

2003 Nissan Altima



Award-winning Nissan Altima Offers More Powerful V6 Engine, Enhanced Interior and New Packaging System for 2003

The third generation Nissan Altima has been an unquestionable success since its introduction as an all-new design for 2002. With its distinctive exterior design, choice of powerful 4-cylinder or V6 engines, performance-oriented suspension and class-leading roominess, Altima has had an immediate impact on Nissan sales, image and in bringing new buyers into Nissan dealerships. Altima has also garnered outstanding reviews, including the *2002 North American Car of the Year* award.

For 2003, Altima features refinements to the interior, along with a new packaging system designed to simplify option choices for consumers. Its technologically advanced 3.5-liter V6 engine has also been retuned to provide five additional horsepower, bringing it to 245 hp (up from last model year's 240 hp).

“Despite a rookie season that was highlighted by great reviews, record sales and winning the most prestigious media award, we're not about to let the 2003 Altima rest on its laurels,” said Bill Kirrane, vice president and general manager, Nissan Division, Nissan North America, Inc. “Once you've set the bar in class, everyone is chasing you – we're determined to keep Altima in front through continuous upgrades and enhancements, starting in year two, with more power, more refinement and simplified equipment choices for our customers.”

In redesigning Altima for the third generation, Nissan's designers and engineers started with a clean sheet of paper, focusing on three key areas – design, performance and roominess.

"Using a whole new platform and new attitude – one that decreed mid-size sedans no longer have to be boring – they created a vehicle that we believe sets a new standard in its class," said Kirrane.

Expressive Exterior Design

Altima's powerful design begins with its wedge shape with a high waistline and pronounced character lines. An arched silhouette slanted back window and integrated front and rear bumper shapes give the sedan a fluid, smooth form. Large 16- and 17-inch wheels give Altima a performance look with an aggressive stance.

This generation Altima is a much larger vehicle than before – wheelbase was increased 7.1 inches to 110.2 inches, overall length increased 5.7 inches to 191.5 inches and width increased 1.3 inches for a total of 70.4 inches. Height was also increased by 2.0 inches to 57.9 inches and track was increased by 1.8 inches in front and 2.4 inches in the rear for

increased handling capability and a substantial look.

Again in 2003, finely crafted combination headlights, with optional xenon bulbs on V6 models and large round taillights with clear lenses give Altima an upscale appearance. Green-tinted UV-reducing solar glass enhances Altima's luxury look, protects interior fabrics and improves passenger comfort.

Altima is assembled at the award-winning Nissan North America Manufacturing Smyrna and Decherd Tennessee plants using the Intelligent Body Assembly System (IBAS), which produces panel fit accuracy within +/- 1.0 mm. Altima is the first Nissan assembled in Tennessee to utilize a one-piece bodyside structure – a key feature for uniform panel gap and quality.

Body and structural improvements made to the third generation Altima add up to a 170 percent increase in overall body stiffness versus the 2001 model. The increased stiffness and solidity increase driving stability and ride comfort while reducing noise, vibration and harshness (NVH).

For 2003, Altima is available in two new exterior colors – Sonoma Sunset and Crystal Blue – among a choice of ten exterior colors selected to complement the sedan's body and personality.

Dynamic Performance and Innovative Technology Systems

Altima's 245-horsepower 3.5-liter DOHC 24-valve V6 with 246 lb-ft of torque offers an increase of five horsepower over the 2002 model. The 3.5-liter V6 is part of the VQ engine series, which has been recognized as one of the "Ten Best Engines" by Ward's Auto World magazine for eight consecutive years. V6-powered Altimas qualify for Low Emission Vehicle (LEV) status.

Also available on 2003 Altimas is a 175-horsepower 2.5-liter DOHC 16-valve 4-cylinder producing 180 lb-ft of torque. This engine, called QR25, features a silent chain drive and a balancer system that effectively negates vibrations without taking up much space – combining ideal packaging and smoothness. All 2.5-liter 4-cylinder-equipped Altimas qualify for Ultra Low Emission Vehicle (ULEV) status.

Both engines feature continuously variable valve timing, modular engine design, microfinished crank journals and cam lobes, molybdenum coated lightweight pistons and electronically controlled throttles.

Backing either engine is a choice of 5-speed manual (not available on 2.5 SL 4-cylinder models) or 4-speed electronically controlled automatic transmissions.

Automatic transmission-equipped V6 Altimas offer an available traction control system. This advanced system uses a combination of throttle, fuel cutoff and shift schedule to aid traction in off-the-line starts and slippery situations. A 20-gallon fuel tank provides a long range between fill-ups.

The 2003 Altima features an advanced front suspension design with extensive use of aluminum parts, which is eight percent lighter than a comparable steel design. A cradle-type frame with an offset coil spring and lower transverse link layout provides better handling and

riding performance, cutting 30 percent of lateral forces acting on the front suspension.

The rear multi-link independent suspension was adapted and improved from the Japanese-market Nissan Skyline supercar and is similar to Infiniti's flagship Q45 sedan. The rear shocks and springs are separated for reduced friction and the shock is in line with the center of the rear wheels, providing better damping and less harshness. In addition, the rear suspension is approximately six percent lighter than the rear suspension in the previous generation Altima.

Overall torsional rigidity has increased by 70 percent, which helps provide confident handling. For a quiet ride in this generation Altima, numerous countermeasures were taken to improve noise, vibration and harshness (NVH).

All 4-cylinder Altimas come with 205/65R16 tires on either steel or aluminum-alloy wheels and V6 models feature standard 17-inch aluminum-alloy wheels and 215/55R17 tires.

Braking is provided by standard 4-wheel disc brakes with an optional 4-wheel, 4-channel, 4-sensor Anti-lock Braking System (ABS). ABS-equipped Altimas feature two advanced braking systems - Electronic Brake force Distribution (EBD), which optimizes brake force depending on load condition (passengers and cargo) and Brake Assist, which senses hard or panic pedal application and helps provide maximum braking capacity.

Inviting Interior Design

The 2003 Altima continues to offer a contemporary interior design that is relaxed, modern and comfortable and emphasizes a harmony between driver and machine. Refinements include new charcoal seat fabric (late availability), padded cloth front center armrest cover (genuine leather appointments on leather-equipped vehicles) and bright titanium interior accent colors on all models. Wood-tone trim color has also been enhanced.

As with last year, the 2003 Altima's large cabin is designed to be among the best in class with cabin volume at 103.2 cubic feet, up 9.2 cubic feet from the previous generation Altima. All major interior dimensions increased from the previous vehicle, including a 1.3-inch increase in front head room, 1.9-inch increase in front leg room, 2.6-inch increase in rear leg room and increases of front and rear hip and shoulder room.

Altima again offers three distinctive interior "environments" that encompass both seat cloth or (optional) leather color and interior surface trim finish, including audio faceplate and HVAC controls. The three environment choices feature colors of Charcoal, Blond and Frost.

The instrument panel, designed to fall away from the occupants for increased leg room and improved ingress and egress, is a high tech design with a three-gauge "cockpit" instrument pod. The gauges feature a fine vision meter illumination system for superior visibility.

In the gauge cluster is a multi-function trip computer, which includes an odometer, twin trip meters and a display for outside air temperature, driving time, average speed, fuel consumption and distance to empty.

For the driver, there's a tilt and telescoping steering wheel, height-adjustable center console armrest and gated automatic transmission shifter with a formed gearshift knob design. HVAC

and audio controls are grouped in a single unit, reducing complexity.

Additional features include a power port inside the center console storage area for a mobile phone, large cup holders that can hold up to a one-liter bottle, roof-mounted map light and sunglass holder. Power windows and locks are standard and windows can be opened remotely via key fob for cabin venting.

Audio systems include a standard 6-speaker AM/FM/CD with an available in-dash 6-disc CD changer with radio data system (RDS), speed-sensitive volume control and steering wheel audio controls. Optional is an 8-speaker Bose® premium audio system with an AM/FM/in-dash 6-disc CD changer with RDS, speed-sensitive volume control and steering wheel audio controls.

Altima also features a large trunk with standard cargo net. The trunk measures 15.6 cubic feet.

From a safety standpoint, Altima comes with standard dual-stage supplemental air bags that sense seatbelt use and collision severity and deploy accordingly. Optional are front seat side-impact supplemental air bags and roof-mounted side-impact curtain air bags for front- and rear-seat occupant head protection. Also standard are seat belts with pretensioners and load limiters and the LATCH (Lower Anchors and Tether for CHildren) child seat anchors and tether system.

Models and Options

The 2003 Nissan Altima is available in four well-equipped models – the base 2.5, mid-grade 2.5 S, luxurious 2.5 SL and the V6-powered 3.5 SE. For 2003, the 2.5 SL now offers many features which were previously available as part of option packages, including a standard automatic transmission, heated front seats and outside mirrors, trunk lid trim and simulated wood trim. The 3.5 SE features extensive reworking of its equipment packages, including the addition of a new Sport Package (which includes sunroof and spoiler) and Sport Package Plus (which includes sunroof, spoiler, Bose® audio system and xenon headlights). A new 3.5 SE Leather Sport Package includes the Leather Package, spoiler and xenon headlights, while the new 3.5 SE Premium Leather Package includes the Leather Sport Package plus simulated wood trim.

Other 2003 options and packages include the Convenience Package, Convenience Package Plus, Premium Convenience Package, power glass moonroof, as well as optional side air bags/ABS combination and side air bags/ABS/Traction Control combination.

2003 Nissan Altima Specifications

Mechanical

Engine	2.5 / 2.5 S / 2.5 SL	3.5 SE
Name	QR25	VQ35
Cam Design	DOHC	

Orientation	Transverse	
Cylinders / Configuration	I4	V6 w/Molybdenum coated pistons
Block / Head Composition	Aluminum/aluminum	
Displacement (liters)	2.5L	3.5L
Horsepower	175 @ 6,000 RPM	245 @ 5,800 RPM
Torque (lbs/ft)	180 @ 4,000 RPM	246 @ 4,400 RPM
Bore & Stroke (mm)	89.0 x 100.0	95.5 x 81.4
Compression Ratio (:1)	9.5	10.3
Maximum Engine Speed	6,200 RPM	6,600 RPM
Induction System	Sequential multi-point electronic fuel injection	
Valvetrain	4-valves-per-cylinder; w/CVTC	
Engine Cover	Standard	
Engine Mounts (4 mounts per vehicle)		
Automatic	4 fluid filled	2 electronically controlled, fluid filled, 1 rubber
Manual	4 fluid filled	3 fluid filled, 1 rubber
Recommended Fuel	Regular unleaded	Premium unleaded
Emissions System	Closed Loop Alpha Control, ECCS	
Emission Certification Level	LEV	
Exhaust	Variable capacity muffler	Dual exhaust

Electrical	
Ignition System	Electronic, Nissan Direct Ignition System (NDIS)
Starter	1.4 kW
Alternator	110 Amp.
Battery	12V-55Ah (5HR)

Transmission and Drive System	
Drive configuration	Front-engine / front-wheel drive
Transmission Type	
5-speed manual	Standard on 2.5 / 2.5 S / 3.5 SE
4-speed auto w/ overdrive	Standard on 2.5 SL
<u>Gear Ratio</u>	<u>M/T 4-</u> <u>M/T V6</u> <u>A/T 4-</u> <u>A/T V6</u>

	<u>cyl.</u>	<u>cyl.</u>		
1 st	3.416	3.153	2.785	2.785
2 nd	1.944	1.842	1.545	1.545
3 rd	1.258	1.258	1.000	1.000
4 th	0.947	0.947	0.694	0.694
5 th	0.772	0.772	--	
Reverse	2.272	2.272	3.252	3.002
Final Drive Ratio (:1)	4.133	3.812	4.087	3.789
Drive Shaft	Carbon Fiber Reinforced Plastic (CFRP)			
Helical Limited-Slip Differential	Optional on SE			

Brakes	
Standard	
Front	
Type	Vented Disc
Rotor size diameter and thickness (in.)	11.7" x .94t"
Rear	
Type	Self-adjusting, Solid Disc
Rotor size diameter and thickness (in.)	11.5" x .35t"
Brake Assist	Standard
Brake Control	
w/ABS	Power-assisted with Brake Assist and Electronic Brake force Distribution (EBD)
w/o ABS	Power-assisted
Electronic Brake force Distribution (EBD)	Standard
ABS	N/A on 2.5; Optional on 2.5 S, 2.5 SL and 3.5 SE
Number of Wheels	4
Number of Channels	4
Number of Sensors	4
Parking Brake	Hand operated along left side of center console

Steering	2.5/2.5S/2.5SL	3.5 SE
Type	Power rack-and-pinion	

Power Assisted	Standard	
Overall Ratio (:1)	16.1	
Turns (lock to lock)	2.8	2.6
Turning Diameter (curb to curb, in feet)	37.4	38.7

Suspension	
Front	Independent strut w/ coil springs
Stabilizer Bar	Standard
Rear	Multi-Link independent suspension
Stabilizer Bar	Standard

Body / Chassis	
Type	Unibody
Materials (primary)	Corrosion resistant and high strength steel

Exterior

Wheels & Tires	2.5	2.5 S	2.5 SL	3.5 SE
Wheels				
Steel with bolt-on cover	S	S	-	-
Aluminum-alloy	-	O	S	S
6.5JJ x 16	S	S	S	-
7.0JJ x 17	-	-	-	S
Tires				
P205/65R16 T-rated all-season tires	S	S	S	-
P215/55R17 H-rated (V6 A/T) or V-rated (V6 M/T) all-season tires	-	-	-	S
Temporary spare tire	S			

Lights	2.5	2.5 S	2.5 SL	3.5 SE
Headlights				
Type				
Halogen	S	S	S	S
Xenon	-	-	-	O
Auto On/Off (ambient light sensitive)	-	O	S	S

Fog Lights	-	-	-	S
Center high mount stop light				
Parcel shelf	S	S	S	S
Spoiler	-	-	-	O

Interior

Seating	2.5	2.5 S	2.5 SL	3.5 SE
Capacity	5 passenger			
Materials				
Cloth	S	S	-	S
Leather appointments	-	-	S	O
Front seats Type	Bucket			
Heated	-	-	S	O
Driver seat				
4-way manual	S	-	-	-
8-way manual	-	S	-	-
8-way power	-	O	S	S
Manual lumbar	-	O	S	S
Passenger seat				
4-way manual	S			
Manual lumbar	-			
Head restraint	Height adjustable			
Seatback Pockets Driver and passenger	-	S	S	S
Rear seats Type	3-across bench			
60/40 split fold-down	S	-	-	-
60/40 split fold-down with lock	-	S	S	S
Fold-down release	In cabin and in trunk			
Center armrest	S			
Head restraint	High back seat type			

Audio	2.5	2.5 S	2.5 SL	3.5 SE
Head unit and speakers				
AM/FM/CD w/ 6 speakers	-	S	-	-

Mid-Line AM/FM/CD w/6 speakers	-	O	-	S
Bose® with AM/FM/6-disc CD w/8 speakers	-	O	S	O
Speed sensitive audio volume control	-	O	S	S
Radio Data System (RDS)	-	O	S	O

Instrumentation	
Meters/Gauges	Standard
Speedometer – fine vision	
Tachometer – fine vision	
Coolant temperature	
Fuel level w/ fuel door opener direction	

Comfort & Convenience Features	2.5	2.5 S	2.5 SL	3.5 SE
Power windows Driver and passenger one-touch up/down	S			
Power door locks	S			
Remote keyless entry system w/remot trunk opener	-	S	S	S
Remote releases – trunk and fuel filler door	S			
Steering wheel mounted control switch (ASCD, audio, trip computer)	-	O	S	S
Height adjustable center console w/ armrest, phone and CD storage	S			
Cup holders – 2 in front center console, 2 in rear center armrest	S			
Illuminated glove box with lock	S			
Covered storage box	S			
Retained accessory power for windows & sunroof	S			
HomeLink® Universal Transceiver	-	-	S	O

Safety and Security

Passenger Restraint Systems	2.5	2.5 S	2.5 SL	3.5 SE
Airbags				
Driver (dual stage)	S	S	S	S

Passenger (dual stage)	S	S	S	S
Front seat side and front and rear head curtain	-	O	O	S
Outboard seat belts, front	3-point (ALR/ELR for passenger, ELR for driver)			
Rear	3-point ALR/ELR			
Inboard seat belts, rear	3-point ALR/ELR			
Seatbelt pretensioners	Front			
Load limiters	Front			
Tether anchorage	S			
Power window lockout button	S			
LATCH system	S			
Child safety rear door locks	S			

Passive Safety

Energy absorbing steering column	S
Front crumple zones	
Hood buckling creases and safety stops	
Rear crumple zones	
Body side reinforcements	
Shift interlock system	

Security

Emergency inside trunk release	S
Steering wheel locks when key is removed	
Vehicle Security System	
Immobilizer	

Dimensions

Exterior (inches)	
Wheelbase	110.2
Overall length	191.5

Overall width	70.4
Overall height	57.9
Tread width	61.0
Front	61.2
Rear	
Coefficient of drag (Cd)	0.32
Trunk liftover height	27.6

Interior (inches)	Front	Back
Head room (w/o sunroof)	40.8	37.6
Leg room	43.9	36.4
Hip room	53.0	52.7
Shoulder room	56.7	56.1

Weights	2.5	2.5 S	2.5 SL	3.5 SE
Curb (pounds)				
Front				
M/T	1,810	1,844	-	1,974
A/T	1,858	1,893	1,896	2,023
Rear				
M/T	1,191	1,195	-	1,223
A/T	1,191	1,195	1,210	1,223
Total				
M/T	3,001	3,039	-	3,197
A/T	3,049	3,088	3,106	3,246
Weight distribution (%)				
Front/Rear M/T	60/40	61/39	-	62/38
A/T	61/39	61/39	61/39	62/38
GVWR (pounds) QR25	4,202			
VQ35	4,374			

Volume (cubic feet)	
Passenger compartment	103.2
Cargo	15.6

Total	118.8
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Fuel Economy (estimates)	
City (A/T / M/T) QR25	23 / 23
VQ35	19 / 21
Highway (A/T / M/T) QR25	29 / 29
VQ35	26 / 26
Classification	Mid-size

Options	
Convenience Package: (available as an option on 2.5 S models, standard on 3.5 SE models) alloy wheels, 8-way power driver's seat, driver's seat lumbar support, leather-wrapped steering wheel, steering wheel mounted controls, trip computer with outside temperature display, Vehicle Security System, cargo net, dual illuminated vanity mirrors, sun visor extensions, remote keyless entry front window control, speed-sensitive volume control, auto on/off headlights, auto up/down front pass window, door key cylinder front window control	O
Convenience Plus Package: (available as an option on 2.5 S models) Convenience Package features plus power glass sunroof with sunshade	O
Premium Convenience Package: (available as an option on 2.5 S models) Convenience Plus Package features plus Bose® audio system with AM/FM/6-disc in-dash CD changer, 8 speakers, Radio Data System	O
Sport Package: (available as an option on 3.5 SE models) rear spoiler, power glass sunroof	O
Sport Plus Package: (available as an option on 3.5 SE models) Sport Package features plus Bose® audio system, high intensity xenon headlights	O
Leather Package: (available as an option on 3.5 SE models) Bose® audio system, power glass sunroof, leather-appointed seats, leather door trim panels, automatic temperature control, HomeLink® Universal Transceiver, auto-dimming inside rearview mirror, heated seats, heated outside mirrors, trunk lid trim	O
Leather Sport Package: (available as an option on 3.5 SE models) Leather Package features plus rear spoiler and high intensity xenon headlights	O
Premium Leather Package: (available as an option on 3.5 SE models) Leather Sport Package features plus simulated wood trim	O
Power glass moonroof (available as an option on 2.5 SL models)	O
Option 1: (available as an option on 2.5 S, 2.5 SL and 3.5 SE models) side air bags, Anti-lock Braking System (ABS)	O
Option 2: (available as an option on 3.5 SE models) side air bags, Anti-lock Braking System (ABS), Traction Control System	O