

# Safety, Operations & Maint. Manual

## **Cleanfix<sup>®</sup> Starling (TW 300 S)**



This unit is intended for commercial use

This manual is furnished with each new **TW 300 S**. It provides necessary operation and maintenance instructions.

### **READ AND FOLLOW ALL INSTRUCTIONS, WARNINGS AND CAUTIONS BEFORE AND WHEN USING THIS SELF-CONTAINED EXTRACTOR.**

All information and specifications printed in this manual are current at the time of printing. However, because of Cleanfix's policy of continual product improvement, we reserve the right to make changes at any time without notice.

#### **WHEN THE MACHINE IS DELIVERED**

This extractor will afford you many years of trouble-free operating satisfaction, provided it is given proper care. All parts are passed rigid quality control standards prior to their being assembled to the finished product. Prior to packaging, your extractor was again inspected for assurance of flawless assembly.

This self-contained extractor is protectively packed to prevent damage in shipment. When the machine is delivered carefully check the carton for signs of damage. Unpack the machine from the carton and inspect it for any possible damage.

Only a visual examination will reveal damage that may have occurred in transit. If damaged is discovered, immediately notify the transportation company that delivered your extractor and request an inspection. As a shipper we are unable to report any claim for damage. You must origin any claim within 5 days of delivery. Be sure to keep the carton, packing inserts, packing list and carrier's receipt until the inspector has verified your claim. **CLEANFIX'S LIABILITY CEASES WHEN THE SHIPMENT IS PICKED UP BY THE CARRIER.** Cleanfix will furnish any information needed to expedite the claim process.

## GENERAL PRECAUTIONS

FAILURE TO FOLLOW PRECAUTIONS AND WARNINGS MAY CAUSE SERIOUS INJURY TO THE OPERATOR AND CAUSE DAMAGE TO MACHINE, WHICH CAN VOID WARRANTY.  
TO REDUCE RISK OF FIRE, ELECTRIC SHOCK OR INJURY: READ ALL INSTRUCTIONS BEFORE AND WHEN USING THIS SELF-CONTAINED EXTRACTOR.

### WARNING

#### To Avoid Electric Shock, Do Not Expose to Rain. Store Indoors.

- For 120 volt grounded outlet models. The unit must be plugged into a properly grounded outlet. **Do not** operate the machine with a broken/missing grounding pin. Have a qualified service person replace the plug immediately.
- **Do not** leave the extractor when plugged in. Unplug from outlet when not in use and before servicing.
- Turn **OFF** all the controls before unplugging the extractor.
- This is **NOT** a toy. Close attention is necessary when used around or near children.
- Use only as described in this safety/operations manual. Use only manufacturer's recommended attachments and accessories.
- **Do not** use this extractor with damaged cord or plug. If the extractor is not working as it should, because it has been dropped, damaged, left outdoors or dropped into water, contact authorized service center or factory.
- **Do not** pull or carry extractor by the cord, use cord as a handle, close a door on cord or pull cord around sharp edges and corners. **Do not** run extractor over cord. **Keep** cord **away** from heated surfaces.
- **Do not** unplug the extractor by pulling on the cord. To unplug, grasp the plug, not the cord.
- **Do not** handle the plug of the extractor with wet hands.
- Store extractor indoors in a dry area. **Do not** expose to freezing temperatures.
- **Do not** put any objects into openings. **Do not** use with any opening blocked; keep free of dust, lint, hair and anything that may reduce air flow.
- Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts.
- **Do not** use this extractor for dry vacuuming. This extractor is not fitted with a fine dust filter.
- **Do not** use the extractor to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present. **Do not** pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
- Turn **OFF** all controls before unplugging.
- **Do not** use where anesthetics or oxygen is used.
- **Do not** use an extension cord unless absolutely necessary. If an extension cord is used, the wire size must be 14 ga. or larger and should not exceed 50 feet in length. The extension cord must be three-wire type to insure grounding protection.
- Replace damaged or worn parts immediately with genuine original equipment parts to maintain safety and to protect your limited warranty.
- **Do not** run pump dry. When solution tank is empty, turn off the pump.
- **NEVER** drive extractor over steps.

## CARE OF THE EXTRACTOR

This extractor is designed to be safe when used to perform cleaning functions as specified. Should damage occur to electrical parts, the unit should **NOT** be used until the damage is repaired by the manufacturer or an authorized service center. This will avoid further damage to the extractor or injury to the user.

These instructions are for your protection and information.

**PLEASE READ CAREFULLY!** Failure to follow instructions or precautions could result in injury or damage to the user and/or the extractor.

### SAVE THESE INSTRUCTIONS!

## GROUNDING INSTRUCTIONS - 120 VOLT

Electrical equipment must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electrical current to reduce the risk of electric shock.

The extractor is equipped with a cord having equipment grounding conductor and grounding plug.

The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

If repair or replacement of the cord or plug is necessary, **DO NOT** connect the grounded wire to either flat blade terminal. The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire.

### WARNING

Improper connection of the equipment-grounding conductor can result in risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded.

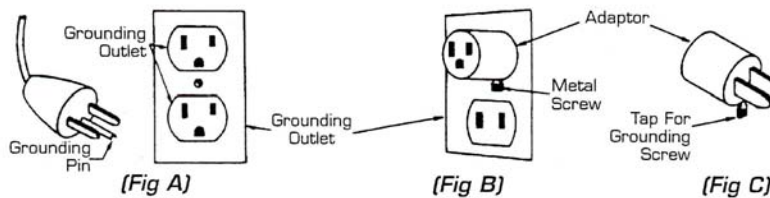
**Do not** modify the plug provided with the equipment. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

**Note:** In Canada, the use of a temporary adaptor is not permitted by the Canadian Electrical Code.

## GROUNDING METHODS

This electric equipment is for use on a nominal 120-volt circuit, and has a grounded plug that looks like the plug illustrated in (Fig. A). A temporary adaptor that looks like the adaptor illustrated in (Fig. B & C) may be used to connect this plug to a 2-pole receptacle as shown in (Fig. B) if a properly grounded outlet is not available.

The temporary adaptor should be used only until a properly grounded outlet (Fig. A) can be installed by a qualified electrician. The green color rigid ear, lug or the like extending from the adaptor must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adaptor is used, it must be held in place by a metal screw (Fig. C).



### DANGER:

Improper use of the grounding plug can result in a risk of electrical shock.

## INTENDED USE

The TW 300 is designed to be used as a carpet cleaning machine (basic equipment).

- Dry vacuum cleaning
- Wet vacuum cleaning
- Spray extraction of carpets and upholstery (with carpet tool, optional accessory)
- Wet cleaning of hard floors (with additional hard floor tool, optional accessory)
- Window cleaning (with window cleaning set, optional accessory)

## BEFORE USING THE EXTRACTOR

1. Remove furniture from the area to be cleaned. Large pieces can be removed to opposite end of the room from where you start cleaning.
2. Vacuum carpet thoroughly to remove all loose debris.
3. Pre-spray tough stains with stain remover.
4. If you are using heated water, the temperature should not exceed 120° F. This improves the cleaning effectiveness when removing oil or grease from the carpet.

5. Before plugging power cord into grounded outlet all switches must be in the **OFF** position.

6.

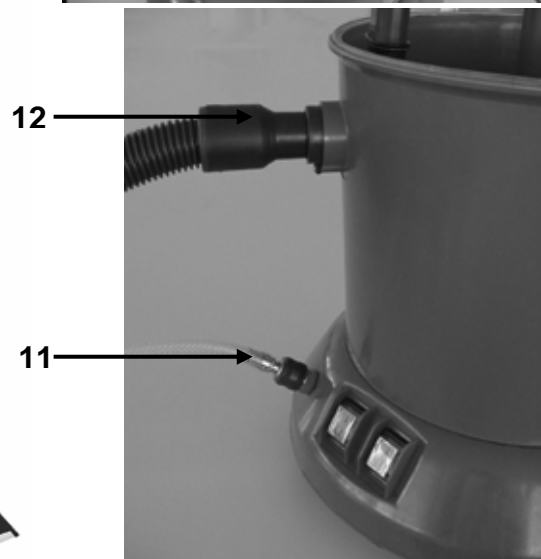
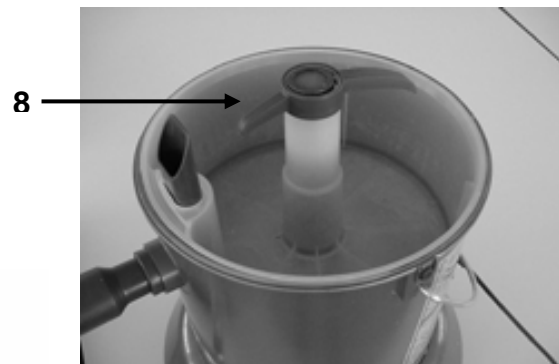
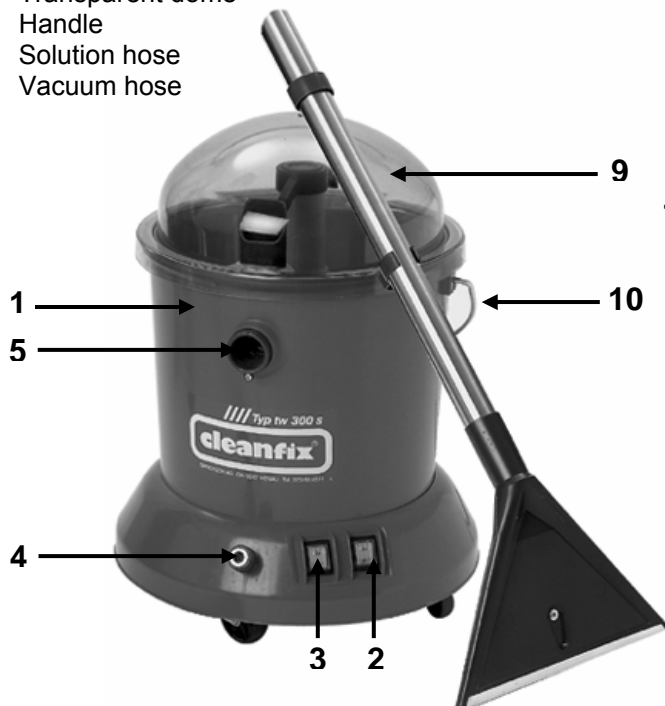
NOTE: A non-foaming chemical must be used. Carpet that has been previously cleaned may have a heavy build-up of old shampoo residue which may cause excessive foaming in the recovery tank and could damage the vacuum motor. Use a defoaming agent if this occurs.

## WARNING

**DO NOT operate extractor without a cord ground pin. This is necessary to avoid electric shock.**

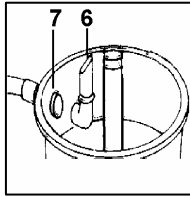
## FUNCTIONAL PARTS AND ACCESSORIES

1. Housing
2. Vacuum switch
3. Pump switch
4. Solution hose quick disconnect
5. Connector for vacuum hose.
6. Inlet Pipe (see next page)
7. Connector for inlet pipe (Inside tank, next page)
8. Recovery tank
9. Transparent dome
10. Handle
11. Solution hose
12. Vacuum hose



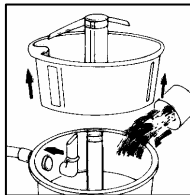
## ASSEMBLING AND USING THE EXTRACTOR

1. Fit the inlet pipe (6) onto the connector (7) on the inside of the tank.

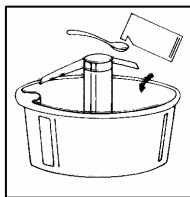


2. Remove recovery tank and fill water with the cleaning agent up to the mark inside the tank.

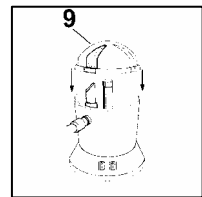
For dilution of cleaning agent see instructions on bottle



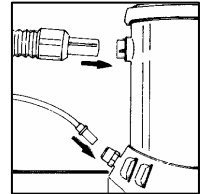
3. Insert recovery tank and add some defoamer into the recovery tank. The defoamer prevents large amount of foam which can damage the vacuum motor.



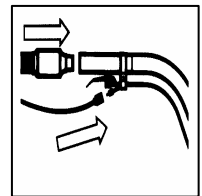
4. Place transparent dome (9) onto the tank.



5. Attach the vacuum hose (12) to the connector at the tank (5). Connect male quick disconnect at the end of the solution hose to the quick disconnect (4) on the lower housing.



6. Connect the connector at the end of the hose to the carpet tool (optional accessory). Connect the quick connector at the end of the spraying hose to the nipple of the valve.



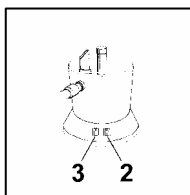
7. Before using the unit always make sure that the carpets to be cleaned are color-proof. To test color-proofness of the carpet put a little amount of the carpet cleaning agent onto a white cloth and rub onto the carpet in hidden corner. If the carpet is not color-proof the white cloth will stain.

### CAUTION

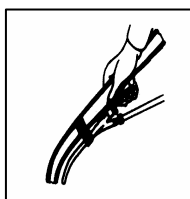
**DO NOT run the pump without solution, this could damage the pump.**

8. Spray extraction process

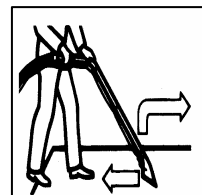
a. Turn-on vacuum switch (3), then pump switch (2).



b. By pressing the handle of the valve water and cleaning solution is sprayed onto the carpet. The dirt inside the carpet is rinsed to the top of the carpet and immediately vacuumed.



c. Whilst pulling the valve trigger gently pull the carpet tool over the carpet. At the end of a line release the trigger and lift the tool from the carpet. Start a new line by slightly overlapping by 2 to 3 cm.



d. For a thorough cleaning pull the carpet tool slowly. To reduce the drying time of the carpet pass over the already cleaned line but without pulling the trigger of the valve.

e. When no more cleaning solution exits the spray nozzles immediately turn-off the unit. Empty the recovery tank and re-fill solution tank with clean water and cleaning agent to continue carpet extraction.

9. After finishing carpet extraction turn both switches off. Empty solution and recovery tank.

Re-fill solution tank with water only. Turn-on both vacuum and pump. Pull the trigger of the

valve and let the clean water rinse the hoses inside the unit and also the pump. Empty all tanks and clean the units with a damp cloth.

10. Before removing the solution hose pull the trigger shortly to relieve pressure from the hose.

Gently pull the plastic ring on the quick disconnect and remove the solution hose.

**11. To ensure fast drying of your carpets open the windows and doors.**

## CLEANING TIPS

### **PRE-TEST:**

Pre-test an area so cleaning problems will not develop during cleaning or after the carpet is cleaned. Not all products can be safely used on all fibers and dyes.

1. Mix the cleaner you are using according to directions and select an inconspicuous area, such as a corner, behind a chair etc.
2. Place approximately 1 teaspoon of the mixed solution on a spot about the size of a nickel. Work solution in with fibers.

3. Press a clean white cotton cloth against the wet spot and hold it there for about 10 seconds. Examine cloth to see if any dye has transferred.

4. Examine the wet spot carefully to make sure there is no color change to the carpet that did not appear on the cloth.

### **PRE-TREAT HEAVILY SOILED AREA:**

Pre-treat heavily soiled carpet or areas of concentrated foot traffic with pre-spotting or pre-spray chemical.

If a spotter is used, follow label directions exactly. **DO NOT** allow to dry on carpet as it may damage the carpet permanently.

### **AFTER CLEANING:**

After cleaning the carpet when replacing the furniture, place a small square of Styrofoam under the furniture legs to prevent moisture from damaging the finish or rusting metal slides.

## CAUTION

**Disconnect the power cord from the outlet before working on this unit.**

## FREEZING TEMPERATURE PRE-CAUTIONS

If it becomes necessary to store or transport the unit where temperatures could drop below freezing, 32° F, the pump, solution hoses and valve on the tools must be protected from freezing with a solution of automotive radiator antifreeze.

1. Mix ½ gallon of water and ½ gallon of antifreeze in the solution tank. Hook up the hoses and tools to the extractor.
2. Turn the pump ON and press the valve to let antifreeze mixture fill the solution line system.

3. Disconnect solution supply hoses and vacuum out remaining antifreeze from the solution tank.
4. To prevent damage to unit, allow the extractor to reach room temperature before using. The antifreeze **MUST** be flushed out of the solution system with clean water, otherwise, the carpet may be damaged.

## STORAGE OF EXTRACTOR

This extractor should be stored in an upright position. Objects should not be stored or stacked on top of unit.

Always store the extractor in a dry, protected area at temperatures above freezing.

This unit should not be stored in vehicles or areas where extreme heat or cold occurs.

## TO MAINTAIN THE EXTRACTOR

### AFTER EACH USE:

1. Drain recovery tank after each use.
2. Remove all soil and debris from the recovery tank.
3. Flush out recovery tank with clean water.

### END OF DAY MAINTENANCE:

1. Pour 2 gallons of clean hot water – not exceeding 120°F - in the solution tank. Turn the pump ON and flush the entire system for about a minute to prevent alkaline build-up. Using hose provided, drain tank into a bucket or floor drain.

**CAUTION: DO NOT** leave water in tanks over night or store with water in tanks.

### AFTER REPEATED USE:

**Spray Nozzles:** Remove and clean the spray nozzles of any debris or build-up. Replace when necessary.

**Solution Filter:** After 4 to 6 uses, remove the in-line solution filter (located in solution tank) and clean with a small brush and rinse.

**Solution Lines and Fittings:** Flush extractor at least once a month with a solution of 1 part water to 3 parts white vinegar in order to neutralize the alkaline residue left by the cleaning solution.

**Accessory Disconnect:** Spray with silicone lubricant to prevent coupler from sticking.

**Pump:** Follow procedure used above on solution line and fittings to flush out pump. In order to service the pump, contact the factory or authorized service center.

**Vacuum Motor:** Carbon brush mechanism holder should be replaced after operating 700 hours or when the carbon brushes are worn down to  $\frac{3}{8}$ " in length. Replace both brushes at the same time.

**WARNING**

**Service and repairs, should only be performed by an authorized service center.**

- Symptom:** **Extractor does not run! No power to the machine!**  
**Problem:** Blown fuse/circuit breaker in the building / room has tripped.  
**Solution:** *Replace fuse with the same rating. Reset circuit breaker. Make sure no other appliances are connected on the same circuit as the machine. The machine requires a dedicated 15 amp circuit.*
- Problem:** Frayed cord, damaged plug or loose internal wiring.  
**Solution:** *Have an authorized service technician check cord and replace if necessary. Have an authorized service technician open switch panel and check for loose wire connection.*
- Symptom:** **Insufficient vacuuming power! Loss of vacuum!**  
**Problem:** Tank cover not properly seated or gasket on tank cover damaged.  
**Solution:** *Reseat tank cover correctly or replace damaged gasket.*
- Problem:** Damaged vacuum hose or loose cuffs.  
**Solution:** *Replace hose or tighten cuffs.*
- Problem:** Defective vacuum motor.  
**Solution:** *Have an authorized service technician replace vacuum motor.*
- Symptom:** **Motors (vacuum, brush & pump) will not run!**  
**Problem:** Fuse blown or circuit breaker in the building / room tripped.  
**Solution:** *Replace fuse with the same rating. Reset circuit breaker. Make sure no other appliances are connected on the same circuit as the machine. The machine requires a dedicated 15 amp circuit.*
- Problem:** Faulty **ON/OFF** switch.  
**Solution:** *Have an authorized service technician replace switch or switches..*
- Problem:** Loose wiring.  
**Solution:** *Have an authorized service technician trace and repair.*
- Problem:** Faulty motor.  
**Solution:** *Have an authorized service technician replace motor.*
- Symptom:** **Little or no water flow going to tool**  
**Problem:** Solution line blocked.  
**Solution:** *Flush out solution tank and lines with clean water.*
- Problem:** Solution tank filter clogged.  
**Solution:** *Unclog filter.*
- Problem:** Solution tank empty.  
**Solution:** *Refill solution tank.*



## New Machine Warranty



**1. Limited Warranty.** These terms and conditions of the New Machine Warranty are a material part of the agreement between Buyer and Cleanfix Cleaning Systems Inc., a New Jersey-based corporation (hereinafter "Cleanfix"), and supersede warranty terms and conditions in documentation submitted by Buyer to Cleanfix. Cleanfix warrants new machines of its manufacture against defects in material and workmanship under normal use and service to the original end-user purchaser. No person, agent, representative or distributor is authorized to give any warranties on behalf of Cleanfix, or to assume any other liability for Cleanfix in connection with any Cleanfix machine. Cleanfix reserves the right to make changes to its equipment without notice. The warranty coverage is subject to the conditions below.

**2. Registration of Warranty.** The warranty commences on the date of purchase by the original end-user from an authorized Cleanfix distributor or agent, subject to proof of purchase. The warranty commences latest, however, after six (6) months of the purchase date by the authorized distributor or agent of Cleanfix. Any new Cleanfix machine must be registered immediately with Cleanfix by the original end-user customer by fully completing and returning the warranty registration form to Cleanfix. If proof of purchase cannot be identified through a completed and returned warranty registration form, the warranty commences from the date of sale to the authorized Cleanfix distributor.

**3. Warranty Coverage.** Subject to conditions outlined below, Cleanfix warrants rotationally molded PE housings and tanks on all of its machines to be free from defects in material and workmanship, under normal use and service for ten (10) years to the original end-user.

Subject to conditions outlined below, Cleanfix warrants fiberglass housings and tanks on all of its machines to be free from defects in material and workmanship, under normal use and service for three (3) years to the original end-user.

Under this warranty Cleanfix warrants the performance of non-polyethylene and non-fiberglass components to be free from defects and workmanship for up to one (1) year to the original end-user. Parts replaced or repaired under this warranty are warranted for the remainder of the original warranty period. (See table below)

Rotationally molded PE housings and tanks	10 years
Fiberglass housings and tanks	3 years
Vacuum motors, brush motors, pump motors, boards and electronics	1 year
Battery and battery charger*	1 year

\* The 1 year period warranty commences with the purchase date by the authorized distributor or agent of Cleanfix.

Service labor charges are covered for up to one (1) year from the date of purchase through an authorized Cleanfix service provider. A total maximum of one (1) hour travel time - equal to one (1) hour labor rate - is covered for large machines, namely Falcon, Raven, Eagle and larger for 90 days. No coverage is extended for diagnosis time.

**4. Product Exceptions and Exclusions.** ALL vacuum cleaners and air movers are warranted for one (1) year. No warranty is extended for wear items, accessories and attachments including, but not limited to, belts, brushes, pad holders, capacitors, carbon brushes, wheels, casters, glides, clutches, cords, filters, filter bags, gaskets, hoses, rectifiers, switches, float switches, valves, squeegees, bearings, pulleys, relays, actuating cables, wheels, tires, vacuum cleaner attachments.

The purchaser is assured that meticulous care has been exercised in the selection, assembling and testing of these parts and components before shipping. No warranty is extended for machine finish, labels and other cosmetic parts or features.

**5. Stated Warranties.** Stated warranties are in lieu of all other warranties, expressed or implied. Any statutory implied warranties, including any warranty of merchantability or fitness for a particular purpose, are expressly limited to the duration of the written warranty. Cleanfix will not be liable for any other damages, including but not limited to incidental, indirect or special consequential damages arising out of or in connection with the furnishing, performance, use or inability to use the machine, including damages to persons or property. This remedy shall be the exclusive remedy of the buyer. The warranty is limited to the warranty.

**6. Warranty is null and void for the following.**

- Damage, defects, malfunction or other failures caused by not using the electric current indicated on the spec plate, including the use of improper extension cords.
- Damage or defect caused by accident, misuse, neglect, abuse, fire etc., including use of incompatible or corrosive chemicals or overloading of capacity.
- Failure caused by lack of proper maintenance and care, including proper machine clean-up after use, proper charging procedures for batteries.
- Failure caused by loss, damage or removal of protective components, including, but not limited to, filters and filter screens, tank covers and lids, skirts and bumpers, float shut-off assemblies.
- Freezing of any water or chemical related components (this will void all warranties on water or chemical related components, internal or external, of the product).
- Deposits and buildup in any water or chemical related systems due to hardness in water (this will void all warranties on affected systems).
- Any design alterations, adjustments and/or repairs performed on the equipment by an organization not authorized or specified by Cleanfix.
- Use of any parts not approved by Cleanfix, including, but not limited to, batteries, battery charger, filter bags, belts, electric components, motors.
- Use of machine for a purpose other than which it was designed and intended, and use of machine in excess of design duration.
- Damage in transit.

**7. Warranty Claim Procedure.** If a difficulty develops during the specified warranty period, contact the authorized Cleanfix distributor/partner from whom the machine was originally purchased. Do not return any products to Cleanfix unless explicitly authorized by Cleanfix. Cleanfix may elect to require the return of the machine or component(s) to validate the claim. Any defective machine or component to be returned must be shipped freight pre-paid to an authorized Cleanfix distributor/service center.

Cleanfix will provide and charge for replacement parts, including shipping and handling, to the original purchaser through an authorized service center. If the part is returned within 30 days and is found defective, the purchaser will be credited for the cost of the replacement part including shipping and handling.

**8. Term.** This warranty is valid for all products sold after January 1, 2006. A product sold before that date will be covered by the limited warranty in effect at the date of sale to the original purchaser.