

The Simple Smoke Pump II

INSTALLATION

MANUAL

Although the Simple Smoke Pump is extremely easy to install, please take the time to read through this manual. We have concentrated every tip and experience we have learned over the years to help guarantee your success.

SIMPLE SMOKE PUMP

I. INTRODUCTION

Congratulations for purchasing TME's Simple Smoke Pump. You are now the owner of the simplest and most effective high quality smoke pump on the market. All our Simple Smoke Pumps now feature a NEW IMPROVED user serviceable geared pump. We also now feature a NEW IMPROVED universal connector configuration. You may now use the same pump on Futaba, JR, HITECH, or newer AIRTRONICS systems. Additionally, our kit now includes a T fitting for twin engine installations. However, as simple as this smoke system is to install and use, **please read all of the following instructions. This way you'll be sure that you are using the pump to its maximum potential.** The proper installation will assure you with years of trouble free performance.

IMPORTANT!! DIRT IN YOUR SMOKE OIL CAN DAMAGE YOUR PUMP. USE IN-LINE FILTERS IN YOUR CONTAINER AND/OR SMOKE TANK TO INSURE LONG LIFE.

II. SMOKE SYSTEM SAFETY

We are focusing on safety first, since many are tempted not to read through all the directions. We feel these are important and we know you do to.

10 STEPS TO SAFE SMOKE (PLEASE READ FIRST)

1. DO NOT USE THIS PUMP TO PUMP GASOLINE. UNDER NO CIRCUMSTANCES SHOULD YOU OPERATE THIS PUMP IN THE PRESENCE OF GASOLINE VAPORS. THE MOTOR BRUSHES MAY CAUSE GASOLINE VAPORS TO IGNITE. TME, Inc. ASSUMES NO LIABILITY FOR MISUSE. PLEASE BE SAFE, IT'S JUST A HOBBY, ENJOY IT SAFELY!

2. Flammable liquids and battery shorts! This danger

is present with or without a smoke system. Please look out for frayed battery, pump, or servo wires. Always inspect everything closely after a crash, no matter how minor the external damage is.

3. Range test your radio system with the pump on before flying your model. Any electric motor placed near the receiver can reduce the available range no matter how well it's filtered. See section on how to ground test your radio.

4. Make sure system is off when inspecting or installing tubing otherwise the pump may come on and splash liquid into eyes or model. Secure all tubing with plastic ties or wire.

5. Wait until the system is cool before refilling with smoke fluid.

6. Do not ground test except for very short intervals. Otherwise Smoke fuel may accumulate and catch fire.

7. Make sure the smoke pump is off while starting or whenever your engine is running at idle. Smoke fluid that accumulates in the muffler may catch fire.

8. Angle your muffler exhaust downward and away from the airplane so that no excess smoke fluid can accumulate in the muffler.

9. Although not necessarily a safety consideration. Be cautioned that some film coverings and paints, especially the low temperature films, are not compatible with the smoke fluids commonly used. Run your own compatibility test and divert heat and oil away from your plane as much as possible. In general, polyester films such as Monokote, Ultracote and 21st Century should work. Stay away from polypropylene film coverings and the low temperature films. Read the film manufacturers' instructions or call them if in doubt.

10. Clean your model frequently when using your smoke system. Inspect for seepage near control surface hinges frequently. Smoke oils may eventually loosen the hinges causing you to lose control of the model. BE SAFE & ENJOY...

IMPORTANT TIPS FOR SUCCESS

PLEASE READ! Omitting the following steps can lead to hours of aggravation.

1. Do not place the pump significantly higher than the tank because priming becomes difficult.
2. Perform the bench test (as outlined in the instructions) to measure oil rate per minute. Too much oil or too little oil rate can lead to all kinds of problems.
3. Prime the pump BEFORE starting your engine!
4. Erratic operation is usually the need for a check valve or an air leak from the tank line. (see troubleshooting)
5. For LONG LIFE isolate the system from vibration. Big engines can shatter motor magnets. Wrap in foam and away from firewall.
6. **DO NOT USE OR MIX GASOLINE PRODUCTS WITH THIS PUMP. MAY DAMAGE PUMP OR CAUSE FIRE**

See our web site for additional troubleshooting tips at www.TMEnet.com

III. INSTALLATION

The Simple Smoke Pump is the heart of your smoke system. It is capable of delivering a **very high rate** of smoke oil to your muffler. The quality and reliability of the smoke system, however, depends to a large degree on the selection and installation of the engine, airplane, muffler, preheater and even the weather. Please give consideration to all the other components of the system and you will be assured of an impressive aerial display.

1 Getting started

The first thing you'll want to do is sit back, get a warm cup of coffee and take a good look at the "Secret Smoke Success" tips booklet. In there you will get a wealth of ideas on producing the best possible

smoke. For now, pay close attention to the sections describing the optimum selection of the airplane, engine, smoke muffler, and smoke oil tank. The knowledge contained here may lead you to a different direction in your smoke project. Location of the system can also be critical. Try to get a good understanding and soon the mystery of a smoke system will disappear.

2. Smoke tank considerations

In **most** installations the size of your smoke tank is typically enough for only 3 to 4 minutes of MAXIMUM density smoke. This is because of practical size and weight considerations. Bear in mind that 3 or 4 minutes is not that little. It gets boring if smoke is left on all the time. To calculate your tank size, first look up the ounces per minute in section IV - WET TESTING and multiply by 3 or 4. The answer you get is the approximate tank size for 3 to 4 minutes of smoke. Select the largest tank you can carry.

You will need to make provisions for filling the tank with smoke fluid. The addition of a filler tube and vent line will work well. If your installation provides you access to the tank to pump line, then this is another ideal place to provide a means of filling the tank.

Bear in mind that since we are not pressurizing the tank, commercial fuel fillers will work just fine here. Just make sure the filler you select is compatible with gas, or diesel fuels. Also, don't forget that you need to provide an open vent for overflow and to let air in while the pump takes the fluid out of the tank.

Since there is no pressure in the tank, both fill and vent tubes may be used interchangeably and need not be closed after filling. Just make sure that the tubing goes up to the very top of the tank when oriented for normal filling.

VERY IMPORTANT: Although the new gear style pump is more tolerant of dirty oil, a small speck of dirt, sand, dried grass, or even plastic shavings from a new oil tank have been known to completely jam the Simple Smoke Pump. PLEASE: If your fill lines can possibly pick up dirt use a filter between the tank and the pump. We recommend

that you filter the oil coming out of the field container for maximum life of your pump. NOTE: Dirt related problems are NOT covered under warranty.

TUBING CONSIDERATIONS

NOTE: Tubing is supplied ONLY in DELUXE models. We recommend 1/8" ID gas compatible tubing only. We include TYGON brand tubing in our DELUXE kits due to its durability and clear nature. Clear tubing allows you to monitor air leaks when troubleshooting. TYGON is available from many sources. Check your hobby shop first.

When connecting directly to the muffler, the only types of tubing that can withstand the heat are either neoprene or silicon tubing. Ideally you may use the check valve as a junction to make the last two or three inches connected to the muffler either neoprene or silicone. Note that most silicon tubing reacts to petroleum oils and must be monitored and changed every few flights.

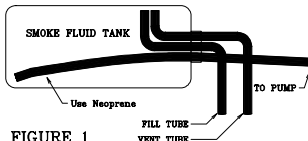


Figure 1. SMOKE TANK WITH FILL AND VENT TUBES

3. Selecting a battery pack

The Simple Smoke Pump consumes electrical energy from a separate battery pack at about a 1 amp rate. Because of the relatively high current demands we suggest using only NiCd or Gel cell batteries rated at 4 to 6 volts. Therefore a typical 500 mah NiCd pack can be expected to give you about a half hour of solid smoke time. Depending on the size tank you have selected this can be anywhere from 4 to 10 air shows before exhausting the pump battery.

Before going out and buying a brand new battery pack, see if you can find a couple old packs with bad

cells. You can easily make yourself a new "smoke only" pack from surviving cells of old packs. Or use that old pack that is in your airplane now and buy your airplane a new pack. After all, you should be replacing your NiCd packs in your RC system at least every 2 to 3 years. (It's one of those mathematical probability things.)

Remember that a dead smoke battery, may be a show stopper if it fails in the air. However, the way we've designed the Simple Smoke Pump; if the battery dies, it won't affect your receiver. Just make sure the battery pack you use is in fairly good condition and shows no sign of leaking.

For added weight savings in 1.2 cubic in. planes and smaller you may want to consider buying a 250 mah 4 cell NiCd pack. You will save some weight and size at the expense of having a total smoke time of approximately 15 minutes before recharging. This will yield 2 to 5 smoke flights.

4. Pump battery placement considerations

Don't forget that your separate battery pack for your Simple Smoke Pump will need service. In other words you will need to provide access to the battery pack for charging or removal.

With the optimum installation, you would automatically have perfect access to your battery when the wings are removed. Another approach is to provide a small hatch into the fuselage for battery pack access. Or you can simply solder or plug in a simple Y cord arrangement to your battery pack that provides a charge jack for fast field or overnight charging.

Remember that unplugging the battery or providing an external switch is not necessary. When you turn off your receiver battery, power is automatically turned off to your pump battery.

5. Mounting the pump

(PLEASE NOTE: PUMP may look different than illustration)

Obviously the space available in a model airplane will limit your options for installation. The mounting of the Simple Smoke Pump and your tank is not real



critical in terms of plumbing. However it is best to keep any electric motor a few inches away from the receiver or antenna wire so as to minimize any potential interference. (See section IV on how to range test your system)

It is also imperative that the smoke pump **NOT** be used in the presence of trapped gasoline vapors. (see Section II on safety.) This means that if you decide to use the pump in a gasoline powered model, keep the pump away from any area that can trap gasoline vapors. **Make sure that it is away from any gasoline tank that may leak and eventually cause a fire.** SOFT LATEX FOAM mounting the smoke pump on the outside firewall with large gas engines is one way to avoid operating near trapped fumes. The same gasoline danger exists with the motors in your servo's also. Also bear in mind that a frayed wire may cause a battery short that may ignite gasoline vapors. Please be careful. TME cannot be responsible for the consequences of a poor installation.

It is also best to keep the pump physically lower and behind the smoke fluid tank. With the airplane sitting on the ground, the tank should be not much higher from the ground than the muffler entry point.. We have observed quicker initial priming times and

minimal siphoning when these rules are followed.

If your installation causes your pump to un-prime (especially if prime is lost while you are flying with the oil pump switched off) and you cannot rearrange the placement to minimize this effect, you will need to add a check valve. WE RECOMMEND ONLY A GAS/OIL PROOF FLAPPER STYLE CHECK VALVE as included in our DELUXE kits. Ball type check valves will back leak erratically and you will still loose prime. Insert the check valve between your pump and muffler. This will prevent muffler pressure from pushing fluid backwards through the pump during off periods and thereby un-priming your pump. If you lose prime while the smoke is turned on then you are sucking in air from the tank. A bouncing clunk or a leaky system can cause this loss of prime. Visit our web site for suggestions on how to track down priming problems.

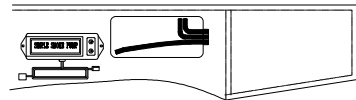


FIGURE 2

Figure 2. AIRPLANE XRAY VIEW

IMPORTANT: SOFT MOUNT YOUR SMOKE PUMP AS YOU WOULD YOUR RECEIVER. There are fundamentally two different philosophies when it comes to mounting the smoke pump. You may FIX mount or make a movable smoke tray.

SIMPLE SMOKE PUMP HOOKUP

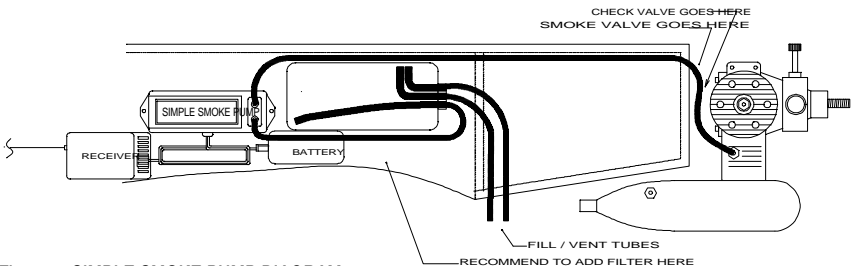


Figure 5. SIMPLE SMOKE PUMP DIAGRAM

FIXED MOUNTING. The pump may be fastened to any structure in the airplane by using the two mounting holes in the case. You will want to isolate the pump from vibration by padding the mount with foam. To insure a long life you can simply wrap the pump in foam and stuff it in the available space. It wouldn't be a bad idea to wrap the pump in a plastic bag in case any leaks develop over time. **DO NOT SCREW THE SIMPLE SMOKE PUMP DIRECTLY TO YOUR ENGINE FIREWALL. THE VIBRATION HAS ACTUALLY CRACKED THE MAGNETS IN THE MOTOR OR DESTROYED ELECTRONIC CONNECTIONS.** Velcro or plastic tie wraps are great for fastening to secure structure or braces in the fuselage.

Figure 3. SMOKE PUMP MOUNTING

REMOVABLE SMOKE TRAY. The Simple Smoke Pump was actually inspired by a removable tray setup that Dave Patrick used in the TOC and demonstrated in the "WRING IT OUT!" Volume III video. In this type of setup the pump, battery and tank are all attached to a small plywood or tray. We also like to attach the pump and battery to the tank with either Velcro or latex foam and rubber bands. The complete smoke system can be fastened with screws, loops of velcro or latex foam and rubber bands to the airframe. In this way the complete tray can be moved from model to model as needed. This approach does require a **single large space** for the system. It also needs to be placed quite close to the CG of the model so as not to affect the balance.

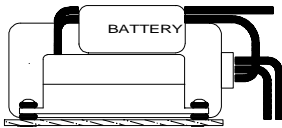


Figure 4. REMOVABLE SMOKE TRAY

6. Cutting the tubing

Now that you have planned for the placement of the components of your smoke system it is time to cut the tubing to length. You will need a length of tubing from the tank to pump. Another length will be needed from the pump to the Smoke muffer or

preheater. The flow rate adjustment may be placed on either length, however, it will be more convenient to install it near the muffer. You will need to provide a short length of neoprene or any other high temp tubing to connect to the hot muffer, especially when using large 4 cycle or gasoline engines. 1/8" or 7/64" I.D. Neoprene works best. Don't forget to use plastic or wire ties to secure the tubing.

7. Drill exits for tubing.

If your installation is inside the fuselage then your tubing must eventually get to your muffer. Drill a hole for the tubing at a convenient point in the firewall or front fuselage. Be sure to sandpaper or file the holes so as to bevel the edge and prevent chaffing. Don't forget to provide exits for the filler and overflow lines.

8. Providing Flow rate adjustment

The small supplied valve will provide you with a quick and easy means of adjusting the smoke fluid rate. Simply unscrew the adjustment counter clockwise until you can slip the clamp over the UN-CUT tube. Tubing may be clamped either between the tank and pump or the pump and muffer. Turn clockwise until the tubing becomes pinched while centered in the clamp jaws. Adjust smoke oil flow as instructed for your size engine in our instructions. **NOTE: GIANT SCALE Slimline smoke ready mufflers may not need any flow valve due to the small ID of the coil and the large amounts of oil required..**

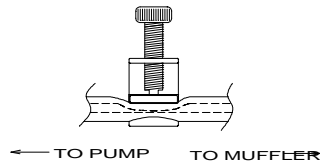


Figure 6. FLOW VALVE

9. Connecting to your receiver

The Simple Smoke Pump simply connects to a spare channel in your receiver. If your pump is too far from your receiver, you may need to purchase an "aileron extension cord" for your brand of radio from your hobby dealer. Do not cut or splice wire onto existing connectors as this will violate your warranty.

The Simple Smoke Pump will turn on at approximately the 50% servo point. If the turn on direction is not what you desire you may use your transmitters servo reversal function if supported.

USING UNIVERSAL CONNECTORS

Your new Simple Smoke Pump is equipped with a **NEW IMPROVED** universal connector configuration that works with all **FUTABA**, **JR**, **HITEC** and newer **AirTronics** systems. This configuration, however, requires you to pay close attention to the orientation of the plug for proper operation.

If you own a **FUTABA** system orient the plug into the receiver so that the brown wire on the Smoke Pump is on the same side as the black wire on all the other servos plugged into the receiver.

If you own a **JR** or **HITECH** or new **AIRTRONICS** system orient the pumps battery plug so that the black wire on the smoke pump matches the black wire on the pumps battery pack.

If you plug the connectors in backwards it will **NOT HARM** the Simple Smoke Pump or receiver, however the Simple Smoke Pump will NOT FUNCTION properly until the error is resolved.

IV. TESTING

DRY TESTING

**** IMPORTANT ****

With this pump as with any electric motor device in proximity to a sensitive receiver, it is very important to range test your equipment. With the pump on the ground range may slightly decrease. A decrease of 5 to 15% is considered very good. Some receivers are so sensitive that a slight jitter may occur. In that case insure that you at least obtain the manufacturers' minimum ground range "jitter-free" before flying.

If you cannot get a good range check, **DO NOT FLY** your model, contact us and we'll be glad to help you resolve the problem.

THE RANGE TEST

Before performing the test it is a good idea to let the motor brushes break in by letting the pump run dry for at least one half hour. To perform the test, collapse your transmitters' antenna and place the model (in a ready-to-fly condition) outdoors on the ground. Loop the output of the pump back to the filler tube in the tank to keep the motor wet. With the pump switched off, turn the radio system on and walk away while moving the control surfaces via the joysticks. Note the distance when the surfaces become erratic and completely stop responding to your control. This distance is your reference.

RANGE TESTING

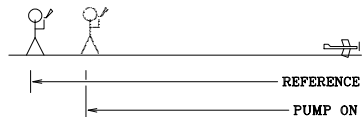


Figure 7. Range Testing

Now walk closer towards the model and begin turning the Simple Smoke Pump Channel on and off. At some distance you may notice the control surfaces will become erratic when the pump is on. Note the point where you regain control of the model with the pump both on and off. If this range is approximately 80% or better than the range with the pump off (your reference), then you should have no problems. If you get less than 80% range then you may want to move the placement of the Simple Smoke Pump away from the receiver or its antenna. At any rate, the system must get the minimum ground range as specified by the manufacturer or don't fly.

At this point, mark your transmitter switch position with tape so that you remember which way the Simple Smoke Pump is turned ON and OFF. Insuring the smoke pump is off, is very important when actually hooked up to the engine during system power up. Transmitters equipped with servo reversing may be used to reverse the direction of the "smoke on" switch position if desired.

WET TESTING

It is suggested that you perform the following test with the pump, tank and tubing visible for inspection to determine if there are any leaks in the system.

At this point with the engine off and the muffler dumping into an appropriate container. Fill the smoke tank and turn the pump on while timing the amount of time it takes to empty the tank. Adjust the valve for about a 2 oz. per minute rate for .90 or smaller glow engines. In other words adjust so that a 6 oz. tank empties in about 3 minutes, 8 oz. in 4 minutes, 10 oz. in 5 minutes and so on. 1.2 cubic in. engines require about 3 oz. per minute.

Larger gasoline engines from 1.8 to 4.2 cubic inches can burn from 4 to 8 oz. per minute. At the TOC in Las Vegas, 8.8 cubic in. glow engines were burning up to 15 oz. per minute with large and intense clouds of smoke. When the smoke system is finally running, you will adjust this for your optimum rate. Here the available heat, amount of smoke and the size of tank will be your guide.

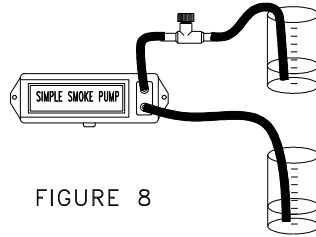


FIGURE 8

Figure 8. PUMPING INTO A GRADUATED CONTAINER

Note that when a dry pump is activated the very first time, smoke fluid will be delayed coming out. The delay is caused by the pump drawing air until it is primed.

The goal here is to see the pump working in action while on the ground. The other goal is to adjust the flow rate to get you very close to the ball park.

V. OPERATION**THE SMOKE TEST**

Make sure all your batteries are freshly charged and perform the following steps in order:

1. Turn on your transmitter
2. Turn your smoke pump OFF
3. Turn your receiver ON
4. Ground test your system (GOOD HABIT, Smoke or not)
5. Momentarily turn on your Simple Smoke Pump until it is primed. Then quickly shut the pump off. You will either hear the motor bog down or see

drops of oil coming from the muffler. **BE CAREFUL NOT TO FILL UP YOUR MUFFLER WITH OIL.**

6. Start engine

7. Put on an airshow.

REMEMBER: Enhance your maneuvers with smoke and don't leave it on all the time. It will quickly get boring if you leave the smoke on all the time. Here is your chance to develop your own performance style and truly impress your audience.

ADJUSTING FOR OPTIMUM SMOKE.

You may want to fine tune your pumps' flow rate to optimize your smoke time and smoke density. Remember that ground tests can be dangerous so therefore test only for short periods of time. Adjust for optimum flow rate by pinching off the flow until a noticeable decrease in smoke production occurs. Slowly increase the flow rate and observe the smoke output. At a certain point you will no longer be burning all of the available smoke fluid and you may see it sputtering out of your exhaust. Back up until this excess fluid disappears. Your Smoke pump is now tuned to the consumption rate of your engine and muffler.

REMEMBER TOO MUCH OIL CAN PRODUCE LESS SMOKE. This pump has supplied tremendous amounts of oil in up to 8.8 cubic inch engines. Too much oil cools the muffler and produces little or no smoke at lower throttle settings. An initial burst of smoke at high throttle thinning out rapidly also signifies too much oil. Optimize the oil rate for the amount of power required to torque roll the aircraft.

VI. TROUBLESHOOTING

PROBLEM: PUMP DOESN'T TURN ON OR EVEN MAKE NOISE.

SOLUTION: Make sure batteries are charged. Make sure you are toggling the right TX channel.

PROBLEM: NO PUMPING., CLICKING SOUND EVERY TIME YOU TRY TO TURN ON THE PUMP

SOLUTION: Dirt has jammed the pump. Sometimes reverse flushing under pressure with denatured alcohol will free the pump. Adding momentary reverse polarity to pump at battery connector may also help dislodge the pump. Also, see pump servicing directions below. You should be filtering the smoke fuel when filling or add an in-line filter between the tank and pump.

PROBLEM: NO SMOKE, PUMP MAKES BUBBLES IN SMOKE FLUID TANK

SOLUTION: Pump tubing connections are reversed.

PROBLEM: WITH ENGINE RUNNING - NO SMOKE, PUMP RUNS OK ON BENCH

SOLUTION: Make sure you let the pump get primed before turning on the engine. A "flapper" style check valve, if not equipped, may be necessary.

PROBLEM: SMOKE DELAYED OR QUILTS WORKING AFTER A LONG "OFF TIME" PERIOD.

SOLUTION: Your pump is becoming un-primed by the back pressure of the muffler. Install a "flapper" style check valve. SPRING-LESS BALL style check valves are completely ineffective.

PROBLEM: PUMP PRIMING TAKES TOO LONG OR PUMP DOESN'T PRIME WITH ENGINE RUNNING AT HIGH THROTTLE.

SOLUTION: Try opening up the flow valve to allow more fluid to pass. Check for air leaks coming from filler valves or tie points. Home made pre-heaters built into mufflers should dump smoke fluid in the same direction as exhaust flow. If you dump against the flow you are working *against* exhaust pressure. Make sure your tubing dumps *perpendicular to the direction of flow* so that the muffler does not hinder priming. If you tapped your own muffler it *is very important that the tap be as close as possible to the engine exhaust port*. Tapping at the small part of the muffler not only gives you maximum heat, but it provides the lowest pressure point on the muffler. If all else fails, install or replace the "flapper style" check valve.

PROBLEM: RADIO INTERFERENCE.

SOLUTION: Properly broken in pumps have proven to show no noticeable interference to modern R/C receivers. DO NOT RELY on tests done indoors since radio waves bouncing around will cause unpredictable effects. If you have any trouble that cannot be solved by proper placement DO NOT FLY YOUR MODEL, CALL OR RETURN UNIT TO THE FACTORY.

USER SERVICABLE GEARED PUMP

If your pump dries out and will not prime you will need to apply a drop or two of oil directly into the intake nipple of the pump. This reestablishes a virtual seal around the gears enabling it to prime more efficiently. Other factors that contribute to poor priming is a high pump configuration or priming the pump while the engine is running.

This new design is much more tolerant of foreign particles in the smoke oil fluid. However, we still recommend using a filter either between the on board smoke oil tank and pump or at a very minimum you should filter all oil just before it enters your model.

However, if your pump should fail and stop turning (no sound), the most likely cause is a foreign particle jamming the gears.

NOTICE: This type of failure is not covered under the terms of our warranty. If you want to send it back for factory service you will be charged for the work or you may service the pump yourself by following these directions.

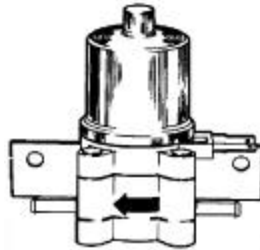
SERVICING THE PUMP:

STEP ONE: In order to service the pump you must first drill out the four rivets that attach the back plate of the pump. (This is the plate that has the words IN and OUT in raised lettering.) Carefully use a 1/8 inch drill bit and starting at the bottom end slowly drill out and push out all metal debris.

STEP TWO: Remove the back plate and carefully remove the two small plastic gears noting which one goes where.

STEP THREE: Clean the gears with running water and be sure to clean out the gear cavity with a dry lint free cloth or cotton swab.

STEP FOUR: Carefully reassemble the pump by replacing the gears and reattaching the back plate using four 1-1/4" 4-40 screw with nut and lock washer.



VII. WARRANTY

LIMITED WARRANTY

The SIMPLE SMOKE PUMP is warranted to the original purchaser for 180 days from the date of purchase to be free from defects in material and workmanship. During this period Tejera Microsystems Engineering Inc. will repair or replace, at their discretion, the defective unit.

This warranty does not apply to any unit which has been jammed with small foreign objects, abused, improperly installed, improperly used, used for purposes other than those purposes for which the unit was designed, handled roughly, damaged in shipment, nor to any unit which has been altered or repaired by unauthorized personnel. Under no circumstances will the buyer be entitled to incidental or consequential damages. This Limited Warranty gives you specific legal rights, you may also have other rights which vary from state to state.

WARRANTY PROCEDURE:

A minimum charge of \$4.00 to cover shipping and handling is required on all returned units, and should be enclosed with the unit. Be sure to enclose your Bill of Sale as proof of purchase with the unit.

(A legible photocopy is acceptable.) In the event that the work is not covered under the warranty, the unit will be repaired and returned C.O.D. (for repair charges) to the owner unless special instructions or a credit card number are received with the unit.

REPAIRS:

For out of warranty repairs the standard repair fee per unit is 50% of the current list price plus \$4.00 shipping and handling charges. You may prepay by check, MO, VISA, MASTER CARD or DISCOVERY

ALL RETURNS MUST BE SENT TO:

Visit our web site for the current return address, tips, troubleshooting and information on this and all of our other fine products.

www.TMEnet.com

Warranty Registration

TME, Inc. limited warranty becomes effective upon the date of purchase. However, this form (or a copy) must be filled out and returned within 10 days to validate the warranty.

Date Purchased _____ Product model # _____ Model SSP: _____

Name _____ Signature _____

Address _____

City _____ STATE _____ ZIP _____