

How to install a fine parts filter?

STEP 1
UNSCREW THE LIQUID TANK
CONNECTOR



STEP 2
TURN OVER THE CONNECTOR
INSERT THE FILTER TO THE SLOT



STEP 3
TURN OVER THE FOGGER
INSERT THE FILTER TO PUMP



STEP 4
SCREW THE CONNECTOR
INTO THE PUMP



1. Unscrew the metal connector from the pump (you don't need to follow this step if the connector is already installed on the white liquid tank).
2. Turn over the connector, and place the fine parts filter into the slot.
3. Turn over the fogger and insert the connector to the pump. (It is better to insert the filter in this position, to prevent filter from falling out)
4. Screw the connector with the filter into the pump. Now it is ready for use.

Cleaning & Storage the VAROMORUS Turbo Fogger:

1. When the treatment is done, clean the system with the distilled water.
2. Clean up a fogger system after each use, to ensure proper pump functioning.
3. When the fogger cooled down, flush it with mineral oil, kerosene or acetone.
4. Flush a white fluid tank with a distilled water after use. Let it dry.
5. Transport the device in a sealed package in the luggage compartment of vehicle.
6. Store it in a well ventilated non-residential building.

FEEL FREE TO CONTACT US WITH ANY QUESTIONS:

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**VAROMORUS**
BEEKEEPING TOOLS

USER MANUAL



VAROMORUS TURBO

PROPANE INSECT FOGGER NORTH AMERICAN

COMPONENTS OF THE VAROMORUS FOGGER:



1. Gas-burner
2. Fluid pump
3. Fluid tank (white jar for solution)
4. Automatic piezo ignition
5. Fluid tank lid
6. Fixation hole for the fluid tank
7. Extension nozzle
8. Gas valve
9. Trigger
10. Bolt for dose adjustment of fluid supply
11. Ring for clamping a gas cylinder
12. Fine parts filter

EXAMPLE MIXING INSTRUCTIONS:

!Safety first: Wear protective gloves, a respirator, and protective glasses while using the fogger.

Preparation of treatment fluid # 1

Add 15 grams of the oxalic acid to 100 milliliters of 96% ethyl alcohol. Stirring, warm up the fluid on a water bath (t 40-50°C / 104-122 °F) until the acid crystals are completely dissolved. Do not boil it. Add 15 grams of thymol to the solution. Stir around until the fluid of the noted composition dissolves well without the formation of oxalic acid crystals. This amount of fluid is calculated for processing of 25 beehives. It retains its properties for 2-3 weeks.

Preparation of treatment fluid # 2

Add 5 ml of "Bipin" or "Tactic" to 100 ml of purified kerosene. During this, a homogeneous fluid of white hue should be formed, without any sediment. This amount of working fluid is calculated for processing of 50 beehives. It retains its properties for several months.

Preparation of treatment fluid #3

Add 5 ml of clartane or tau- fluvalinate to 100 ml of water. Preheat in a water bath (t 40-50 °C/ 104-122 °F) until completely dissolved. Such working fluid must be prepared immediately before use. Can be used for processing of 50 beehives.

Residues of the working fluid should not be stored in the working system of the device, and in case of repeated use, it is recommended to filter it.

HOW TO USE VAROMORUS FOGGER :

Open the lid of the fluid tank and pour the mixed solution inside. Put the lid on. By turning the fuel valve counterclockwise, set the valve on the minimal position. Light the gas burner by squeezing the trigger of the automatic piezo ignition. Adjust the desired (optimal) mode of gas supply. The flame of the burner must not protrude above the external protective cover. After 1-2 minutes using the drive handle of the pump of hydraulic fluid supply, pour a working mixture into the system, until the persistent smoke puffs will appear from the nozzle. During this pull the drive handle all the way to the stop. The liquid is supplied when the handle is released. The drive handle is adjusted to feed approximately 2ml of the working mixture. With the formation of the first smoke puffs, there might be a small drop of working fluid from the nozzle. Insert the nozzle into the bottom of beehive entrance for about 1-2cm and feed one puff of smoke into the nest of the bee family using amitraz as the active substance, in case, you are using thymol or oxalic acid, make about 3-5 puffs. It is recommended not to use thymol if there is a young barren queen bee in the nest, and also if the air temperatures are above + 30 °C. (+ 86 ° F). After the treatment is completed, the gas supply valve must be closed. During the summer period, treatment with amitraz can be carried out only after the last pumping of honey, or 45 days before the first pumping of honey, selection of a bee-bread or 7 days before the collection of the pollen load. The treatment of the bee colonies is carried out in a hive, preferably in the evening, when the flying bees return from the field, or during the day in non-flying weather. In calm weather, it is not necessary to close the beehive entrances during treatment, and in a windy weather, it is advisable to close the entrances for 15-20 minutes. If there is a brood the treatment is carried out 4 times with an interval of 3 days. (For the destruction of a varroa that comes out of the brood). In the infertile period, the treatment is carried out 1-2 times with the intervals of 3-4 days. It is important to use a catching net for mites during the treatment with any drug. The presence of nets prevents the emergence of resistant mites to a particular preparation, significantly increases the treatment efficiency.

Safety precautions when using the device. Use of the device requires compliance with safety rules when working with gas cylinder equipment, and flammable substances. Please always follow the safety instructions.

PACKAGE CONTENTS COMPLETE SET:

- 1x—"VAROMORUS" Fogger
- 1x—Respirator
- 1x—Protective gloves
- 1x—Wrench 8/10mm
- 1x—User manual (ENG)



HAZARD STATEMENTS:



Risk of burns

caution Device generates strong heat during use



Health hazard

depending on the vaporized substances, toxic and / or corrosive vapors may form



Respiratory protection

it is essential to ensure adequate respiratory protection



Eye protection

it is always necessary to wear eye protection



Protective gloves

it is always necessary to wear protective gloves



Read Operator's Manual

read and fully understand operator's manual before using this device



Keep away from children



Use only outdoors

SAFETY PRECAUTIONS

CAUTION: Read entire instruction booklet before operating.

Use of the device requires compliance with safety rules when working with gas cylinder equipment, and flammable substances.

- ⇒ Operate the fogger outdoors only. Do not use it indoors or within any enclosed structure.
- ⇒ Always keep the fogger away from flammable materials.
- ⇒ Do not smoke while filling and/or operating the unit. Contamination, fire or explosion could occur.
- ⇒ Never leave the fogger unattended while the burner is lit.
- ⇒ Do not inhale the fog or vapors.
- ⇒ It is forbidden to take food, drink, smoke during the treatments.
- ⇒ Do not operate the Fogger in areas when people and pets are present.
- ⇒ Keep the Fogger, cylinder and working solution out of reach of children.
- ⇒ When handling treatments, move against the wind.
- ⇒ The coil wire basket becomes very hot while in operation. Do not touch it, to avoid getting burned.
- ⇒ Always pre-heat your fogger for one to two minutes, to get the right working temperature.
- ⇒ Do not allow any mechanical damage of the device. This can lead to the loss of its tightness and possible leakage of gas or working fluid.
- ⇒ Always inspect the threaded outlet of the propane fuel cylinder and remove any dirt that may be there.
- ⇒ Propane gas cylinders are high pressure. Do not handle cylinders roughly. Follow instructions on cylinder label for use and storage.
- ⇒ Never store propane gas cylinders indoors or attached to the Fogger.
- ⇒ Always store cylinders in a cool, well ventilated space.
- ⇒ Caution! Do not incinerate cylinder. Propane cylinder vessels should be disposed of properly when empty.
- ⇒ If there are any defects associated with the operation of the gas burner, it is necessary to contact the gas service technicians.
- ⇒ In case of the low fog pressure, unscrew the nut on the pump to provide the more moving way for the pump lever so more of the substance can reach the heater.

USAGE:

Varomorus Fogger – a modern beekeeping tool for effective management of Varroa mites at bee hives. With this portable propane powered fogger, you can easily treat multiple bee colonies in a quick time. This professional fogger is used in the fumigation method of beehives and thus with the evaporation of the solution the bees are getting necessary treatment drugs. The Varomorus is meant for effective treatment and prevention of varroaosis. The treatment solution is well evaporated by the fogger without forming any crystals. It is heated in the coil and comes out as a dense white fog. Those droplets are very fine around about 15-18 micron size, it doesn't hurt the bees. It causes the bees to groom themselves and in that process, the very fine droplets block the breathing spiracles on the Varroa mites. The bees will actively circulate the fog all throughout the hive, which significantly increases the efficiency of using Varomorus Fogger. Varomorus became particularly useful for the owners of Organic beekeeping. So, using it with clean environmental products (thymol, oxalic acid, etc.), you can effectively deal with varroa mites without using chemicals. It saves time and gives high-quality treatment.

As treatment substances can be used:

- Oxalic acid,
- Fluvalinate
- Bipin
- Thymol
- Amitraz
- Taktic
- Mavric usw.

As solvent can be used:

- Ethanol 96%
- Alcohol 96%
- Isopropyl alcohol 91%
- vodka
- purified kerosene
- distilled water

THIS IS AN UPDATED VERSION OF THE FOGGER: VAROMORUS "TURBO".

IT CAN BE USED WITH THE OXALIC ACID OR WITH MINERAL OIL.

FOR THE OXALIC ACID SOLUTION: use the minimal flame power, it will be enough for the quality evaporation.

FOR THE MINERAL OIL: use the medium flame power for the quality evaporation.

Regulate the flame power with the gas valve at the torch (pic.8)

It is recommended to test the device by filling a fluid tank (white jar for solution) with kerosene or 91% isopropyl alcohol that doesn't contain the active substance. Then pull the pump lever for few times to check if the fluid goes properly .