# Born in Namyang, honed at Nürburgring, driven in North Georgia

s you get deep into the Hyundai N realm, you'll find that N stands for an N-dless number of things: the Hyundai Namyang Research & Development Center in South Korea, where these vehicles and their technologies are developed; the famed Nürburgring motorsports complex in Germany, where everything is put to the test; it also suggests the N-shape of a nice track chicane; and it starts the brand's catchphrase, Never just drive.

In that spirit, we met up with Hyundai to take two new N models—expanding the subbrand's US stable to three—not just on the open road (which we did), but on the track. And in the spirit of N, we flew to Atlanta, but then headed to, you guessed it, north Georgia—to Atlanta Motorsports Park, about an hour north, in the Appalachian foothills.

And in the spirit of not just driving on the track, we drove on a very wet and stormy track, as well as a coned autocross course.

We also drove N Line-upgraded vehicles—the Elantra up and Kona back (Sonata and Tucson N Line are also available)—and we took a road spin in the IONIQ 5 EV, a first taste before having it in Arizona for a week (see feature in this issue).

**VELOSTER N.** We first drove the Veloster N, the first Hvundai N car in our market (there was already an i30 N in other parts of the world), in late 2018, at Thunderhill Raceway, about an hour and a half north of Sacramento—a pattern largely matched in Georgia—and we drove it again here in Arizona last summer for a week, with a few other encounters at various events in between.

This three-door rocket coupe, which had set the stage for the models released this year, was on hand for us in Georgia, too, for a combination of comparison and affirmation. We gave it a spin on both the autocross course and track.

**ELANTRA N, KONA N.** The big news today, however, is the application of the full N treatment to Hyundai's extremely popular Elantra sedan and Kona crossover—continuing to apply the formula to smaller vehicles in their lineup. (There is also now an i20 N in other parts of the world.)

That formula is completely true to its heritage, of course, while also benefiting from about three and a half years' continued tweaking at Namyang R&D in Korea. There are in fact two formulas, one more emotional and one more engineering-based. On the emotional side, the vehicles are to be exhilarating, authentic and accessible (that last point being equal parts emotional and financially practical). The goals of the engineers, meanwhile, are to

deliver three Product Pillars: to create a vehicle that works as an everyday sports car, is notable as what they call a "corner rascal," i.e. has exceptional handling, and despite its everyday usability has solid, proven racetrack capability.

That's quite an order, but it clearly gives the team focus, and they have once again delivered.

The N lineup has been winning in full-blown motorsports for its duration, with trophies including the FIA World Rally Manufacturer's Championship, FIA World Touring Car Cup Driver Championship, first and second in class at the 24 Hours of Nürburgring and more (variously running the i20 N, i30 N, Veloster N and Elantra N). Hyundai Motor America is also now in its fourth season racing in the IMSA Michelin Pilot Challenge (IMPC) with Bryan Herta Autosport, where they are three-time Series Champion, three-time consecutive Driver's Title (including fielding the first female champion last year) and two-time Manufacturers' Champion.

There are many fundamental differences from a base model to an N model, with some of those differences kicking in at the N Line level (and others having an intermediate bump at that level). For example, the engines stairstep, running from 147 hp in the base Elantra or Kona, to 200 or so (195 Kona, 201 Elantra in the N Line), to 276 hp with 289 lb-ft of torque in the full N version. Suspension upgrades kick in at the N Line level, while wheels, tires and brakes build up in stages. Considerable body and chassis reinforcement are added at the full-blown N level. Steering is also upgraded from a column- to rack-mounted unit in







# SPECIFICATIONS: ELANTRA N, KONA N, VELOSTER N

ENGINE		2.0L dir inj "Flat Power" 4-cyl turbo			
	Veloster N	2.0L Theta E-CVVT 4-cyl turbo			
HP/TORQUE	Elantra N, Kona N	276 hp (286 w N Grin Shift) / 289 lb-ft			
	Veloster N	275 hp / 260 lb-ft			
TRANSMISSION	Elantra N, Veloster N	6-spd manual std,			
	optiona	8-spd wet dual-clutch w paddle shift			
	Kona N8-sp	d wet dual-clutch w paddle shift only			
DRIVETRAIN		FWD			
DIFFERENTIAL					
Elantra N, Kona NN Corner Carving electronic limited slip (E-LSD)					
Veloster N	electronic	limited slip (E-LSD), torque vectoring			
0-T0-60 MPH		ec / Kona N 5.2 sec / Veloster N 5.4 sec,			

Elantra N, Kona N: electronic control susp (ECS):
F: MacPherson strut, stblzr bar, coils;

R: multi-link indep; stblzr bar; +Elantra N: rear coils, rear strut tower Veloster N: F: MacPherson strut, coils,

ECS gas-filled hydraulic twin-tube shocks, stblzr bar;
R: multi-link indep, ECS hydraulic twin-tube shocks, stblzr bar

Elantra N ......rack-mounted motor driven rack & pinion Kona N ......rack-mounted motor driven rack & pinion Veloster N .....column-mounted motor driven rack & pinion

Elantra N......F: 14.2 vented, R: 12.4 vented; 11-in booster, ratio 8:1

Kona N......F: 14.2 vented, R: 12.4 vented; 10-in booster, ratio 7.5:1

Veloster N.....F: 13.6 vented, R: 12.4 vented; 10-in booster, ratio 7:1

Elantra N .......19x8.5 / 245/35R19 Michelin PS 4S summer

Kona N .......... 19x8.0 / 245/40R19 Pirelli P Zero summer Veloster N ...... 225/40R18 Michelin Pilot SS / opt 235/35R19 Pirelli P Zero

		3.0		
	Elantra N	Kona N	Veloster N	
LENGTH / WHEELBASE	184.1 / 107.1.	165.9 / 102.4	167.9 / 104.3	in
HEIGHT	55.7	61.6	54.9	in
TRACK (F/R) MT	62.4 / 62.2.		61.2/61.6	in
DCT	62.4 / 62.2.	62.2 / 60.0.	61.9/61.6	in
GROUND CLEARANCE	5.5	6.8	5.3	in
TURNING CIRCLE	38.4	38.3	38.12	ft
HEADROOM (F/R)	39.9 / 37.3.	39.6 / 37.8	38.1 / 35.9	in
LEGROOM (F/R)	42.3 / 38.0.	41.5 / 35.2	42.6 / 34.1	in
PASSENGER VOLUME	99.4	94.1	89.9	cu.ft
CARCO VOLUME	1/1 2	102/150	100/115	ou ft



the N models (though not yet in the Veloster N). And openly visible cues grow in stages, outside and in, from paints and badging to seats, pedals and steering wheels, through all levels.

The impressive attention paid to hardware is backed up by electronics on N models, including an electronic limited slip differential (E-LSD), performance algorithm N Grin shift and control systems (as well as N Track Sense and N Power Shift modes), electronically controlled suspension variables, customizable exhaust acoustics and more, as well as a Launch Control feature that can shave a few tenths off your zero-to-60 time. As much as you will enjoy and benefit from N model engineering right out of the box, you will be able to play with its many possibilities, to your heart's content, for as long as you own one of these vehicles.

The engine has been upgraded in the new Elantra N and Kona N, with a bump in both horsepower and torque at the top end, and achieving maximum torque at just about 2000 rpm and holding that maximum flat through about 5000 rpm.

Gauges and infotainment systems are all greatly advanced in the N models, with contextual instrumentation for N Mode as well as sport, normal and (when so inclined) eco modes.

The primary screen offers detailed customizable performance information specific to the N, particularly for track use. N1, N2 and NGS buttons on the steering wheel provide instant access to customizable drive modes.

Surprisingly or not, the N Hyundais are front-drive only, for the usual reasons of weight, complexity and price. Transmissions are a mix, with a choice of six-speed manual or a sophisticated eight-speed wet dual-clutch unit on Veloster N and Elantra N, but only the wet DCT on Kona N. Both transmissions have rev-matching technologies for quick

shift response

Normally, we're devoted all-wheel- and reardrive fans (all the moreso in high speed twisties such as on a racetrack), and we prefer manual transmissions or at least like having the choice.

We had already learned, however, at the Veloster N track launch in California, that these vehicles exhibit basically no front-drive torque steer characteristics whatsoever—they could easily be mistaken for all-wheel-drivers.

When we had the choice on the track at the earlier Veloster N launch, we had time to try (and thoroughly enjoy) both transmissions. Between the weather and having multiple models to drive, time was a little tighter in Georgia. When given the choice—Veloster N and Elantra N on autocross and track—we still went for the dual-clutch. We knew from the Veloster N that it's an incredible piece of machinery, strong and precise. Another variable is that while we don't use paddle shifters constantly on the open road, we did on the track. where it is a whole lot quicker (and thus more accurate) than using a manual clutch and stick. This set the stage for our run in the Kona N, the one that is DCT-only, with zero thought about its lack of a manual option.

Specifications are linear among the three in some aspects—for example, Elantra N is about 50 pounds heavier than Veloster N, Kona N about 50 more than Elantra N. In other cases, key numbers criss-cross and overlap among the three.

The four-door Elantra sedan is about a foot and a half longer and the four-door Kona a couple of inches shorter than the three-door Veloster, while the turning circle is virtually identical on all three.

The Elantra N mitigates its extra length through the addition of a rear chassis brace that increases its torsional rigidity by 29 percent. Its competitors

are identified as Honda Civic Type R, Golf GTI, Subaru WRX and Volkswagen Jetta GLI.

The Kona N has about an inch and a half more ground clearance and is about five or six inches taller than either of the others. (A competitive set was not stated for the Kona N, which underscores its distinctive nature and market position.)

Maybe it was based in those physical differences, or maybe it was subtle expectations, but we might have expected the Kona N to hug the track less, but that was not the case, at least perceptually (lab-caliber g-force testing probably parses a small difference). The difference in length among the three could work different ways in any model's favor, in different situations.

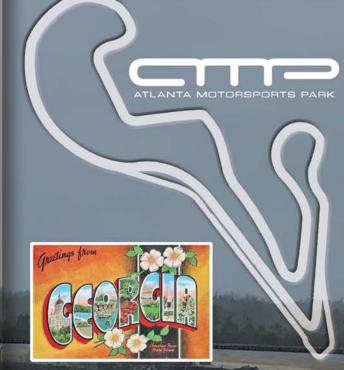
Even daily (or weekend getaway) driver considerations such as cargo volume are non-linear, with Kona having more than Elantra (even with all seats up), but then again Veloster having just as much as Kona (seats up or down). This brings you back to ignoring the finest points of variously slightly overlapping but all magnificent specifications and choosing just by where your spirit leads you. But you can set aside the idea that the Kona N exists only because this is an era where any good idea must have a utility version—Kona N is a solid idea in its own right. We had a ball in all three.

As for the original in our market, the Veloster N (and also the i30 N in the rest of the world), we're inclined to expect a refresh on that next, to integrate engine, brake and other tweaks that have been made in the new Elantra N and Kona N.

It all sounds pretty great, doesn't it? And that's where the lineup's accessibility kicks in—you can join the action (or just aspire to it daily) from base prices of \$32,150 for Elantra N, \$32,500 for Veloster N or \$34,200 for Kona N. If you have a hankerin' for a hot Hyundai, then here you go.







ATLANTA MOTORSPORTS PARK, about an hour north of Atlanta, was named as one of the Top 10 Tracks in North America by Road & Track magazine. This two-mile road circuit—with FIA Formula Onestyle curbing and rumble strips, extensive runoffs, mitigating impact zones and safety barriers, precision timing and an F1 caution lighting system—features up to six challenging circuit configurations and aggressive elevation changes up to 98 feet. The facility can run three events simultaneously. AMP also offers luxury garages, kart racing with the world's most extreme elevation changes on any kart track, and a Driver Development Center featuring an on-site skid pad and ice hill for honing skills in both wet and dry conditions, with schools from beginner to pro. Atlanta Motorsports Park is located outside Dawsonville, Georgia. www.atlantamotorsportspark.com.

