

**Mission:**

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



**Ron DeSantis**  
Governor

**Vision:** To be the Healthiest State in the Nation

**MEMORANDUM**

**INFORMATION**  
**DCEH 2019-002**

**DATE:** February 6, 2019

**TO:** County Health Department Directors/Administrators  
ATTN: Environmental Health and Engineering Directors

**THROUGH:** Kendra F. Goff, PhD, DABT, CPM, CEHP, State Toxicologist and Chief  
Bureau of Environmental Health

**FROM:** Ed Barranco, MPH, CEHP, CPM, Environmental Administrator  
Bureau of Environmental Health, Onsite Sewage Programs

**SUBJECT:** ANSI/NSF Standards 40 and 245, Class I, Aerobic Treatment Unit (new listing)

**INFORMATION ONLY**

The aerobic treatment unit (ATU) series Model J-500CF has been certified as meeting all of the requirements of ANSI/NSF Standard 40, Residential Wastewater Treatment Systems, and Standard 245, Residential Wastewater Treatment Systems - Nitrogen Reduction, based on test report SPE111 (revised December 2018), and upscale report SPE332 (revised December 2018), both by Gulf Coast Testing, LLC. Review of drawings and treatment receptacles for models J-500CF, J-750CF, J-1000CF, J-1250CF, J-1500CF has shown that the requirements of Chapter 64E-6, Florida Administrative Code are met for these models. Please add these to the listing of ATUs acceptable for use in the State of Florida.

Attached, you will find electronic copies of the performance testing and evaluation certification report conducted by Gulf Coast Testing, the operation and maintenance manual, and the current listing of Florida-approved tanks to house the Jet CF ATUs.

Please direct any questions to Debby Tipton at 850-901-6944.

EJB/dt  
Attachments  
cc: Ed Schloss, Jet Inc.

**Florida Department of Health**

Division of Disease Control & Health Protection • Bureau of Environmental Health  
4052 Bald Cypress Way, Bin A-08 • Tallahassee, FL 32399-1710  
PHONE: 850/245-4250 • FAX: 850/487-0864

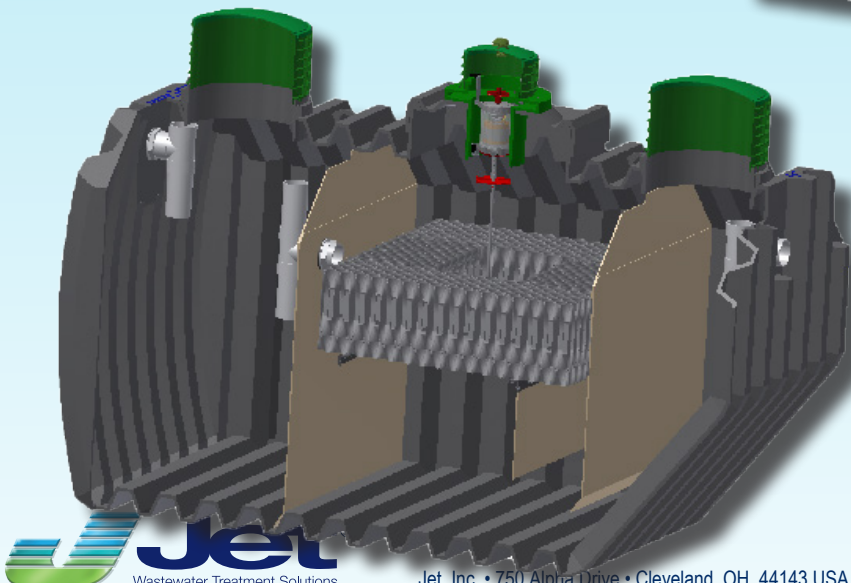
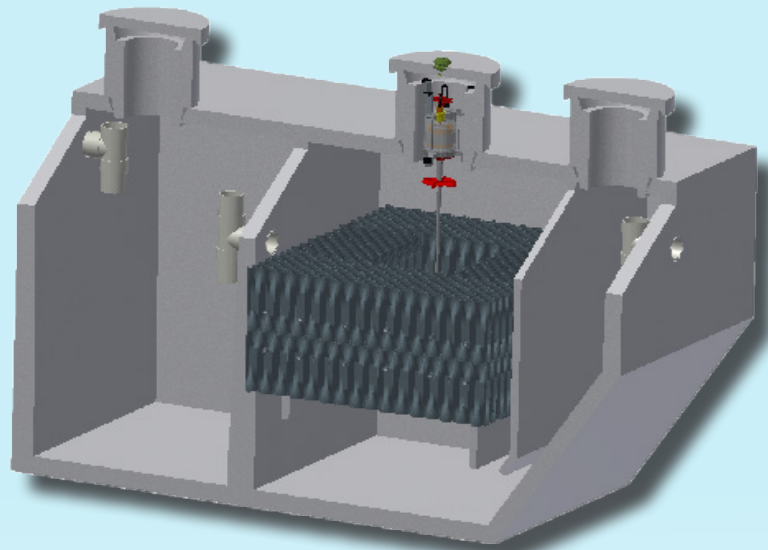
**FloridaHealth.gov**



**Accredited Health Department**  
Public Health Accreditation Board

# CF & 1500 SERIES BAT MEDIA PLANTS

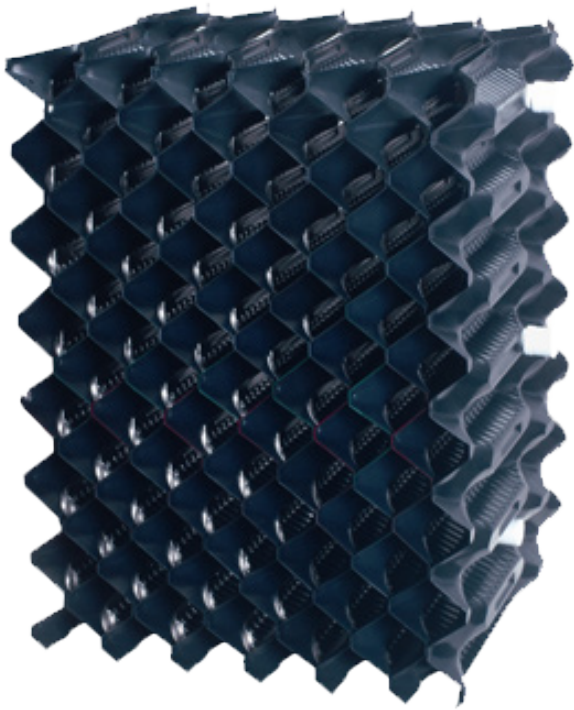
OWNER'S MANUAL



## CF & 1500 Series BAT® Media

### PLANT MODELS

Jet Media Plants are available in six sizes – 500, 500PLT, 750, 800, 800PLT, 1000, 1250 & 1500 gpd (“gpd” means “gallons per day” and refers to the way wastewater treatment plants are rated). Plants in the CF Series have been tested to NSF Standard 40/245 criteria for Class I NSF Listing. Jet Media Plants are designed to treat domestic wastewater only. Domestic wastewater is generally defined as any wastewater produced by a typical residence.



BAT® MEDIA

### BAT® PROCESS

Your plant uses Jet’s exclusive wastewater treatment process called Biologically Accelerated Treatment, or BAT®.

In this process, millions of microorganisms attach themselves to the media. The Jet Aerator supplies the oxygen utilized by the microorganisms to convert the waste to colorless, odorless liquids and gases. This process provides an extraordinarily high degree of treatment.

### CONTENTS

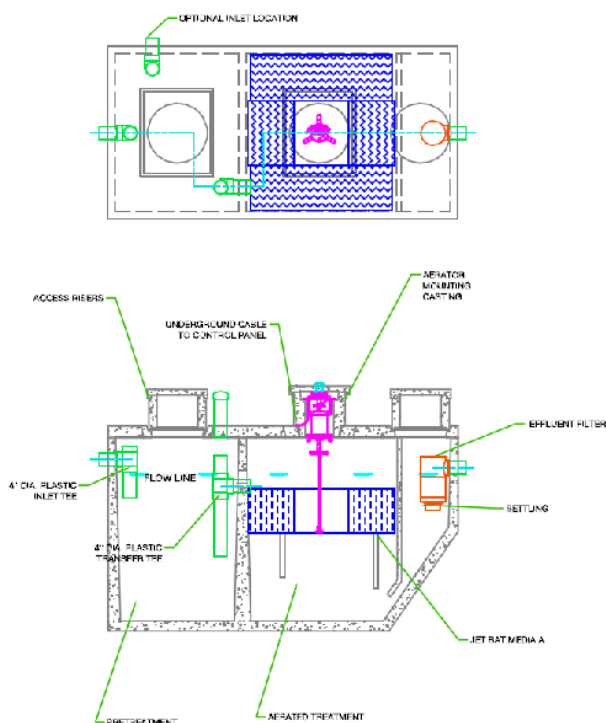
PLANT MODELS .....	2
BAT® PROCESS .....	2
JET TANK .....	3
500 THROUGH 1500 GPD PLANTS .....	3
CONTROL PANEL .....	3
JET AERATOR .....	4
DO’S & DON’TS .....	4
TROUBLESHOOTING GUIDE .....	5
INSPECTION & SERVICE .....	6
SERVICE INTERVALS .....	6
PLANT LANDSCAPING & VACATION USAGE .....	6
TANK PUMPING INSTRUCTIONS .....	7
DISINFECTION DEVICES .....	8
JET WARRANTY .....	9
LIFETIME EXCHANGE POLICY .....	9
ABOUT JET .....	10
NOTES .....	11

## JET TANK

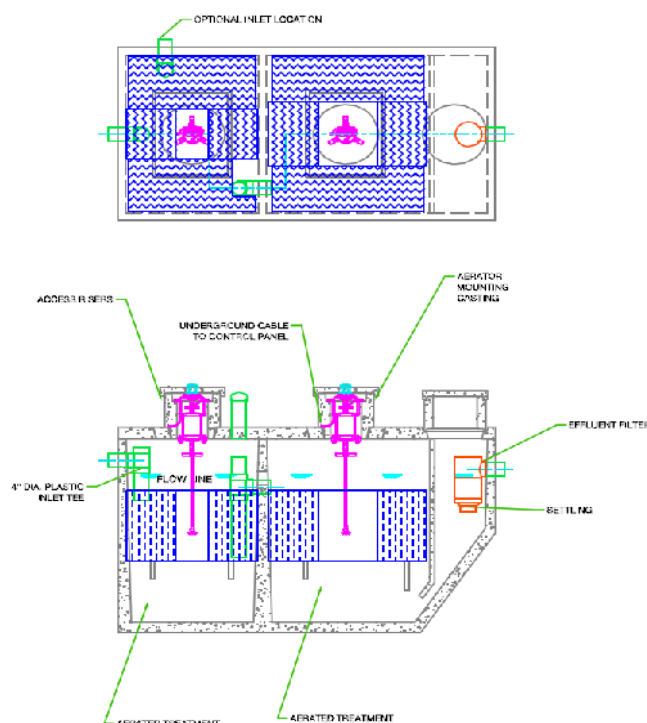
The Jet tank has three compartments. The Pretreatment Compartment receives wastewater and treats it physically and biologically. The Jet Aerator provides mixing and injects fresh air into the Treatment Compartment contents. The model 500, 750, and 800 gpd tanks have only one aerator and media pack with a built-in pretreatment tank. The model 1000, 1250, and 1500 gpd plants have two aerators and media

packs with a separate pretreatment tank. The wastewater flows through the plant, receiving treatment as it travels to the Settling Compartment. Here, fine particles settle and return to the Treatment Compartment, for further processing, leaving only a clear, odorless liquid for final discharge. **(The CF model uses a filter in the settling compartment and the control panel operates the aerators intermittently).**

### JET MODEL 500 THROUGH 800 GPD PLANTS



### JET MODEL 1000 THROUGH 1500 GPD PLANTS



## JET CONTROL PANEL

The control panel should be mounted where it can be easily accessed and seen. A wiring diagram and instructions are inside the control panel cover. Energy requirements are 115 Volt, 60 Hz. Electrical work must be performed in accordance with the requirements of the National Electrical Codes and local codes.

If the red visual alert light glows and/or an audible alert buzzer sounds, the circuit breaker has tripped to protect the aerator. To restart the aerator, and turn off the buzzer and alert light press the control panel circuit breaker reset button.

J-1500 Series Panels control the aerators to run continuously.

J-1500-CF Series Panels control the aerators to run continuously 30 minutes on, 30 minutes off.

If the buzzer and alert light come on repeatedly, turn the switch in the control panel to "OFF" and call your Jet Distributor immediately for service.

The contact information for your Jet local distributor is located on a data plate attached to the front of the control panel. You should contact the authorized Jet distributor in the event of an alarm, or if your system is in need of routine maintenance. If you have problems locating this information contact Jet Inc.

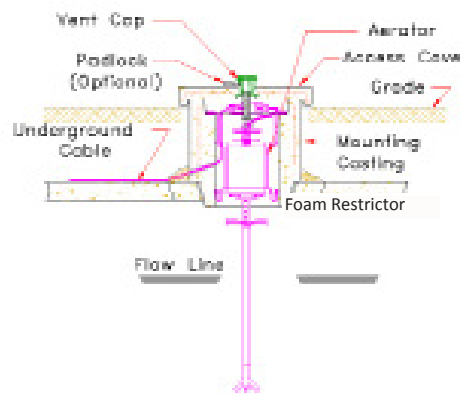
## JET AERATOR

The aerator is the only mechanical component in your plant. It requires no homeowner maintenance.

The aerator shaft spins and combines fresh, outside air with the wastewater in the Jet Tank Treatment Compartment. Air travels down the mounting casting cover air vent through the aerator and into the tank, providing oxygen for the treatment process. Any foam is controlled by the foam restrictor.

Aerator operation is nearly silent. If the plant is located near an open window, you may detect the sound of air moving into the treatment tank. For virtually silent operation, ask your Jet Distributor to install an Aerator Silencer.

The Jet Plant uses a sealed aerator. The aerator is sealed to protect it from damage by water. It is not designed to operate under water. If a high water level occurs, the control panel circuit breaker will trip, shutting off power to the aerator. The warning light will turn "on". If this happens, press the circuit breaker reset button on the control panel to restart the aerator.



- Never handle your aerator. Call your Jet Distributor if any service is necessary.
- When the Aerator Access Cover is removed and reinstalled, it is important to place the outside air hose in the vent cap. The hose must not be obstructed.
- Never disassemble or work on the aerator. This voids the warranty.
- Power at the main electrical panel must be turned off before any authorized service is performed on the aerator, the control panel, or any wiring.

## DO'S & DON'TS

### THINGS TO DO

- Know the location of your control panel and check periodically for alarm conditions.
- Keep a record of pumping, inspections, and maintenance.
- Practice water conservation to reduce the amount of water going into the Jet system.
- Learn the location of your Jet system and avoid constructing patios, decks, and paved surfaces over your system.
- Divert roof drains and surface water away from your Jet system.
- Keep sump pump water and house footing drains away from the Jet system.
- Reduce heavy water usage periods by separating dish washing and laundry from shower time.
- Use dryer sheets in the dryer in place of liquid fabric softeners in the wash cycle.
- Use detergents without phosphates (i.e., Seventh Generation Free & Clear, Method 3x Concentrate, Arm & Hammer, Era, Oxydol).

### AVOID THESE ITEMS

Do not put any of the following items in your Jet system. They will cause serious damage to the plant's biological process and equipment.

- Baby wipes, flushable wipes, plastic, sanitary products, scouring pads, condoms, mop strings, "disposable" diapers, towels, lint, rags, etc. These items will collect in your plant and require more frequent pumping.
- Paints, paint thinner, chemicals, grease, solvents and sanitizer. These kill the good bacteria in your plant.
- Water softener backwash.
- Heavy plumbing cleaners and toilet tank tablets that will kill off the good bacteria in your plant.
- Don't use concentrated detergents, that contain phosphates, or liquid fabric softeners.
- Anti-bacterial soaps can kill off the beneficial bacteria in your system.
- Antibiotics and chemotherapy can affect the performance of residential treatment plants.

# TROUBLESHOOTING YOUR JET PLANT AND EQUIPMENT

Symptom	Probable Cause	Correction
Aerator not functioning	No power to control panel	Check main house breaker
	Mini-breaker tripped	Reset mini breaker on Jet control panel
	Aerator failure	Replace unit, contact service provider
Aerator functioning intermittently	High water in treatment tank	Check discharge field or pump tanks
	Thermal breaker engaged	Load on aerator shaft, contact service provider
Control Panel Alarm Active	Aerator not functioning	See above
	Aerator not installed in system	Install/replace aerator
	Secondary alarm activated	Check auxiliary devices
Effluent has strong odor	Bacteria not present/dead	Allow system to regenerate bacteria, if problem persists for over 48 hours pump tank.
	Aerator not functioning	See above
	Media pack requires service	Contact service provider, have system serviced and pumped
	Hydraulic/Organic Overload	Reduce overload conditions by altering water use patterns
Sewage odors indoors	Improper plumbing installations	Check plumbing and ensure traps have water
	Roof vents clogged	Check vents
	Poor/Bad wax seal on toilets	Replace wax ring seals

For additional information on Jet systems reference the FAQ section on our web site at [www.jetincorp.com](http://www.jetincorp.com)



## INSPECTION & SERVICE

**LOCAL DISTRIBUTOR:** The Jet Distributor who installed your Jet Plant is trained, experienced and properly equipped to handle service and answer any questions. Your distributor's name and phone number are posted on the cover of your control panel. You can also search for a list of available service providers in your area on our web site at [www.jetincorp.com/distributorlocator.php](http://www.jetincorp.com/distributorlocator.php).

**LIMITED WARRANTY & SERVICE POLICY:** Your Limited Warranty and Inspection/Service Policy are printed on a card accompanying this manual.

**RENEW YOUR INSPECTION/SERVICE POLICY:** The cost for the first two years of an Inspection/Service policy are included in the purchase price of your Jet system. The initial two year policy includes four scheduled service and maintenance calls at no charge. After this policy expires don't forget to renew your policy with your Jet Distributor.

## PLANT SERVICE - 3 YEAR CYCLE

Service	Months					
	6	12	18	24	30	36
6-Month	•	•	•	•	•	•
12-Month		•		•		•
3-Year						•

## SERVICE INTERVALS

**6-Month Service:** This comprehensive service call includes collection and assessment of a post-treatment sample, inspection, servicing, cleaning, removal, reinstallation and testing of the aerator by a trained service technician. CF Series requires cleaning of the filter at this service.

**12-Month Service:** This call provides all elements of the 6-Month service as well as media cleaning.

**3-Year Service:** This service provides all steps in the 6- and 12-month service and tank pumping, if necessary. If you have not renewed your Inspection/Service Policy, you will be charged for the 30- and 36-month service calls. Tank pumping is not included under your Jet Distributor's Inspection/Service Policy. It is charged to you by your tank pumper. If you have kept your service policy active, there will be no charge for aerator service. **Make sure you notify your Jet Distributor before you have your tank pumped. If the tank pumper is not familiar with Jet's media and media has not been cleaned before pumping, severe damage to the media can occur. This is potentially costly to repair.**

### When applicable:

Note:

- UV bulbs should be cleaned and inspected every 6 months, and replaced every other year.
- Chlorinator and dechlorinator units should be inspected, and

## PLANT LANDSCAPING & VACATION USAGE

### PLANT LANDSCAPING

Most owners plant grass over their Jet Plant. Many owners prefer planting a flower bed. Myrtle, Pachysandra, or Ivy is also attractive. Do not position anything permanently over below-grade access covers. They must be accessible for service (Note: Some systems may already have all three access covers extended above grade. Refer to drawings on page three for access cover locations). It is very important that the finished grade slope away from the plant. Also, grade must be at least 1" below the bottom of the access covers.

### VACATIONS & INTERMITTENT USE

When absent for extended periods of time, the plant should be left running and cycled as it is during any absences. This will clean the Treatment Compartment during the absence and keep the plant in top operating condition.

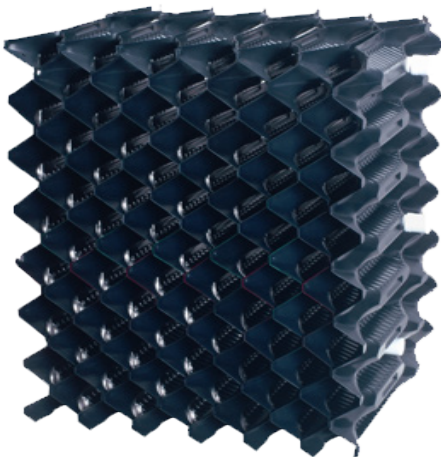
# TANK PUMPING INSTRUCTIONS

## Media Compartment Pumping 500 Thru 1500 GPD Plants:

1. Jet service technicians must air clean the media tank prior to tank pumping. Pumping must take place within two weeks after media cleaning.
2. Remove tank access covers. Remove aerator(s). Always place aerator so shaft and foam restrictor do not contact any surface. You can lean aerator against the mounting casting as long as the shaft does not come into contact with hard surfaces. Even a small bend in the shaft will shorten the aerator's lifespan.
3. Always pump the Pretreatment Compartment (access 1) first, then pump the Treatment Compartment (access 2) second. Pumping from the Settling Compartment (access 3) is not required. CF series requires cleaning of the filer.
4. The opening in some media is very small. Take extreme care not to touch any part of the media with the pump hose or the tip of the pump hose - serious damage can occur if the media is stressed by the vacu-um or the hose.
5. The opening in the media center can not be seen from the surface. Care-fully lower the hose down the center of the mounting casting, through the opening in the media, and down to the bottom of the tank.
6. Pump tank until empty and carefully remove hose. Use caution not to touch the media with the hose as the hose is being removed.
7. Rinse out all compartments and pump out residual water.
8. Reinstall aerator(s) and access covers.

*Note: Tank pumping should only be performed by a properly equipped professional service provider. Check with your local health department for current tank pumping regulations.*

***\*\*The plastic tank must be filled with water immediately after pumping.***

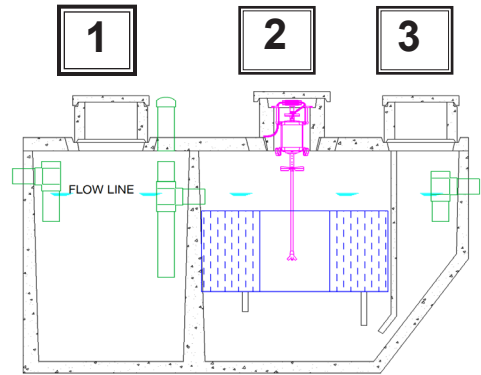


BAT® MEDIA

## ACCESS COVERS

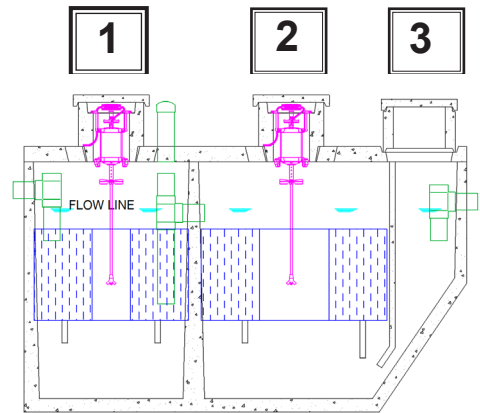
### 500, 600, 750 & 800 GPD

There are three access covers. Pump from access cover one and two.



### 1000, 1250 & 1500 GPD

These systems have two sets of media, use caution when pumping from riser one and two. There is also a separate pre-treatment tank that will require pumping.





## DISINFECTION DEVICES

Your plant may be equipped with a disinfection device, such as a tablet chlorinator or ultraviolet disinfection device. These are installed on the plant discharge line. If your system has a disinfection device make sure to read the "Installation and Operation" manual. These have important instructions for operation and maintenance requirements.

For tablet chlorinators we recommend you use only EPA approved wastewater treatment tablets. Using chemicals intended for use with other household fixtures, such as swimming pool tablets, is extremely dangerous – fire or explosion could result. Contact your Jet Distributor to purchase chlorine tablets designed specifically for use with wastewater tablet feeders or to receive additional information.



## CHLOR-AWAY® DECHLORINATION

If you have a chlorinator, your plant may be equipped with the Jet Dechlorinator. This is installed after the chlorinator on the discharge line.

We strongly recommend that you use only CHLOR-AWAY® Tablets in your dechlorinator. Our tablets are highly effective and cost efficient. Contact your Jet Distributor to purchase CHLOR-AWAY® or to receive additional information.



## LIMITED WARRANTY

Jet Inc. ("Jet") warrants that newly manufactured JET aerators, control panels, media assemblies and PLT tanks (plastic tanks) shall be free from defects in materials and workmanship. This warranty will remain in effect for a period (the "warranty period") of 30 months from the date of original installation in cases where the purchaser completes a warranty card in the then-current form provided by Jet ("Warranty Card") and delivers such Warranty Card to Jet at 750 Alpha Drive Cleveland, OH 44143 within 20 days from the date of installation of the applicable Jet Product. In all other instances, the warranty period shall be a period of 30 months from the date of shipment of the applicable Jet Product from the Jet factory.

The purchaser's sole and exclusive remedy for breach of the foregoing warranty shall be limited, at Jet's option, to the repair or replacement of the defective goods or refund of the purchase price, and in no event shall Jet's liability exceed the purchase price paid by purchaser for the goods. Purchaser claims shall otherwise be subject to and conditioned upon purchaser promptly notifying either (1) the distributor from which the purchaser purchased the applicable Jet products ("Jet Distributor") or (2) Jet's Customer Service Department, 750 Alpha Drive, Cleveland, Ohio 44143, on or before the termination of the applicable warranty period via certified mail, return receipt requested.

Aerators and control panels must be removed and returned to the Jet factory via the Jet Distributor. Media assemblies will be repaired or replaced by the Jet Distributor at the installation site. If any repairs or replacements covered by the warranty are needed for aerators or media assemblies, the applicable aerator or media assemblies will be repaired or replaced with no charge to purchaser for labor and materials. If any repairs or replacements covered by the warranty are needed for a PLT tank, the PLT tank will be repaired, or defective materials replaced, at the installation site at no cost to purchaser for labor and materials; provided, that, under no circumstances shall Jet be responsible for, any labor costs incurred for removal and/or installation of a PLT tank in the case of replacement. Further, in all instances, purchaser shall assume all responsibility for shipping and handling charges to and from the Jet factory in connection with any repairs or replacements covered by this Limited Warranty. If any Jet Product returned to Jet or the Jet Distributor have any missing parts, an additional charge will be made to the purchaser to replace such missing parts.

This Limited Warranty does not cover any Jet aerators, control panels, media assemblies or PLT tanks that have been damaged by water or damaged due to (1) disassembly or alteration by unauthorized persons, (2) improper installation or maintenance, (3) misuse (including use outside of the normal intended purpose), (4) lightning or other acts of God, (5) acts of any third party, (6) improper or altered wiring, (7) improper overload protection, (8) failure to follow the instructions in the Owner's Manual, (9) failure to maintain a service or maintenance policy after any applicable free initial service or maintenance policy of Jet or a Jet Distributor expires, and/or (10) any negligence or intentional misconduct of purchaser or any third party.

This Limited Warranty applies only to the JET Aerator, control panel, media assembly and PLT tank and does not include any of the house wiring, plumbing, drainage, or any other part of the disposal system.

EXCEPT FOR THE REPAIR OR REPLACEMENT OF JET PRODUCTS AS PROVIDED FOR IN THIS LIMITED WARRANTY, JET SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGES CAUSED BY ANY DEFECT IN MATERIALS OR WORKMANSHIP, OR FOR LOSS INCURRED BECAUSE OF THE INTERRUPTION OF SERVICE, OR ANY OTHER SPECIAL, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, LOST PROFITS OR EXPENSES ARISING FROM THE MANUFACTURE, SALE, USE, MISUSE, REPAIR OR REPLACEMENT OF ANY JET PRODUCT (INCLUDING PENALTIES, TAXES OR FILING FEES) REGARDLESS OF WHETHER SUCH LIABILITY IS BASED ON BREACH OF CONTRACT, TORT, STRICT LIABILITY OR OTHERWISE, AND EVEN IF ADVISED OF THE LIKELIHOOD OF SUCH DAMAGES. THE WARRANTY PROVIDED FOR IN THIS LIMITED WARRANTY ARE IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE (IF APPLICABLE).

Jet reserves the right to revise, change or modify the construction and design of any Jet Product and any component part or parts thereof, without incurring any obligation to make such changes or modifications in prior Jet Products.

### CAUTION!

AERATOR WARRANTY IS VOID IF A 7 AMP CIRCUIT  
BREAKER & A JET CONTROL PANEL ARE NOT USED.

## ABOUT JET

Our Mission Statement: To be the #1 worldwide provider of advanced onsite wastewater treatment systems known for the quality of our systems, customer service and business integrity.

## THE COMPANY

Founded in 1955, David S. MacLaren acted on an innovative idea. While working closely with his father, Albert MacLaren, they designed and patented an aerator for family homes that would more effectively treat and dispose of residential wastewater, changing the technology in the wastewater treatment business forever! A close look at our competitors will highlight how much of an innovator we are as most of the competing concrete tanks are modeled after our design, but they can't copy another Jet innovation, our patented BAT® media. This makes Jet the true pioneer and a leader in onsite wastewater treatment both in residential and commercial settings. Offering a high level of customer service and cutting edge products in an ever changing industry, Jet is the LEADER in wastewater technology. Jet's representatives design, install and service the best products in the industry!

## THE PRODUCTS

Jet concentrates on water pollution control, producing equipment and components for package wastewater treatment plants. Starting with a residential plant, the company refined and worked with this product so that today it is the most accepted, largest selling home plant in the country. Next, Jet added a complete line of commercial plants designed to serve factories, apartments, hospitals, service stations, trailer parks, and dozens of similar installations located beyond city sewer lines. To support its commercial plants Jet offers a complete line of optional equipment and accessories. A unique feature of Jet's Commercial Plant is the Jet AIR-SEAL® Diffuser; the first truly non-clog diffuser in the field, it has been acclaimed by health authorities and engineers. Jet's product lines also include JET CHLOR® Disinfection Systems, CHLOR-AWAY® Dechlorination Systems, BIO JET-7®, a wastewater additive (not available in FL), Lift Stations, Liquid Level Alarms, Controllers and a broad range of other wastewater treatment products and equipment. Field-proven in thousands of installations, Jet plants have successfully undergone hundreds of testing programs and performance evaluations at the local, state, and national levels.

## THE DISTRIBUTOR

Jet has an extensive network of distributors licensed to sell, install, and service Jet Treatment Plants. Jet works with these local distributors, guiding them with training and follow-up in engineering, production, sales and office procedures. The company arranges frequent training seminars at its factory and sends factory specialists to aid the distributor in their territory. Jet prides itself on this program of close cooperation with its distributors, and credits this with being one of the major elements contributing to the distributors' success. As Jet's management puts it: "Jet products plus Jet training plus Jet Distributors makes an unbeatable Onsite Wastewater Treatment Team."



# NOTES:



YOUR LOCAL JET DISTRIBUTOR :