

PATRIOT 2XP Models PATRIOT BAT & CC Manual



12 Pingree Hill Rd.
Derry, NH 03038
603 339-6239 www.unifixusa.com

Congratulations!

We at UNIFIX USA, LLC. would like to congratulate you on your choice of the new Patriot injector. We have worked hard to make this injector the most reliable and hardest working machine in the industry. Our background is pest control with two generations of industry experience which led to the design and performance features of our Patriot.

The Patriot by definition: One who loves, supports, defends ones country.

In fact all PCO's are Patriots. The work you do is hard and very important. In years to come and even now, a PCO with the knowledge of the use of an injector, such as the Patriot, will always be in high demand. With the growing threats of viruses and disease, the PCO's work hard at eliminating and controlling germ and bacteria carrying critters. You are the line of defense between unaware and trusting citizens who eat at commercial locations and even residents burdened by infested homes.

We at UNIFIX USA, LLC. would like to salute you with respect in all that you do. You are a Patriot and our Patriot injector, like you, will not quit when times get tough.

We look forward to serving your needs with new and improved equipment in all areas of pest control. Please check our site for new equipment frequently. www.unifixusa.com

Thank you for your support,

Barry Franks Jr.
President UNIFIX USA, LLC.

Patriot 2XP Ninja & Green Injector System

Contents

	Page
Introduction	4
Specifications	4
General Information	5
Equipment Setup	7
Operation	8
Equipment Shut Down	9
Maintenance	10
Trouble Shooting	12
Ordering Parts	14
Parts List	15
Battery Operation	21

Introduction

The Patriot Injector System is a precision (ULV) ultra low volume generator tool in the hands of a trained pest control technician. The application of the Patriot places ULV Insecticide into cracks and crevices and deep voids. This application provides for direct kill and flush of harbor areas. The Patriot Injector is part of a complete IPM (Integrated Pest Management) program. This system should be operated in conjunction with the industry standards and guidelines. When using the proper techniques, the Patriot will apply a small dosage of insecticide in tough to reach cracks and crevices. This will yield better results than space treatments or residuals alone.

Safety First

Please Read the Instructions contained in this manual, before attempting to use the Patriot Injector.

Specifications

Length	11.6"
Width	8.5"
Height	10.3"
Weight	16.5 lbs.\21 Lbs. w/Battery
Voltage	85-265 VAC +12 Volt DC
Amps	8
Chemical Capacity	55 oz.
Operating Range	13-24 P.S.I.G

General Information

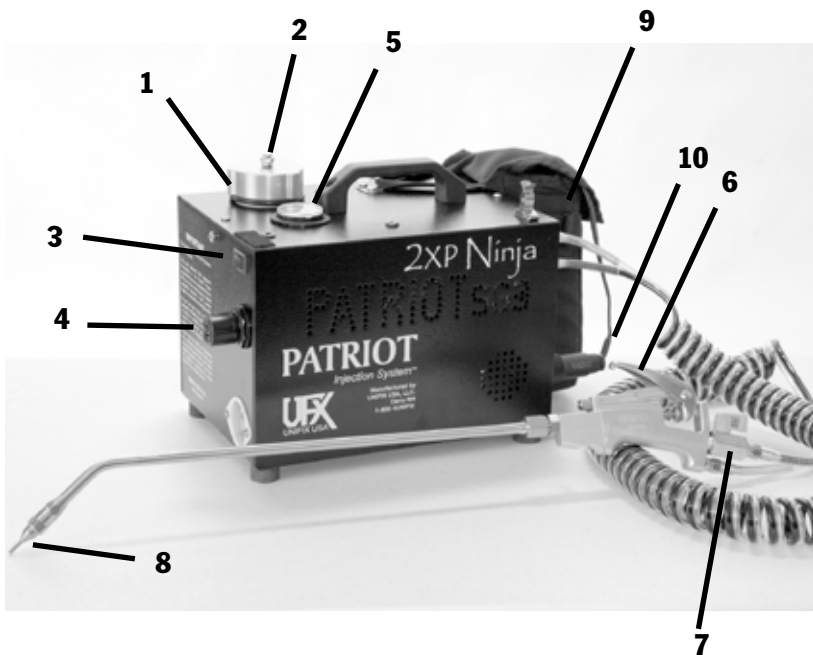
The Patriot Injector System is designed for application of solvent based insecticides. These insecticides are labeled ULV application. The Patriot is not designed for the application of residual chemicals. It may be a federal violation to use residual chemicals in the Patriot even though the insecticides

may be labeled for crack and crevice. If you have any questions regarding the appropriate chemicals to use please contact the manufacturer of the chemical or UNIFIX USA LLC.

The Patriot 2XP Models operate with worldwide electrical input range 85V-265VAC + 12 volt DC input.

Use appropriate safety apparel (goggles, approved respirator, proper clothing) as recommended by the manufacturer of the chemical compound intended in use.

Do not use this equipment as a space spray application. Those applications are more efficiently done, by using proper foggers/fumigation equipment.



Before operating your new Patriot Injector, please become familiar with figure 1. These are basic components you should familiarize yourself with. The chemical tank cap (1) which is removed by turning counter clock wise. A pressure relief valve (2) is located on top of the tank cap, this allows the operator to release pressure from the tank. The switch (3) operates the unit. The regulator (Ninja)(4) adjusts air pressure, clockwise to increase and counter clock wise to decrease. The pressure gage (Ninja)(5) monitors the air pressure in the chemical tank. The handle trigger (6) is squeezed to release chemical. The chemical flow valve (7) is located and easily accessible for controlling flow and shutting chemical off. located and easily accessible for cleaning in the valve handle. The stainless steel nozzle tip (8) is located at the end of the wand and is easily



replaced if damaged. (9) Lithium Life P04 Battery and pack attached (10)to 2XP Models.

Equipment Setup

Before operating your Patriot Injector please follow the Guidelines Below:

- 1.) Make sure Machine is not plugged in, and toggle switch is in the off position.
- 2.) Check for damages in the cord which you intend to plug into your Patriot Injector. (heavy duty Commercial Cord is highly recommended, make sure extension cord has 3 prongs).
- 3.) Remove the Patriots chemical cap by turning counter clockwise.
- 4.) Fill tank with approved ULV chemicals. (When filling tank, leave approximately one inch of space under inner collar, do not fill up to cap.
- 5.) Replace tank cap and tighten clockwise until it is seated completely.
- 6.) Connect Patriot Injector to a damage free 3 prong cord, then connect cord to 110 VAC power source. 2XP models input ranges 85 VAC - 265 VAC plus DC 12 volt input.
- 7.) Push toggle Switch and Turn Unit on.
- 8.) Adjust regulator to desired setting. (Ninja)(Turn counter clockwise to Decrease pressure and clockwise to Increase pressure.) You may also release pressure by depressing the pressure release valve on top of the tank cap.
- 9.) Point wand away from any face or body and begin purging the air out of the system(To begin the purging process, shut machine off, do not release air out of the tank, point wand tip into chemical container and depress the Patriot trigger until a solid stream of chemical comes out of the tip, this usually take a couple seconds). Once the air has been purged, you are now ready to operate the unit. Turn unit on and the system is operational.

Operation

The following comments on operation instructions are directed for best results. I know each trained PCO will have his own technique or style.

I have summarized roach harbor age areas as internal or external.

External

- 1.) Stoves, Ovens, Woks, Kitchen equipment etc.
- 2.) Appliances
- 3.) Shelving, carpentry, wood work cracks and crevices.
- 4.) Dry goods, empty beer/food/soda boxes etc.
- 5.) Motors, fridge/freezer etc.

Internal

- 1.) Wall Voids
- 2.) Ceilings

The Patriot Injector was manufactured for superior dependability.

CAUTION

Be careful when treating around electrical junction boxes, outlets, fuse boxes etc. Injuries from electrical shock can be fatal. Do not allow nozzle tip to contact live connections.

To begin:

Treat exterior harbor age areas as listed above. Simply point the tip into cracks and crevices of external target areas and apply 1-2 second bursts of insecticide. Be sure to hit all cracks and crevices. Treating each exterior component by using this flush technique will allow the PCO to find the harbor age areas. This will help you zero in on target areas and spend more

time eliminating more populated breeding areas. Usually for instance if a stove is infested, the problem may be internal, as well as the wall behind the external stove may be an infested area, as well as the ceiling. These areas should be treated the same way. Find all cracks and crevices and fill the wall and ceiling voids with short 1-2 second bursts. Depressing trigger for longer periods of time may result in chemical run off in some areas.

Equipment shut down

For best results the following procedure should be performed after each use of your Patriot Injector. (figure A pg 11.)

- 1.) Turn Machine off, depress air from the tank by depressing the pressure relief valve on top of the tank cap.
- 2.) Loosen and or remove tank cover.
- 3.) Turn machine back on and hold down the handle Trigger.
- 4.) Place finger over nozzle tip for 4-5 seconds.
- 5.) Shut chemical line valve off, located on bottom of handle.

This will purge chemical from the wand and keep it out of the wand.

Do not squeeze trigger while tank is pressurized even, if it is not on. The pressurized tank will allow chemical to spray out of the tip causing possible contamination. When you are done with your Patriot always release pressure from the tank and make sure chemical shut off valve is closed and in the down position.

Maintenance

Daily

Regular scheduled maintenance will increase the life of you Patriot Injector. Keep your unit clean. Don't let deposits of insecticides or any other residue collect and dry. These areas will attract dirt. Always purge the liquid out of the unit when storing it and make sure shut off valve is down and off. Look over your unit like a soldier coming home from battle. Make sure it doesn't have any damages, cracks or leaks.

Monthly

Have a service person check your Patriot for operation. Visually check over your unit for any defects, or damages. Look over the wand nozzle tip, operating parts and components on the unit itself. Repair or replace any defects. Refer to the parts section for part identification and equipment information.

Clean unit with mineral spirits, add a small amount to the tank and pressurize the unit. Once the unit is pressurized, shut the machine off. Depress the Patriot Trigger allowing the pressurized tank to push the mineral spirits from the tank to the nozzle tip. A fine spray of the flushing agent will stream out the wand nozzle. Make sure you have an acceptable container to house this flushing agent (refer to chemical manufacturers label guidelines for proper disposal). Make sure the chemical shut off valve is in the on position.

Filter Cleaning & O-Ring Replacement

A. Handle Filter & O-Ring Maintenance(page 11)

B. Ruby Jet maintenance (page 18-19) The Quick release Ruby jets are of vital importance to the operation of the Patriot. Please Read this section in the manual and become confident with their maintenance. I have designed these jets to offer simple maintenance, superior spray, easy micron droplet



changes and tremendous chemical waste reduction.

A. Turn Unit Off. Release Pressure and Loosen or remove cap. Turn unit on, place finger over tip and squeeze trigger. This will purge chemical from handle (hold for about 5 seconds) Close ball valve and shut off machine.

B. Remove thumb screw, by turning counter clock wise. Pull detachable front wand adapter away from spray handle body.



C. Remove O-Ring, replace if necessary and clean and or replace filter.



Trouble Shooting

These are basic trouble shooting approaches. Should this not resolve the problem return the Injector to UNIFIX USA LLC.

Problem	Cause	Action
Unit will not run When turned on	No Power Room to cold Switch defective	Check cord is inserted correctly. Check outlet for power. Warm room Check switch
Unit has low pressure	Regulator not set Properly. Air leak Pressure gage Weak compressor	Check and adjust regulator Check: chemical cap, pressure release valve, coiled tubing for holes Check gage and replace Replace diaphragm
Unit has good pressure But will not spray properly.	Valve closed	Turn chemical valve on

Chemical low
Air lock

Check and fill
Purge air (see operating procedure)

Clogged Ruby Jet

Check, clean and replace
If necessary (page 18-19)

Nozzle tip Damaged

Check and replace if necessary.

Coiled tubing
Damaged or clogged

Check and replace if necessary.

Spray is uneven or
Will not shut off

Air in liquid
Purge chemical(see operating procedure)

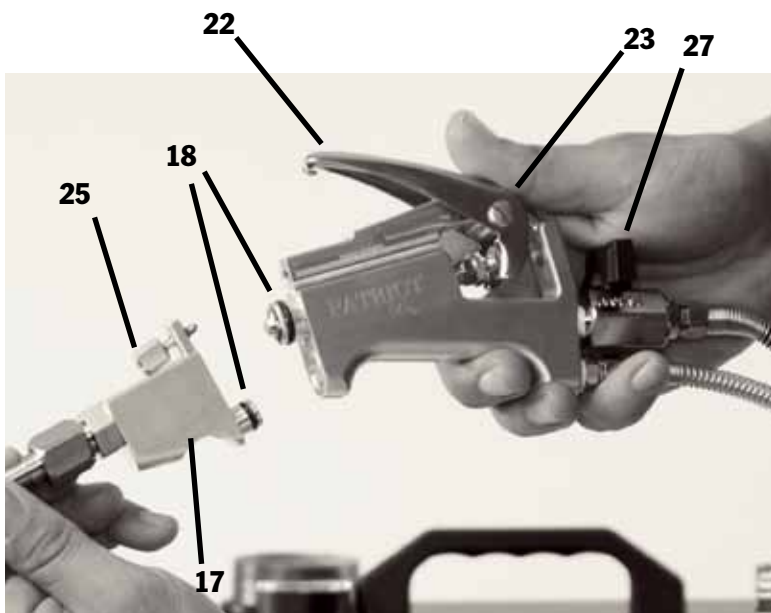
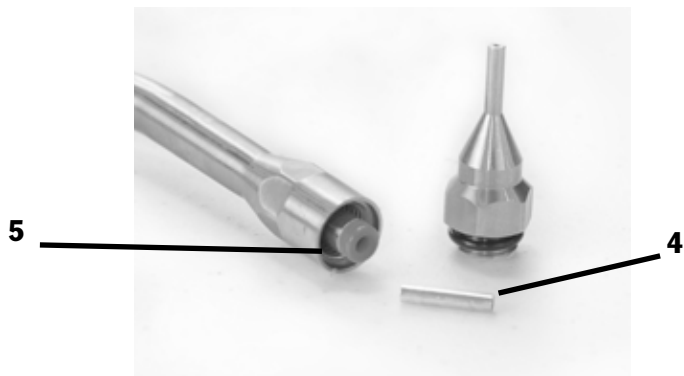
Bad O-Ring

Remove and replace O-Ring in detachable
wand adapter (pg 11)

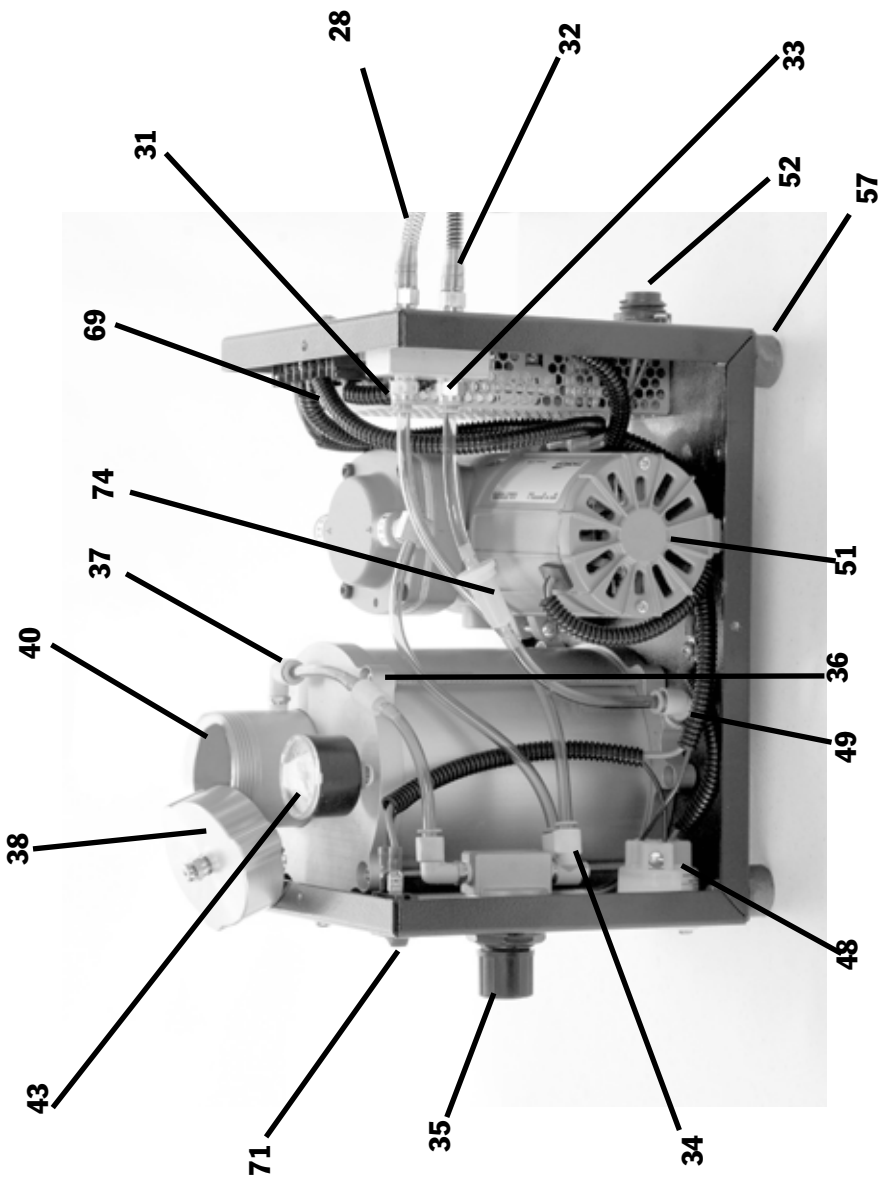
Parts Ordering Information

Patriot Injector Parts may be ordered through participating distributors, Or on line at www.unifixusa.com
The following information must be completed with each order. Quantity Part #

Shipping information If additional information is required please contact your distributor or:
UNIFIX USA LLC 12 Pingree Hill Rd., Derry, NH 03038 603 339-6239



PART #	DESCRIPTION
UFX-100-1	PATRIOT 2XP NINJA
UFX-100-G	PATRIOT 2XP GREEN
UFX-100-3	STAINLESS STEEL NOZZLE TIP
UFX-100-4	RUBY JET
UFX-100-5	RUBY QUICK RELEASE
UFX-100-6	CONNECTOR BARB
UFX-100-7	POLY TUBING WAND INTERNAL
UFX-100-8	WAND ASSEMBLY COMPLETE
UFX-100-9	WAND BARREL
UFX-100-10	WAND TUBE
UFX-100-11	WAND SLEEVE
UFX-100-12	WAND NUT
UFX-100-13	BARB NIPPLE
UFX-100-13G	PUSH CONNECT 10/32 1/8
UFX-100-14	BARB EXTENSION
UFX-100-15	COMPRESSION TUBE ADAPTOR W/O-RING (NINJA ONLY)
UFX-100-16	SPRAY HANDLE ASSEMBLY COMPLETE
UFX-100-17	DETACHABLE WAND ADAPTOR BODY
UFX-100-18	SEATED O-RING
UFX-100-19	SCREEN
UFX-100-20	TEFLON/ PLUNGER/ SPRING/ PACKAGE
UFX-100-21	PACKING NUT
UFX-100-22	TRIGGER HANDLE
UFX-100-23	TRIGGER SCREWS
UFX-100-24	LOCK NUTS 1 & 2
UFX-100-25	THUMB SCREW
UFX-100-26	MID AIR LINE SEAL PLUG
UFX-100-27	CHEMICAL SHUT OFF VALVE
UFX-100-28	REUSABLE 1/8 FITTINGS W/SPRING GUARD
UFX-100-29G	TWIN COIL TUBING GREEN/BLUE



UFX-100-30	TWIN COIL TUBING BLACK/CLEAR
UFX-100-31G	PLASTIC/BLACK SPRING GUARD CONNECTORS
UFX-100-31	MANIFOLD CONNECTOR BLOCK
UFX-100-32	QUICK DISCONNECTS STRAIGHT
UFX-100-33	1/4 PLASTIC TUBING INTERNAL
UFX-100-34	3 WAY PORT QUICK DISCONNECT
UFX-100-35	REGULATOR W/MOUNTING NUT (NINJA ONLY)
UFX-100-36	CHECK VALVE
UFX-100-37	ELBOW QUICK DISCONNECT FITTING
UFX-100-38	TANK ASSEMBLY COMPLETE
UFX-100-39	TANK
UFX-100-40	TANK CAP W/PRESSURE RELIEF
UFX-100-41	TANK CAP O-RING INTERNAL
UFX-100-42	TANK CAP O-RING EXTERNAL
UFX-100-43	PRESSURE GAGE (NINJA ONLY)
UFX-100-44	PRESSURE GAGE TRIM MOLDING (NINJA ONLY)
UFX-100-45G	BOX HANDLE (PATRIOT 2XP GREEN)
UFX-100-46	BOX HANDLE BLACK (PATRIOT 2XP NIJA)
UFX-100-47	BOX HANDLE SCREWS
UFX-100-48	MALE FLANGED RECEPTACLE (IEC 320 CONNECTOR)
UFX-100-49	INTERNAL WIRING HARNESS
UFX-100-50	COMPRESSOR COMPLETE
UFX-100-51	COMPRESSOR
UFX-100-52	BATTERY CONNECTOR
UFX-100-54	SHOCK MOUNTS
UFX-100-55	SHOCK MOUNT NUTS W/LOCK WASHERS
UFX-100-56	GROUND SCREW W/LOCK WASHERS
UFX-100-57	FOOT BUMPERS
UFX-100-58	FOOT BUMPER NUTS/WASHERS
UFX-100-59	COMPRESSOR INTAKE MUFFLER/FILTER
UFX-100-62	COMPLETE BOX

UFX-100-63	BOX BASE
UFX-100-64	BOX COVER
UFX-100-65	BOX SCREWS
UFX-100-67	CARRY STRAP SCREWS
UFX-100-68	COMPRESSOR 1/4 ELBOW BARB FITTING
UFX-100-69	CIRCUIT BOARD POWER SUPPLY
UFX-100-71	TOGGLE SWITCH
UFX-100-72	HANDLE CATCH PIN
UFX-100-73	DC PANEL CONNECTOR
UFX-100-74	48U MICRON FILTER INTERNAL
UFX-1030	3 FOOT DETACHABLE WAND WITH/NOSE
UFX-1020	2 FOOT J CURVE WITH/NOSE
UFX-1010	18" WAND WITH/NOSE
UFX-BAT01	BATTERY PACK COMPLETE ORIGINAL NINJA
UFX-BATG	BATTERY PACK COMPLETE PATRIOT 2XP GREEN



18



19

Ruby Atomizing Jet Maintenance

A. Remove tip by turning counter-clockwise'





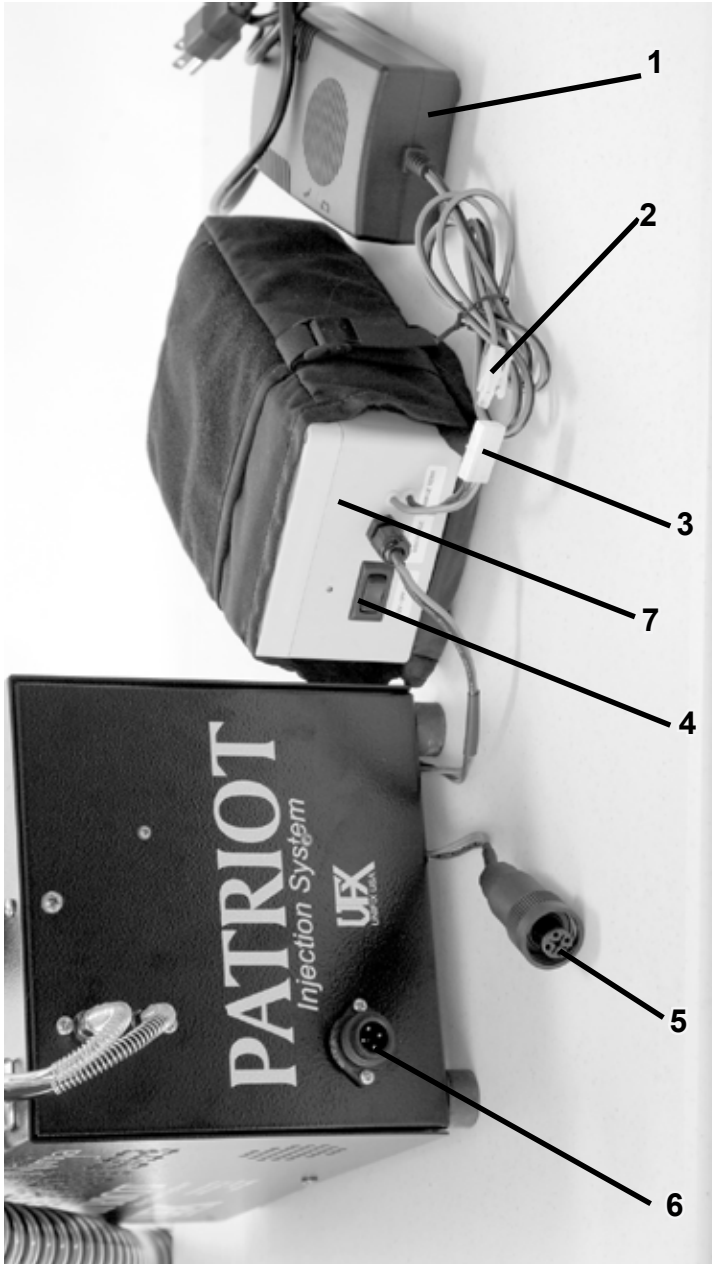
B. 1. Push down on orange face of quick disconnect



2. Pull Ruby Atomization Jet out. (Orange connector must be pushed down to remove ruby Jet)



C. Replace or blow out ruby jet Place Ruby back into the Orange push to connect, push down all the way and make sure Ruby side (Glassy side) is facing up.



14.8 Volt Poly Lithium 20 amp battery regulated 12 volts 8 amps. Weight: 4.5 lbs.

Battery Operation

Warning (**ORIGINAL Lithium Batteries**) can be dangerous when misused.(original models)

Your Battery pack has been placed in a fireproof box for safety.

Only use the charger (1) registered for lithium battery charging included with your battery.

For complete details on dangers associated with Lithium Batteries please visit manufacturers web site www.batteryspace.com. Batteries should be charged at least once a month ****CHARGER MUST BE POWERED ON BEFORE CONNECTING TO THE BATTERY.**

Battery Packs are not shipped fully charged. Please charge Battery Packs to full Charge before use. Simply connect Tamiya connector (2) of Charger to the Tamiya connector (3). of the battery pack. Black with Black, Red with Red. Red LED light on charger = Charging in Progress: Green LED Light on Charger = Charge complete. During operation when the battery pack becomes low it will simply shut off. Charge time is approximately 7 hours and delivers 2.5 hours plus of operation. The battery pack may run the Patriot at either 13.2 volts or 12 volts via the selector. 12 volts is recommended.

The **New Life P04 Packs** must be charged with the appropriate Life P04 charger, the New Life P04 pack does not have the dangers associated with the original Lithium batteries and are not shipped in fire proof boxes.

New Green Packs Life P04 12v 9.6 amps. Run time approximately 1.3 Hours, charge time approximately 3.2 Hours. Connects to charger and to machine with new DC connectors. Fittings only connect one way align and turn collar counter clock wise.

Simply connect your charged battery pack (7) to the Patriot via the DC female connector(5) on the Battery to the

male DC Panel connector (6) on the Patriot Box. Turn the battery pack on (4) by selecting the 12 volt switch (Ninja original models switch is on battery new models DC switch is located on Patriot Box. The Green LED light will show the battery is operational. On and off of the Patriot unit when plugged into the battery is controlled by the battery pack (Original Model).

SOME OF OUR OTHER PRODUCTS

UNIFIX SG-1000



Strong Commercial FOGGER
2 piece light weight, but durable Aluminum box
Built-in 60 Degree metal nozzle
5 minute timer
2 inch orifice Blow motor
Separate 65 oz metal filling reservoir
(can cloud a 3000 sq ft room with
10 ft ceilings in 45 seconds)

UNIFIX SG-30



Simply attaches to your current spray tank.

Benefits include:

ANTI-CRACK Wand (No More Cracked Wand!)

Better Filtration - Shut off valve

No Cable Snaps

Simple maintenance

Same pricing as competition plus a 1 year warranty.



Easy Assembly Extension Wand 4-15 ft.

Warranty:

The Patriot Injection system has a full 1 year manufacturer defect warranty. All hard parts are fully covered: Box, handle, compressor, Tank, Electrical. Normal wear and tear are expected. In other words and with no small print your Patriot Injector is fully covered under normal wear and tear involved with proper use. If within a 1 year time frame your Patriot Injector fails to operate because of a manufacturer defect your Unit will be fixed and or replaced free of charge.

Money Back Guarantee

The Patriot Injector offers a 30 day money back guarantee.