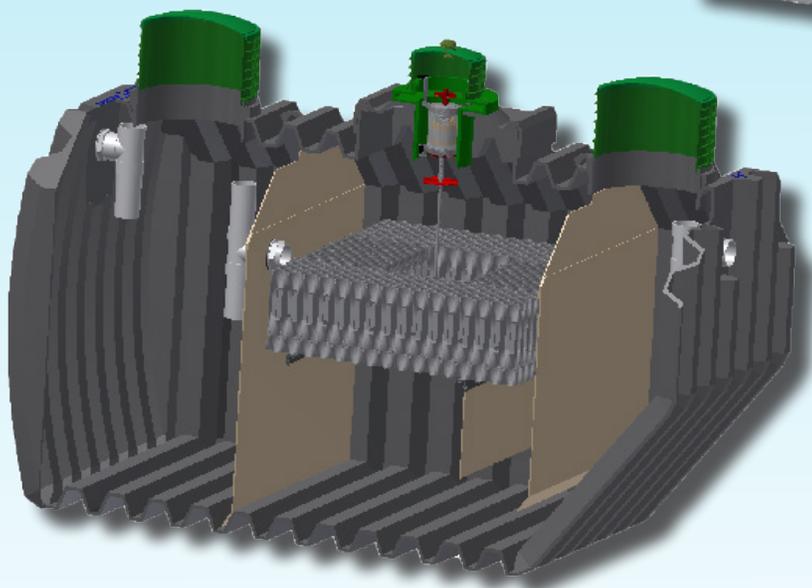
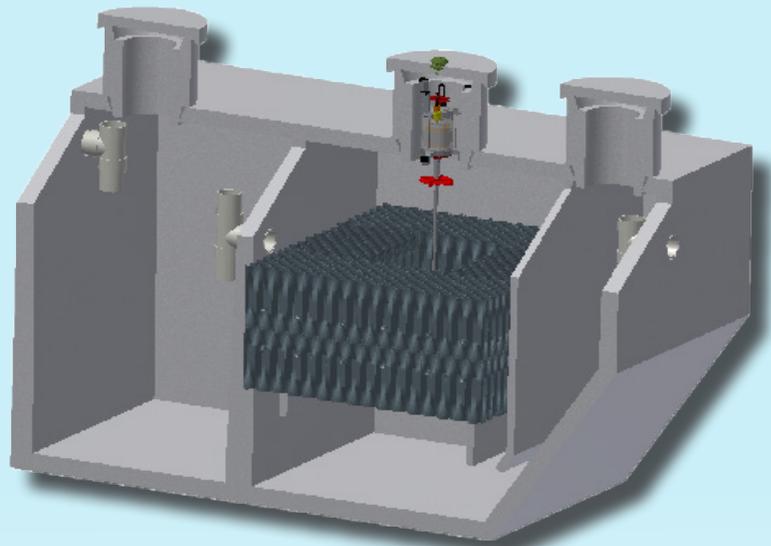


# 1500 SERIES BAT<sup>®</sup> MEDIA PLANTS

OWNER'S MANUAL



## 1500 Series BAT<sup>®</sup> Media Plants

### PLANT MODELS

Jet Media Plants are available in seven sizes – 500, 500PLT, 600, 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 J-1500 Series have been tested to NSF Standard 40 criteria for Class I NSF Listing. Jet 1500 Series Media Plants are designed to treat domestic wastewater only. Domestic wastewater is generally defined as any wastewater produced by a typical residence.



BAT<sup>®</sup> MEDIA

### BAT<sup>®</sup> PROCESS

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

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.

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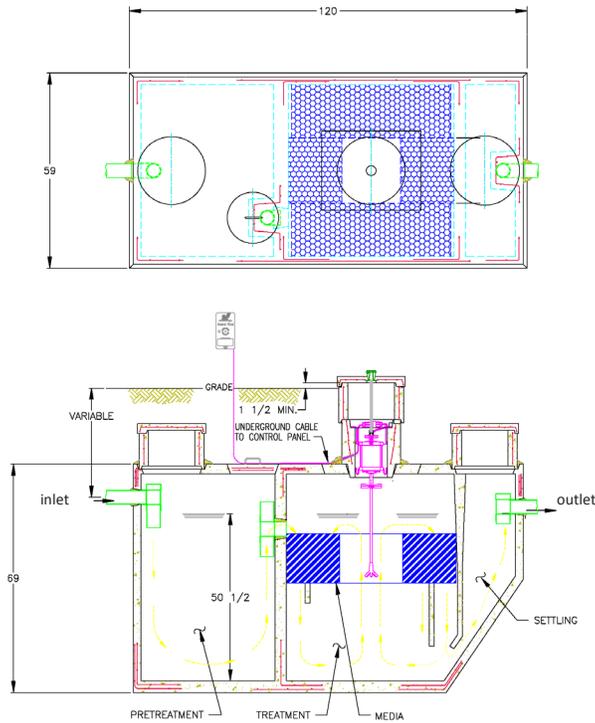
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## JET TANK

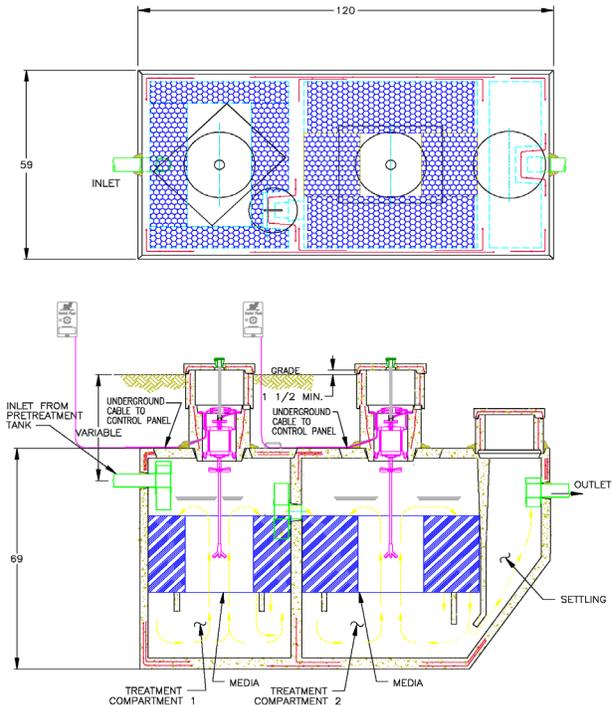
The Jet tank has three compartments. The Pretreatment Compartment receives wastewater and treats it physically and biologically. The Jet Aerator provides mixing and injects fresh air into the Treatment Compartment contents. The model 500, 600, 750, and 800 gpd tanks have only one aerator and media pack 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.

### 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.

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.

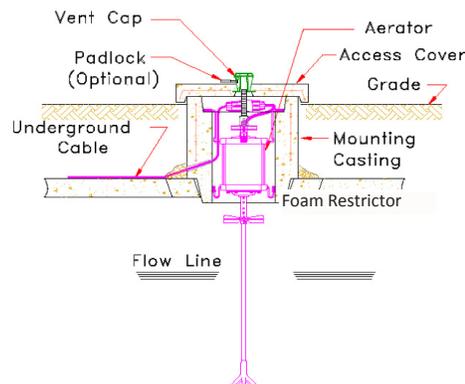
## JET AERATOR

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.

- 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  Mini-breaker tripped  Aerator failure	Check main house breaker  Reset mini breaker on Jet control panel  Replace unit, contact service provider
Aerator functioning intermittently	High water in treatment tank  Thermal breaker engaged	Check discharge field or pump tanks  Load on aerator shaft, contact service provider
Control Panel Alarm Active	Aerator not functioning  Aerator not installed in system  Secondary alarm activated	See above  Install/replace aerator  Check auxiliary devices
Effluent has strong odor	Bacteria not present/dead  Aerator not functioning  Media pack requires service  Hydraulic/Organic Overload	Allow system to regenerate bacteria, if problem persists for over 48 hours pump tank and seed with BIO-JET7®  See above  Contact service provider, have system serviced and pumped  Reduce overload conditions by altering water use patterns
Sewage odors indoors	Improper plumbing installations  Roof vents clogged  Poor/Bad wax seal on toilets	Check plumbing and ensure traps have water  Check vents  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						●

### 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.

### 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.

**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 restocked, if necessary, every 6 months.

#### 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.

If gone for a long duration of time, we recommend using BIO JET-7<sup>®</sup> or BIO JET-7<sup>®</sup> Dry Packs to repopulate the beneficial bacteria in the system.

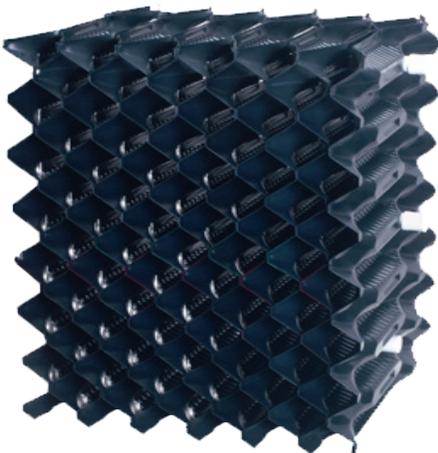
# TANK PUMPING INSTRUCTIONS

## 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.
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.***

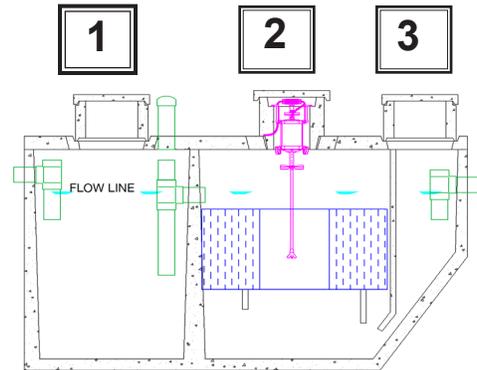


BAT® MEDIA

## ACCESS COVERS

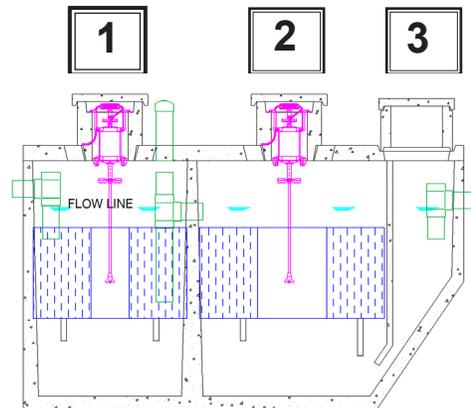
### 500, 600, 750 & 800 GPD

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<sup>®</sup> 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<sup>®</sup> Tablets in your dechlorinator. Our tablets are highly effective and cost efficient. Contact your Jet Distributor to purchase CHLOR-AWAY<sup>®</sup> or to receive additional information.

### BIO JET-7<sup>®</sup> WASTEWATER SUPPLEMENTS

Jet, Inc. has an entire line of environmentally friendly supplements that focus on enhancing the stability and efficiency of natural biological processes that lie at the foundation of wastewater treatment. All of the BIO JET-7<sup>®</sup> products microbial populations are made of naturally occurring, non-toxic microorganisms and are safe for wastewater systems, human handling, and the environment.

BIO JET-7<sup>®</sup> is a non-hazardous and non-toxic active liquid culture of 7 microorganisms that accelerate biological oxidation.

BIO JET-7<sup>®</sup> Dry Packs are an odorless, mess-free product that contain highly beneficial, naturally occurring bacteria in spore form, packaged in a quick dissolving flushable packet.

BIO JET-7<sup>®</sup> and BIO JET-7<sup>®</sup> Dry Packs:

- Have a high naturally occurring bacteria count
- Are easy to use - just flush or drop directly into the tank
- Can be used to jump start systems, clear up slow draining fields, or reduce grease trap pumping

We suggest periodic application of BIO JET-7<sup>®</sup> or BIO JET-7<sup>®</sup> Dry Packs for a simple and effective preventative maintenance program – reducing costs and saving money, or use after a vacation or a harmful hydraulic or chemical event for fast revival of wastewater ecology.

Contact your Jet Distributor to purchase BIO JET-7<sup>®</sup> or to receive additional information.



## 30 MONTH LIMITED WARRANTY

Jet Inc. warrants every new Jet aerator against defective materials and workmanship, under normal service, for 30 months commencing on the date of original installation if a completed warranty card is returned to Jet Inc. within 20 days from the date of installation or within 20 days after the original purchaser moves into the building or home serviced by the aerator or on the date of shipment from the factory if no warranty card is returned within the time period described above.

To make a claim under this warranty you should notify your Jet Distributor or notify the Jet Inc. Customer Service Department, 750 Alpha Drive, Cleveland, Ohio 44143.

Aerators and control panels must be removed and returned to the factory by a Jet Distributor. If any in-warranty repairs are needed, the aerator will be repaired at the factory with no charge for labor or materials. The purchaser shall assume all responsibility for freight charges to and from the factory. If there are missing parts, an additional charge will be made.

If there is any in-warranty media repair or replacement, this will be taken care of by the Jet Distributor at the installation, with no charge for labor or materials. Media damage caused by owners or unauthorized persons is not covered under the warranty.

This warranty does not cover any Jet aerators or control panels that have been damaged by water or damaged due (1) to disassembly by unauthorized persons, (2) improper installation, (3) misuse, (4) lightning, (5) external damage, (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 policy after the free initial service policy expires.

The warranty applies only to the JET Aerator and control panel and

does not include any of the house wiring, plumbing, drainage, or any other part of the disposal system

JET INC. SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGE CAUSED BY DEFECTIVE COMPONENTS OR MATERIALS OR FOR ANY LOSS INCURRED BECAUSE OF THE INTERRUPTION OF SERVICE, OR ANY OTHER SPECIAL CONSEQUENTIAL, OR INCIDENTAL DAMAGES OR EXPENSES ARISING FROM THE MANUFACTURE, SALE, USE OR MISUSE OF ANY JET PRODUCTS COVERED HEREUNDER. THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. ANY WARRANTY IMPLIED BY LAW, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE (IF APPLICABLE), AND IS IN EFFECT ONLY FOR THE WARRANTY PERIOD SPECIFIED ABOVE. (SOME STATES DO NOT ALLOW EXCLUSIONS OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE MAY NOT APPLY TO YOU.) SOME STATES DO NOT ALLOW LIMITATIONS OF HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

Jet Inc. reserves the right to revise, change or modify the construction and design of any and all Jet products or any component part or parts thereof, without incurring any obligation to make such changes or modifications in present equipment. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

## LIFETIME EXCHANGE POLICY

All Jet aerators are covered under our lifetime exchange policy. Your aerator is automatically enrolled in our pro-rated exchange program so you will never have to pay full price for an exchange aerator should your aerator fail. Contact your authorized Jet distributor for more details regarding this unique advantage to owning a Jet system.

### 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 natural, organic wastewater additive, 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 :