

Limited Warranty

AltFuel LLC.,
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Warrants:

That all equipment manufactured by it be free from defects in material and workmanship under normal use and service when installed and used in accordance with all applicable state and local laws and regulations.

Defects in material or workmanship shall be corrected, at the option of AltFuel LLC, by repair, replacement or refund. In the event a repair is not commercially practicable or cannot be timely made, the item will be replaced, or with the consent of the consumer, a refund may be made.

This warranty does not cover damage resulting from abuse, misuse, negligence or accident; nor from problems resulting from failure to comply with all applicable state and local laws and regulations or problems caused, in whole or in part, by alteration or modification to the product.

This warranty does not cover transportation to and from service locations, loss of time, inconvenience, commercial loss, loss of use, incidental charges, or other consequential damages.

This warranty shall be for the term of five years from the date of sale by the consumer to the customer. Upon demand by AltFuel LLC the consumer shall produce the original contract or receipt to identify the date of purchase.

Disclaimer

Purchase of this kit is at your own risk, and we are not liable for any damage or consequential damage that may be caused by inappropriately or appropriately installed kits. We are not responsible for any injury or harm caused by the use of this kit. We are not responsible for any engines or engine damage caused by inappropriately or appropriately installed kits or due to modification by other parties. Also, it is important to check your manufacturers engine warranty, which may be voided. We are not liable nor responsible for anything that may occur while operating the alt fuel conversion kit.

AltFuel products are not endorsed or supported by any third party manufacturers or vendors.



WARNING: These products contain a chemical known to the state of California to cause cancer and birth defects or reproductive harm



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Green Conversion Kit® for Small Engines MODEL 2

Model 2 is designed to easily convert all Overhead Cam engines and Overhead Valve engines (OHC, OHV). This kit is best used to fuel overhead cam and overhead valve powered engines with clean, green propane fuel.



- * If you do not see pictures of the specific engine you are converting, do not be alarmed. Please follow the text in these instructions. This conversion kit will work on all single cylinder and most twin cylinder engines. The conversion process is the similar for all of these engine types.
- ** If your engine does not utilize an OHC/OHV system, you will need to use our Model 1 kit.

** PATENT PENDING **

Tips Prior To Installation

This kit will not work on two-cycle engines and engines that require a gasoline and oil mix.

This conversion kit will not work on cars.

Do not use mapp gas cylinders (tall slender tanks) on the AltFuel Green Conversion Kit.

Do not modify conversion kit by any means.

The AltFuel Green Conversion Kit is designed to be fueled with a 1lb disposable propane fuel cylinder. These are the short, fat green cylinders that are typically used on camp stoves and other small grills. The tall, slender 1lb cylinders that are used for torches will not perform as well, due to their smaller surface area and the unique characteristics of liquid propane. Optional larger cylinders, mounts and supply lines are also supported and available from AltFuel.

Thank you for purchasing the AltFuel Green Conversion Kit

Included in the Model 2 kit:

The AltFuel Green Conversion Kit Model 2 is made up of three key components

- 1) Regulator system – includes:
 - 1 – Regulator assembly
 - 3 – Zip ties
 - 1 – AltFuel “No Gas” sticker
 - 1 – Set of Model 2 instructions
- 2) 1/4” certified rubber LP fuel line (custom length dependent on application)
- 3) Aluminum adapter plate (dependent on engine model)

Prior to Installation

For best engine life and performance, we recommend that you check your oil and replace it with a high-grade synthetic blend of motor oil applicable to your engine before installing the AltFuel Green Conversion Kit. Also, it is recommended that you check the spark plug on the engine you intend to convert. Clean or replace the spark plug to ensure proper and easy startup. Make sure the engine air filter is new or clean and free of dirt and debris. Any engine that you intend on converting to propane fuel should be in good running condition before attempting to install this kit.

Tools needed:

- 1 – Siphon
- 1 – Gas tank to siphon gasoline into
- Socket set
- Flat head screw driver and hex head screw driver
- 1 – 1 lb propane canister (We recommend buying 2 propane cylinders)

Dual Fuel Options

If you happen to run out of propane you have the option to run your engine on gasoline. Simply fill the fuel tank, turn the gasoline on/off valve to “on” and start.

DO NOT RUN PROPANE AND GASOLINE AT THE SAME TIME!

To return to propane fuel: Siphon all gasoline from the fuel tank and start engine on gasoline only and run until all gasoline is consumed.

WE ONLY RECOMMEND GOING BACK TO GASOLINE IN A TRUE EMERGENCY.

** WARNING **

If your engine is 10 horsepower or higher, the conversion kit must be mounted vertically.
If your engine is less than 10 horsepower, it must be mounted horizontally.
AltFuel cannot guarantee the performance or end result of an improperly installed kit.

REFUELING THE ENGINE

NEVER ALLOW SMOKING OR BE NEAR AN OPEN FLAME WHEN MAINTAINING THE FUEL SYSTEM ON THIS ENGINE.

Always handle LP with care. LP is a safe but highly flammable fuel.

- Always close valves on cylinders when not in use.
- Use only cylinders that meet Code #49 of the federal regulations #173.34.
- Use only LP fuel.
- Never attempt to remove an LP cylinder while mower is running.
- Cylinders must be filled by trained personnel only.

When removing and replacing fuel lines on the LP tank, make sure the nozzle is free of any debris that might clog or cause damage to the nozzle. Damage to or debris in the nozzle may cause a failure of the check valve, which may result in seal compromise and fire hazard.

Removing Fuel Tank For Refueling

Ensure that the fuel supply valve is turned off before removing tank for refueling. Remove fuel line from tank by turning coupling in a counter clockwise direction. This is a good time to inspect washers on the coupling for wear. If wear or damage is visible, replace worn parts to prevent leakage. Release the straps (2) which secure the tank to the machine. Carefully lift cylinder straight up to remove from machine. Transport tank to an authorized LP fuelling station for refueling. If exchanging tanks, be sure to use cylinders that meet codes and regulations referenced above.

CAUTION: Ensure tanks are properly secured and positioned where damage cannot occur to the tank and valves during transportation.

Installing Fuel Tank

Reverse the above procedure. Be sure to check for leaks after installing tank. Leaks must never be checked with a flame. Always check for seal compromise with a spray bottle filled with soapy water and look for bubbles.

Transporting Fuel Tank(s)

The owner/operator is responsible for transporting the propane cylinder in accordance with local, state, and federal laws.



Cold Start

- Step 1:** Attach propane fuel source to the conversion kit.
- Step 2:** Open throttle to the highest speed setting.
- Step 3:** Close the choke.
- Step 4:** Open the fuel control valve on ½ of a turn.
- Step 5:** Prime the system with fuel by depressing the primer button located on the 2nd regulator for 2 seconds.
- Step 6:** Start the engine.
- Step 7:** Adjust the fuel control valve to obtain desired engine speed.

Warm Start

- Step 1:** Open throttle to the highest speed setting.
- Step 2:** Close the choke.
- Step 3:** Open the fuel control valve on ½ of a turn.
- Step 4:** Start the engine.
- Step 5:** Adjust the fuel control valve to obtain desired engine speed.

How To Stop Your Newly Converted Propane Engine

- Step 1:** Turn off engine
- Step 2:** Turn off the propane cylinder by closing the valve.
- Step 3:** Disconnect the propane cylinder and store it in a safe place.
(Please read the back of the propane cylinder for storage information and applicable Federal laws.)

Installation

- Step 1:** Switch gas on/off valve to “off” position.
- Step 2:** Siphon any gasoline out of the fuel tank. (*fig 1*)
- Step 3:** Start engine in order to consume all gasoline in the carburetor. Run engine until it stalls, then attempt to restart the engine until it will no longer run. This is done to ensure all gasoline is used and none remains in the carburetor.
- Step 4:** Remove air filter cover and air filter from engine. Carefully remove air filter mounting bracket. Slide carburetor off of studs. To easily remove carburetor, you may have to remove the throttle control arm from the top of the carburetor butterfly.



Fig 1



Fig 2



Fig 3



Fig 4



Fig 5

- Step 5:** Attach the propane fuel supply line to the aluminum adapter plate.

Step 6: Replace the plastic carburetor spacer plate, located between the carburetor and engine head, with the aluminum plate designed to fit your engine. Line running into adapter plate may be on the top or bottom depending on your personal preference and setup of your engine. Make sure you have enough clearance space between the feral and engine. You may have to twist the aluminum plate to the correct side depending on the engine. (Be sure to keep the original plastic plate in a safe location.)



Fig 6



Fig 7

Step 7: Reassemble the carburetor system with the AltFuel adapter plate in place. Be careful to put all seals back in their positions. (If a seal is accidentally ripped or misplaced, it is very important to replace it. If your seals are old or dirty, we also recommend changing them.) Make sure every thing is secured properly before moving to the next step.



Fig 8



Fig 9



Fig 10



Fig 11

Step 8: Secure the AltFuel Green Conversion Kit regulator system to your equipment in the desired position. Secure tightly with supplied clamps. Attach the provided propane fuel line to the regulator system. Secure the propane fuel line to your equipment with the supplied zip-ties. Be sure to leave enough slack to accommodate any foldable or adjustable parts. The propane line may be a little long, this is to ensure that you have the option to fold and/or transport the equipment without crimping the line.



Fig 12

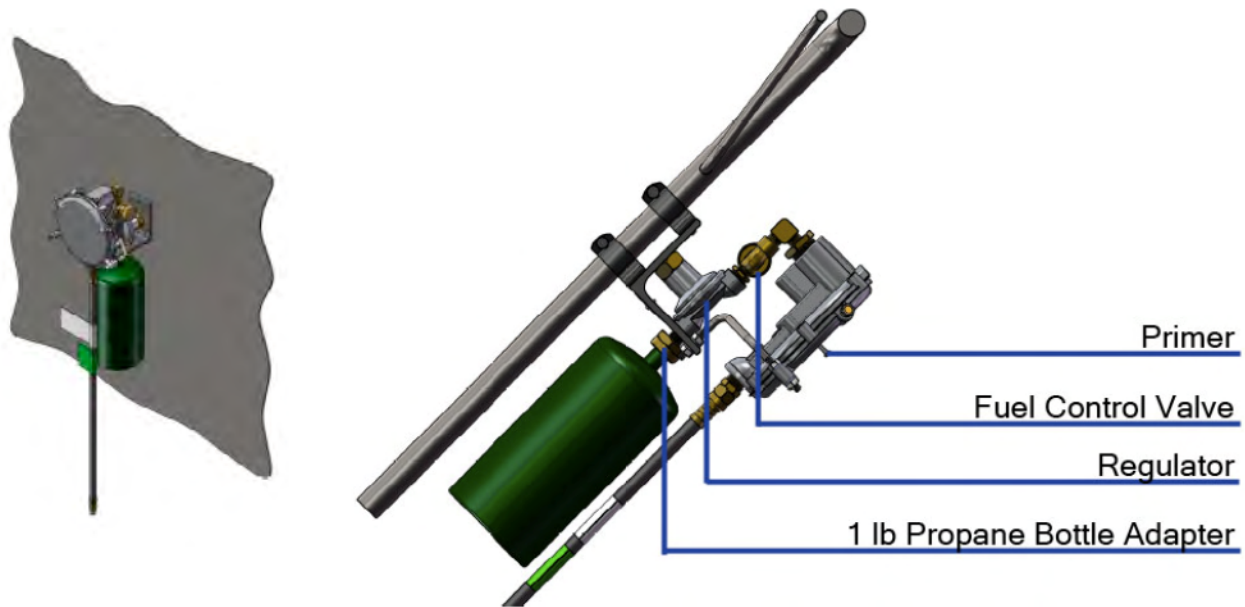
Step 9: Place “No Gasoline” sticker on fuel cap or in a visible location.



Fig 13

Quick Checklist Before Starting Your Newly Converted Propane Engine:

- Make sure you have read and fully understand all warnings and disclaimers concerning converting and operating your engine with the AltFuel Green Conversion Kit.
- Make sure you have put the “No Gasoline” sticker onto the gas tank or in a visible location on the engine.
- Make sure oil is in new or good condition.
- Make sure spark plug has been cleaned or is brand new.
- Make sure air filter is new or clean and free of dirt and debris.
- Make sure all seals are in there original positions and are in good, clean condition.
- Make sure that the conversion kit is in a desirable position for starting and stopping purposes.
- Make sure every part has been returned to its proper position and is secured tightly.
- Be sure to test any newly installed components for leaks by spraying with leak detector spray or a soapy water mix. Watch for growing bubbles on the conversion kit and all connections. If any leaks are detected please contact AltFuel.



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