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Jason Scott at Mopar Enthusiast recently attended the Pedders USA New Jersey Track day and wrote this full report on the Arrington Engines: www.shophemi.com Pedderized 300C. Have a read of the article and be sure to check out: www.moparenthusiast.com



SWEET TRIDE

We track-bash a Pedderised Arrington Engines Chrysler 300C and find that the whole really can be greater than the sum of its parts.

STORY AND PHOTOGRAPHY BY JASON SCOTT

Want a 300C (or other LX-based Hemi car) that can break the tires loose at 140 mph and set record lap times on your local road course? The folks at Pedders USA and Arrington Engines can help with that.

THE NEEDLE SWEEP PAST THE 150 MPH MARK AS WE ROARED DOWN THE FRONT STRAIGHT OF NEW JERSEY MOTORSPORTS PARK'S 1.9-MILE LIGHTNING RACE COURSE IN THE MODIFIED SRT8 300C. YES, A 300C.

With the scenery whizzing by in a blur and turn one – an exciting uphill right hander that'll get you airborne if you crest it too fast – coming up in a hurry, my mind kept wandering. All I kept thinking about were Reese's Peanut Butter Cups.

Fortunately, for this lap, I wasn't the one behind the wheel. My fate – and that of the 300C – was in the capable hands of Stan Wilson, a many-times-over SCCA Championship-winning road racer who can usually be found behind the wheel of his American Le Mans Series GT2 Viper Competition Coupe on the weekends.

Stan's a quiet guy, unassuming, and out on the track, he's got a gentlemanly, Jackie Stewart-like smoothness that

made it easy to forget that we were moving at nearly three times the legal speed limit of most U.S. highways. So, as I sat there in the SRT8's leather-covered cockpit, I was free to have a little Zen-like moment of being one with the universe (or at least the racetrack) and ponder how I was going to describe what it felt like inside the 300C on the track.

But all that kept coming to mind were Reese's Cups.

THE CREAMY PEANUT BUTTER FILLING

As any connoisseur of the little candy cups will tell you, what makes Reese's Cups special is that they're comprised of "two great tastes that taste great

together," to steal a line from their old advertisements.

The creamy filling in our 300C test car was its engine: a Gen-III Hemi that had been bored and stroked by Arrington Engines to displace a wholly-appropriate 426 cubic inches. Rather than "cheat" by installing a supercharger or turbo, the folks at Arrington choose to make their horsepower the old-fashioned, naturally-aspirated way – something they learned a thing or two about while building some of the hottest Mopar racing engines for NASCAR legend Richard Petty. Despite all those cubes, a custom cam, plus heads and an intake that have been massaged for better flow, you might still be surprised to know the engine puts

out an honest 600 horsepower on the dyno. "Technically, it made 608 on the dyno," Arrington's PR man, Eric Hruza (pronounced Herza), confessed to us. Torque is equally impressive at 560 lbs-ft. But perhaps more impressive is the fact that the Arrington 426 Hemi idles as well as a stock motor and was docile enough that Hruza drove it eight hours to meet up with us at the track.

When asked what he thought of the 300C's engine, Stan blurted out: "Fantastic power! When you put your right foot down, it's like hangin' onto a missile being launched." In fact, he commented that the engine had so much power that "I was getting a lot of wheelspin exiting the corners." Mind you, he was exiting some of those corners at well over 75 mph... and in some cases over 100 mph!



PEDDERS SUSPENSION may look like any other company's combo of springs, bars and bushings... but it's not. Their philosophy to suspension design retains the stock-like ride comfort, but firms up turning. The top-option XA coilover shocks take that philosophy to an extreme: crank the XA shocks' adjuster knobs down for a soft ride on the street, then simply twist the knobs at the track to dial in the car for race day.

Stan's partner-in-crime for our track day was Chris Brannon, another accomplished road racer with numerous wins in the SCCA's fender-bangin' American Sedan series and is also a

National Championship winner. Chris – who's a self-proclaimed GM man – heaped high praise on the Mopar: "My first reaction to the car was that the power is absolutely startling! Startling is

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FOR COMPARISON we rounded up a stock Charger R/T and ran it around the NJMS skidpad to a best of 0.87G. SRTBs are rated at 0.88G. Respectable, but there's definitely room for improvement.

actually an understatement... but I don't have a better word for it." So, what kind of power "startles" a race driver? "When the car shifted at 140 mph and broke the rear tires loose - with a 3.08 gear and an automatic transmission - I knew that I was dealing with a properly-built naturally-aspirated motor!"

THE RICH MILK CHOCOLATE CUP

Of course, man can't live on peanut butter alone. Meals would become

monotonous, boring even.

In a Reese's Cup, the rich, milk chocolate coating melts in your mouth and mixes with the peanut butter to provide a delicious taste sensation.

The chocolatey coating of our 300C test mule was its Pedders USA suspension system, which helped harness the engine's power so it could be put to good use pushing the more than 4,000-pound C around the track in astonishing times - a 1:20 lap with Chris at the wheel, which compared

THE FLAMED BEAUTY covers don't begin to hint at the 600 horsepower and 580 lbs-ft of torque that the Arrington 426-cubic inch Gen-III Hemi produces. We've never heard the words awesome, unreal, unbelievable and incredible uttered so much to describe an engine before. But this one deserved every mention.



THE ARRINGTON Gen-III 426 Hemi starts life as a 6.1-liter factory motor. The block is tested to ensure suitable wall thickness before being bored and stroked to 426 cubes. A custom cam, head work, intake work, massive Arrington throttle body and a proprietary computer "tune" all work in harmony to develop the 600 horsepower, yet maintain a stock-like idle.

favorably to some Porsche GT3 and Corvette Z06 racers that were sharing the track that day... topping out around 1:21 a lap.

Pedders - which is huge in Australia and even sponsors the V-8 Supercar Series there - takes a practical, "no bull," as they like to say, approach to suspension engineering.

With the LX platform, they first focus on removing flex and deflection caused by overly-soft bushings - a condition the company's engineers refer to as "bush mush." The "tuned"

IT'S HARD TO IMAGINE, but the 4,000-pound 300C actually felt as agile and nimble around New Jersey Motorsports Park's 1.9-mile Lightning road course as cars almost half its size, like the SRT4 Neon that its seen leading here through turn five.



SKID MARKS

There are a number of ways to measure a car's handling prowess, but the most well known is certainly the skidpad, since it minimizes variables and focuses purely on cornering forces and lateral traction. Before we went nuts on the road course with our 300C and a few other stock and Pedderised Mopars, we took a little time to run them 'round New Jersey Motorsports Park's 300-foot skidpad surface.

For a baseline comparison, we ran a stock LX Charger R/T first. It registered 0.67G runs in each direction during our testing, matching published reports by other magazines and exhibited significant body roll and camber change. Truthfully, it didn't look like it would take much to beat the stock car. But just how well would the Pedderised 300C do?

Not surprisingly, the Arrington 426 Hemi's torque kept breaking the tires loose, which made it tricky for Stan Wilson - and then Chris Brannon - to drive that fine line. When the testing was done, each had driven the car to 0.99G on original equipment SRTB wheels and tires - 0.11G better than published reports for a stock SRTB model, and 0.12G better than the stock Charger R/T that we had available for testing at the track.

It would be one thing if those gains came from rock-hard bushings, stiff springs and unforgiving shocks. But Pedders did it without creating a punishing ride. What's more, the car doesn't just post good numbers on the skidpad - it posted fast lap times on the road course, too!

polyurethane bushings replace stock hollow-void bushings at the control arms, engine cradle and rear subframe mounts. Special offset bushings relocate the steering rack to minimize bump-steer - a condition that changes the toe in or out when the suspension cycles up or down.

With a stable platform from which to build, Pedders then replaces the coil springs and shocks at all four corners with matched units that keep the car from floating and porpoising over bumps.

Finally, Pedders' adjustable sway bars prevent body roll, thereby allowing the tires to remain in contact with the ground for maximum grip through the corners.

Despite the upgrades, the Pedders pieces don't go overboard and kill the 300C's ride quality. Instead, the ride feels "firm but comfortable," as Pedders' Peter Basica described it, and we'd have to agree.

Out on the track, Stan - our precise, technical driver - said the Pedderised 300C was "very predictable, very flat" and that it turned in lap times that were "very repeatable and consistent."

Chris may have said it best, when he commented: "To take an over-4,000-pound car like [the 300C]... and to be able to throw it in a corner and have it do what you wanted it to do is awesome."

TWO GREAT TASTES THAT TASTE GREAT TOGETHER

We're pretty easy to please, so we would have been happy with either set of upgrades on the 300C.

The Arrington engine would have made us smile every time we sunk our foot into it - be it on the street, a road course or a dragstrip. Frankly,



LEFT Pedders USA takes a sensible approach to its suspension upgrades: start by firming up the chassis with carefully engineered replacement bushings, because, as Pedders puts it, "you can't stick a fence post in Jell-O and expect it to work properly." From there, performance-tuned springs, shocks and adjustable sway bars turned our 4,000-pound-plus 300C into a 0.99G corner-carving machine. **ABOVE** A number of Pedders customers joined us at NJMS to experience what their cars are truly capable of when unencumbered by things like speed limits... or police.

the Arrington 426 Hemi gave the 300C far more power than we would have imagined could ever have been useful in a car like that.

On the other hand, the Pedders suspension did more than just bring out the best of the LX platform; it redefined our expectations of acceptable handling and ride quality. In fact, now that we've driven the Pedders-equipped 300C, we wouldn't want to own an LX model that hasn't been "Pedderised."

But the most astonishing part of our day at NJMS with the Pedders and Arrington crews (and a handful of each company's speed-crazed customers) was the realization of just how well each company's product lines complement each other.

The Reese's folks described it as "two great tastes that taste great together". But we really liked how our GM-loving racer, Chris, put it: "this car hopped the rumble strips, enjoyed threshold braking, and tore down the straights like a road racing car should. But this thing's an interstate cruiser with radio, air, leather, a warranty and stock, treaded tires!"

Sweet!

SOURCES

PEDDERS USA SUSPENSION
www.peddersusa.com
(248) 522-8021

ARRINGTON ENGINES
www.shophemi.com
(866) 844-1245

NEW JERSEY MOTORSPORTS PARK
www.njmotorsportspark.com
(856) 327-8000