



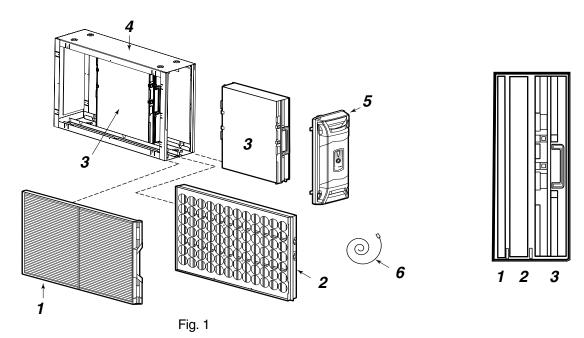
# **User's Information Guide**

# Trane CleanEffects™ Whole House Air Filtration System



Congratulations – Your TRANE CleanEffects™ air filtration system is the most advanced, innovative and effective whole house air filtration system on the market today. It is designed to deliver what we call TRANE Air™ throughout your home. It delivers air that is meticulously filtered and cleaned of up to 99.98% of allergens to provide maximum comfort. You and your family can breathe easier than ever before.

### Figure 1. COMPONENTS OF THE TRANE CLEANEFFECTS™



- PRE-FILTER Traps large particles such as hair and lint before they can enter the COLLECTION CELL section.
- FIELD CHARGER Charges the contaminants. Only to be removed, cleaned or serviced by a qualified technician.
- **3) COLLECTION CELL (2)** Removes and collects very small impurities from the air.
- 4) CABINET Mounts between the furnace or air handler and return air duct work and houses the COLLECTION CELLS. FIELD CHARGER and PRE-FILTER.
- 5) POWER DOOR The solid state power supply components that convert the 24 Volt AC to the high-voltage, direct current required to power the FIELD CHARGER and COLLECTION CELLS. Allows access to the COLLECTION CELLS, FIELD CHARGER and PRE-FILTER.
- 6) 24 VOLT POWER CABLE

#### NOTE: International (50 Hz) Timings:

Due to differences in electrical systems outside the United States, customers with 50 Hz electrical systems will need to be aware of minor differences in the timings shown in this guide. 50 Hz timings will appear in [brackets] following the standard 60 hz timings.

#### **DISPLAY FEATURES**

The air cleaner display (Fig. 2) has the following functions:

LED and PRE-FILTER lights display the operating status of the air cleaner, indicating when to clean the PRE-FILTER or COLLECTION CELLS.

The LED display is also used in the SET-UP mode, see page 7.

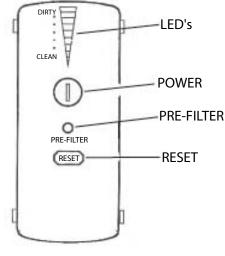


Fig. 2

#### SEQUENCE OF OPERATION

Turn on the unit by pressing and releasing the POWER button. The backlit POWER and RESET button will illuminate along with the first green LED indicating power is present. When the indoor fan is operating the first green LED will slowly flash. This indicates the FIELD CHARGER and COLLECTION CELLS have power and the unit is operating normally. There is a slight time delay between the indoor fan starting and LED flashing.

NOTE: There is a 10 [12] minute delay after the indoor fan operates, before the air cleaner starts to operate, each time the power to the air cleaner is turned off/on.

Your air filtration system only operates when the air is circulating through the indoor unit. The air filtration system is most effective at cleaning the air if the fan operates continuously. Most thermostats have a setting that will permit continuous fan operation.

Continuous fan mode during Cooling operation may not be appropriate in humid climates. If the indoor air exceeds 60% relative humidity or simply feels uncomfortably humid, it is recommended that the fan only be used in the AUTO mode.

In normal operation, the air cleaner may make a slight sound as the air passes through it and is cleaned. In some applications, you may notice this sound coming from the return air vent(s). If desired, this sound level can be reduced with minimal impact on air cleaning efficiency by reducing the power setting of the FIELD CHARGER in the SET-UP mode (see pages 7-8).

#### **MAINTENANCE**

#### WARNING

RISK OF ELECTRIC SHOCK: These servicing instructions are for use by qualified personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in this User's Information Guide unless you are qualified to do so.

#### **A** CAUTION

Before cleaning the coil or ducts in the air handler or furnace, remove the COLLECTION CELLS, FIELD CHARGER, and PRE-FILTER from the air cleaner. Chemicals used during the cleaning of the air handler, furnace, or ductwork can damage the air cleaner components and degrade the performance of the air cleaner.

For maximum efficiency, the COLLECTION CELLS and PRE-FILTER should be inspected and cleaned as prescribed in this User's Information Guide.

The FIELD CHARGER should only be removed and cleaned annually by a qualified service professional.

#### **CLEANING**

Cleaning Instructions:

The air cleaner utilizes a PRE-FILTER and COLLECTION CELLS. The purpose of the PRE-FILTER is to capture large particles before they enter the COLLECTION CELLS which allows the COLLECTION CELLS to work more efficiently.

 Turn the air conditioning system off at the Comfort Control (thermostat).

#### WARNING

High Voltage is present within the air cleaner for operation. Before removing the Power Door, turn the power off and wait at least 15 seconds to allow voltage to discharge. Failure to follow instructions could result in death or serious personal injury.

- Turn off power to the air cleaner by pushing and holding the POWER button for three seconds. The LED's will remain on until the voltage has discharged and it is safe to remove the door. This requires approximately 15 seconds. Do not remove the door until all the lights are off.
- 3. Disconnect the power/control cable.
- Rotate the two latches and remove the door as shown in Figure 3. Place the door in a secure location.

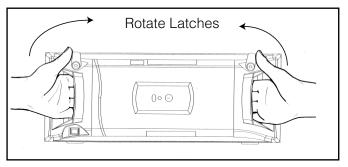
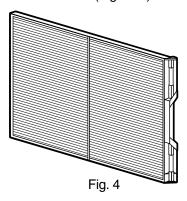


Fig. 3

Remove the PRE-F ILTER (Figure 4) and/or the COLLECTION CELLS (Figure 5) from the air cleaner.



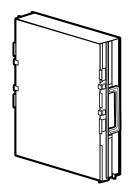


Fig. 5

#### **VACUUM CLEANING**

Vacuuming is the preferred method to clean the PRE-FILTER and COLLECTION CELLS. It is recommended that the PRE-FILTER and the COLLECTION CELLS be vacuumed outside the home to ensure particles on the filters are not re-introduced into the air. Persons highly sensitive to the collected particles should wear appropriate respiratory protection while cleaning.

#### PRE-FILTER -

It is time to clean the PRE-FILTER when the red "PRE-FILTER" light (shown in Figure 6) is illuminated.

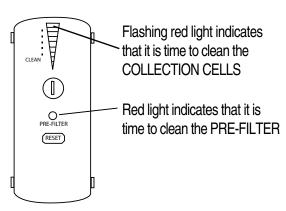


Fig. 6

The air cleaner is factory set to notify the home owner to clean the PRE-FILTER every two months [10 weeks] of actual run time of the air cleaner. This notification can be changed by the installer/home owner to 1 month or 3 months [5 to 15 weeks] depending on the conditions in the home (pets, smokers, etc.). Please see "SET-UP MODE" (Page 7) to change the factory settings.

 Using a vacuum hose, vacuum in even strokes across the length of the PRE-FILTER. After vacuuming the entire PRE-FILTER using even strokes going in one direction, repeat the process using even strokes going in the opposite direction as shown in Figure 7.

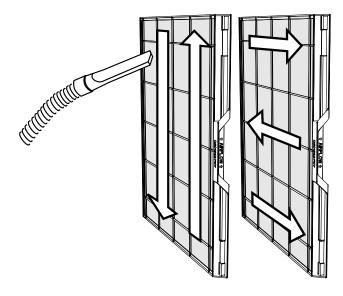


Fig. 7

NOTE: Do NOT replace the plastic PRE-FILTER with a metal type PRE-FILTER. A metal PRE-FILTER will cause reduction in efficiency and potential failure of the electronics in the air cleaner.

#### COLLECTION CELLS

The clean/dirty LED light bar indicator will illuminate as the system cleans the air. The LED lights will progress from green to yellow and then to red. When the last red indicator is flashing, it is time to clean the COLLECTION CELLS (see Figure 6). The air cleaner is factory set to notify the home owner to clean the COLLECTION CELLS every six months [31 weeks] of actual run time of the air cleaner. This notification can be changed by the installer/home owner to 2 months, 4 months, 6 months, or 9 months [10, 20, 31 or 46 weeks] depending on the conditions in the home (pets, smokers, etc.). Please see "SET-UP MODE" (Page 7) to change the factory settings.

 Using a vacuum hose, vacuum in even strokes across the entire COLLECTION CELL surface. Vacuum using even strokes in one direction, then repeat the process using even strokes in the opposite direction, as demonstrated in Figure 8 below.

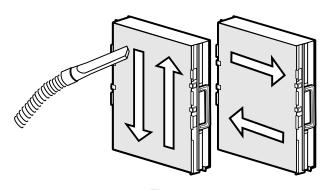


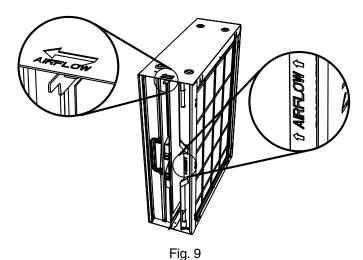
Fig. 8

 Once vacuuming is completed on one side of the COLLECTION CELL, turn the COLLECTION CELL over and repeat on the other side of the COLLEC-TION CELL.

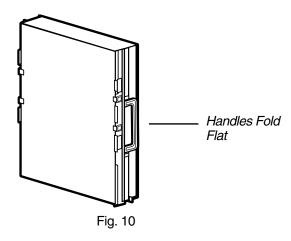
NOTE: It is normal for COLLECTION CELLS to discolor during operation. Vacuuming will not restore the Collection cells to their original color. However, vacuuming does restore the COLLECTION CELLS to a high efficiency.

# REPLACING THE PRE-FILTER AND COLLECTION CELLS INTO THE AIR CLEANER

 Replace the PRE-FILTER into the air cleaner. Ensure that the "AIRFLOW indicator arrow" on the PREFILTER is pointing in the same direction as the "AIRFLOW indicator arrow" on the air cleaner cabinet.

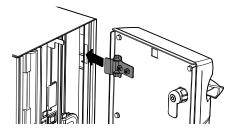


Reinstall the COLLECTION CELLS into the air cleaner. Ensure the handles on both of the COL-LECTION CELLS are folded flat.



3. Replace the power door onto the air cleaner.

To install the door, follow the instructions in Figures 11 - 14 below.



Hold door so that tabs are aligned with slots in cabinet.

Fig. 11

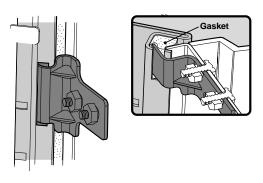


Fig. 12

Insert tabs into cabinet slots. Edge of door should fit into channel against gasket. (See detail)

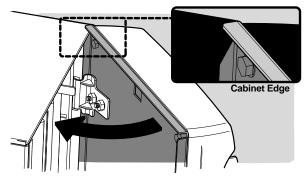


Fig. 13

Rotate door to closed position. Ensure ends of door overlap cabinet. (See detail)

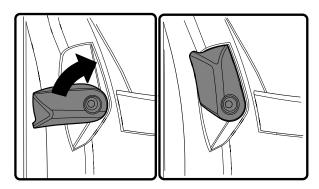


Fig. 14

Rotate latches to secure door.

- 4. Ensure the power cord is plugged into the air cleaner.
- 5. Press the POWER button to turn on the air cleaner.

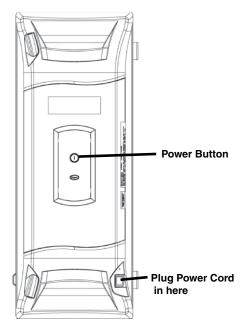
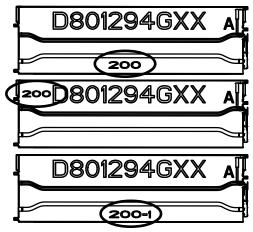


Fig. 15

NOTE: Once you press the POWER button, the first LED will be on and it will start flashing after the first 10 [12] minutes of indoor fan operation. This is normal operation.

# Alternate Cleaning option for homeowners with 200 or 200-1 COLLECTION CELLS ONLY

Vacuuming the PRE-FILTER and COLLECTION CELLS restores them to a high efficiency. However, some environmental conditions, like tobacco smoke, cause the COLLECTION CELLS to need to be washed with water. Washing the COLLECTION CELLS is acceptable ONLY if the COLLECTION CELL has a "200" embossed or written on the frame in the vicinity of the manufacturing part number:



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Carefully review **BOTH** of the COLLECTION CELLS for the "200" mark. If the "200" mark is visible on BOTH COLLECTION CELLS, they may be washed. If the "200" mark is NOT visible, the COLLECTION CELLS **cannot** be washed.

#### **A** CAUTION

Washing COLLECTION CELLS that do NOT have the "200" mark on them can result in degradation of the air cleaner system. Failure to follow instructions could result in property damages.

- If the COLLECTION CELLS do have the "200" mark on them, they may be washed using a low pressure water spray, such as a sink sprayer or garden hose. Residue like tobacco smoke may require warm water to be removed.
- Do NOT use soap or detergent in cleaning the COL-LECTION CELLS.
- Do NOT immerse the COLLECTION CELLS completely in water.
- Do NOT place the COLLECTION CELLS into a dishwasher to clean.
- ALLOW THE COLLECTION CELLS TO DRY THOR-OUGHLY BEFORE INSTALLING.

- 2. After washing, drain as much water as possible from the COLLECTION CELLS.
- Holding the sides of the COLLECTION CELLS, gently tap the cells on a flat surface to dislodge any water droplets inside the COLLECTION CELLS. After tapping, wipe down the surfaces of the COLLEC-TION CELLS to remove any visible droplets of water.

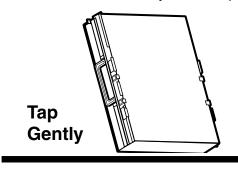
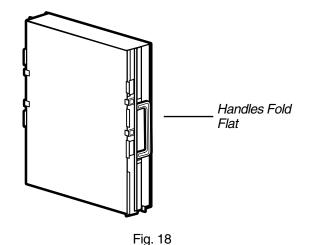


Fig. 17

 When there are no visible water droplets left in the COLLECTION CELLS, reinstall them into the air cleaner cabinet. Be sure to fold the COLLECTION CELL handles flat.



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#### **SET-UP MODE**

You can customize the operation of the air cleaner to meet the needs of your home and family using the SET-UP mode.

To enter the SET-UP mode, press and hold BOTH the POWER and the RESET buttons for a minimum of 5 [6] seconds. The LED display will light up indicating the current settings. If the settings were not changed during installation into your home, the LED's will light up with the factory settings as shown in Figure 19.

#### Factory settings

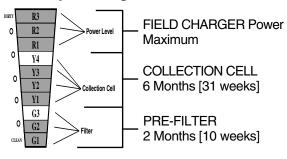


Fig. 19

You may select the cleaning intervals of the PRE-FILTER and the COLLECTION CELLS as well as the power setting of the FIELD CHARGER by cycling through the various settings. Once you have made the desired changes, press and hold BOTH the POWER and the filter RESET buttons for a minimum of 5 [6] seconds to exit the SET-UP mode.

#### PRE-FILTER Timer Setting

The GREEN LED lights are used to set the PRE-FILTER cleaning interval for one, two, or three months [5, 10, or 15 weeks]. The number of illuminated GREEN LED lights indicates the current setting. The factory setting is 2 months [10 weeks] of run time (see Figure 19).

#### **COLLECTION CELL Timer Setting**

The YELLOW LED lights are used to set the COLLECTION CELLS cleaning interval for two, four, six, or nine months [10, 20, 31, or 46 weeks]. The number of illuminated YELLOW LED lights indicates the current setting as shown in Figure 19. The factory setting is 6 months [31 weeks] of run time.

#### FIELD CHARGER Power Level Setting

The RED LED lights are used to set the power level of the FIELD CHARGER for maximum, medium, or minimum. The number of illuminated RED LED lights indicates the current setting as shown in Figure 22. The factory setting is for maximum.

Lower settings will reduce the slight sound emitted by the unit with minimal loss of air cleaning efficiency, if desired.

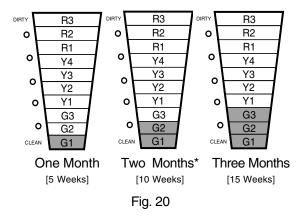
Lower settings will also further reduce the very low ozone produced by the air cleaner. The U.S. Food and Drug Administration recommends indoor ozone concentrations should not exceed 50 parts per billion. Your air cleaner will contribute only 5 parts per billion at the factory setting and can be reduced to 3 parts per billion at the minimum setting.

#### **CHANGING THE SETTINGS**

While in the SET-UP mode, press the POWER button once to begin cycling through the various setting options in the following order:

# PRE-FILTER Cleaning Interval Setting (Figure 20)

One or more of the GREEN LED lights will illuminate. To change the reminder interval time, press the RESET button until the desired setting is indicated, and then press the POWER button again. Choices are in months of "run time", not a calendar month.



# COLLECTION CELLS Cleaning Interval Setting (Figure 21)

One or more of the YELLOW LED lights will illuminate. To change the reminder interval time, press the RESET button until the desired setting is indicated, and then press the POWER button again.

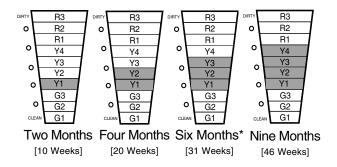
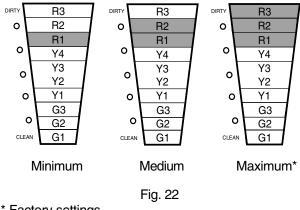


Fig. 21

# FIELD CHARGER Power Level Setting (Figure 22)

One or more of the RED LED lights will illuminate. To change the power level setting, press the RESET button until the desired setting is indicated.

To save your new settings and exit the SET-UP mode, press and hold BOTH the Power and filter RESET buttons for a minimum of 5 [6] seconds.



\* Factory settings

#### **FAULT INDICATORS**

The air cleaner has been designed to continually monitor itself to insure it is working properly. If it detects a problem, three of the four YELLOW LED lights will flash continuously. See Figure 23.

#### **WARNING**

High Voltage is present within the air cleaner for operation. Before removing the Power Door, turn the power off and wait at least 15 seconds to allow voltage to discharge. Failure to follow instructions could result in death or serious personal injury.

If this fault occurs:

1) Turn off power to the air cleaner by pushing and holding the POWER button for three seconds.

The LED's will remain on until the voltage has discharged and it is safe to remove the door. This requires approximately 15 seconds. **Do not remove the door until all the lights are off.** 

 Clean both the PREFILTER and the COLLECTION CELLS to insure no large material is trapped in the filters and causing the fault. See pages 3-7 for cleaning information.

NOTE: If collection cells are wet, you may see this fault indication. Turn air cleaner off until collection cells are completely dry.

If the unit detects any other type of fault, all three RED LED lights will flash continuously as shown in Figure 24. The filter will shut down and does not represent a safety risk. You should call a qualified service technician for service.

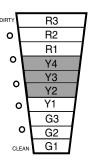


Fig. 23

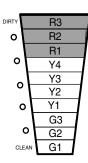


Fig. 24

# **System Information**

#### **A** CAUTION

Before cleaning the coil or ducts in the air handler or furnace, remove the COLLECTION CELLS, FIELD CHARGER, and PRE-FILTER from the air cleaner. Chemicals used during the cleaning of the air handler, furnace, or ductwork can damage the air cleaner components and degrade the performance of the air cleaner.

#### **A** CAUTION

Do not install air cleaner where the filter can be exposed to UV light. UV light can cause the plastic material to deteriorate, which may lead to filter damage.

# Limited Warranty CleanEffects™ Whole House Air Cleaner TFD

(Parts Only)

This limited warranty is extended by Trane U.S. Inc., to the original purchaser and to any succeeding owner of the real property to which the CleanEffects<sup>™</sup> Air Cleaner is originally affixed, and applies to products purchased and retained for use within the **U.S.A.** and **Canada**.

If any part of your CleanEffects™ Air Cleaner fails because of a manufacturing defect within five years from the date of the original purchase, Warrantor will furnish without charge the required replacement part. In addition, if the electronics fail because of a manufacturing defect within the sixth through tenth year from the date of the original purchase, Warrantor will furnish without charge the required replacement part. Any local transportation, related service labor and diagnosis calls are not included.

This limited warranty does not cover failure of your CleanEffects<sup>™</sup> Air Cleaner if it is damaged while in your possession, damage caused by unreasonable use of the CleanEffects<sup>™</sup> Air Cleaner and/or damage from **failure to properly maintain** the CleanEffects<sup>™</sup> Air Cleaner as set forth in the Use and Care manual **(see Proper Maintenance section).** 

THE LIMITED WARRANTY AND LIABILITY SET FORTH HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES AND LIABILITIES, WHETHER IN CONTRACT OR IN NEGLIGENCE, EXPRESS OR IMPLIED, IN LAW OR IN FACT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR USE, AND IN NO EVENT SHALL WARRANTOR BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow limitations on how long an implied limited warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Parts will be provided by our factory organization through an authorized service organization in your area listed in the yellow pages. If you wish further help or information concerning this limited warranty, contact:

Trane Troup Highway Tyler, TX 75711-9010

Attention: Manager, Field Operations Excellence

TW-1020-4707





6200 Troup Highway Tyler, TX 75707 12/07

Since the manufacturer has a policy of continuous product and product data improvement, it reserves the right to change design and specifications without notice.