
INTRODUCTION

The intention in creating the Acura NSX, which was first introduced for the 1991 model year, was to produce a hand-built, exotic, mid-engine sports car that would establish entirely new levels of prestige, performance, refinement, driveability and reliability. The aluminum-bodied NSX is designed to represent an entirely new definition of the exotic sports car through state-of-the-art, lightweight technology.

As the NSX has evolved during the 1990s, it has been hailed as a technological showcase.

The NSX-T model introduced during the 1995 model year, which features a removable roof panel, created a different level of excitement and broadened the appeal of the NSX. It also succeeded in maintaining the extremely high levels of performance and sophistication established by the NSX coupe. It also included technological achievements such as an optional Formula One-inspired SportShift automatic transmission with a unique column-mounted electronic shifter, a drive-by-wire throttle system, standard variable electric power-assisted steering, a compact and efficient system pioneered in the first-year NSX equipped with the automatic transmission.

For 1997, the NSX/NSX-T takes a giant step forward in performance with several major enhancements — most notable of which is a larger, more powerful 3.2-liter V-6 engine with a new 6-speed manual transmission. Significant engineering updates also were made to the powertrain, brakes and steering.

Continuing in its role as a lightweight technology leader, the 1997 NSX increases only 4 1/2 pounds in total weight (plus 9 pounds for the NSX-T) despite many improvements. The new 3.2-liter V-6 engine produces 290 horsepower (20 more than its predecessor) and 224 lbs-ft of torque, increasing the horsepower-to-weight ratio of the 6-speed manual-equipped NSX by 7 percent. The SportShift automatic transmission-equipped NSX continues to utilize the potent 3.0-liter V-6 which provides 252 horsepower and 210 lbs-ft of torque.

Changes for 1997 also include:

- Larger brakes and improved Anti-Lock Braking System (ABS) performance;
- Retuned freer-flowing exhaust system;
- Application of new aluminum alloys for lighter-weight, high-rigidity body panels;
- Refinements to the Electric Power Steering (EPS) system;
- Adoption of a dual-mass flywheel;
- Highly efficient heat-absorbing green window glass;
- Anti-theft vehicle immobilizer system;
- Reshaped front spoiler;
- New clear-coated wheel finish;
- Two exciting new colors: Spa Yellow and Monte Carlo Blue.

CONCEPTS AND GOALS

In designing the original NSX, light weight was chosen as the core technological path leading to the the following attributes::

- Top-rank performance equal to or greater than existing exotics;
- Excellent liveability. The NSX had to be as easy to live with as any other Acura;
- Outstanding handling;
- A high level of comfort and ergonomic design, and low ambient noise level;
- Reliability and durability equal to mass-produced automobiles;
- Extremely high level of fit, finish and materials;
- Limited production;
- Excellent climate control system that could keep the occupants comfortable under any weather condition.

The NSX achieved all of these goals and established itself on a level equal to or greater than existing exotic sports cars. Goals for the NSX-T included all the original attributes of the NSX, plus the intangible excitement of open-air motoring. Priorities included:

- Excellent body rigidity for precise handling;
- Outstanding levels of noise insulation;
- Providing a convenient storage compartment for the roof panel;
- Minimizing wind buffeting at speed;
- Providing a security system that functions with the top removed.

For 1997, the NSX takes all of these performance goals to the next level, with significantly better:

- Performance;
- Braking;
- Steering.

OVERVIEW

The mid-engine, 2-seater NSX now offers two distinct powerplants. New for 1997 is an all-aluminum 3.2-liter V-6 that produces 290 horsepower and 224 lbs-ft of torque, and features an all-new 6-speed manual transmission as standard equipment. An electronically controlled 4-speed automatic transmission with Formula One-inspired SportShift mode is optional equipment and comes with an all-aluminum, 3.0-liter V-6 which produces 252 hp and 210 lbs-ft of torque.

Both engines are normally aspirated and are equipped with dual overhead cams, four valves per cylinder, a Variable Valve Timing and Lift Electronic Control (VTEC) system, and a Variable Volume Induction System intake configuration. They also offer Programmed Fuel Injection (PGM-FI) and a direct ignition system that uses an individual coil mounted atop each spark plug instead of a single coil for the entire system.

The chassis features all-aluminum construction for light weight. The 4-wheel independent double-wishbone suspension also features aluminum-alloy control arms and hub carriers front and rear, and aluminum subframes for the front and rear suspension. The braking system has been improved for 1997 and features larger-diameter (by 6-7 percent), ventilated 4-wheel discs front and rear, and an advanced 4-channel Anti-Lock Braking System (ABS). The sophisticated Traction Control System (TCS) has been designed to help limit wheelspin and enhance control.