

HOT LICKS EXHAUST

Optional Active Ignition Installation Instructions for Carbureted Automobiles and Motorcycles

How It Works

Active ignition installation is only an option if you have a carbureted engine and will require a secondary on/off toggle switch not included in the kit, in addition to the momentary push button already installed. It may also require the installation and use of a manual choke.

This method does not always work, and if it does not, you will have to install the kit using the basic installation instructions. With the engine at idle rpm's, after turning on the toggle switch, the spark plugs mounted in the tailpipes will begin to ignite. Flames should begin to belch out as the engine idles. If not, you would need to begin to rev the engine up and let it come back down to an idle. If it still does not begin to produce flames, you will need to pull out the manual choke knob slowly. For each minor adjustment of the manual choke, you

should hear the engine begin to rise in rpm's and begin to lope or cam over. Upon each lope/cam, flames should begin to come out. If you like this method as opposed to the basic installation, you can use the momentary push button, but you will have to sit there and hold the button down. By installing a simple on/off toggle switch, you can exit the vehicle while allowing the flames to continue.

This method is not guaranteed to work on all applications, but is an option you can try if you have a carbureted engine and a manual choke. You can install the kit using both the basic and active ignition methods together so you will have the option of shooting flames utilizing either method, but you will need a secondary toggle switch for the active ignition installation. Call us if you have any questions.

Getting Started

1. Always be careful not to short out any wires connected to the flame control module box by grounding a positive wire or touching a positive wire to a ground on the box. Unlike all other kits on the market, this kit does not use any automotive coils and will be damaged if connected to automotive coils.
2. This kit comes complete with everything you need to install the kit and shoot flames.

Tools Needed

- Cordless Screwdriver
- Wire strippers/crimpers
- 1/2" drill bit
- Light Tester or Multimeter
- 9/16" drill bit
- Welder (optional)

Procedures

1. Mount the Hot Licks Exhaust Inc. flame control module/s within four (4) feet of the tip of your exhaust (for automobiles in the trunk or under the rear of the vehicle, for motorcycles under the seat, in a bag, or on the frame). If you want to mount the flame control module box further than four feet from the tip/s of the exhaust, you will need additional low profile flame cable (available from Hot Licks Exhaust, Inc.).
2. Drill a 9/16" hole about eight (8) inches from the tip of the exhaust for motorcycles and about ten (10) inches from the tip of the exhaust for automobiles.

Caution!! Once you drill a hole, it is permanent! If you have any questions about where to drill the hole, please call us for advice before you drill. Hot Licks Exhaust, Inc. will not be held responsible for any modifications to your pipes even if your motorcycle or automobile does not produce flames with the kit installed.

3. If you do not want to drill a hole and have spark plugs sticking out of your expensive pipes, some people use a dedicated set of exhaust tips to mount the bung nuts/spark plugs in. This would allow you to remove the dedicated set of exhaust tips when you do not want to shoot flames and install the tips when you do want to shoot flames, thus leaving your existing exhaust unmodified. **NOTE:** This may not be a viable option for every application.
4. Weld the spark plug bung over the hole you just drilled into the exhaust pipe/s. You can use stainless wire with argon silver shield gas to get a weld that will not be as prone to rust. Also, you do not have to weld completely around the spark plug holder nut if you want to avoid heat discoloring the chrome. A good weld on opposite sides will be plenty strong. If you cannot weld them in, you can insert the plug in the hole and then thread the bung nut on from inside the exhaust pipe using an open end wrench. Install the spark plug by threading it into the bung and tightening firmly. The spark plugs come gapped at about 1/8" wide for best results. Make sure to tighten the plugs securely and periodically check them to make sure vibrations have not loosened them.

5. Crimp on a blue ring terminal to one end of the four (4) foot piece of low-profile flame cable. You can shorten the length of the low-profile flame cable if you need to. Unscrew the nipple cap on the top of the spark plug/s, place the ring terminal over the threaded shaft on top of the spark plug, and screw the nipple cap back on the spark plug to hold the ring terminal in place. Use some pliers to tighten it. If you want to use some custom spark plug wires in place of the black four (4) foot piece of low profile flame cable/s, you can.
6. Crimp on a female spade connector to the other end of the flame cable and connect it to the male spade on top of the flame control module/s.
7. Connect the black wire coming out of the flame control module/s to a good solid ground on the chassis using the self tapping screws included in the kit. Good solid grounds are important.
8. Drill a 1/2" hole on a flat panel area somewhere easily reachable from the driver's seat to mount the momentary push button or a simple on/off toggle switch. The dash or in the console is usually a good place to mount the button on automobiles, and for motorcycles you may have to get creative to find somewhere to mount the button that is within reach while sitting on the motorcycle. Down by the seat is a good place to start looking. The button housing can easily be taken apart to produce a small microswitch that can be attached just about anywhere using

some double sided tape. For motorcycles, if you want to use your horn button or some other handlebar type button in place of the momentary push button supplied in the kit, you can. To remove the black push button, completely unscrew the metal ring and pull up hard enough to pop off the black push button. You have to pull hard, so don't worry about breaking the switch. Insert the push button threaded shaft through the hole you drilled, thread the black plastic nut on along with the metal ring, and push the black push button firmly into place. The button, once installed and when pressed, should ignite the spark plugs in the exhaust pipe/s while the motor idles.

9. Now you will want to find a fused 12-volt wire (15 amp minimum) and connect that wire to the terminal marked COM. This is the terminal on the bottom of the momentary push button. If using a simple on/off toggle switch, connect the 12-volt fused wire to either pole on the toggle switch.
10. Connect the red wire from the flame control module/s to terminal number NO (middle terminal) on the momentary push button. If installing two modules for dual exhaust, connect both red wires from each flame control module together using a butt connector and run a wire from the butt connector to the terminal marked NO, the middle terminal. If using a simple on/off toggle switch, connect the red wire from the flame control module/s to the other pole on the toggle switch.

Quick Test

Without starting the motor, hold the momentary push button down briefly or turn your toggle switch on, and you should see the bright blue arcs of the spark plug/s. A bad ground is usually the problem if you don't see the spark plugs arcing bright blue. Make sure you warm the car up to operating temperature or you will not get any flames. With the engine at idle rpm's, flip on the toggle switch. Flames should begin to belch out as the engine idles. If not, you would need to begin to rev the engine up and let it come back down to an idle. If it still does not begin to produce flames, you will need to pull out the manual choke knob slowly. For each minor adjustment of the manual choke, you should hear the engine begin to rise in rpm's and begin to lope or

cam over. Upon each lope/cam, flames should begin to come out. If you like this method as opposed to the basic installation, you can use the momentary push button, but you will have to sit there and hold the button down. By installing a simple on/off toggle switch, you can exit the vehicle while allowing the flames to continue. This method is not guaranteed to work on all applications, but it is an option you can try if you have a carbureted engine and a manual choke. You can install the kit using both the basic and active ignition methods together so you will have the option of shooting flames utilizing either method, but you will need a secondary toggle switch for the active ignition installation.

Warning: Never use the Hot Licks Exhaust, Inc. flame box on public roads. Only for recreational off road use. Always be safe and have a fire extinguisher nearby. Never use in a garage or closed-in area. Never use within 500 feet of flammable substances such as gas stations or gas cans. Never use while anyone is behind the vehicle. Hot Licks Exhaust, Inc. shall not be liable for accidents, property damage, or bodily injury directly or indirectly from any defect or non-defect in its product/s or from product's use. Hot Licks Exhaust, Inc. makes no warranty expressed or implied that any of our products are merchantable or fit for any particular use or purpose. All photos, instructions and diagrams are copyrighted and must not be used without the express written permission of Hot Licks Exhaust, Inc. Copyright © 2012 Hot Licks Exhaust, Inc. By purchasing this product you have agreed to the above terms.

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Optional Active Ignition Wiring Diagram

Use this diagram for carbureted engines only. Not guaranteed to work on all carbureted applications.
May require installation and use of a manual choke. Results may vary.

