

TRACK CHALLENGE: VIPER ACR VS. KATECH Z06 CLUBSPORT

MODIFIED



LUXURY & EXOTICS

POWER BEAUTY & SOUL



PLUS

- 545HP SUPERCHARGED VANTAGE
- STREET TEST: ASTON'S NEW DBS FLAGSHIP
- VANTAGE N400 FROM LONDON TO LE MANS

TRACK TEST
WE HAMMER ON THE
650HP GUMPERT APOLLO



PHOTOGRAPHY: MICHAEL BEFFERSON

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DOMESTIC

VIOLENCE

DODGE VIPER ACR VERSUS
KATECH PERFORMANCE CLUBSPORT Z06
AT THE AUTOBAHN COUNTRY CLUB.

STORY DAVID PRATTE PHOTOS JEFFREY CREECH





With a name like the Autobahn Country Club, you might be imagining a lot of polo being played and a little Grey Poupon being consumed, along with some witty banter about the stock market from a guy named Thurston. You wouldn't be all wrong, because the Autobahn is a private country club with a well-funded group of members, but instead of polo horses and wooden

stables, these guys (and gals) are into horsepower of the motorized variety and have built a suitably impressive racetrack and garages to match. But thanks to LAPS (www.lapsincorporated.com) and Aaron Vanassche at the Illinois Viper Club, we've gained access to this exclusive 21-turn, 3.56-mile circuit to see what two of the fastest street-legal machines to ever come out of Detroit are capable of. It's a classic battle of Dodge versus Chevy and OEM performance division versus aftermarket supertuner. It's the new Dodge Viper

ACR versus the Katech Performance ClubSport Z06 Corvette, so get ready for an all-American pushrod-pumping, tire-torturing, brake-pad-melting battle that would make Rocky Balboa and Apollo Creed proud.

'09 DODGE VIPER ACR

With SRT Vehicle Dynamics engineer Erich Heuschle helping strap me into the Teamtech six-point harness seatbelt he added to the new Dodge Viper ACR—a machine he knows inside and out because he has been an integral part of



SPECIFICATIONS

'09 DODGE VIPER ACR

600 hp, 560 ft-lbs, 3,400 lbs, 5.67 lbs/hp

'07 KATECH Z06 CORVETTE

535 hp, 490 ft-lbs, 2,915 lbs, 5.45 lbs/hp

its development—there was something familiar and a little intimidating about the situation. As a Touring Car racing driver, I've been strapped into my fair share of fast machines, but having a factory engineer (and accomplished racing driver himself) briefing me on handling characteristics and the layout of an unfamiliar track, I'd be lying if I didn't admit to some trepidation. Add to that the mighty rumble of the big snake's 8.4-liter, V-10 powerplant coming to life as I hit the start button and my heart rate was definitely starting to climb.

Having spent the first session in the Viper learning the technically challenging Autobahn Full Circuit and acquainting myself with the ACR's capabilities, during the second session I began to find a rhythm, where man, machine and track work together to induce motoring bliss. The ACR feels like a true GT race car and as such commands the full attention and respect of its driver. You cannot bend a machine this hard-core to your will. Instead, you must work with its strengths and its weaknesses quickly disappear. What I thought was

severe understeer in the tighter turns was actually me overdriving the Viper into these corners, but once I brought my corner entry speeds down a bit and got the big snake pointed in the right direction a little sooner, suddenly I was able to get on the gas earlier and allow all 560 ft-lbs of torque to team up with the massive rear 345/30/19 Pilot Sport Cups for launches so violent they'd put a smile on Mike Tyson's face.

Lap times quickly dropped as I adapted to the Viper's handling dynamics and unlocked a few of the Autobahn circuit's



SPECIFICATIONS & DETAILS

'09 DODGE VIPER ACR

ENGINE

8.4-liter V-10

WHEELS, TIRES AND BRAKES

Lightweight forged aluminum Sidewinder 18x10" wheels w/ 295/30/18 Michelin Pilot Sport Cup tires (f); Brembo 4-piston rotors w/ StopTech 14" calipers; lightweight forged aluminum Sidewinder 19x13" wheels w/ 345/30/19 Michelin Pilot Sport Cup tires (r); Brembo 4-piston rotors w/ StopTech 14" calipers

SUSPENSION

KW Suspensions double-adjustable coilover shock absorbers, KW 514 lb-in [front] and 1048 lb-in (rear) springs, Competition Coupe antisway bars

BODY AND CHASSIS

Carbon-fiber front splitter, diveplanes, and aerofoil rear wing; Competition Coupe lowered hood

NUMBERS

Horsepower: 600 at 6100 rpm

Torque: 500 ft-lbs at 5100 rpm

Curb weight: 3,400 lbs

Weight-to-power ratio: 5.67 lbs/hp

MSRP: \$98,110

Best lap time: 1:37.666



secrets. Now the fastest machine on a track full of high-end machinery, I pulled out next to a 996 Porsche GT2 to make a pass on the straight between Patience and Viper Alley. Making the long shift into fourth gear (the Viper's gearbox is not terribly quick due to its long, heavy throws) right next to the GT2, the ACR's exhaust released a T-Rex-sized snarl that caused the shocked Porsche driver to swerve to the right. Apparently, I had unknowingly engaged one of the ACR's many weapons systems—its "shock and awe" side-exit exhaust. SRT hasn't built a gussied-up Viper, they've built a racetrack battleship.

Or maybe it's a fighter jet, given the advanced aerodynamics SRT has equipped this bad-ass American Club Racer with. Through the fast sweeping esses of N3, N4 and N5, as well as the deceptively quick S4 through S7 section of the south part of the circuit, the massive downforce generated by the ACR's front splitter, diveplanes and rear aerofoil wing allow for early and aggressive application of the go-pedal. At 150

SPECIFICATIONS & DETAILS

07 KATECH PERFORMANCE CLUBSPORT CORVETTE Z06

ENGINE

7.0-liter V-8

ENGINE MODIFICATIONS

Katech lightweight exhaust system and carbon-fiber valve covers, Haltech carbon-fiber air-intake system, Emsby twin-disc ceramic clutch and lightweight chromoly flywheel, Braille all-season lightweight battery

WHEELS, TIRES AND BRAKES

Katech ClubSport 18x9.5" wheels w/ 285/30/18 Michelin Pilot Sport Cup tires (f); Brembo Gran Turismo big brake upgrade including 6-piston callipers w/ 14" rotors, Ferodo DS3000 pads, AP Racing brake fluid; Katech ClubSport 19x12" wheels w/ 325/30/19 Michelin Pilot Sport Cup tires (r); Brembo Gran Turismo big brake upgrade including 4-piston callipers w/ 1.6" rotors, Ferodo DS3000 pads, AP Racing brake fluid

SUSPENSION

Metan Clubsport double-adjustable coilover shock absorbers

BODY AND CHASSIS

Katech carbon-fiber lowered lift-off hood, front splitter, rear spoiler and ClubSport appearance package, serialized plaque

NUMBERS

Horsepower: 535 at 6300 rpm
Torque: 490 ft-lbs at 4800 rpm
Curb weight: 2,915 lbs
Weight-to-power ratio: 5.45 lbs/hp
MSRP: \$109,000 MSRP (from Les Starford Chevrolet Cadillac in Dearborn, MI)
Best lap time: 1:39.723



mph the overall aero package produces an astounding 1,000 lbs of downforce (with a front-to-rear aero split at factory settings of 40/60) according to SRT's wind-tunnel testing, a fact driven home by the planted feeling the big snake had at triple-digit speeds over the jump that connects the North and South Autobahn circuits.

According to Erich from SRT, "We spent the equivalent of 1,300 hours doing aero development with CFD, wind-tunnel testing and track testing. The challenge wasn't making rear downforce with the wing, but it was making front downforce and optimizing drag. Through development, we reduced drag by 15 percent and added downforce to the ACR from the base Viper at a 7:1 downforce-to-drag ratio."

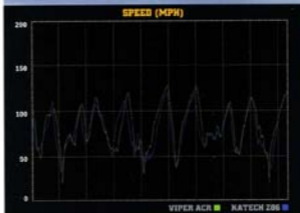


'07 KATECH PERFORMANCE CLUBSPORT Z06 CORVETTE

Katech Performance, Corvette tuner extraordinaire and engine-builder for the legendary Corvette Racing ALMS program, brought out its own track day special, the aptly named ClubSport Chevrolet Corvette Z06. Katech has developed the ClubSport as its response to Dodge's Viper ACR, Lamborghini's Gallardo Superleggera and Ferrari's F430 Scuderia. As Jason Harding from Katech explained before handing me the keys to the company's sleek silver test mule, "We wanted to maintain a very clean styling for the ClubSport, in keeping with our Superleggera concept for it, so we focused our efforts on improving the power-to-weight ratio through weight reduction while also enhancing cornering grip, braking and downforce."

Out on the Autobahn circuit, the ClubSport could not feel more different than the Viper, despite their almost identical power-to-weight ratios and choice of tire (both equipped with Michelin Pilot Sport Cup R-compounds). Where the Viper feels big and brawny and even a bit angry, like a heavyweight boxer that just might bite your ear off, the ClubSport Z06 feels light and nimble like a cool and composed middleweight, though it still packs a mighty wallop thanks to its rev-happy 535hp, 7.0-liter V-8. And at just 2,915 lbs, the ClubSport is 154 lbs lighter than a stock '07 Z06 and almost 500 lbs lighter than the Viper ACR (officially rated at 3,400 lbs).

With a thousand extra rpm, a peakier powerband and short gear ratios, the ClubSport Z06 wants to be driven hard. Gone is the "slow-in, fast-out, smooth inputs" approach the Viper demands, and in its place is a much freer driving style where fearless threshold braking and high slip angles in the turns is the new prescription for speed. The superb handling balance imparted by the Moton Clubsport double adjustable coilover shock absorbers, along with the World Challenge spec carbon-fiber front splitter, give the Katech machine phenomenal front grip, making for confidence-inspiring performance when blitzing the braking zones and attacking corner entry. As a result, the ClubSport Z06 really shines in the more technical turns the Viper Alley chicane and the double right-turn combo



of N8 and N9 as well as Black Diamond, where the lightweight chassis and finely tuned suspension resulted in the ClubSport posting higher lateral g-forces than the Viper in these tight turns.

The Katech Clubsport Z06 isn't just light on its feet, it's also the looker of the duo thanks to a very clean exterior package that includes a low-profile, carbon-fiber trunklid spoiler, beautifully integrated front splitter, paint-matched carbon-fiber ALMS vented hood, and a gorgeous set of custom Katech wheels finished in Gunmetal Gray. In fact, the

unique 15-spoke, flat-face, single-piece, forged-aluminum ClubSport wheels (different than the wheels used during testing) will be sold separately for Corvette owners wanting to give their C6 a distinct appearance and performance upgrade. According to Jason from Katech, "The ClubSport wheels have been safety tested and exceed factory standards for cornering strength by 37 percent while clearing most big brake kits including the Brembo GT 14- and 15-inch front rotors used in the complete Katech Corvette Z06 ClubSport package." But



THE RESULTS

	VIPER ACR	KATECH ZDC
BEST LAP	2.37.666	2.39.723

SEGMENT 1

MAX MPH	118.56	116.33
MIN MPH	21.00	34.35
MAX LAT G	1.55	1.39
MAX LONG G	-1.17	-1.20
SEGMENT TIME	39.289	40.113

SEGMENT 2

MAX MPH	120.10	111.37
MIN MPH	31.28	45.14
MAX LAT G	1.46	1.27
MAX LONG G	-1.05	-1.15
SEGMENT TIME	36.114	37.225

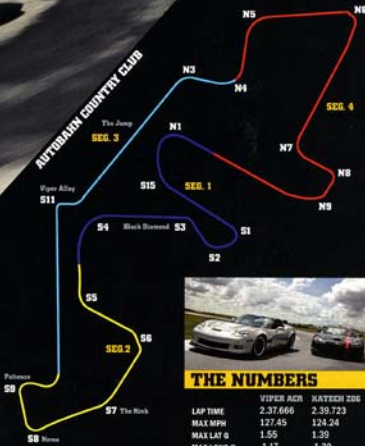
SEGMENT 3

MAX MPH	127.45	119.9
MIN MPH	37.82	39.19
MAX LAT G	1.39	1.30
MAX LONG G	-0.99	-1.13
SEGMENT TIME	34.573	33.854

SEGMENT 4

MAX MPH	120.88	124.24
MIN MPH	20.28	36.56
MAX LAT G	1.40	1.35
MAX LONG G	-1.04	-1.17
SEGMENT TIME	47.690	48.541

AUTOBAHN COUNTRY CLUB



the sleek and subtle good looks come at something of a price, namely less rear downforce compared to the GT winged Viper, and this means comparatively less mid-corner grip and lower corner exit speeds out of the faster turns. This results in the lower top speeds and lateral g-forces that were seen in data collected with our MSD G2X lap timer and data acquisition system.

THE FIGHT

With one half-hour session of track time left, it was time to put in as clean



THE NUMBERS

	VIPER ACR	KATECH ZDC
LAP TIME	2.37.666	2.39.723
MAX MPH	127.45	124.24
MAX LAT G	1.55	1.39
MAX LONG G	-1.17	-1.20



a lap as possible in both cars so that any comparisons being made would be as fair as possible. Weather conditions were ideal and I had learned a lot about the track layout and each car's strengths and weaknesses, so it was time to switch it into Time Attack mode.

In this corner, wearing silver with carbon fiber and gunmetal trim, it's the lightweight Katech Performance ClubSport Z06 Corvette. With minimal traffic to contend with, I brought the Pilot Sport Cup tires up to temperature and tried to push the lightweight

Vette a little bit deeper in every braking zone and get on the power a little bit earlier coming out of every turn (without inducing any speed-robbing oversteer or power slides). Hurling down the two back straightaways that are divided by the Viper Alley chicane, I row through the gears as the lightly modified LS7 V-8 engine spins up to its 7100-rpm rev limit with ease. Halitech's carbon-fiber intake system and Katech's own lightweight exhaust system combine to give GM's masterpiece small-block a melodious bark, not to mention an additional 30

whp. The combination of low mass and nimble handling in the tighter turns resulted in a Segment 3 time eight-tenths of a second faster than the Viper would manage and a higher top speed down the front straight thanks to its ability to carry more speed out of N9. But would the ClubSport's strength under braking (where it consistently posted higher negative longitudinal or braking g-force numbers) and in the slower speed turns be enough to overcome the Viper's enormous high-speed grip and broad powerband? With a best lap of 2:39.723

according to our G2X lap timer, it looked like it was going to be very close since my best lap time in the Viper up to this point had been a 2:40 flat.

In the opposite corner, wearing black with a red driver-side stripe and a huge rear wing, it's the '09 Dodge Viper ACR. Jumping in and buckling down as quickly as possible, I make the conscious decision to push my braking points as deep as possible, since this was clearly the area where the Viper was giving up the most performance to the Vette.

I warmed up the tires for the first lap, and then went into Full Time Attack mode for the second lap, hoping to throw in a quick one right away since there were signs of brake pad fade during my previous session in the Viper. I also committed to getting on the power sooner in the higher-speed turns, where I needed to trust that the aerodynamic downforce would keep the Viper glued to the track. Sure enough, it all came together on this first hot lap, where the aero-aided lateral grip made it possible to get on the power much sooner in N1 Economika, S15, S4, S5 and S6, translating to higher corner exit speeds and therefore higher top speeds on the straight blasts that followed, resulting in a shocking 2:37.666 lap time.

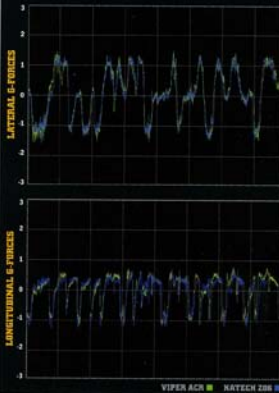
But my concern about brake fade also proved justified, when halfway through my second hot lap the brake pedal began to get softer and softer and braking distances longer and longer. Unfortunately, there wasn't enough time to cool the brakes and go for another hot lap, but to SRT's credit Erich mentioned he would equip future ACR's with the Mintex Motorsports pads from the Competition Coupe, rather than the base Viper pads we used for this test.

THE SCORECARD

The Autobahn Full Circuit is a very tricky track to master in a single day, especially in two cars as stunningly fast as these. I was pushing both equally hard, but with every session on the track I was finding new places to carry speed and learning how to extract a bit more performance out of both of these amazing domestic brawlers. With another session in both cars, lap times would have certainly dropped further, but by how much is difficult to say. But on this day, at this

CORNER-BY-CORNER LATERAL AND LONGITUDINAL G-FORCE READINGS

	VIPER ACR			KATECH Z06		
	MAX LAF G	MAX DECEL G	MAX ACCEL G	MAX LAT G	MAX DECEL G	MAX ACCEL G
TURN 1 (R1)	1.55	-1.62	0.28	1.27	-1.14	0.40
TURN 2 (S16)	1.44	N/A	0.35	1.39	N/A	0.34
TURN 3 (S1)	1.48	-0.87	0.55	1.26	-1.20	0.40
TURN 4 (S2)	1.19	-0.96	0.57	1.12	-1.20	0.34
TURN 5 (S3)	1.15	-0.40	0.42	1.26	-0.84	0.34
TURN 6 (S4)	1.31	-1.37	0.36	1.22	-1.11	0.39
TURN 7 (S5)	1.38	-0.56	0.39	1.27	-1.15	0.39
TURN 8 (S6)	1.40	-1.02	0.40	1.21	-1.12	0.35
TURN 9 (S7)	1.18	N/A	0.64	1.13	N/A	0.47
TURN 10 (S8)	1.40	-1.05	0.63	1.25	-1.14	0.41
TURN 11 (S9)	1.32	-1.03	0.58	1.22	-1.11	0.41
TURN 12 (S10)	1.46	-0.53	0.69	1.20	-1.12	0.47
TURN 13 (S11)	1.20	-0.58	0.65	1.30	-1.10	0.56
TURN 14 (S12)	1.20	-0.99	0.37	1.15	-1.13	0.56
TURN 15 (S13)	1.27	-0.55	0.32	1.21	-0.99	0.40
TURN 16 (S14)	1.40	-1.05	0.32	1.32	-1.05	0.40
TURN 17 (S15)	1.25	-0.75	0.58	1.20	-1.17	0.43
TURN 18 (S16)	1.36	-1.04	0.74	1.32	-0.94	0.69
TURN 19 (S17)	1.38	-0.92	0.51	1.23	-1.06	0.48
TURN 20 (S18)	1.26	-0.97	0.77	1.34	-1.00	0.48
TURN 21 (S19)	1.13	-0.81	0.62	1.30	-0.96	0.55



LAT. G-FORCES:

The Viper ACR (green line) reaches higher lateral g-forces in most of the right turns (above 0 on the Lateral G axis) and left turns (below 0 on the Lateral G axis) thanks to its aerodynamic grip and SRT-tuned KW shocks and springs, resulting in higher corner exit speeds (which contributes to a higher mph down the straight-aways).

LONG. G-FORCES:

It's under braking (below 0 on the Accel G axis) where the Katech ClubSport Z06 (blue line) really shines, posting consistently higher deceleration g-forces than the Viper ACR (green line), though you can also see the acceleration advantage (above 0 on the Accel G axis) the Viper ACR has thanks to the massive torque of its 8.4-liter, V-10 engine.

track, and with this driver, the Viper ACR showed incredible pace on that single flying lap when it mattered the most.

Nevertheless, despite the 2-second difference in best lap time, on my scorecard it's a split decision for a number of reasons. The Viper ACR is going to be the faster machine around a high-speed circuit, thanks to its factory-engineered aerodynamics and flexible power delivery. But the Katech ClubSport Z06 is incredible on the brakes and very nimble in tighter technical turns, not to mention

it cuts a cleaner profile with its subtle aero package, allowing it to fly well under the radar during street use. As a potential buyer, it's up to you to decide which is more important: the huge grunt and grip of the Viper ACR with its GT race car aerodynamics or the street-friendly styling and lightweight responsiveness of the Katech Z06. Both of these American gladiators are faster than anything else you're likely to see at a track day, including that stunned GT2 driver with the bruised ego and ringing ears. **WET**