2008.09V
M1027/1058 USA

www.moletech.us

Improve Fuel Consumption

Reduce Emissions

Quick Installation

Lasts for 10 years

Patented “Molecule Reaction Technology”

User Manual

INDEX

Introduction

- **Congratulations on purchasing a Moletech Fuel Saver. For best results please read the complete owners manual. There are important steps to follow to ensure improved fuel efficiency and giving many years of driving enjoyment.**

IMPORTANT

- **2 steps to follow before installing your Fuel Saver:**
  - 1) Good records are required to monitor volume of fuel used. Calculations should be the average of 3 tanks of fuel. We recommend you download the online form for monitoring fuel at www.moletech.us.
  - 2) It is recommended the Moletech Fuel Saver is installed by a qualified automotive mechanic.

Vehicle + Moletech Knowledge!

Question ~ what is the engine size (displacement) of your vehicle? _____

Question ~ what is the capacity of your fuel tank? _____

Kits are specific for fuel capacity and engine size. It is important to check the graph below to determine you have the correct kit.

MODEL NUMBER	ENGINE CAPACITY	TANK CAPACITY LITRES	TANK CAPACITY USA GALLONS	ENGINE DISPLACEMENT
M1003	Scooter	20	5	100 c.c
M1010	Motorcycle	50	13	100c.c to 3000c.c
M1027	Gasoline Engine Under 3000c.c	50	13	Under 3000c.c
M1058	Casoline Engine 3000c.c to 6000c.c	100	26	3000c.c to 6000c.c
M1034	Diesel Engine Under 6000c.c	100	26	Under 6000c.c
M1041	Diesel Engine 6000c.c to 12000c.c	200	52	6000c.c to 12000c.c
M1089	*LPG Engine	ALL	ALL	ALL *LPG ENGINES
M1096	*LPG + Gasoline Engine	ALL	ALL	*LPG ENGINES with Gasoline Spare Tank
M2041	Diesel Engine	400	104	Please refer to the tank capacity.
M3042		600	156	
M4042		800	208	

*LPG (Liquefied Petroleum Gas.)

Question ~ Does the vehicle have a secondary tank? _____

If your vehicle has a secondary tank that feeds fuel directly to the engine this tank needs Fuel Saver sensors installed or the fuel from this tank will not be treated.

Question ~ Does the vehicle have a reserve tank? _____

The reserve tank feeds fuel into the main tank. A reserve tank does not need Fuel sensors installed. The fuel will be treated when it is delivered into the main tank.

Question ~ what is the condition of the vehicle? _____

Moletech recommend start the trial after the vehicle is serviced to accurately compare before and after Moletech Fuel Saver is installed.

Question ~ Have fuel additives been used within the last 3 tanks of fuel? _____

Performance fuel additives may void the effectiveness of the Fuel Saver.
Before installing Moletech Fuel Saver If fuel additives have been used, it is necessary to deplete 3 tanks of fuel prior to installation.

The final installation procedure is to rev the engine!

Question ~ what is the age and mileage of the vehicle?

Age _____ **Mileage** _____

After the kit is installed, the Fuel Saver needs to be calibrated. The 'Molecule Reaction Technology' (MRT) is activated and the treatment of the fuel begins.

How to Calibrate Fuel

Allow 30 minutes to lapse after installing the fuel sensor. The time is measured from the time the fuel saver makes contact with the fuel. The engine must be revved in neutral, alternating between 50% and 60% of maximum RPM to activate the system. This will complete the process.

Vehicle less than 2 years old,
Vehicle travelled less than 18,000 miles / 28,000 kilometres
Rev the engine for 2 minutes.

If the vehicle is more than 2 years old,
Travelled more than 18,000 miles, / 28,000 kilometres
Rev the engine for 5 minutes.

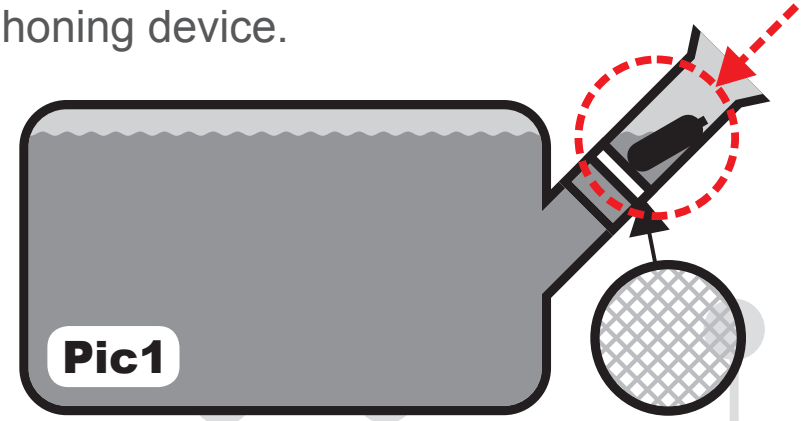
INSTALLATION PROCEDURES

FOR GASOLINE VEHICLES ***Kit # M1027 Install Fuel Sensor***
Kit # M1058 Install Two Fuel Sensors

WARNING: Gasoline is a hazardous substance and must be handled with extreme care.

Most passenger vehicles are fitted with an anti-siphoning device.

- It is usually found in the fuel filler tube.
- It will prevent the fuel sensor from entering the fuel tank (Pic1).



There are varying methods of installing the fuel sensor. Your workshop or mechanic will need to identify the most suitable installation procedure:

1. Through the sender or fuel pump via the access plate.
2. Through the neck of the tank by removing the anti-siphon.
3. Through the sender or fuel pump by removing the tank.

1) Through the Sender or Fuel Pump via the access plate

An access plate is usually found in the boot or under the back seat. (Pic2) In this case under the back seat.

- Remove the access plate and remove the pump / sender unit (Pic3).
- Drop the fuel sensor into the tank.

NOTE: Generally most vehicle manufacturers recommend a new pump or sender gasket be installed when carrying out this process.


Pic2


Pic3

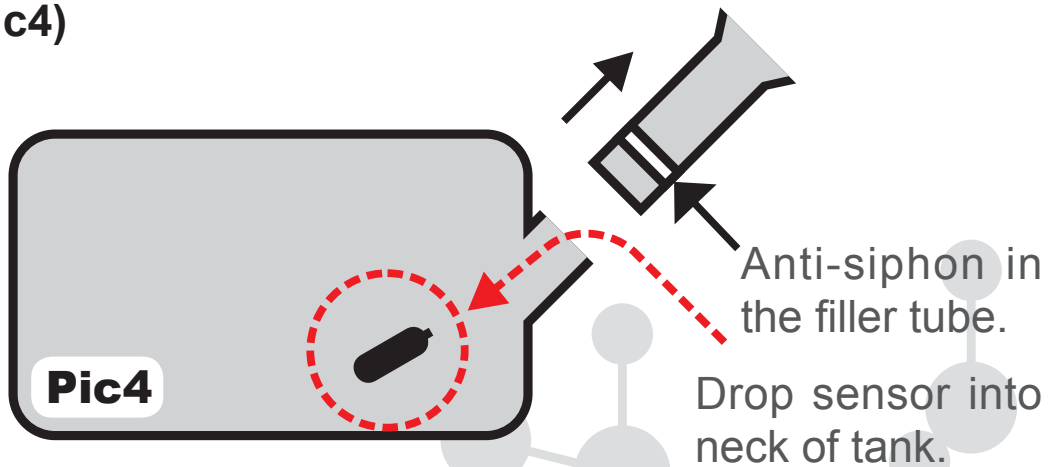
2) Through the Neck of the Tank by removing the anti-siphon

The filler tube is connected to the neck of the tank by a rubber connecting hose.

- Disconnect the hose and the filler tube.
- The anti-siphon will either be inside the filler tube, attached to the neck of the tank or integrated with the tank neck.

Anti-siphon inside the filler tube (Pic4)

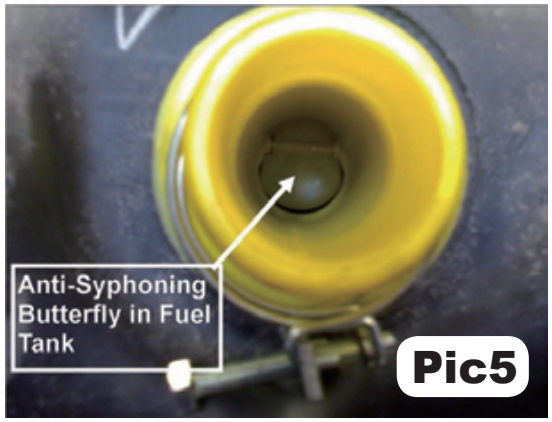
- Drop the fuel sensor down the neck of the tank.



Pic4

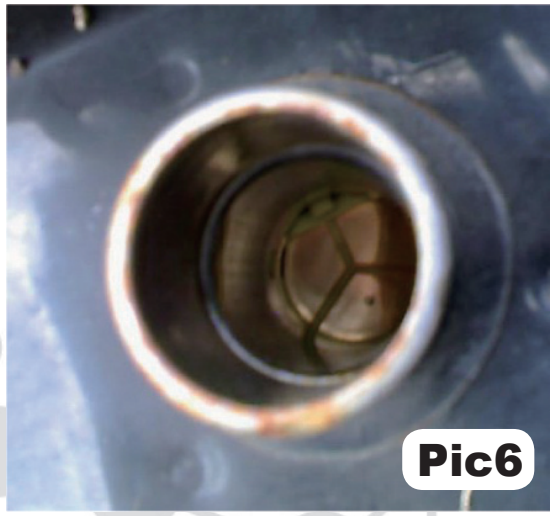
Anti-siphon attached to the neck of the tank (Pic5)

- Remove the anti-siphon
- Drop the sensor down the neck of the tank.



Anti-siphon integrated with the tank neck (Pic6)

- The fuel sensor cannot be dropped into the neck of the tank.
- The fuel sensor must be installed through the sender or fuel pump.



3) Through the sender or fuel pump by removing the tank

NOTE: This method is only used if your vehicle does not have an access plate and must be carried out by a licensed mechanic.

Install the Air Sensor

The air sensor is installed in the air intake tube or inside the air filter housing. It is mounted on the pre-filtered (before the air is filtered) side of the air filter. It is held in place by the self-adhesive pad.

- Find a suitable location.
- Clean the selected area.
- Attach the sensor.

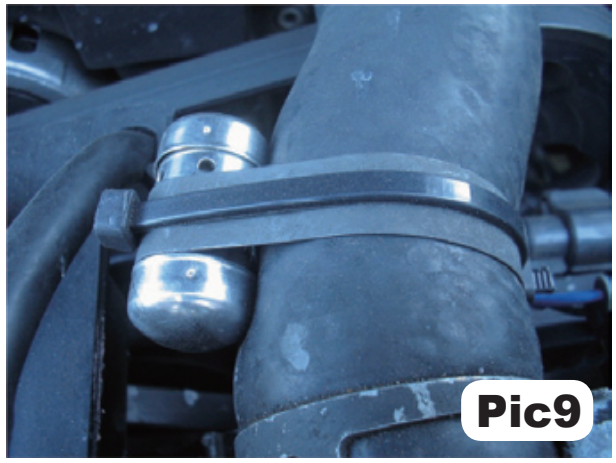
Consider securing the sensor with a plastic cable tie as outlined below.

Be sure the location allows access to thread a cable tie around the sensor.

- Drill two 2.5 mm holes on either side of the sensor.
- Ensure the opposite side of the drill site is clear (Pic7).
- Use an appropriate plastic cable tie to secure the air sensor (Pic8).

Install the Water Sensor

Use the metal clamp provided to attach the sensor onto the outside of the top radiator hose. Consider securing with a plastic cable tie (Pic9).


Pic9

Final Procedure - Complete the Process

Step 1

To allow the effects of the Fuel Saver to act on the fuel, the fuel sensor will need 30 minutes in contact with the fuel.

Step 2

The Fuel Saver needs to be calibrated. Once calibrated the 'Molecule Reaction Technology' (MRT) is activated. The engine must be revved in neutral, alternating between 50% and 60% of maximum RPM to activate the system. This will complete the process.

Example: If the maximum engine speed is 7,000 RPM, alternate RPM between 3,500 and 4,200 RPM.

- Less than 2 years old and 18,000 miles, rev the engine for 2 minutes.
- More than 2 years old or 18,000 miles, rev the engine for 5 minutes.

California Environmental Engineering (CEE)
ENVIRONMENTAL TESTING LABORATORY
2530 S. BIRCH STREET. SANTA ANA, CA 92707

July 3, 2007

EXECUTIVE SUMMARY

A “Proof-OF-Concept” test series was conducted using the Moletech Fuel Saver aftermarket device. The tests were accomplished using accepted Federal Test Procedures (FTP) at the California Environmental Engineering (CEE)-Center for Environmental Research in Santa Ana, California. The test protocol was based on Federal Test Procedures defined in CFR-40,Part 86, Appendix 1. The independent test facility is both EPA-recognized and CARB-certified. A representative light-duty gasoline vehicle (2004 Chevrolet Tahoe) was selected and used for the chassis-dynamometer tests.

The POC test series included three (3) FTP-Tests to establish an average “Baseline” without the Moletech Fuel Saver Device (MFSD).After installing the Moletech System, the test vehicle was run 50(+) miles to familiarize the fuel supply and computer with the aftermarket device. Three additional FTP-Tests were accomplished for an average with the MFSD. The average baseline was compared to the average established using the Moletech System to determine accurate reduction in key vehicle tailpipe emissions and fuel economy. Analysis of the database indicates a reduction in key vehicle tailpipe emissions and an increasing improvement in fuel economy using the Moletech Fuel Saver Device. This included a significant reduction in Total Hydrocarbons (THC) and Carbon Monoxide (CO). The results of the limited but decisive test series is considered noteworthy and verifies with a high level of confidence the viability of the technology while indicating the more dramatic improvement could be expected and achieved with time. The device as tested, provided results the are more dramatic than similar technologies previously evaluated.

Fuel Saving Tips

The way you drive and the condition of your car has a huge impact on the amount of fuel you use. There are literally hundreds of strategies that can be implemented to help conserve fuel. In conjunction with the Moletech Fuel Saver, here are the top ten tips for fuel efficient driving to help you conserve fuel and save money. You'll also be doing a better job looking after your car, which will increase your savings!

1. Minimize your vehicle use. Vehicles are least fuel efficient and most polluting at the start of trips and on short trips. One reason for this is that catalytic converters (which reduce air pollution emissions) do not operate properly until they have warmed up. Trips of less than five kilometres generally do not allow the engine to reach its peak operating temperature. Plan to do a number of errands in one trip rather than several trips and save both time and fuel. Try to avoid short vehicle trips by walking or cycling. This will save over a quarter of a kilogram of greenhouse gas emissions per kilometer of vehicle driving it replaces, as well as give you healthy exercise.

2. Drive in the right gear. Driving in a gear lower than you need wastes fuel, and letting the engine labour in top gear on hills and corners is also wasteful. In a manual vehicle, change up gears as soon as the car is comfortable with the higher gear but without accelerating harder than necessary. Automatic transmissions will shift up more quickly and smoothly if you ease back slightly on the accelerator once the car gathers momentum. Avoid the use of power options which drop the car into a lower gear and therefore use more fuel. Stop/start driving is much less efficient and more polluting than driving at a constant speed. Avoid travelling during peak-hours and on congested roads whenever possible.

3. Drive smoothly. Take it easy on the accelerator - more revs equals more petrol use. Drive at a good distance from the car in front so you can anticipate and travel with the flow of traffic. This avoids unnecessary acceleration and frequent repetitive braking that ends up wasting fuel. It's also far safer. If you see traffic stoppages ahead, first take your foot off the accelerator and let the engine's drop in power slow the vehicle, particularly by also changing to a lower gear. Don't continue to drive at the same speed and applying the brakes at the last minute. Getting back to cruising speed while the car is still moving uses far less fuel than stopping and then accelerating again.

4. Minimize fuel wasted. Most cars don't need to be "warmed up" by idling before setting off. This simply wastes fuel. Start your car when you are ready to go. Once on the road, minimize fuel wasted in idling by stopping the engine whenever your car is stopped or held up for an extended period of time. By having the engine switched off, even for a short period, you will save more fuel than is lost from the burst of fuel involved in restarting the engine. The net increased wear and tear from this practice is negligible.

5. Don't Speed. Fuel consumption increases significantly over about 90 km/h. At 110 km/h your car uses up to 25 per cent more fuel than it would cruising at 90 km/h. If your car is fitted with cruise control, using it during highway driving will help to maintain a steadier speed, which will save fuel.

6. Minimize aerodynamic drag. Additional parts on the exterior of a vehicle such as roof racks and spoilers, or having the window open, increases air resistance and fuel consumption, in some cases by over 20 per cent at higher speeds. Take off roof and bike racks when not in use. If you have to use roof racks, load them carefully to help minimize wind resistance or use a streamlined roof box.

7. Look after your vehicle's tires. Inflate your vehicle's tires to the highest pressure recommended by the manufacturer and make sure your wheels are properly aligned. Looking after your tires will not only reduce your fuel consumption it will also extend tire life and improve handling.

8. Use air-conditioning sparingly. Air conditioners can use about 10 per cent extra fuel when operating. However, at speeds of over 80 km/h, use of air-conditioning is better for fuel consumption than an open window as this creates aerodynamic drag. If it is hotter inside your car than outside when you start a trip, drive with the windows down for a few minutes to help cool the car before starting the air-conditioning.

9. Travel light. The more weight a vehicle carries the more fuel it uses. Don’t use your car as a mobile store room. Leave heavy items like tools and sports equipment at home when you don't need them on a trip.

10. Keep your vehicle in good condition. Keep your vehicle well tuned and regularly maintained. Get your car serviced at the intervals specified in the manufacturer's handbook. Use the fuel that is recommended for your vehicle by the manufacturer. If you use regular unleaded in a car designed to run on premium unleaded you can expect slightly less performance and fractionally higher consumption. Using premium unleaded petrol in a car designed for regular unleaded may give better fuel consumption in some newer vehicles but it is unlikely to offset the extra cost of the fuel.

This document explains how Moletech Works

Moletech Fuel Saver will continue to improve with time.

When the Moletech Fuel Saver is installed there is a “Molecule Reactive Environment” created in the vehicle. The air, water and fuel molecules are impacted by the sensors that are installed in the vehicle. Separately they all contribute to improve fuel combustion.

The Moletech Fuel Saver will have optimum result within 30 days on newer vehicles less than 2 years old.

For vehicles older than 2 years, the optimum result can be achieved within 90 days. In the case where the vehicle is older than 10 years, the Moletech Fuel Saver will continue to improve performance for up to 12 months. This is due to

1. Removal process of the carbon build within the engine, and is different on a case by case due to distance traveled, age and condition of vehicle.
2. Driving habits including distance and average speed after Moletech is installed.

If you are not experiencing fuel saving results check our handy hints at www.moletech.us where we update the latest ways to improve the performance with your Moletech Fuel Saver.

The Undisputed Leader

The Undisputed Leader
Moletech is the world leader in Molecule Reaction Technology.
Moletech has undergone the most stringent test procedures.
Research and development for all global markets is on-going.
Moletech is the fore-runner in the race to save fuel and reduce exhaust gas emissions.
Molecule Reaction Technology reduces the level of Hydrocarbon, Carbon Monoxide and NOx (Nitrogen Oxides) output, which are the harmful emission pollutants.

We deliver these savings to petrol / gasoline, diesel and LPG.

Lowering Greenhouse Gases

Moletech Fuel Saver has been tested by a recognized USA EPA facility CEE.
During these comprehensive procedures, the test vehicle showed that green house gases were lowered, authenticating our contribution as carbon friendly.

Deaths Caused by Pollutants

Air Pollution death toll is higher than fatalities from road accidents.
There are many illnesses and health issues linked to air quality.
Each year a growing number of deaths are linked to air quality.
The long term effects of air-borne toxins are causes of cancer.
Globally many health departments are challenged with increasing numbers of air related illnesses.

We are doing our part

If every vehicle had our system installed there would be a substantial decrease in greenhouse gases. For every vehicle per annum the average greenhouse gases that are dumped in the atmosphere are substantial.

Frequently Asked Questions

1. What is the difference between the Moletech Fuel Saver and other fuel savers which use Magnet or Infrared?

Moletech Fuel Saver uses a revolutionary world leading technique called Molecular Reaction Technology. It is totally different to all other fuel saving devices around the world and works at a Nano molecular level. A magnetic type fuel saver uses strong magnets and places a strong magnetic field on and around the treated fuel which may affect the sensitive electronics in today's modern vehicles. We use a magnet within the fuel sensors as a temperature stabilizer only. The magnet is not used to treat the fuel, it controls the speed of the reaction to prevent a rapid uncontrolled reaction and unwanted heat builds up in the fuel. This ensures the molecular reaction continues in freezing conditions.

2. Will the Moletech Fuel Saver perform if it is installed into a fuel tank that is badly contaminated with sludge or muddy water?

Many contaminants can reduce the performance of the Fuel Saver. We recommend that the tank be cleaned prior to installation to achieve best results.

3. Can the Moletech Fuel Saver dissolve or remove contamination from the fuel tank or clean the fuel filter?

Moletech cannot dissolve or remove contamination or clean a dirty fuel filter. In some cases, contamination can damage the Fuel Saver sensors. In other cases, it can cause the sludge to break down, move through the system and become trapped in the fuel filter. Best results are seen by cleaning contaminated tanks prior to installation.

Frequently Asked Questions

4. What are the other benefits of installing the Moletech Fuel Saver?

It will reduce carbon build up in the engine; increase the life of the engine oil, fuel injectors, and spark plugs. By reducing the amount of unburned emissions, the life of the catalyst (catalytic converter) will be extended and less contaminant are left to be washed down into the engine oil leaving it in a cleaner condition.

5. What will happen if we don't install the Moletech Air Sensor into the air intake?

You will not receive the full benefits of increasing the inhalant amount of oxygen.

6. Do I need to perform the engine rev as stated in the final procedure every time I purchase fuel?

No. You only need to perform this procedure one time after completing the installation.

7. Can I double my savings by installing another Moletech Fuel Saver Kit?

No. Although installing another kit will reduce the time taken for the molecular reaction to take affect, the amount gained is negligible and does not warrant the extra expense of a second kit.

8. Do I need to adjust my fuel system?

No. You should not have to make any adjustment to see the improvement as long as the engine was well tuned prior to installation. In vehicles that do not have computer control of the idle speed, the idle can increase by as much as 500RPM. If this occurs, please ask your mechanic to reduce the idle speed or you will not save fuel in traffic.

Frequently Asked Questions

9. What is the best way to measure fuel consumption?

There are many ways but the correct way is by establishing a baseline before you install the fuel saver. Please download the fuel consumption calculator from the Moletech website to record and calculate your fuel consumption results.

10. When can I expect results?

Most users have felt the extra performance within 30 minutes of installation. The Moletech Fuel Saver will have optimum result within 30 days on newer vehicles less than 2 years old. Please make sure you check your mileage before you install Moletech. In some cases on older vehicles it can take up to 5000 kilometers before the effects of the Fuel Saver are realized. Mileage is the sum of the total distance driven divided by the amount of fuel used and must be carried out over several full tanks of fuel. Many people believe they are receiving better mileage than they actually are. We recommend you take proper readings before installing Moletech. Our website contains a FUEL TRIP LOG to download and fill out where the calculations are done for you.

11. Why 5000 Km?

Poorly maintained engines or large amounts of carbon build-up can slow down the reaction of the Fuel Saver. In some vehicles the long term fuel trim stored in the vehicles computer needs to be relearned. It will however eventually become effective.

Frequently Asked Questions

12. Do the climatic conditions make a difference?

Yes. In winter seasons engines take longer to warm up to normal operating temperature or are run more often without the vehicle moving; icy road conditions, etc. This can affect results. However they will still proportionally improve. Proper mileage tests will confirm positive results.

13. Could my mileage stay the same or even decrease? Why?

It is possible after installation to experience a decrease in mileage and increase in emissions. There are several reasons including

1. Poor maintenance, excessive carbon build-up – temporary, improve with time.
2. Installation by dropping the fuel sensor in the filler neck where the anti-siphon device is fitted - fuel sensor will not enter the fuel tank and fuel cannot be treated.
3. Vehicle is too serviced prior to installation. This will include changing the engine oil, oil filter, air filter and fuel filter.
4. Any mechanical problem with the engine, in particular the fuel or lubrication system will cause the Fuel Saver to be less effective.

14. Can I use Moletech Petrol on diesel vehicles or Moletech Diesel on gasoline vehicles?

No. The diesel Fuel Saver is designed for diesel fuel and the petrol Fuel Saver is designed for petrol. The molecule reaction is different for each type of fuel. Installing an incorrect Fuel Saver sensor will give poor or negative results (increase fuel consumption and emissions).

Frequently Asked Questions

15. Regarding the 90 days money back guarantee, how do I prove to you that the product is not working?

In this case you would need to provide the dealer with your fuel mileage logs before and after the Moletech Fuel Saver Kit was installed and they will take the necessary steps to assess your claim. Part of the process is to fill out the Return to Manufacturer (RMA) form.

16. How do I take the fuel sensor out? Removing the fuel sensor(s) will void warranty if proper procedures are not followed.

Please consult directly with the installer that provided the installation for professional advice. In most cases it is a matter of using magnetized pincers to displace the fuel sensor from the fuel tank or by removing the fuel sender.

17. My vehicle does not have computer controlled engine management?

In vehicles that do not have computer control of the idle speed, the idle can increase by as much as 500RPM. If this occurs, please ask your mechanic to reduce the idle speed or you will not save fuel in traffic.

Satisfaction Guarantee

100% Money Back Guarantee

If you do not experience fuel savings, increased horsepower or improved performance within 90 days of having your Moletech Fuel Saver installed, please visit www.moletech.us/satisfaction