

Tech on wheels: Acura NSX returns as gaselectric hybrid

December 21 2016, by Ann M. Job



This photo provided by Honda shows the 2017 Acura NSX. The Acura NSX returns for 2017 after a 12-year absence as the first gasoline-electric hybrid supercar, mixing exotic looks and sports car handling with the latest engine and electric power technology. (Honda via AP)

After a 12-year absence, the Acura NSX returns for 2017 as the first gasoline-electric hybrid supercar, mixing exotic looks and sports-car handling with the latest engine and electric power technology.



A twin-turbo V-6 behind the seats works in tandem with <u>electric motors</u> between the front wheels and at the back of the car to generate 573 horsepower and 476 foot-pounds of torque, all while wearing the fuel-efficiency crown for a high-performance, gasoline-powered <u>sports car</u>.

The federal government rates the 2017 NSX at 21 miles per gallon in city driving and 22 mpg on highways, which is a 17 percent improvement over the last NSX. These mileage ratings help the 2017 NSX avoid the federal government's gas guzzler tax and surpass pricey, two-seat supercar competitors—such McLaren, Ferrari, Lamborghini and Mercedes-Benz.

But the new NSX is more than a fuel-efficient sports car. The electric motors that independently drive the left and right front wheels also provide torque vectoring for all-wheel drive taken to a new level of cornering precision. The electric power adds fast off-the-line starts, then smoothly transitions to robust engine power. And every tap of the accelerator brings instantaneous torque from the electric motors, too, so the NSX feels quick and responsive across a wide driving range.

With a starting manufacturer's suggested retail price, including destination charge, of \$157,800, the 2017 NSX undercuts many competitors, but the price can exceed \$200,000 upon adding options such as <u>carbon fiber</u> pieces and carbon-ceramic brake rotors.

On sight, the NSX has a low-slung, sleek body. Ground clearance is just 3.7 inches, and driver and passenger drop low into the sculpted seats, where they are perfectly positioned to look at the tailpipes of trucks and SUVs ahead of them. Drivers must watch that they don't bump the low NSX nose as they enter driveways.

At 87.3 inches wide, the NSX's cabin feels wider and roomier than expected. Legroom maxes out at a decent 42.8 inches, and headroom is a



good 38.3 inches.

Strong engine sounds emanate from behind the seats where the midmounted engine resides. But there's a "quiet" drive mode that tries to keep the car on silent electric-only power if the driver can creep along at less than 20 mph.

Good luck with driving this car that slow: The 3.5-liter, double overhead cam, twin-turbocharged V-6 is longitudinally placed and is visible, under its engine cover, under the glass of the rear window. The engine, which is new for Acura and its parent company, Honda, has both direct injection for regular fuel delivery and port injection for additional power in high-performance driving.

It's mated to a nine-speed, dual-clutch transmission that can be driven like a typical automatic or shifted manually by the driver without the need for a clutch pedal.

The NSX rides firmly, feels solidly planted to the road and conveys even subtle road imperfections inside to the driver and passengers. Many bumps come through as vibrations, but some can be jarring.

The car stays amazingly flat in turns and curves, and while it can dart aggressively through a slalom, it doesn't feel lightweight. The new NSX weighs 3,800 pounds, some 600 more than its predecessor, because of its electric motors and <u>lithium ion battery</u> pack.

The NSX controls on the dashboard look like they were pulled out of another Acura. As an example, the NSX doesn't have an enlarged, vertically positioned display screen, like a computer tablet, the way such screens are in McLarens, the latest Volvos and the Tesla Model S.

The NSX also doesn't decouple the suspension and engine controls to



allow drivers to mix and match their drive experience the way that a McLaren does.

2017 Acura NSX

BASE PRICE: \$156,000.

PRICE AS TESTED: \$199,200.

TYPE: Mid-engine, all-wheel drive, two-passenger, gasoline-electric hybrid, premium sports car.

ENGINE: 3.5-liter, double overhead cam, twin-turbocharged V-6 mated to three electric motors and lithium ion battery pack.

MILEAGE: 21 mpg (city), 22 mpg (highway).

TOP SPEED: 191 mph.

LENGTH: 176 inches.

WHEELBASE: 103.5 inches.

CURB WEIGHT: 3,803 pounds.

BUILT AT: Marysville, Ohio.

OPTIONS: Carbon-ceramic brake rotors with red calipers \$10,600; carbon fiber exterior sport package (includes carbon fiber side sills, front spoiler, rear diffuser) \$9,000; carbon fiber roof \$6,000; carbon fiber engine cover \$3,600; carbon fiber rear decklid spoiler \$3,000; interior carbon fiber sport package (includes carbon fiber upper steering wheel rim, spokes and meter visor) \$2,900; ELS Studio audio and



technology package (includes 580-watt, premium audio system, navigation system, sonar proximity sensors) \$2,800; semi-aniline leather/Alcantara seats \$1,500; black Alcantara headliner \$1,300; Casino White pearl exterior paint \$700.

DESTINATION CHARGE: \$1,800.

© 2016 The Associated Press. All rights reserved.

Citation: Tech on wheels: Acura NSX returns as gas-electric hybrid (2016, December 21) retrieved 18 May 2024 from https://phys.org/news/2016-12-tech-wheels-acura-nsx-gas-electric.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.