### Flowtron Mosquito PowerTrap®

• For Outdoor Use Only.

• Attracts certain mosquitoes.

### DOMESTIC

READ THE LABEL AND OPERATING INSTRUCTIONS BEFORE USING

Registration No. 28457 Pest Control Products Act

KEEP OUT OF REACH OF CHILDREN CAUTION - SKIN IRRITANT WARNING - EYE IRRITANT DANGER POISON

See enclosed label for additional Precautions, First Aid, Directions for Use and Storage and Disposal instructions.

Box Contents: Flowtron Mosquito Powertrap®, Tank Stand, Post, Cap, 12 Volt Power Pack, Flowtron Mosquito Attractant

> GUARANTEE: 1-Octen-3-ol . . . . 1.66 g/lure

REG. NO. 28456 PCPA

Armatron International, Inc. 15 Highland Avenue Malden, MA USA 02148 781-321-2300

### Enclosed Label

### FIRST AID:

If on skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

If swallowed: Call poison control or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control centre or doctor. Do not give anything by mouth to an unconscious person.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

### PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. Fatal or poisonous if swallowed. May irritate the skin. Avoid contact with skin. Causes eye irritation. DO NOT get in eyes. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by disposal of wastes.

Hazardous to Humans and Domestic Animals Wash thoroughly with soap and water after handling.

### DIRECTIONS FOR USE:

See enclosed Operating Instructions for complete instruction for unpacking the device, set up, installation of the Flowtron Mosquito Attractant and operation of the unit. Please carefully read these instructions.

### Placement:

Locate the Flowtron Mosquito PowerTrap® 6 to 12 metres (20 to 40 feet) from areas of human activity in a location near (but not in) bushes, trees, weeds and other heavy vegetation or standing water.

### STORAGE AND DISPOSAL:

### Flowtron Mosquito Attractant Storage:

Store in original container in a cool, dry area and out of reach of children until ready to use.

### Flowtron Mosquito Attractant Disposal:

DO NOT reuse the spent lures. Dispose in household garbage. Unused or partially used products should be disposed at provincially or municipally designated waste disposal sites.

# NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on the label. It is an offense under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

### Optional Text

How the Flowtron Mosquito PowerTrap® Works

 Heat, moisture and carbon dioxide, the acknowledged leading attractants for mosquitoes are produced from propane gas and air.

 Unique Octenol cartridge releases a special scent which combined with carbon dioxide attracts mosquitoes.

 Powerful vacuum draws mosquitoes into a convenient, removable catch tray where they quickly dehydrate and die.

 Clean, simple and fast mosquito disposal system. No sticky paper or glue panels to handle and replace.

 Computerized electronics automatically controls all operating functions in one of four individual time settings for maximum efficiency.

 Timed on/off settings allow for more economical use of propane gas and octenol attractant resulting in significant savings in operating costs.

 Exclusive catalytic converter uses a platinum catalyst which is safe, flameless and never needs replacing.

- Operates from a refillable 9 kg (20 lb.) propane tank (as used on gas grills).
- Safe, low voltage wiring for above or below ground installation.

### Illustration callouts

- PLATINUM CATALYST Converts propane gas and air into heat, moisture and carbon dioxide.
- POWERFUL VACUUM Draws mosquitoes into the trap.
- CONTROLS Four "Set and Forget" individual time settings.
- PROPANE HOSE AND REGULATOR Connects to a 9 kg (20 lb.) tank. (Tank not included).
- TANK STAND Includes stand, post, tank cap and tank wrap.
- MICRO-PROCESSOR Programmed to automatically control all operating functions.
- TIME RELEASE CARTRIDGE Releases Octenol scent into the carbon dioxide emission for optimum effectiveness.
- ATTRACTANT OUTLET Emits heat, scent, moisture and carbon dioxide to attract mosquitoes.
- SEE-THROUGH CATCH TRAY Removable for clean, easy disposal of dead mosquitoes.
- LOW VOLTAGE WIRE 15 m (50 feet) included in carton. Install above or below ground.

- UL/CSA LISTED POWER PACK Included in carton. Connects to 120 volt A.C. outlet.
- FREE OCTENOL CARTRIDGE Included in carton.
- ACCESSORIES
  - Extension Cord EC-50

15 m (50 foot) low voltage extension cord. Allows placement of the Flowtron Mosquito PowerTrap® an additional 15 m (50 feet) away from the power pack.

- Mosquito Attractant: MA 1000CAN Slow release Octenol Cartridge makes your Flowtron Mosquito PowerTrap® more effective in attracting mosquitoes.
- Hi-TECH MOSQUITO TERMINATOR Generates Carbon Dioxide, Heat and Moisture – irresistible mosquito attractants.
- EXCLUSIVE

"Set and Forget" Operation-micro-processor automatically turns unit on and off in one of four individual time settings. Conserves Octenol and propane gas for maximum efficiencies.

VACUUM ACTION

Mosquitoes attracted to the Flowtron Mosquito PowerTrap® are drawn in by the strong air flow and discharged into a removable collection tray for easy, clean disposal.

- FREE OCTENOL Lure included in carton. Time release cartridge adds Octenol scent to the carbon dioxide emission for optimum effectiveness.
- FREE STANDING
   Convenient, Portable One year Limited Warranty
- Patented Technology Based on 30 years of insect control experience. Pat. Nos. 6,145,243 & 6,286,249 Other Patents Pending
- Made in the U.S.A.
- Converts propane gas to carbon dioxide to attract mosquitoes.
- Attracts and Kills Mosquitoes.
- A Propane Powered Mosquito Trap
- Patented, Non-Clogging System
- Durable, Weatherproof Construction
- Automatic on/off operation in one of four individual time settings.
- Powerful Vacuum Action

- Draws mosquitoes into the "no-escape" trap where they dehydrate and die.
- Removable catch tray for fast, clean and easy disposal of dead mosquitoes.
- Free Octenol scent cartridge releases a proven mosquito lure for optimum effectiveness.
- Special super bright LED's provide added lure.
- Patented propane valve operation is non-clogging and never needs cleaning.
- One Year Limited Warranty.
- Engineered to take on the toughest mosquito problem.

19-APR-2007

Flowtron Mosquito PowerTrap®

OPERATING INSTRUCTIONS

# DOMESTIC

# KEEP OUT OF REACH OF CHILDREN

# READ THE LABEL AND OPERATING INSTRUCTIONS BEFORE USING

Please retain operating instructions for future reference.

Reg. No. 28457 PCPA

Armatron International, Inc. 15 Highland Avenue Malden, MA USA 02148 781-321-2300

# ENGLISH - text without graphics

Flowtron Mosquito Powertrap® Operating Instructions

Look for this symbol to point out important safety precautions

IMPORTANT: Read these instructions completely before installing or operating your new Flowtron Mosquito PowerTrap®.

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# **Carton Contents**

Qty.	Description
1	Flowtron Mosquito PowerTrap®
1	Power Pack and Wire
1	Catch Tray
1	Post Section
1	Tank Stand
1	Tank Support Strap
1	Octenol Cartridge
1	Tank Wrap
1	Tank Cap
1	Owners Manual

### UNPACKING INSTRUCTIONS

Your Mosquito PowerTrap® has been carefully packed at the factory to prevent damage during shipment. Carefully open the carton and:

- 1. Remove contents from carton.
- 2. Check parts against carton content list.

### OUR ENEMY - THE MOSQUITO

There are some 2,700 species (different kinds of mosquitoes) in the world with about 170 species in North America alone.

Most mosquitoes live and die close to where they hatch, although some can travel kilometers (miles) in search of a host. Only the female mosquito bites as she requires a blood meal to produce eggs.

Mosquitoes require standing water in aquatic habitats including fresh water, salt water marshes, brackish water or in water found in containers, old tires, tree holes, even flower pots. The female mosquito lays her eggs on the surface of the water and if conditions are right the eggs hatch and become larvae, then pupae and finally adult mosquitoes; all in 10 to 14 days.

Both male and female mosquitoes feed regularly on nectar obtained from flowers, but females require blood to produce fertile eggs. Therefore, she must find a human or animal host to blood feed before she can lay her eggs.

Most mosquitoes that emerge in the wild never come in contact with humans but obtain blood from birds and other animals. Mosquito species that breed around the home remain close to where they hatched and are regarded as pests.

Mosquitoes in search of a blood meal use visual, thermal and olfactory (odour) stimuli to locate a host. Of these, olfactory cues are the most important.

Out of the more than 100 compounds detected in human breath only two have been isolated and identified as significant mosquito attractants; carbon dioxide (CO2) and octenol (1-OCTEN-3-OL). These attractants serve as long-range airborne attractants and can be detected by mosquitoes at distances of 30 – 40 m (100 to 125 feet).

At close range, body heat, moisture and lactic acid serve as terminal attractants. Certain species show strong preferences for biting different parts of the human body. This is thought to be related to local skin temperature and lactic acid output.

The attractiveness of different persons to mosquitoes varies substantially. Men are bitten more readily than women, adults more often than children and larger persons attract more mosquitoes perhaps because of their greater relative heat and carbon dioxide output.

### HOW YOUR FLOWTRON MOSQUITO POWERTRAP® WORKS

The revolutionary new Flowtron Mosquito PowerTrap® replicates the attractants mosquitoes use to locate, bite and annoy humans. It does this by producing carbon

dioxide, heat and moisture and combining these stimuli with octenol to create an attractant to mosquitoes.

Your Flowtron Mosquito PowerTrap®:

- Replicates the human attractants of respiration, odour and body heat to create an irresistible force that draws female mosquitoes to the trap.
- Converts readily available propane gas into heat, moisture and carbon dioxide, the acknowledged leading mosquito attractants emitted by humans.
- Produces a powerful vacuum to draw mosquitoes into a convenient, removable catch tray where they quickly dehydrate and die for safe, clean disposal.
- Contains state-of-the-art computer controlled electronics to operate automatically in one of four modes selected by you.

Flowtron Mosquito PowerTrap® does away with ultraviolet lights and high voltage killing grids. Most importantly, it targets only female mosquitoes.

Flowtron Mosquito PowerTrap® uses an exclusive platinum catalyst that converts air and propane gas into heat, moisture and carbon dioxide. It does this in an efficient, effective and economical manner. The catalyst converter is completely safe, flameless and never needs to be replaced.

RULES FOR SAFE USE

- 1. Use outdoors only. Install the unit a minimum of 3 metres (10 feet) from buildings and other structures.
- 2. Never place fingers or insert any object into the unit while it is operating.
- 3. Always disconnect unit from its power source and wait for unit to cool before handling, moving or servicing.
- This device was designed for use with propane gas. Never attempt to use any other fuel, including liquid fuels or natural gas. Fire or damage to your Flowtron Mosquito PowerTrap® could result.
- 5. Always operate the unit in an upright position to prevent damage to the CO<sub>2</sub> generator.
- 6. Do not abuse the power pack. Never carry the power pack by its cord or yank it to disconnect it from a receptacle. Keep power cord away from heat, oil and sharp edges.
- 7. Never connect the unit to a battery or other D.C. voltage. Such an attempt will damage your unit.

8. Store indoors when not in use. Remove propane tank from unit before storing and store tank outdoors in a well ventilated space.

### PLACEMENT

Your Flowtron Mosquito PowerTrap® is site specific and placement is critical for successful results.

Your Flowtron Mosquito PowerTrap® emits a plume of octenol-enhanced carbon dioxide which mosquitoes follow in their search for a blood meal. Mosquitoes fly up-wind toward the source of the plume in their attempt to locate a host. Since the direction of the plume is dependent upon the direction of the wind, your unit should be positioned so it's attractant outlet faces downwind.

Female mosquitoes also feed on moisture laden nectar and fruit juices when not in search of a blood meal. They are usually found in shade; around flowers, trees, bushes and other vegetation; and adjacent to standing water.

For best results locate your unit 6 to 12 metres (20 to 40 feet) away from areas of human activity in a location near (but not in) bushes, wooded areas, or adjacent to standing water (other than swimming pools). Select a location which will result in the carbon dioxide plume blowing toward the area where mosquitoes are likely to hide and emerge. A proper location will ensure that mosquitoes encounter the plume and follow it up-wind to the Flowtron Mosquito PowerTrap® before they detect the presence of humans.

See Illustration 1.

(callouts Illustration 1: Prevailing wind direction Plume Attractant Outlet HOUSE PATIO 6 – 12 metres (20 – 40 ft) SOURCE OF INSECTS

### ASSEMBLY

Install Tank Support Strap (MT-275 only)

1. Insert tank support strap into openings in tank stand as shown. See Figure A.

(callouts Figure A: Tank Support Strap Tank Stand Openings)

On the underside of the tank stand, loosen the two hex nuts located on the screws which extend from the sides of the base plate. Place the slots at the ends of the tank support strap over the screws and secure by tightening the two nuts. See Figure B.

(callouts Figure B: Base Plate Screw and Nut (2 places) Tank Strap)

2. Insert one end of the post into the post opening at the front of the tank stand. Insert opposite end of post into the post opening located at the bottom of the Flowtron Mosquito PowerTrap®. Align unit in relation to the tank stand. See Illustration 2.

Place a 9 kg (20 lb.) propane tank on the tank stand and install tank wrap around the tank.

(callouts Illustration 2: Tank Cap Hose and Regulator Tank Wrap Post Opening)

3. Install catch tray by first inserting the rear of the tray into the housing. Then push in upper part of the latch and raise front of catch tray into place. See Illustration 3.

(callouts Illustration 3: Install Catch Tray Push)

4. Position and screw power pack to either an outside or inside wall adjacent to a electrical outlet (screws not provided). Run the low voltage wire either above or below ground from the power pack to the unit. Plug the low voltage wire into the power cord connector located at the bottom of the Flowtron Mosquito PowerTrap®. Plug the power pack into the electrical outlet.

### **Connect Propane Regulator**

- 1. Remove the plastic dust cover from your propane tank valve.
- 2. Screw the propane regulator coupling located on the end of the propane hose onto the tank valve by turning the black threaded coupling clockwise until tight. Hand tighten only. See Illustration 4.

Note: Gas will not flow unless connection is tight. Tighten by hand only. Using a wrench or other tool could damage the regulator coupling and could cause a gas leak.

### WARNING

Check for gas leaks by wetting the connections with a solution of soap and water and watching for bubbles. If bubbles form or if a bubble grows larger, there is a leak and connection must be tightened.

### WARNING

Check for gas leaks every time you disconnect and reconnect a gas fitting.

Be sure there are no sparks or open flame in the area when you check for leaks.

Do not use a liquid propane tank with a damaged valve. Have dented or rusty propane tanks checked by your propane supplier.

Only use regulator supplied with your Flowtron Mosquito PowerTrap®.

3. Place tank cap on top of tank.

### OPERATION

Your Flowtron Mosquito PowerTrap® is fully automatic. It is equipped with a photocell, temperature sensors and a computer microprocessor.

The control panel is located on the top of the unit and has the following operating modes:

- 24/7 (on 24 hours, 7 days/week)
- 3 Hours (on at dusk, off 3 hours later)
- 3 + 2 Hours (on at dusk, off 3 hours later; on again at dawn, off 2 hours later).
- 4 + 3 Hours (on at dusk, off 4 hours later; on again at dawn, off 3 hours later)
- Off/Reset (manual off)

To select the desired mode, first push the button labeled "Off/Reset" to clear the computer memory. Then push the button labeled "Mode".

For continuous operation press the "Mode" button once. The green light labeled "24/7" will light and the unit will operate continuously 24 hours per day until the "Off/Reset" button is pressed.

For timed operation, press and hold the "Mode" button. When the desired mode is selected as indicated by its green light, release the button. No further control is necessary and your unit will function in the mode selected every day until the "Off/Reset" button is depressed or an interruption occurs in the electrical power source.

NOTE: To resume operation following an electrical disturbance or a loss of electrical power, press the "Off/Reset" button to clear the computer memory then reset the unit to the desired operating mode.

In the event the Flowtron Mosquito PowerTrap® fails to respond to its controls (mode selection) unplug the unit for a few seconds, reattach plug and then reset to the desired mode.

When the 24/7 mode is selected, the unit will begin its start cycle and approximately 3 - 5 minutes later, the fan and LED lights located in the entrance to the trap will come on intermittently. Once the catalyst has reached operating temperature, which will take 10 - 15 minutes, the fan and LED lights will remain on and the start cycle will be complete.

When a timed mode is selected, the fan and LED lights will come on immediately and remain on. The unit, however, waits for dusk and then checks the outside air temperature to determine if it is sufficiently warm for insect activity, above 13-15° C (55-60° F). This is an important feature to conserve propane fuel. The unit will automatically begin its start cycle when the light level reaches dusk and remains at the level of dusk for ten minutes (thus avoiding the effects of transient light sources) and if the outside air temperature is above the range 13-15° C (55-60° F).

The start cycle is also repeated at dawn when the 3 + 2 hr or the 4 + 3 hr mode is selected.

During start cycles, which are from five to ten minutes in duration, the fan and LED lights operate intermittently.

Approximately fifteen minutes after the unit detects a lack of propane fuel (either due to an empty tank or due to improper installation of the propane regulator to the tank valve) the three green timed mode lights on the control panel will flash. Simply switch the Flowtron PowerTrap® off and refuel. If the unit is not out of propane and the lights are flashing check that the tank valve is fully open and that the regulator is properly attached to the tank valve.

Mosquitoes are generally most active shortly after dusk and again at dawn. Therefore, the 3 + 2, or 4 + 3 timed modes are usually the most economical settings.

The 24/7 mode is desirable if day flying mosquitoes are present or to operate at temperatures below  $13^{\circ}$  C (55° F).

Note: As mosquitoes pass through the fan, most are killed and thrown against the side of the internal screen-lined funnel. Those that escape the fan's killing action end up in the

catch tray where they quickly dehydrate and die. See page 7 for instructions for removing the screen-lined funnel and cleaning the screen.

# OCTENOL CARTRIDGE

U.S. Government and university researchers have demonstrated that octenol combined with carbon dioxide (both components of respiration) are irresistible attractants to mosquitoes.

The Flowtron Mosquito PowerTrap® uses a specially designed time release cartridge containing octenol (1-OCTEN-3-OL).

To Install the Octenol Cartridge:

- 1. Remove the octenol cartridge from the sealed pouch and peel the protective cover from the face of the cartridge. Avoid touching the openings in the cartridge and always wash hands thoroughly after contact.
- 2. Place the cartridge in the rectangle slot located at the bottom of the plenum. Insert the cartridge with the openings facing inward. See Illustration 5.

(callouts Illustration 5: Plenum Slot Octenol Cartridge Insert Cartridge Cartridge Shown in Place)

Maintenance

1. Refill your propane tank as required. The green timed mode lights on the control panel will flash when a new supply of propane is needed.

2. Replace the octenol cartridge after 450 hours of operation.

NOTE: The following table may be used as a general guide to determine approximate propane refill times.

Operating Mode — Hours per Day	Refill Times 9kg (20 lb propane tank)
3 hours	6 – 7 months
3 + 2 hours	3 – 4 months
4 + 3 hours	2 – 3 months
24 hours	3 – 4 weeks

- 3. Empty the catch tray periodically to ensure proper air flow through the trap. To remove the catch tray push in on the latch at the front of the catch tray and pull tray down.
- 4. Remove and clean the screen-lined funnel each time the propane tank is refilled or more often during periods of heavy infestation. To remove funnel, proceed as follows:
- 5. Switch unit off and allow it to cool. Remove catch tray.
- 6. Push rear of bottom funnel ring up into the unit's housing until front tabs become disengaged from housing. See figure A.

(callouts Figure A: Plenum Bottom Funnel Ring Housing Up Front Tab Push Up Here)

7.Pull funnel down and forward releasing rear section of upper funnel ring and remove funnel from unit. See figure B.

(callouts Figure B: Upper Funnel Ring Down Forward Tabs)

- 8. Remove insect debris from screen surrounding funnel. Wash screen with water and shake off excess water before re-installing.
- 9. Re-install funnel by holding funnel at a slight angle and insert the front edge of the upper funnel ring inside of unit's housing. See figure C.

(callouts Figure C: Front Edge of Upper Funnel Ring)

10.Push funnel upwards and with the rear section of the bottom funnel ring at a slight angle compress funnel until front tabs of bottom funnel ring are up inside of the housing. See figure D.

(callouts Figure D: Up)

- 11. Release funnel and it will spring into place.
- 12. Replace catch tray and re-start unit.

### WARRANTY

Flowtron warrants your Flowtron Mosquito PowerTrap® to be free from defects in materials or workmanship under normal use and service for one year from date of original purchase. All parts which are defective will be replaced free of charge. Any implied warranties, including the implied warranty of merchantability are also limited in duration to the one year period from the original purchase date.

The provisions of this warranty shall not apply to any product which has been subject to misuse, neglect or accident, nor which is used for a purpose for which it is not designed, or which shall have been repaired or altered in any way so as to adversely affect its performance and reliability. Service by unauthorized parties voids your warranty. Warranty covers only the original purchaser. Commercial and/or professional use is excluded from warranty coverage.

Flowtron neither assumes nor authorizes any person to assume for it any other liability in connection with its product. No responsibility is assumed for any consequential damages that may result from the use of a Flowtron product, nor for damages due to accident, abuse, lack of responsible care, the affixing of any unauthorized attachment, loss of parts or subjecting this unit to any but the specified voltage.

If the unit fails to operate during the warranty period, send the product, along with purchase receipt showing purchase date and description of the problem to: Flowtron Service Center, 15 Highland Avenue, Malden, MA 02148. Transportation costs for returning any defective product are the responsibility of the consumer.

Flowtron Outdoor Products, 15 Highland Ave., Malden, MA 02148 www.flowtron.com

1-800-343-3280

TROUBLE SHOOTING CHART

ACCESSORIES

Accessories are available at your local retail outlet or by calling Flowtron Parts Department at 1-800-343-3280. or at www.flowtron.com.

Mosquito Attractant: – MA 1000CAN Slow release Octenol Cartridge makes your Flowtron Mosquito PowerTrap® more effective in attracting mosquitoes.

Extension Cord – EC-50

15 metres (50Ft) low voltage extension cord. Allows placement of the Flowtron Mosquito PowerTrap® an additional 15 metres (50Ft) away from the power source.

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