As Fuel Bills Get Larger, Vehicles Get Smaller, And Traffic Signals Fail More Often

By Eric Scribener

You've likely heard one of those chaos theory statements such as "If a pigeon lands on a statue in

Trafalgar Square, and at the same time a tree falls in Yellowstone Park, then it will rain on Mount Kilimanjaro." Baffling, isn't it? Well, such is the nature of chaos theory. But higher prices for fuel at the pump are absolutely causing more and more people to sit at traffic lights that won't change for them. It's a very direct cause and effect issue - not at all chaos theory.

Unfortunately, people not being able to trigger traffic lights to cycle to green has the effect of causing more gasoline to be consumed/wasted. This raises the demand for fuel, which as we have seen, causes the prices to go up even further. It's an unattractive loop, to be sure. And let's not forget about the many other negative aspects of getting stuck at traffic signals that won't change such as irritation; excessive engine temperatures and overheating; frustration; additional green house gas emissions; excessive engine wear; carbon build−up, and so on.

Let's take a look at how high gas prices are affecting traffic signals. When regular unleaded gas hit $3 per gallon, with spikes as high as $4 in places around the USA, people started buying smaller means of transportation. Motorcycles, mopeds, small cars, and small trucks, with their miserly fuel behaviors, became much more desirable, and much more common on the streets and highways. It's a logical occurrence. If you own a vehicle that gets 15 miles per gallon, and you trade for one that gets just 18 miles per gallon, you stand to save hundreds of dollars a year on gas spending.

One of the reasons that smaller cars and trucks are so much more fuel efficient is that they use lightweight, high−tech alloys, plastics, and rubbers to construct them. There is no argument that new materials and construction techniques make today's vehicles eminently better than those of the past - and certainly more fuel efficient. However, the lack of (1)iron in these modern marvels of transportation makes it a real problem to trigger traffic lights. It's not the lower weight of these vehicles, it's actually the lack of iron. This makes it easy to see why motorcyclists, bicyclists, and moped riders have always had difficulty when it comes to triggering green lights. But let me explain further...

Since early in the 1960's, the overwhelming majority of the controlled traffic signals in the United States are regulated by very large, very weak electromagnets. Electromagnets that are used to sense iron,

instead of lift it, are called "inductive loops." These loops most often appear at controlled intersections as large rectangles (outlined in black) in the road.

Inductive loops, like all magnets, detect iron − not aluminum, rubber, plastic, weight, mass, titanium, etc. Small cars and trucks, as well as motorcycles and mopeds, rarely have enough iron close enough to the ground to cause the inductive loop to detect their presence at the intersection - ergo, the light does not trip. Now for the solution to the problem.

Each Signal Sorcerer® traffic light changer (available at

www.signalsorcerer.com

) generates and

directs a very powerful field that causes the traffic signal controlling inductive loops to detect the vehicle it's attached to, and initiate a signal cycle change. Signal Sorcerer® traffic light changers have been a must−have motorcycle and moped accessory around the world for years, but now that so many small cars and trucks are on the road, they are becoming the new 'must−have' accessory for four−wheeled vehicles.

Signal Sorcerer® traffic light changers install in about two minutes, and require no special tools. Everything needed comes with the each traffic light changer. No electricity, no wiring, no maintenance, a lifetime of service, legal everywhere, EPA compliant, DOT compliant, and the internationally famous Iron Horseman Technologies guarantee of your complete satisfaction.

(1) Iron: ferrite, chemical symbol Fe - used in the making of steels. Ferrite used to be a primary component of steels, but now, with newer, more efficient and stronger materials available, ferrite is rather rare.

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How Do Hybrid Vehicles Work?

By Gray Rollins

How many times have you pulled up to the pumps lately only to be shocked at the price of gasoline? Suddenly your $25 tank of gas is costing $40. Have you considered trading your vehicle in for

something that gets better fuel economy? How about a Hybrid vehicle? If you've ever wondered "how do hybrid vehicles work?" read on.

Hybrid vehicles address two issues - global warming by reducing emissions and reduced fuel costs. There are lots of different hybrid designs showing up on the market, so understanding how they work is very important to getting the best value for your money.

If you have ever owned a moped, you can proudly consider yourself a first generation hybrid owner because they combine pedal power and gasoline. Hybrid vehicles really aren't that new a concept. You'll find them all around you in commercial use. Giant mining trucks, submarines, buses, and even train engines all have a fuel source and an electrical source of power.

Most of the hybrid vehicles we are seeing on the market are gasoline and electric hybrids. This means they use both gas and electricity to power them.

The two power sources can be combined in different ways. The parallel hybrid has a fuel tank which supplies fuel to the engine and a set of batteries which supplies power to the electric motor. Both sources are able to turn the transmission.

The series hybrid is a little different. The gasoline engine turns a generator which can either power the electric motor that drives the transmission or charge the batteries. In this type of hybrid the gas engine never directly powers the vehicle.

With a hybrid car the gas engine can be a lot smaller than in a conventional car so it can be a lot more efficient. Acceleration requires a larger engine to produce the power needed, but by using a smaller engine and combining it with the assistance of an electrical motor that is operating at peak load the acceleration needs of a vehicle can be met.

Hybrid vehicles also capture the energy from the braking system. When the brake is applied, energy is removed from the car and dissipated as heat which is then captured and stored in the batteries for later use.

Hybrid cars also have an automatic shutoff, so when the vehicle comes to a stop the engine is shut off and then restarts automatically when the accelerator is touched. This conserves energy that would be wasted when idling.

Depending on the manufacture, the technology is used in various forms but the basics remain simple. Hybrid technology in the consumer auto market is still relatively new but will continue to develop and improve.

Hybrid vehicles work efficiently to reduce tailpipe emissions and improve mileage. So if you are in the market for a new vehicle you might want to have a look at the hybrids.

Gray Rollins is a featured writer for NewHybridAutos. To learn more about hybrid cars, visit us at

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