a. **Maximum Output** - Turn the dial speed control clockwise to its maximum.
  - b. **Variable Output** - Turn the dial speed control clockwise to desired air output.
  - c. **Off Position** - Turn the dial speed control counter-clockwise until it clicks off.





## WIRING DIAGRAM



## 2000EVAC™ PARTS LIST

Item#	Part#	DESCRIPTION	Qty.
1	2167	Screw 2600 Series Housing	12
2	2123	Housing Plug (models w/o stand)	2
3	2209	Decal, , Switch Side	1
4	2148	Switch Rocker 20A 125VAC 2-Pos	1
5	2198	Barrel Bolt (1/4 Barrel 24 Thread)	1
6	2157-1	Long Black Housing, Left Side	1
	2155-1	Long Blue Housing, Left Side	
7	10075	Motor Brushes, 115v	2
	880	Motor Brushes, 230v	
8	2159	Wire Grommet, 4-Hole	2
9	2108	Housing O-Ring for Hose Adapter	1
10	2157-2	Long Black Housing, Right Side	1
	2155-2	Long Blue Housing, Right Side	
11	2197	Screw, 1/4 Shoulder (#10-24 Thread)	1
12	2131	Shim .24 OD x .190 ID x .015	1
13	2618	Decal, 115v 2000EV	1
	2619	Decal, 230v 2000EV	
14	2119	Connector, Blue Flag	2
15	2187	Cork Disk Filler	1
16	881-3	Assy. Cord Set 115v	1
	403	230v GB Cord Set UK-Ireland	
	404	230v China Cord	
	405	230v Eur. Cord Set Continental Europe	
	408	230v Aus Cord Set New Zealand	
17	5539	Nut, Orange Hard Plastic Wire	4
18	2161	Silicone Rubber Molded Motor Mount	1
19	2191	Internal Filter Housing	1
20	2196	Internal Filter	1
21	2190-1	Vaccum Bag	1
22	2189	Vacuum Inlet Cap	1
23	483	Bow Shackle Assy.	2
24	819	Motor 120v 60 Hz LM #115923	1
	805	Motor w/ Choke, 230 v	