

Road beat: Lexus NX300h – a new hybrid SUV



The Lexus NX300hAWD is available with an electric motor on the rear axle. Photos/Larry Weitzman

By Larry Weitzman

For those of you hooked on hybrids, Lexus has a new relatively inexpensive SUV for your consideration. It's a new version of the well-received NX series, based on the super successful Toyota RAV4. First thing to notice is that the NX has absolutely no resemblance to the RAV4, inside and out.

While its design starts off badly with that huge ugly grille that resembles an upside down frown, the balance of the design has a trim, sleek sporty look with a profile that looks low and lean and no unnecessary lines to alter its shape. One interesting little item are small tabs on the black rear wheel

fender blisters. Why are they there?

As reported in my test of the NX200T model, wheelbase is identical to the RAV4 at 104.7 inches, indicating a chassis sharing. Even the steering rack has the same 2.68 turns lock to lock, but from there most other dimensions are close, but no cigar. It is a couple inches longer at 182 inches, an inch wider at 74 inches, it is shorter (and sleeker) by a couple of inches at 65 inches. The NX also has an inch wider track at 62 inches. NX300h also has gained some weight to 4,055 pounds (about 100 pounds) over the recently tested NX200T.



Specifications

Price \$34,480 to about \$45,000 plus \$925 for destination

Engine

2.5L DOHC 16 Valve inline four 154 hp @ 5,700 rpm
152 lb-ft of torque @ 4,400 rpm

Permanent magnet electric motor (2)

Nickel Metal hydride battery output 67 hp

Maximum combined output 194 hp

Transmission

CVT

Configuration

Transverse front engine/
FWD/AWD

Dimensions

Wheelbase 104.7 inches

Length 182.3 inches

Width 73.6 inches

Height 64.8 inches

Track (f/r) 62.2/62.2 inches

Ground Clearance 6.9 inches

Weight (fwd/awd) 4,055/4,180
pounds

GVWR (fwd/awd) 5,090/5,200
pounds

Tow capacity 1,500 pounds

Fuel Capacity 14.8 gallons

Cargo capacity (second row
up/down) 16.8/53.7 cubic
feet

Wheels (std/opt) 17X7/18X7.5
inches

Tires (std/opt) 225/65X17;
225/60X18

Steering lock to lock 2.68
turns

Turning circle 37.4 feet

Co-efficient of drag 0.34

Performance

0-60 mph 7.53 seconds

50-70 mph 4.36 seconds

50-70 mph uphill 6.46
seconds

Fuel economy EPA rated
35/31/33 mpg

city/highway/combined.

Expect 35 mpg on the highway
at legal speeds and 31 mpg

in suburban driving.

Big differences are also under the hood as this new NX300h gets a hybrid powertrain which is probably quite similar to the Camry Hybrid using the same 2.5L 16valve, DOHC Atkinson cycle engine which makes 154 hp at 5,700 rpm and 152 pounds of twist at 4,400 rpm plus an electric motor which provides a boost of another 40 hp (battery output limits the electric boost number even though its rated at 141hp). Total combined output is 194 hp.

Instead of a six-speed torque converter tranny driving the front wheels, the Hybrid gets a CVT tranny, which makes it a bit smoother. AWD is available with an electric motor on the rear axle. Performance is very good and its numbers are interesting when compared to the turbos' 235 hp, 258 pounds of twist, 2.0L NX200T. Zero to 60 mph times are very close as the 300h averaged 7.53 seconds. The 200T only was 0.2seconds quicker at 7.33 seconds. Passing times are also close, but the separation is not as close as the 50-70 mph times for the 300h were 4.36 on a level pass and 6.46 seconds on an uphill pass. The 200T numbers were 3.96 and 5.46 seconds, respectively. The reason for the quicker times is at that point there is almost no turbo lag, while the hybrid computer still has a slight delay.

But there is a big difference in fuel economy. The 300H is EPA rated at 35/31/33 mpg city/highway/combined while the 200T comes in at 22/28/25, however the real difference is not 8 mpg combined or 13 mpg city. The 300h turned in 31 mpg overall and 35 mpg on the highway at 70 mph and during a 100-mile morning trip to Vallejo with some traffic and speeds of 75 mph the 300h returned 32 mpg. The 200T numbers were 26 mpg overall and 29-30 mpg at 70 mph on a level highway. The 300h should net you an improvement of 5 mpg overall versus the 200T. However, fuel tank capacity shrinks from 15.9 to 14.8 gallon, but overall range should grow by about 50 miles.

While the 300h shares the same suspension as the 200T, the former gets a slightly softer suspension. It's the same MacPherson struts up front with a double wishbone set up in the rear. The wheels were the same at 18X7.5 inch alloys but the 300h gets 225/60X18 rubber and the 200T gets shod with 235/55X18 rubber. Steering gear is the same. I noticed a difference in the slightly softer handling as my 200T had the F Sport handling package upgrade and there is a difference. But if you go with a 300h, there is no F Sport option. So handling is still good with quick steering, you will notice more body roll when pushed hard with more understeer. The 300h gives you almost equal performance, much better fuel economy, but don't expect to be doing Mario Andretti imitations at Laguna Seca.

With the less aggressive suspension settings comes a smoother, quieter ride. I described the 200T as being on the firmer side of the ride equation. The 300h is less firm, just a bit more compliant. It is of Lexus quality. With the Hybrid drive it is also quieter overall, Lexus quiet, especially at low speeds when running pure electric which it can do up to about 45 mph and a feather foot. No tach so no engine speed at 70 mph, but I estimate it so be around a very low 2,000 rpm.

Lexus is second to none when it comes to safety with four-wheel disc brakes (fronts ventilated for heat dissipation) with all the acronyms that have excellent performance stopping the 300h in 41 feet, identical to the 200T. At least eight airbags protect the passengers and pilots and an alphabet soup of letters provides automatic intervention to keep driver error or inattention from becoming too dangerous. But nothing will protect from bad judgment. This is not an autonomous driving vehicle. Headlights are excellent.

Now to another area where Lexus are second to none, the interior. The 300h is no exception, the leather is extremely soft, most everything is soft touch and the quality would be fit for cars costing double. The perforated leather seats are

beautiful and inviting and they sit better than they look. Instrumentation has a hybrid bent with the normal tach hole being occupied by a dial showing engine and electrical usage. The trip computer also functions on system energy usage among at least 20 other functions and vehicle info. In fact, the tire pressure monitoring system worked well to not only tell me of a low tire, but identified the offending tire and its current pressure. After refilling, it allowed me to keep track of the leak.

If there is one thing about the Lexus that is annoying, it is the mouse system that operates mostly the sound system. It's more difficult to operate than the Mazda system. Then again it might take some time of more than a week and there is always operator error.

Pricing for the Hybrid is about \$5K more than the 200T meaning the basic FWD 300h stickers for \$39,720 plus the boat ride from Miyawaka, Japan. Ever notice how most Japanese words have only two letters per syllable (except for "Japan")? My tester had over \$8K in options including a \$4,505 Luxury Package (18 inch alloys, heated and cooled leather seats, moon roof and more), and a \$1,875 Nav system. There was a \$400 power folding rear seat system. The total sticker was \$48,945. But the carpeted floor mats were free. AWD will add \$1,590.

Larry Weitzman has been into cars since he was 5 years old. At 8 he could recite from memory the hp of every car made in the U.S. He has put in thousands of laps on racetracks all over the Western United States.