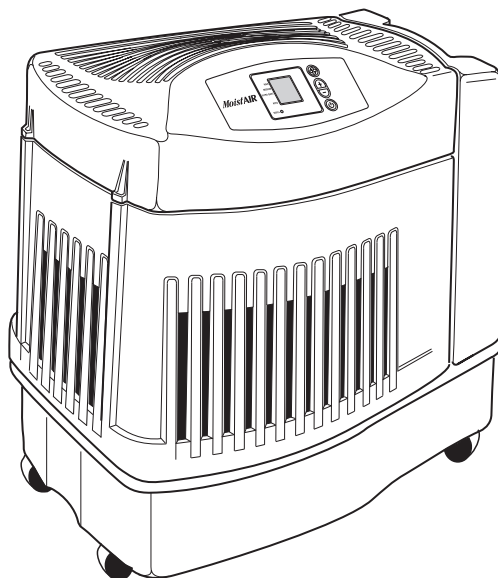


CAUTION: READ ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLATION.
SAVE THIS OWNER'S MANUAL FOR FUTURE REFERENCE.



Model No.
MA12010

MoistAIR®
MD



MA1201

Evaporative Console Humidifier Owner's Manual

Limited Warranty

This product is warranted against defects in workmanship and materials for one year from the date of sale except for motors, which are warranted for two years. This warranty does not apply to damage from accident, misuse, alteration, unauthorized repairs, unauthorized use, mishandling, unreasonable use, abuse, including failure to perform reasonable maintenance, normal wear and tear, nor where the connected voltage is more than 5% above the nameplate voltage, nor to the equipment or products being improperly installed or wired or maintained in violation of this Owner's Manual. THIS WARRANTY DOES NOT APPLY TO FILTERS WHICH ARE CUSTOMER REPLACEABLE PARTS. THIS PRODUCT IS NOT INTENDED FOR COMMERCIAL USE. THIS IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY MANUFACTURER WITH RESPECT TO THE PRODUCTS AND, TO THE MAXIMUM EXTENT PERMITTED BY LAW, IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES AND CONDITIONS, EXPRESS OR IMPLIED, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE. No employee, agent, dealer or other person is authorized to give any warranties or conditions on behalf of the manufacturer. The customer shall be responsible for all costs incurred in the removal or reinstallation and shipping of the product for repairs.

Within the limitations of this warranty, inoperative units should be returned, with a copy of the sales receipt, freight prepaid to an authorized repair service center and the manufacturer will repair or replace the product, at its option, at no charge to the customer with return freight paid by the manufacturer. It is agreed that such repair or replacement is the exclusive remedy available from the manufacturer and that TO THE MAXIMUM EXTENT PERMITTED BY LAW, THE MANUFACTURER IS NOT RESPONSIBLE FOR DAMAGES OF ANY KIND, INCLUDING INCIDENTAL AND CONSEQUENTIAL DAMAGE OR LOSS OF PROFITS OR REVENUES. Some provinces and states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply in some cases.

The warranty gives the customer specific legal rights, and the customer may also have other rights which vary from province to province, or state to state.

SALES RECEIPT REQUIRED AS PROOF OF PURCHASE FOR WARRANTY CLAIMS.

GENERAL SAFETY INSTRUCTIONS

Safety Signal Words

DANGER: means if the safety information is not followed someone **will** be seriously injured or killed.

WARNING: means if the safety information is not followed someone **could** be seriously injured or killed.

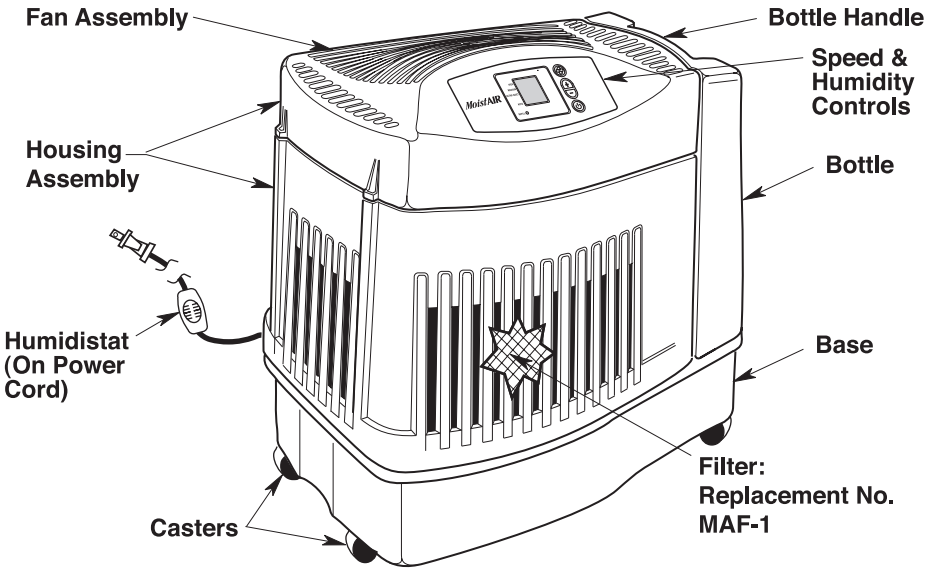
CAUTION: means if the safety information is not followed someone may be injured.

1. To reduce the risk of fire or shock hazard, plug humidifier directly into a 120V, A.C. electrical outlet. Do not use extension cords.
2. Keep the electric cord out of traffic areas. To reduce the risk of fire hazard, never put the electric cord under rugs, near heat registers, radiators, stoves or heaters.
3. Always unplug the humidifier before moving it, removing the fan assembly section, before cleaning, or whenever the humidifier is not in service.
4. Keep the humidifier clean.
5. Do not put foreign objects inside the humidifier.

6. Do not allow to be used as a toy. Close attention is necessary when used by or near children.
7. Never use your humidifier while any part is missing or damaged in any manner.
8. To reduce the risk of electrical hazard or damage to humidifier, do not tilt, jolt or tip humidifier while unit is running.
9. To reduce the risk of damage to humidifier, unplug when not in use.
10. To reduce the risk of accidental electrical shock, do not touch the cord or controls with wet hands.
11. To reduce the risk of fire, do not use near an open flame such as a candle or other flame source.
12. Note the warning label shown below.

WARNING: To reduce risk of fire, electric shock, or injury always unplug before servicing or cleaning.

Know Your Humidifier



Description	MA1201
* Output/24 hrs	12 Gallons(45.4L)
Capacity of Bottle	1.9 Gallons(7.2L)
Capacity of Base	2 Gallons(7.5L)
* Sq. Ft. Coverage	2500
Fan Speeds	3
Replacement Filter	MAF-1
Fill Light	Yes
Auto Humidistat	Yes
Auto Shut Off	Yes
Controls	Electronic (Push Button)
Casters	Yes (4)
CUL Listed	Yes
Volts	120 A.C.
Hertz	60
Amps (High Speed)	0.80
Watts (High Speed)	80

* Based on an area with average insulation and an 8' ceiling height ANSI/AHAM HU-1-1997. SEC. 8.1, results may vary.

How Your Humidifier Works

Your new MoistAIR® Evaporative humidifier is designed to satisfy home humidity requirements through the principle of evaporation of water in the air.

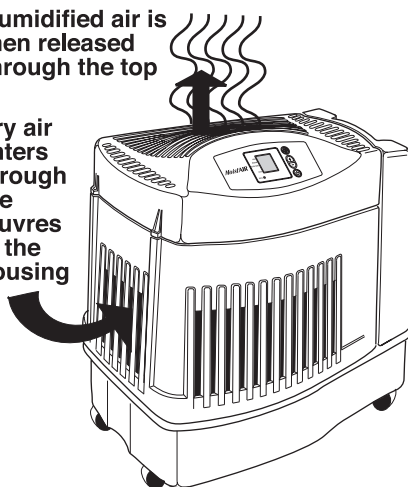
Once the filter becomes saturated, air is drawn in, passes through the filter and moisture is absorbed into the air. All evaporation occurs in the humidifier so any residue remains in the filter. This natural process of evaporation virtually eliminates white dust.

CAUTION: To reduce the risk of injury, fire or damage to humidifier, use only cleaners specifically recommended for humidifiers. Never use flammable, combustible or poisonous materials to clean your humidifier.

To reduce the risk of scalds and damage to humidifier, never put hot water in humidifier.

Humidified air is then released through the top

Dry air enters through the louvres in the housing

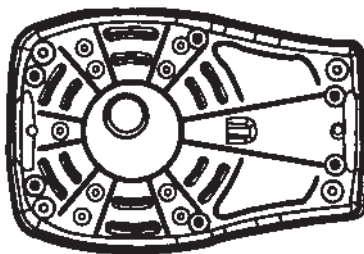


Step 1. Getting Your Humidifier Up and Running —

Assembly

Remove casters, water bottle, housing assembly, and filter from the box and reverse the base. Press casters into the bottom of the base manually. **Do not use tools.** Set the base upright.

Replace the filter, housing assembly and bottle (See “Replacement and Care of Filters”, page 11 for reference).



Step 2. Location and Electrical Hook Up —

WARNING: For your own safety, do not use humidifier if any parts are damaged or missing.

Selecting A Location

Place humidifier on a flat level surface, take extra care in leveling when placing the unit on carpet. Position the humidifier where the most humidity is needed or where the most air will be circulated throughout the house such as near a cold air return.

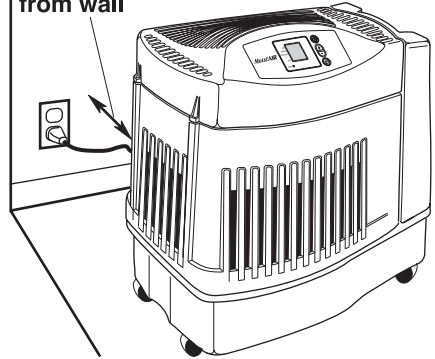
Moist air (humidity) produced will disperse into the whole house, but the area closest to the unit will have the highest humidity. If the unit is positioned close to a window, condensation may form on the window pane. If this occurs the unit should be repositioned in another location.

NOTE: Due to release of cool, moist air from humidifier, it is best to direct air away from thermostat and hot air registers and to position humidifier next to an inside wall. Unit should not be placed where cold air from outside walls or warm air from a hot air register blows directly on it.

Positioning The Unit

The humidifier should be positioned with the back (cord exit side) and left side, at least 2 inches(5cm) away from the wall. Air needs to enter through all of the louvers in the housing assembly in order for the humidifier to operate at peak efficiency.

**At least
2 inches(5cm)
from wall**



NOTE: Be sure that the humidistat, which is located on the power cord, is free from obstruction and away from any hot air source.

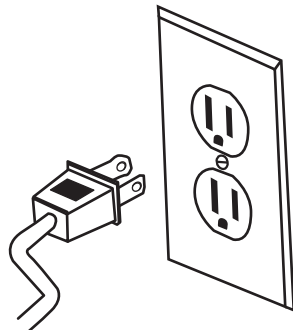
Electrical Hook-Up

Locate nearest 120V A.C. wall socket in the location desired, preferably on inside wall. With the humidifier in the desired location, route the electrical cord safely so no one will trip or upset the humidifier. Plug in the electrical cord.

WARNING: To reduce the risk of fire or shock hazard, humidifier should be plugged into a 120V A.C. outlet. Do not use extension cords.

To reduce the risk of electrical shock, this humidifier has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way.

If the plug does not fit fully in the outlet, reverse plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.



Step 3. Water Fill

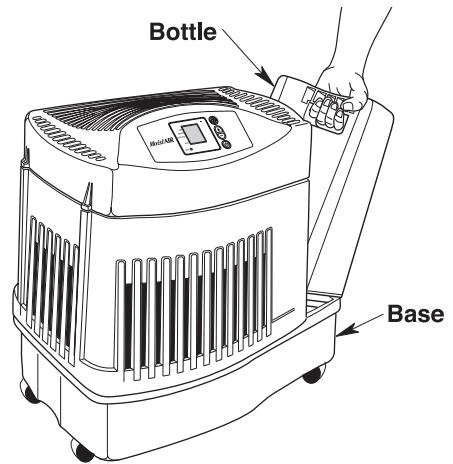
WARNING: To reduce the risk of fire or shock hazard, do not pour or spill water into control or motor area. If controls get wet, let them dry completely and have unit checked by authorized service personnel before plugging in.

After the humidifier is positioned where it will be operating you are ready to fill the humidifier. The bottle lifts straight up and away from the base. Take care not to bump or damage fill valve assembly on the bottom of the bottle.

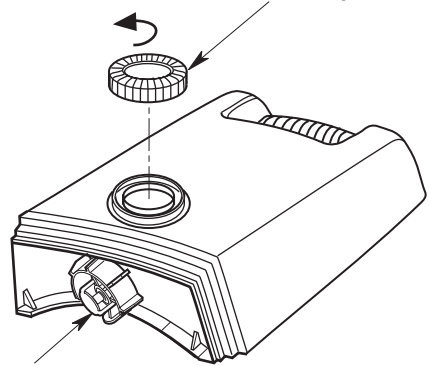
Remove the side fill cap and fill with water. Replace cap and twist by hand until secure. Hold the bottle upright over the sink. Press up on the valve plunger for one second to release a small amount of water. If you hear air bubbles or see leaks around the side fill cap or Spring Valve Assembly, retighten and recheck.

CAUTION: Use only EPA Registered Bacteriostat. Under no circumstances should you use water treatment products designed for Roto belt or Ultrasonic humidifiers.

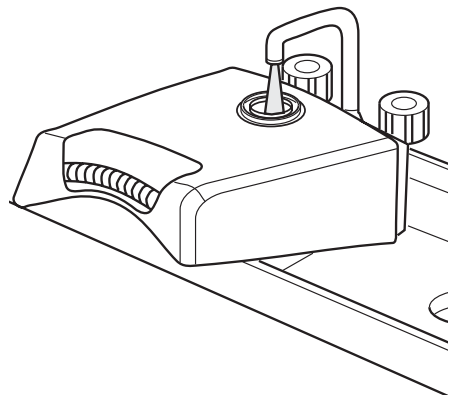
Place the water bottle back into the humidifier base. When positioned properly, the plunger will open and the water will flow into the base. The base will hold the entire contents of the water bottle. Once the bottle is empty, remove it and repeat the filling process. The humidifier is now filled to capacity. To benefit from less frequent filling let the humidifier exhaust both the water from the bottle and the base before filling.



Turn Counterclockwise to Remove Side Fill Cap



Spring Valve Assembly



Step 4. Operating the Controls

Where you set your desired humidity levels depends on your personal comfort level, outside temperature and inside temperature. A starting set point of 30% - 40% **ROOM** humidity is recommended but there may be conditions that require a different setting.


IMPORTANT: Water damage may result if condensation starts to form on windows or walls. Humidity **SET** point should be lowered until condensation no longer forms. We recommend room humidity levels do not exceed 50%.

When Outdoor Temperature is:		Recommended Indoor Relative Humidity (RH) is:
-10° F	-24° C	20%
2° F	-18° C	25%
10° F	-12° C	30%
20° F*	-6° C*	35%

* and above

To Operate the Controls

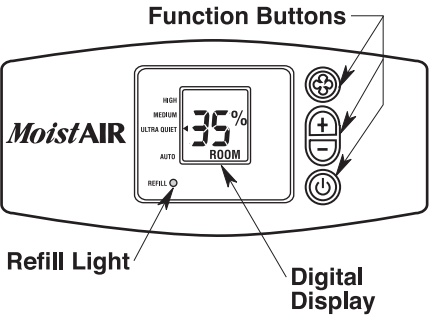
Digital Display

Press the power button  once to display the digital readout*. Initially there is a slight delay while the electronics calibrate.

Two bars (- -) flash during this time. Once calibration is complete a **ROOM** humidity reading between 20% - 95% will be displayed. A flashing 20 display indicates that the room humidity is less than 20%.

NOTE: The default settings at initial startup are **ULTRA QUIET** fan speed and **65% SET** humidity. After desired settings are selected by the user, they remain as long as the unit remains plugged in and there is no power interruption. If the unit is unplugged the **original** default settings are employed.

* Humidifier fan should operate at initial start up. If it does not, refer to, “Fan not operating (digital display is illuminated)” in the “Trouble Shooting” section on page 13 of this manual.

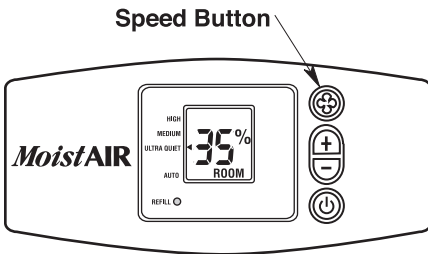


Operating the Controls (cont'd.)

Speed Button

This humidifier is equipped with a 3-speed fan control. Each push of the speed button advances the mode through the settings of **HIGH**, **MEDIUM**, **ULTRA QUIET**, and **AUTO**. The selected setting is displayed on the digital readout. The higher the setting, the faster water is evaporated and released into the air.

ULTRA QUIET is the quietest setting and is provided for conditions that do not require a rapid evaporation rate.



How Auto Control Works


The **AUTO** setting allows the humidifier to manage its speed range to maintain your desired humidity setting. It will automatically cycle to the most efficient speed to achieve the desired humidity. Here is how the fan will operate:

- **HIGH** speed if room humidity is 10% or greater RH (Relative Humidity) below the **SET** point.
- **MEDIUM** speed if room humidity is 10 - 5% RH below the **SET** point.
- **ULTRA QUIET** speed if room humidity is 5% or less RH below the **SET** point.

If the room humidity is not increasing at the current fan speed during a 15 minute period, the fan speed increases to the next higher speed until the humidity **SET** point is reached.

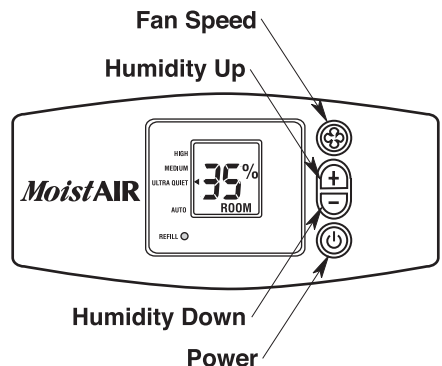
NOTE: The humidifier may run on **HIGH** for an extended period of time if the actual room humidity is extremely low.

Humidity Control

These buttons allow you to adjust the humidity to suit your needs. This humidifier will automatically cycle on and off as required to maintain the selected setting. Press the humidity buttons  to cycle the **SET** humidity readout in 5% increments between 25% and 65% RH. Once you have set the desired humidity, after 5 seconds the readout will change to the actual room humidity.

NOTE: When the **ROOM** humidity is displayed, pressing the set humidity buttons once will display the current **SET** point. To increase or decrease the current **SET** point, press either the “+” or “-” button until the desired **SET** point is reached.

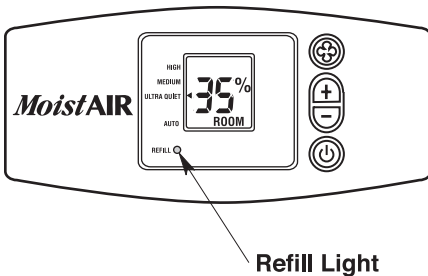
A **SET** point of 65% RH operates the humidifier continuously regardless of the **ROOM** reading. The humidistat that senses the readings is located on the power cord. Insure that it is free from obstruction.



Using Your Humidifier

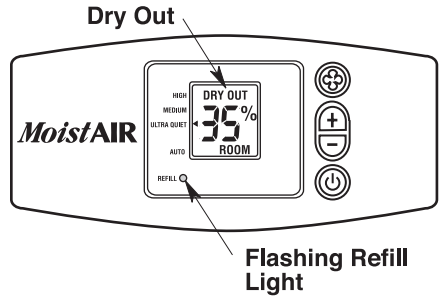
Refill Light

For maximum run time both the bottle and the base should be filled. When both the bottle and the base are empty the red **REFILL** light will flash, informing additional water is required. Also at this time the unit will automatically switch into **DRY OUT** and continue to run on **ULTRA QUIET** speed for a 2 hour period. The message **DRY OUT** will appear on the digital display and the fan speed will switch to **ULTRA QUIET** speed.



NOTE: During this time the room humidity level will continue to be monitored and the humidifier will cycle the fan on and off until the filter is completely dry. The fan will shut off leaving you with a dry humidifier that is less prone to mold and mildew growth. If **DRY OUT** is not desired, refill the humidifier with water.

NOTE: Once the dry out cycle is complete, the fan will shut off and the **REFILL** light will continue to flash. The humidifier will automatically start again when it is refilled.

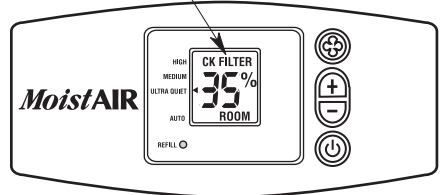


Check Filter Indicator

The ability of any humidifier to efficiently supply humidity output relies heavily on the condition of the filter. As the filter loads with impurities it gradually loses its wicking capability. When this happens, moisture output is reduced and the humidifier has to work longer to satisfy the selected setting. This humidifier has a check filter reminder timed to appear after 720 hours of operation. When the **CK FILTER** message is displayed, disconnect the power cord and check the condition of the filter.

If a build-up of deposits or severe discoloration is evident replace the filter to restore maximum efficiency. The **CK FILTER** message is reset when the humidifier is plugged back in.

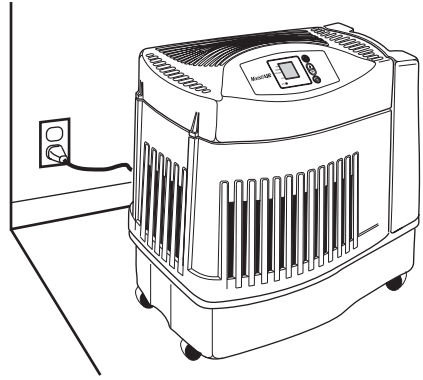
Check Filter



Using Your Humidifier (cont'd.)

Humidistat

The humidistat located on the power cord senses the percentage of humidity in the air. It causes the humidifier to cycle on and off to maintain the selected humidity **SET** point. The fan will turn on if the **ROOM** reading falls 3% below the **SET** point and will continue to run the humidifier until a reading of 1% above the **SET** point is achieved. The fan will turn off until the **ROOM** reading falls 3% below the **SET** point again.



NOTE: Be sure that the humidistat, which is located on the power cord, is free from obstruction and away from any hot air source.

Replacement and Care of Filters

WARNING: To reduce the risk of shock or injury from moving parts, always unplug humidifier before removing or replacing any parts.

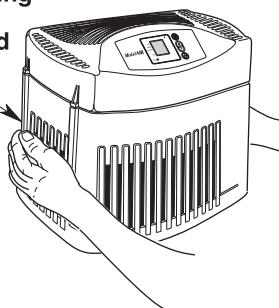
CAUTION: To help retard bacteria growth and keep maximum efficiency, the filter should be replaced at least once per season, or more often under hard water conditions. Use MoistAIR® MAF-1 recommended replacement filter.

Replace the evaporative wicking filter at least once per humidification season or more depending on water conditions in your area.

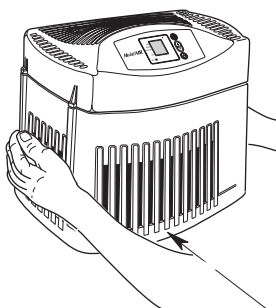
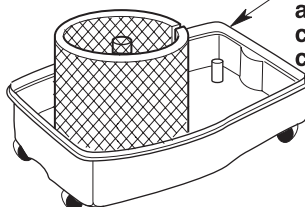
Filter Replacement

1. Unplug humidifier. Before removing the filter, we recommend moving the humidifier to an area where floor coverings are not susceptible to water damage. (i.e. kitchen or bath areas.)
2. Remove the water bottle and set aside. Be sure not to bump or damage the fill valve.
3. Grasp the housing assembly and lift straight up and away from the base and set aside. The filter is now accessible.
4. Take note of the filter position. Remove the filter. You may want to clean the base at this time. See the "Cleaning and Maintenance" section of this manual.
5. Install a new filter (MAF-1) into the base. Coil the filter and position it between the uprights in the bottom of the base. The start and finish of the coil should be captured at the centre of the base (see diagram) and the filter should be resting on the floor of the base.
6. Return the housing assembly to the top of the base. Reposition the humidifier to its operating position.
7. The humidifier is now ready to be filled for operation.

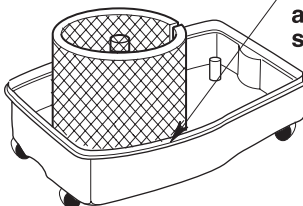
Grasp housing assembly securely and lift off



Position start and finish of coiled filter at centre of base



Align housing assembly bottom with top of base and reposition securely



Cleaning and Maintenance

WARNING: To reduce the risk of injury, fire or damage to humidifier, use only cleaners specifically recommended for humidifiers. Never use flammable, combustible or poisonous materials to clean your humidifier. To reduce the risk of scalds and damage to humidifier, never put hot water in humidifier.

CAUTION: Local water purity varies from area to area and under certain conditions water impurities and airborne bacteria may promote the growth of microorganisms in the reservoir of the humidifier. To retard bacteria growth that may cause odours and be harmful to your health, use only MoistAIR® replacement filters. We also recommend using EPA approved bacteriostat, and humidifier cleaner, available at your local store.

Step 1

To make cleaning easier, the humidifier base should be empty and completely dried out. To accomplish this, use the following method:

- Allow the humidifier to run until the **REFILL** light flashes and the **DRY OUT** mode has stopped the humidifier fan.
- Unplug humidifier.

WARNING: To reduce the risk of shock, always unplug humidifier before cleaning or servicing. If humidifier is not unplugged, fan could start after housing is removed.

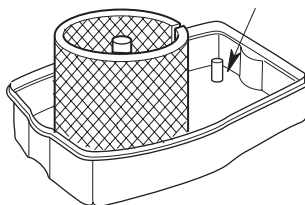
Step 2

To Remove Parts

See "Replacement and Care of Filters" page 11.

NOTE: There may be a little water still in the base. Carefully dump the water out or remove with a sponge.

NOTE: Remove excess water before cleaning



Step 3

Bi-Weekly Maintenance

Removing Scale

- Fill the humidifier base with water and add one 8 ounce cup(236ml) of undiluted white vinegar. Let solution stay 20 minutes.
- Clean all interior surfaces with a soft brush. Dampen a soft cloth with undiluted white vinegar and wipe out the base to remove scale.
- Rinse thoroughly with clean warm water to remove scale and cleaning solution.

Disinfecting Base

- Pour 1/2 gallon(1.89L) of water and 1/2 teaspoon(2.5ml) chlorine bleach into the base. Let solution stay for 20 minutes, carefully swishing every few minutes. Wet all surfaces normally exposed to water.
- Empty base after 20 minutes. Rinse with water until bleach smell is gone. Allow unit to dry out completely.

NOTE: The water bottle should be cleaned in the same manner as the base. Rinse thoroughly with clean water after all steps are complete.

End of Season Maintenance

- Follow "Bi-Weekly Maintenance" instructions at end of humidification season.
- Remove filter.
- Let humidifier dry completely before storing.
- Store in cool, dry location.
- Install a new filter in clean humidifier before next season begins.

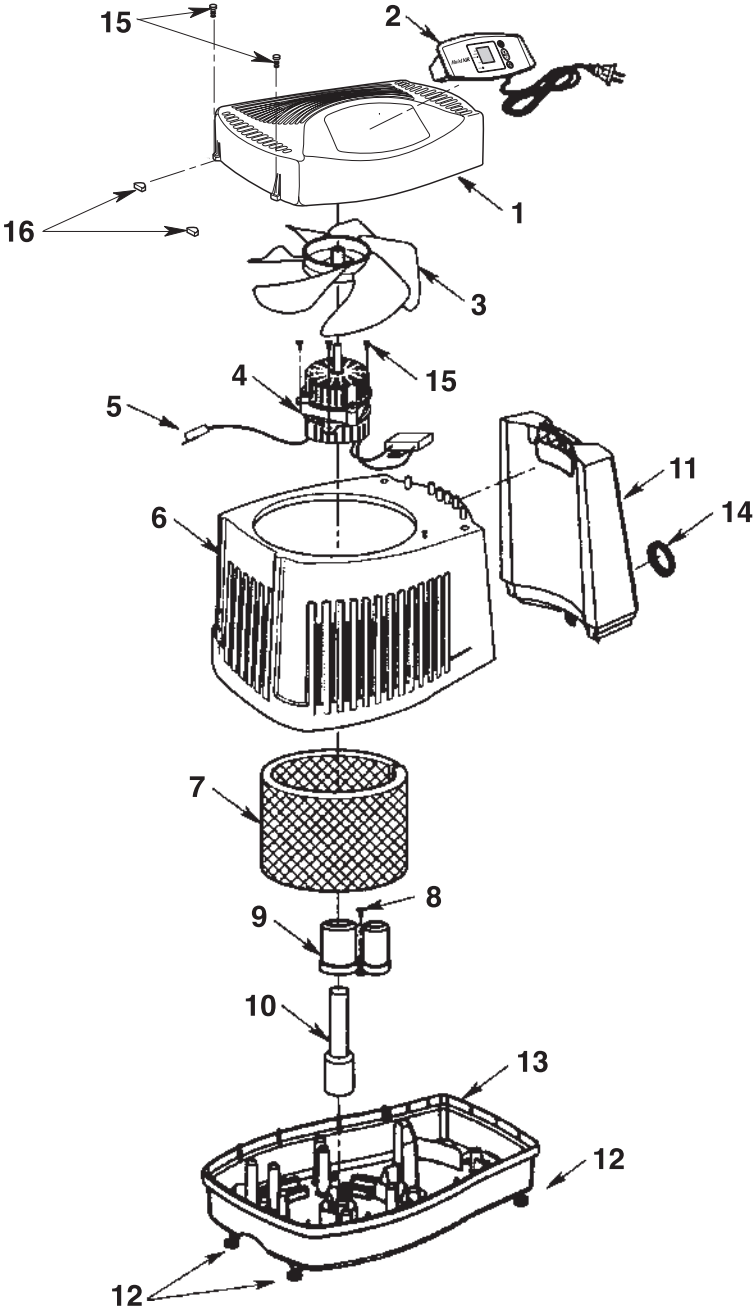
NOTE: "Bi-Weekly Maintenance" procedure is also recommended if you do not plan to run the humidifier for one week or more.

Troubleshooting

Trouble	Probable Cause	Remedy
Digital display not illuminated.	<ul style="list-style-type: none"> No Power. Power button has not been depressed. 	<ul style="list-style-type: none"> Check 120 volt power source. Press power button once to turn on.
Fan not operating (digital display is illuminated).	<ul style="list-style-type: none"> ROOM humidity level is not 3% or more below SET humidity level. 	<ul style="list-style-type: none"> Raise SET humidity level if desired.
Fan running continuously.	<ul style="list-style-type: none"> SET humidity level is 65%. ROOM humidity level has not reached 1% or more above SET humidity level. 	<ul style="list-style-type: none"> A SET humidity percentage of 65% operates fan continuously. Adjust SET level between 25% - 60%. Continue to run until desired humidity level is achieved. This may take up to 48 hours initially.
Poor evaporation of water.	<ul style="list-style-type: none"> CK FILTER message flashing. 	<ul style="list-style-type: none"> Change to a fresh new filter. NOTE: Local water varies from area to area and under certain conditions mineral will build up more rapidly in the filter.
Bottle empties completely.	<ul style="list-style-type: none"> This is normal for initial filling. 	<ul style="list-style-type: none"> Refill bottle for maximum run time.
Bottle continues to empty after complete filling.	<ul style="list-style-type: none"> Air is entering water bottle. 	<ul style="list-style-type: none"> Ensure fill cap is tight with no interfering debris. Check for leak in water bottle.
Bottle not emptying.	<ul style="list-style-type: none"> Base full of water. 	<ul style="list-style-type: none"> The base will hold the contents of water bottle (1.9 gallons/7.2L). Continue to run humidifier to deplete water from base.
CK FILTER message does not appear even when filter is dirty or humidifier performance is clearly reduced.	<ul style="list-style-type: none"> A loss of power has caused the CK FILTER message to prematurely reset. 	<ul style="list-style-type: none"> Replace filter.
Fan operating slower than speed registered on digital display.	<ul style="list-style-type: none"> Humidifier is in DRY OUT mode. 	<ul style="list-style-type: none"> Humidifier automatically switches fan speed to ULTRA QUIET when DRY OUT mode message is displayed.
Humidifier not shutting off during DRY OUT mode.	<ul style="list-style-type: none"> Filter not dry. 	<ul style="list-style-type: none"> During DRY OUT mode the humidifier will continue to run on ULTRA QUIET speed as required for a 2 hour period.

Repair Parts

Parts List for MoistAIR® Evaporative Console Humidifier MoistAIR® Model No. MA12010



Parts List for MoistAIR® Evaporative Console Humidifier

MoistAIR® Model No. MA12010

Always order by part number - Not by key number

Key No	Part No.	Description
1	830488	Housing, Upper
2	831342	• Assembly, Control
3	829821	• Blade, Fan
4	830778	• Motor
5	828854	Switch, Micro
6	830489-1	Housing, Lower
7	MAF-1	† Filter
8	829815	* Screw, Pan Hd. Ty. AB #6 x 1/2 SS
9	830496-1	Support, Float
10	829816	Float, Reservoir
11	830537-1	Bottle, Includes Key #14
12	829812	Casters (Includes 4)
13	830484-1	Base
14	824690-2	Cap, Fill
15	829805	Screw, Pan Hd. Trx. Hi-Lo #6 x 3/4
16	830587	Cap, Screw
17	SP6615	Owner's Manual (not shown)

† Stock item - Purchase at your local retail store.

- Any attempt to repair the control assembly or motor may create a hazard unless repair is done by a qualified service technician.

* Standard hardware item - May be purchased locally.

To order parts, call:

U.S.A.: 1-800-654-3545

Canada: 1-866-808-6500

FOR TECHNICAL HELP, CALL
(800) 654-3545 FROM USA OR (888) 744-4687 FROM CANADA
(Please have complete model number)

MoistAIR® MD



TM
MC

Essick Air Products
For more information about MoistAIR® humidifiers, visit our website at
www.moistair.com