

fig. 1  
SIDE

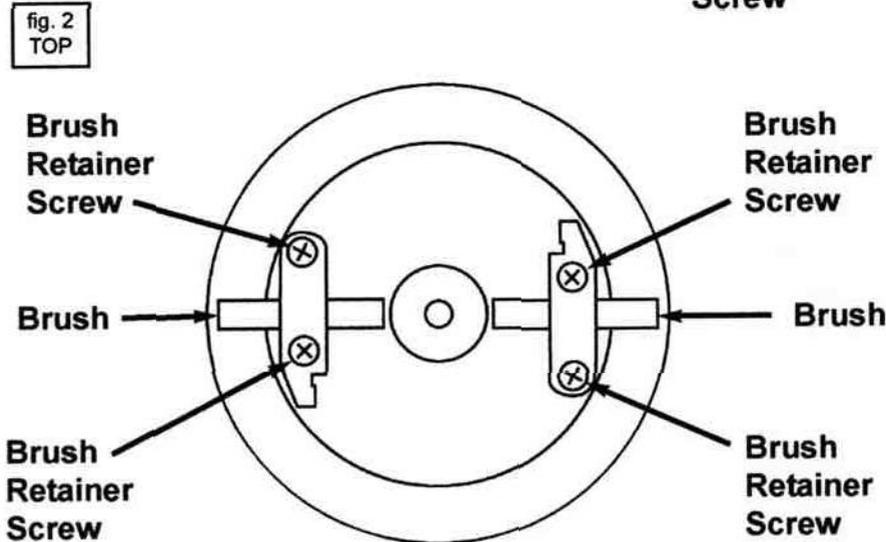


fig. 2  
TOP



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**DOUBLE™**  
INDUSTRIES

The **CHALLENGAIR™**

**AIRMAX™**

## INSTRUCTION MANUAL

**PLEASE READ ALL INSTRUCTION AND SAFETY PRECAUTIONS BEFORE OPERATING PRODUCT!! SAVE FOR FUTURE REFERENCE.**

Product Specifications:

Model - AIRMAX  
Voltage - 115  
Amperage - 15.8  
Wattage - 1817

## IMPORTANT SAFEGUARDS

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

When using electrical appliances, especially when children or pets are present, 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 move rapidly and may cause injury.

1. Do not leave dryer OR the animal unattended while product is 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 or 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 openings.
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, exposed to rain or water. Return to Double K Industries or an Authorized Service Center for service.
12. This dryer, and all dryers of this type, produce very warm air, and should not be used as cage dryers. For cage drying, please consider our *CHALLENGAIR 560* cage dryer.

12. This product is for use on animals only.
13. Recommended operation by adults only. Use caution when working around children.
14. Do not use attachments not recommended by Double K Industries.
15. Do not operate without filters in place. Keep filters clean, as dirty filters limit air intake and may damage the motor or cause overheating.
16. Plug only 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 for amperage rating of this product).
17. Do not use product for anything other than its intended purpose.
18. Do not attempt to perform any service or maintenance not outlined in instruction manual.
19. Do not attempt any product modifications or alterations. Do not use if any part or switch is damaged - send to an Authorized Service Center or Double K Industries for service.
20. When servicing, use only Double K Industries parts.

## ***Congratulations!***

You've just purchased the Double K *CHALLENGAIR AIRMAX* Forced Air Dryer, which produces warm, high velocity air under pressure to make your grooming tasks easier. 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 this manual 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. Your *CHALLENGAIR AIRMAX* has a two year warranty covering the unit against defects in materials and workmanship except brushes and filters (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 AIRMAX* has two brush-type motors. 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 500 hours of dryer use. Please see section on BRUSHES in this manual for instructions.

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

## **ASSEMBLY**

**To attach hose to dryer:** Your dryer hose has a black hose adapter, with a hose clamp attached. Fit the black hose adapter onto the air outlet snout and tighten the hose clamp firmly with a screwdriver.

**To remove hose from adapter:** Turn the hose clockwise.

**ATTACHMENTS:** Your dryer is equipped with one hose and 3 twist-on nozzles. To attach nozzles to hose, twist the nozzles "counter-clockwise". Twist clockwise to remove.

## **OPERATION - Switches and Controls:**

1. **Standard Speed/Standard Heat** - Turn on one motor switch.
2. **High Speed/High Heat** - Turn on both motor switches.

## **MAINTENANCE**

**FILTER CLEANING:** Both the external and internal filters of the *CHALLENGAIR AIRMAX* should be kept clean. If the filter becomes heavily coated with hair and/or dirt, it will reduce the air output of your dryer and can cause damage to the motors or cause the motors to overheat. Never operate the dryer without both filters in place.

Clean external filter daily by vacuuming or shaking off dirt and hair. Filter may be rinsed in water if necessary. Let filter dry completely before reinstalling on dryer.

To clean the internal motor filter of the *CHALLENGAIR AIRMAX*:

1. Unplug dryer.
2. Slide off the burgundy back cover of the dryer. This is a compression fit and will come off with a little effort.
3. Remove the filter disk on the motor assembly housing by pulling filter off.
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.
5. Replace filter disk onto motor assembly housing by pushing into place.
6. Replace dryer back cover.

## **CHANGING BRUSHES ON THE AIRMAX DRYER:**

Your *CHALLENGAIR AIRMAX* has two brush-type motors. The brushes should be checked for wear after approximately 500 hours of use. If the carbon brushes are worn shorter than ¼ 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 an AIRMAX 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.
2. Slide off the burgundy back cover (#2049) from the dryer. Remove the external filter (#2027) and pull from the outside of the 'X' bracing. This is a compression fit and will come off with a little effort.
3. Remove the wire nuts and disconnect the motor power wires. Pull the wires towards the rear of the dryer. Doing this may make it easier to remove the motor mount.
4. Remove the four acorn nuts (#420) on the outside front of the dryer that holds the motors in position.
5. Pull the dual motor assembly out by the holder/wire loom (#2063) of the motor housing.
6. NOTE: See figures 1&2 (on back page of user manual) for an illustration of the brush components.

### **Front motor:**

A. Set the entire motor mount (#2043) in an upright position with the front motor facing up.

Remove the two brush retainer screws to loosen the brush retainer. The brush retainer will flex to be moved out of the way in order to remove the motor brush. Then remove the brush, replacing it with a new one.

Note: IMPORTANT-the brush has a small tab on the bottom that MUST be fitted into the slot on the motor frame for proper positioning.

B. After the new brush is seated, tighten the brush retainer screws.

C. Repeat steps A-B for brush on other side of motor.

Rear motor:

A. To remove the rear motor brushes, you must remove the five rear nuts and holder/wire loom (#2063) holding the motor enclosure assembly together. Pull off the motor filter (#868) on the back of the motor. Then remove the front motor from the motor mount to access the rear motor. Set the motor mount back in an upright position with the rear motor facing up. The brushes can be accessed while the rear motor is still in the motor mount.

B. Follow steps A-C above, as outlined for the front motor.

C. Set the front motor back into the original position, making sure that the gasket is in good condition and properly installed, then reattach the nuts that hold the motor enclosure assembly together. Note: When you close the motor assembly, make sure the distance between the end of the front motor mount and the back motor mount is 4"( $\pm 1/8$ "). Press the front and rear motor mounts together as much as possible to create a tight fit. If there is space on the rod between the rear motor mount and the nut then tighten the nuts until there is little or no space left on the rod.

This will ensure a tight seal between the motors. Replace the holder/wire loom (#2063).

7. Slide the motor assembly back into the housing, lining up the screws to the holes on the front of the unit.

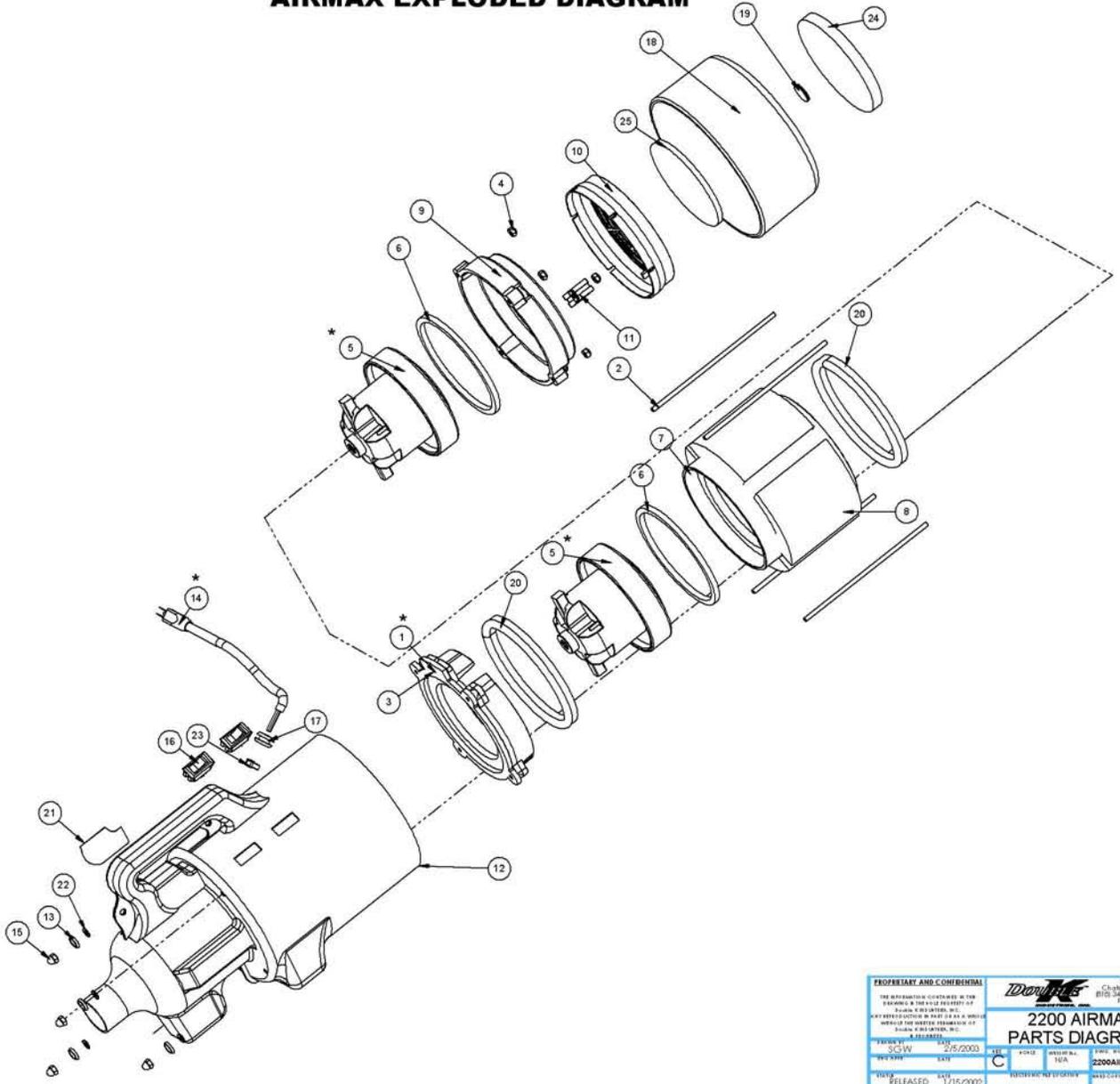
An easy way to do this is by setting the front of the dryer down on a table and lower the motor mount into the housing with all of the wire facing towards the rear of the unit. Replace the motor filter (#868).

Reattach the acorn nuts and reconnect the motor power wires (wires are color coded).

8. Replace the end cap (#2049) and external filter (#2027).

Any maintenance not explained in this manual should be performed by Double K Industries, or an authorized service center. Call Double K Industries or visit the website, [www.doublekindustries.com](http://www.doublekindustries.com), for the name of the Authorized service center near you. All warranty service must be performed by an authorized service center (or Double K Industries) to protect your warranty status.

# AIRMAX EXPLODED DIAGRAM



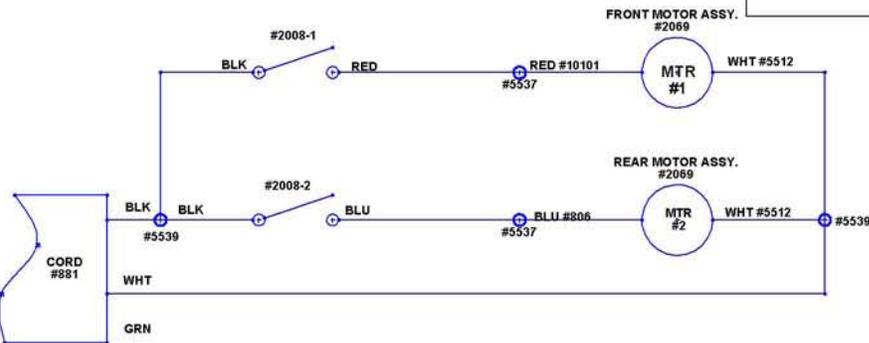
<b>PROPRIETARY AND CONFIDENTIAL</b>				9711 Marine Ave Chatsworth, CA 91311 818 345-0010    818 320-9449 Fax: 818 306-0215
THE INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.		<b>2200 AIRMAX PARTS DIAGRAM</b>		
DRAWN BY: SCS/KV DATE: 2/5/2003 CHECKED BY: [blank] DATE: [blank]	SCALE: C REVISION: N/A RELEASED: 1/15/2002	PART NO.: 2200AIRMAX PARTSREF REV: [blank]	SHEET NO.: [blank]	OF 2

## AIRMAX PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2050	FRONT MOTOR MOUNT	1
2	2054	ALL THREAD #10-32 x 7.0 ZINC PLATED	4
3	2014	FRONT MOTOR MOUNT SEAL	1
4	5531	NUT #10-32 UNF NYLON INSERT	4
5	2069	MOTOR UNIVERSAL SINGLE STAGE 120 V	2
6	2060	FOAM RUBBER SEAL	2
7	2035	MOTOR MOUNT/HOUSING TUBE	1
8	2043	FOAM RUBBER SOUND PROOFING	4
9	2051	MOTOR MOUNT BACK PLATE	1
10	868	INTAKE AIR FILTER	1
11	2063	LOOM CLAMP 1-1/4"	1
12	2012-A	HOUSING AIRMAX 2200	1
13	2016	WASHER #10 CTSK FINISH BLACK SS 18-8	4
14	881-1	ASSY CORDSET W/TIE 120V 14 FT	1
15	420	NUT #10-32 ACORN BLACK	4
16	2008	SWITCH ROCKER 16A 2 POSITION RED	2
17	534	GROMMET BLACK	1
18	2049	HOUSING END CAP	1
19	5538	VELCRO, MVA 8 BLACK VELSTICK	1
20	2066	U-CHANNEL .56 x .37 MOUNT SEAL	2
21	2044	LABEL AIR MAX UNIT 115	1
22	9028	WASHER #8 SAE FLAT PLATED	4
23	877	QUICK TIEWRAP	1
24	2027	FILTER INTAKE	1
25	2009	FOAM DISC, SOUND CONTROL	1

ITEM14	403	230V CORD EUROPEAN
ITEM14	405	230V CORD EUROPEAN
ITEM14	408	230V CORD EUROPEAN
ITEM 5	2061	MOTOR 230V/50HZ
ITEM 5	2064	MOTOR 230V/50HZ
ITEM 5	2065	BRUSH,110V
ITEM 5	2067	BRUSH 230V/50HZ

### WIRING DIAGRAM



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<b>2200 AIRMAX PARTS LIST</b>					
THE INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DronAir, INC. IS PROHIBITED.	DATE: 2/5/2003 BY: SSCW	REV: C	TITLE: N/A	PART NO.: 2200AIRMAX PARTSREF	SHEET: 2 OF 2
DATE RELEASED: 1/15/2002	REVIEWED BY: GSHV	WORK CENTER: 2200	DRAWING NO.: 2200AIRMAX PARTSREF	PART NO.: 2200AIRMAX PARTSREF	SHEET: 2 OF 2