Improving mileage and power with a few simple steps

One would think it was easy to find a General Motors pickup to do a project on. That's what I thought, but it was harder to find than you think.

So, I enticed one of my employees to loan us his truck for the project, promising to only do minor upgrades. Reluctantly, Chris handed over the keys to his daily driver.

The truck in question is a 2004 Chevrolet 1500, crew cab, short box. It is equipped with an automatic transmission and a 5.3l engine. The truck is also 4-wheel drive. The purpose of this project will be again to somehow improve on the already great power and possibly improve fuel mileage while doing so.

As usual we begin with breathing upgrades. Making anything breath better will always help its performance. And this truck is no different from any other.

Factory air intakes and exhaust systems are designed to keep interior noise levels to an acceptable limit while trying to inhale and exhale at the same time. While these systems seem to do their jobs well, the after-market provides us with many ways to easily improve on them.

For Chris's truck we opted for the more simple of air intake upgrades. We chose to use a K&N replacement style air filter. The K&N air filter is a direct replacement for the factory filter, making this install very easy and economical. The K&N filter is washable and re-usable and carries a lifetime warranty, so it should be the last filter you ever buy.

Now that we have completed the air in, we need to deal with the air out. For this we will have to do some type exhaust upgrade.

We were given specific instructions before Chris handed us the keys. If we were to do any exhaust upgrades, the truck must remain quiet inside and out, and nothing too flashy. Little did he know we already had a plan for the exhaust, so we just listened and nodded like his words meant something.

Like I said we already had a plan, and that plan once again involved MBRP exhaust. We love to use MBRP exhaust for three main reasons: The fit is always perfect, the 304 stainless steel construction and polished finish is unbeatable and lastly it's Canadian-made.

We chose MBRP's cool duals for this truck; this is a cat back exhaust system, meaning that the factory catalytic converter stays on the truck, keeping all emissions warranties intact.

Installing this system is as easy as removing the old and installing the new. The only hard part is positioning the beautiful dual walled polished, three-inch tips. This is only hard because the owner of this truck was overly picky and wanted them just so. This would not prove true for most people.

We also needed to upgrade the power. For this we chose to try something new— choosing a Superchips Flashpac tuner. This tuner installs in about 15 minutes and allows us to change shift points, rev limits and speed limiter as well as allowing for larger tires or changed gear ratios.

To install the Flashpac tuner you simply plug into the vehicles diagnostic port and follow the on screen instructions. Once finished, you remove the tuner and you're done. Basically the tuner downloads your factory programming and uploads the performance and mileage programs. So don't throw the tuner away as you may need your factory program one day and it's stored on the tuner.

Lastly, we decided to change the plugs in the truck as it has approximately 100,000kms on the factory plugs. Although this may seem like a simple upgrade, it is probably one of the easiest and simplest to do wrong.

The type of plug you choose and the gap you install them with dictates how well the vehicle will perform. We chose to use NGK iridium spark plugs.

NGK have been around for many years and manufacture many of the spark plugs found in new vehicles today. Not only did we choose an NGK plug but we also chose plugs that were one heat range cooler. In choosing a colder plug we allow the fuel in the cylinder to burn just that little bit longer resulting in improved power and mileage. This is not a trick, as most of the fuels today contain 6-12per cent methanol and methanol burns faster and hotter, so this results in poor fuel mileage and your check engine light coming on for no reason.

By installing a colder spark plug, and slowing down the burn you correct for this condition and should see a 3-5 per cent gain in fuel economy. This will only hold true if all other sensors and maintenance items are in good working order.

So there, we did it— one mild power and performance upgrade for a GM truck. And we are happy to report that Chris is very happy with his truck.

He says that the exhaust is quiet in the cab but has a nice throaty sound when putting the pedal to the metal. He also has noticed that the truck stays in overdrive longer, especially on hills and while towing.

As far as fuel mileage is concerned, Chris report's a 3-MPG increase, but admits he has been enjoying the power a little more than he should. So once the novelty of the extra power wears off we will give you a report on exactly how good his mileage has gotten.

—Article supplied by Jason Turner
owner, Turner Automotive in Georgetown

MSRP for 2008 Sedona LX SD7528/2008 Spectra LX Conv. ST5428/2008 Sportage LX Conv. SP5528 is $29,745/$18,195/$23,895. **Monthly lease payments for 2008 Sedona LX/Sportage LX Conv. are $269/$229 for 48 months at 0%/0% lease APR with a $2,445/$1,440 down payment. Total lease obligation is $15,377/$12,453 with the option to purchase at end of term for $11,068/$9,592. Payments and/or down payments are reduced by a credit of $3,300/$1,850 for 2008 Sedona LX/Sportage LX Conv. Delivery and destination of $1,650/$1,650 excluded. Lease has 20,000 km/year allowance (other packages available) and 0.10/km for excess. License, registration, insurance, dealer administration fees, lease acquisition fee, and taxes are excluded for finance, lease and cash purchase offers, where applicable. $0% purchase financing available on all 2008 Rio/Spectra/Spectra5/Rondo/Magentis/Amanti/Sportage/Sorento/Sedona LX Conv. models with cash purchase. If cash rebate is not taken, the effective interest rates are 0%/5.62% relative to their payments up to a maximum amount of $1,950 (amount differs by model) available on all lease offers for new 2008 models. Kia Canada pays for the first three lease payments or the customer can elect to apply the amount towards the down payment to reduce monthly payments. Advertised down payment for 2008 Sedona LX/Sportage LX Conv. includes free lease payment offer of $1,800/$1,350. This down payment option can be exercised in lieu of 3 free lease payments. ❖Cash purchase price of $13,995/$18,995. ◆Purchase price reduction of $2,750 on new 2008 Sedona models with respective advertised finance/lease APRs. The effective rates are for information purposes only. See dealer for details. Purchase financing example: $10,000 at 2.9% purchase financing equals $179 per month for 60 months; cost of borrowing (C.O.B.) is $755 for a total obligation of $10,755. Monthly payment and C.O.B. will vary depending on amount borrowed, the term and down payment/trade. Other lease and finance options available. Dealers are free to set individual prices. Prices subject to change without notice. Certain restrictions may apply. >Highway/city fuel consumption for 2008 Sedona LX is 8.8 L/13.2 L per 100km/2008 Spectra LX is 6.5 L/8.9 L per 100km/2008 Sportage LX is 7.8 L/10.4 L per 100km. The actual fuel consumption of these vehicles may vary. ‡Green Score for Kia Spectra based on automatic/manual transmission specification within the segment. Refer to GreenerCars.org for full details. ††NHTSA (National Highway Traffic Safety Administration) test results. Visit www.safercar.gov for full details. ✧2008 Sedona awarded the Top Safety Pick by the Insurance Institute for Highway Safety. Visit www.iihs.org for full details. ^Conditions apply to the $500 Grad Rebate program. +Some conditions may apply to the $750 Kia Mobility program. Some vehicles may include optional equipment and may not be exactly as shown. Information in this advertisement is believed to be accurate at the time of print. KIA is a trademark of Kia Motors Corporation. ▼Kia's "Worry-Free Comprehensive" warranty covers most vehicle components against defects under normal use and maintenance conditions. Price, availability and specifications are subject to changes without notice. Some vehicles may include optional equipment and may not be exactly as shown.

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