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## THE MOST BANG FOR THE BUCK!

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*“Pulse plugs change the paradigm from more horsepower at any cost to responsible horsepower at the lowest cost.”*

The automotive aftermarket is loaded with “bolt-on” or “plug-in” products claiming to improve fuel economy and engine performance. Indeed many of these products actually do what they claim. Products like cold air intakes, exhaust headers, ignition chips offer modest gains in horsepower while turbochargers and nitrous offer the greatest gains. And then there are the products of questionable technical merit like gas tank pills, magnets and a host of spark plug modifications that claim to invigorate your engine and defy the laws of physics. These and a host of other products constitute a performance market in North American worth approximately \$5 billion.

Along with their power boosting claims all of these products have some drawbacks: high initial cost, debit in fuel economy, installation cost or potential engine damage. Whereas exhaust headers and cold air intakes offer only modest gains in horsepower and little advantage in fuel economy, they are relatively safe and easy to install. Turbochargers and nitrous on the other hand can create a very significant increases in engine performance, but also have the potential to blow up your engine.

## THE COST OF HORSEPOWER

It is generally thought that a one horsepower gain can cost as much as \$500 in the aftermarket. When ranked by total cost of ownership on a cost per horsepower gained, the results might be quite surprising. For instance turbochargers can yield a very significant gain of 50 horsepower, but costs about \$5,000 to retrofit the average car. Aftermarket turbochargers will likely reduce fuel economy as compared to the stock vehicle and end up costing an additional thousand dollars in gasoline over the life of the turbo.



*Turbochargers can yield a very significant gain of 50 horsepower.*

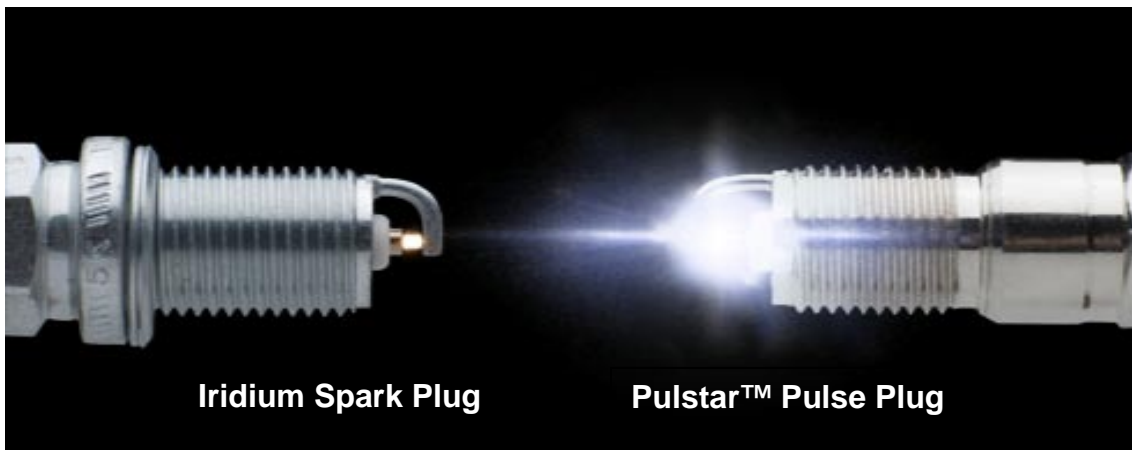
A simpler device like a cold air intake might cost only \$400, but gain only 4 or 5 horsepower. Installation is relatively simple and costs about \$100. Cold air intakes because they help the engine breathe better may actually improve fuel economy.



When comparing turbochargers against cold air intakes on a cost per horsepower basis, the nod will most likely go to the cold air intake due to its simplicity and cost efficiency.

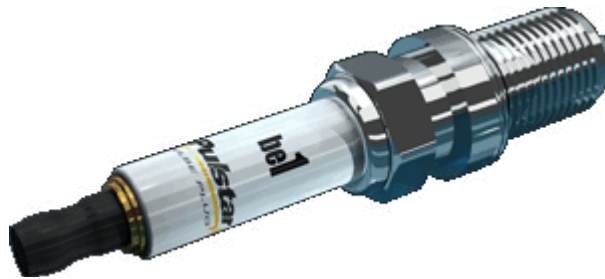
## PULSE PLUGS ARE BETTER THAN SPARK PLUGS

Recently a new product entered the horsepower race with quite impressive results. It is called Pulstar™. Pulstar™ is a pulse plug and unlike spark plugs, contains an integral capacitor, which increases spark energy much like a camera flash increases light energy. It yields 10 times more spark power than any spark plug on the market including iridium spark plugs.

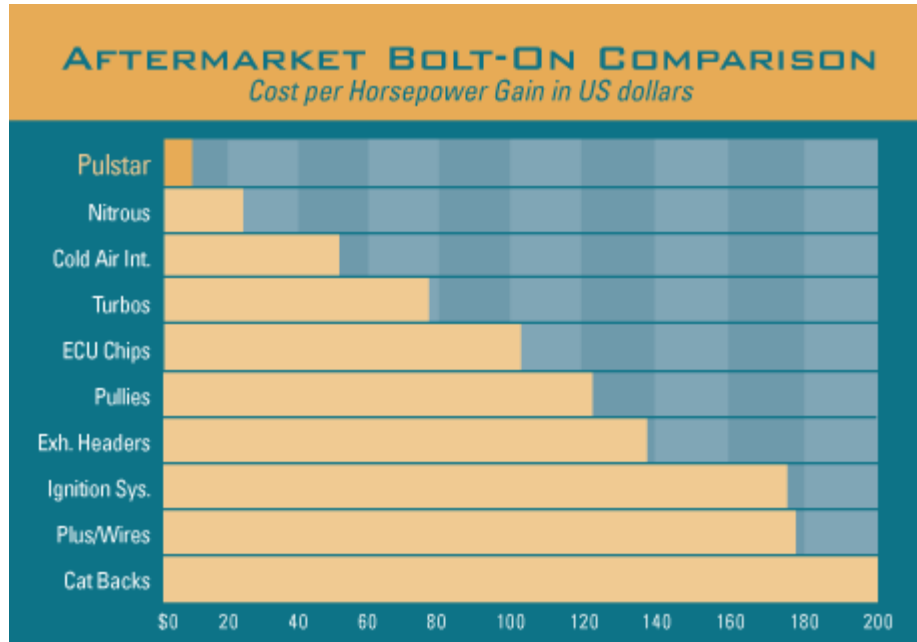


*Pulse plugs have 10 times more spark energy than spark plugs.*

This boost in spark power has a significant impact on horsepower for most cars jumping them by as much as 8%. On a Z06 Corvette Pulstar™ adds 20-30 horsepower just by replacing spark plugs with pulse plugs. On more conventional vehicles like a Toyota Corolla, Pulstar™ can provide another 5-10 horses – remarkable for a simple plug-in device.



Pulstar™ changes the horsepower game because when comparing the most popular aftermarket bolt-ons, none come close to its low cost per horsepower and its ability to improve fuel economy when not called on to develop horsepower. After all, the vast majority of drivers use their new found horsepower for less than 2% of their driving. The other 98% is an opportunity to improve fuel economy if the aftermarket device is capable of doing so.



*On a cost per horsepower basis, Pulstar™ is the most cost-effective horsepower available.*

## PERFORMANCE CAN BE “GREEN” TOO.

And this is where Pulstar™ shines. On average Pulstar™ will improve fuel economy by 6% on a 6 cylinder engine. The larger the engine displacement the greater the fuel economy gain. Five liter V8s for instance generally enjoy an 8 to 11% gain.

Pulstar’s combination of horsepower and fuel economy is not only attractive to sports car enthusiasts, but owners of sports utility vehicles (SUVs) or light duty trucks can also enjoy better performance or towing capacity while gaining a “greener” vehicle. Pulstar™ changes the paradigm from more horsepower at any cost to responsible horsepower at the lowest cost.