

Toyota Sequoia Adds All-New 4.6-Liter V8, Wider Array of Standard Features for 2010

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The second-generation Toyota Sequoia full-size sport utility vehicle enters its third model year with a new standard 4.6-liter V8 that is more powerful and more efficient than the 4.7-liter V8 it replaces. In addition, all 2010 Sequoia models add driver and front passenger knee airbags, a Cold Kit with heated side mirrors and windshield wiper de-icer, and daytime running lights to their safety roster, along with numerous new amenities and user-technology features. Many more popular optional features are now standard equipment on all models, making Sequoia nearly mono spec, adding considerable extra customer value and simplified vehicle ordering for 2010.

The Sequoia is available in SR5, Limited and Platinum grades. In select areas, the Sequoia features as standard E85 Flex Fuel capability on 4×4 5.7-liter V8 models.

Among the added standard features on the SR5 grade are a towing package, an eight-way power driver's seat, fog lamps, running boards, power tilt/slide moonroof, a roof rack and rear spoiler and a leather steering wheel with audio and climate controls. The SR5's standard audio system gains integrated satellite radio and Bluetooth®, and all models add USB iPod connectivity.

The Sequoia Limited likewise adds value for 2010, gaining a standard power rear door with a sliding window (previously standard only on Platinum), 20-inch alloy wheels, power tilt/slide moonroof, roof rack, rear spoiler and a backup camera with a 3.5-inch display built into the rear view mirror.

At the top of the Sequoia line, the Platinum grade gains laser cruise control, which can help maintain a set distance from vehicles ahead. A standard rear seat DVD entertainment system combines a seven-inch LCD screen with a separate rear seat audio system, including dual wireless headphones. Luxury detailing is enhanced with newly standard wood-trimmed steering wheel and shift knob. Both the Platinum and Limited grades get new chrome-accented vent register knobs.

Performance

Sequoia is available with a choice of two V8 engines, a new 4.6-liter and the 5.7-liter unit it debuted with. Both engines run on recommended regular-grade fuel. The standard engine for the 2010 Sequoia SR5 is the new 310 horsepower 4.6-liter i-Force V8, which replaces the previous 276-hp 4.7-liter V8. The new 32-valve DOHC engine features aluminum alloy cylinder heads with Dual Variable Valve Timing with intelligence (VVT-i), which controls valve timing and overlap on both the intake and exhaust camshafts to optimize power, fuel efficiency and emissions. Peak torque is also up, now 327 lb.-ft. at 3,400 rpm vs. 314 lb.-ft. at 3,400 rpm for the 4.7-liter engine.

The new 4.6-liter V8 is teamed to a six-speed electronically controlled automatic transmission, compared to a five-speed automatic with the previous 4.7, benefitting both performance and fuel economy. Highway fuel economy estimates improved, now with and EPA rating of 19 mpg (2WD) vs. 17 mpg with the previous 4.7-liter V8.

As before, the Sequoia Limited and Platinum grades feature a standard iForce DOHC 5.7-liter V8 engine teamed to a six-speed electronically controlled automatic transmission, and this powertrain is optional for the SR5. The

5.7-liter iForce provides outstanding acceleration performance and enables the Sequoia to tow up to 10,000 lbs. (depending on model grade and equipment), putting it among the leaders in its class.

The 5.7-liter engine produces 381 hp at 5,600 RPM and 401 lb.-ft. of torque at 3,600 RPM, among the highest outputs in this vehicle class. Critical to customers who tow, the 5.7-liter V8 produces 90 percent of its peak torque at just 2,200 RPM. A Tow/Haul mode modifies shift points for optimal performance. The Sequoia's towing hitch is integrated into the frame as a single unit.

The 5.7-liter V8 is also equipped with Dual Variable Valve Timing with intelligence (VVT-i). An Acoustic Control Induction System (ACIS) switches the length of the intake tract in two stages, based on RPM and throttle angle, to optimize torque across the engine speed range.

In the six-speed automatic transmission for all models, Toyota's flexible torque converter lock-up control enhances efficiency, with lock-up occurring in fourth, fifth and sixth gears. The Multi Mode four wheel drive system available for all grades uses a two-speed transfer case with a lockable TORSEN® limited-slip center differential to power the front and rear wheels. The transfer case is shifted electronically via a rotary knob, and it locks with the push of a button.

Handling and Ride

The second-generation Sequoia is built on an all-new platform that features four-wheel independent suspension to help provide exemplary ride quality, handling and straight-line control. The suspension employs upper and lower A-arms at each wheel, tubular shock absorbers, coil springs and a hollow tubular anti-roll bar. Four-wheel independent suspension improves chassis dynamics thanks to increased suspension travel and reduced unsprung weight. The 39-foot turning circle is one of the tightest in Sequoia's class.

The Sequoia Platinum model is equipped with Adaptive Variable Suspension (AVS), which adjusts damper response with settings for comfort, normal and sport. AVS helps improve the ride comfort and augments the Sequoia's ability to tow and haul heavy loads while maintaining an appropriate ride height and chassis attitude. The SR5's standard 18-inch aluminum wheels have 275/65 R18 tires; 275/55 R20 tires on 20-inch aluminum wheels are standard for Limited and Platinum, with a diamond-cut finish featured on Platinum. Sequoia uses 13.9-inch ventilated disc brakes up front and 13.6-inch ventilated disc brakes at the rear. Four opposed pistons – two per side – ensure optimal braking performance and fade resistance. The Anti-lock Braking System is equipped with EBD (Electronic Brake-force Distribution) and Brake Assist (BA).

Safety

The 2010 Sequoia is equipped with Toyota's STAR Safety System™, which includes VSC (Vehicle Stability Control), ABS with EBD, BA and TRAC (Traction Control). On 4WD models TRAC is replaced by A-TRAC (Active-Traction Control) on 4WD models. Sequoia's collision safety includes a dual stage front air bag system, seat-mounted side airbags for the driver and front passenger, and roll-sensing side curtain airbags for all three seating rows. Driver and front passenger knee airbags are new for 2010.

Comfort and Convenience

In addition to its new standard features for 2010, the Sequoia SR5 grade is equipped with carryover standard equipment that includes eight-passenger seating; tilt/telescoping steering wheel; engine immobilizer with alarm; direct tire pressure monitoring system; fold-flat feature for second- and third-row seats; automatic tri-zone air conditioning; illuminated entry system; power windows, locks and back window; keyless entry; rear wiper and defogger; cruise control; spare tire; and mud guards. Standard audio on the SR5 is an AM/FM/MP3/CD with eight speakers, integrated satellite radio with a 90-day trial subscription to XM Satellite Radio, and an auxiliary audio jack/USB port.

Additional standard features on the Limited grade include front and rear parking sonar; heated front leather-trimmed seats and a steering wheel which integrates controls for the Sequoia's air conditioning system; and Bluetooth-capable phones and other functions. The Limited grade also features standard 10-way adjustable power driver's seat; a leather-trimmed steering wheel and gear shift knob; optitron gauges; and a multi-information display. A standard-equipped auto-dimming electrochromic rear-view mirror integrates a compass, and a map lamp – along with a 3.5-inch monitor for the backup camera when not equipped with a navigation system.

The Sequoia Limited also comes standard with a JBL Synthesis AM/FM/MP3/six-disc CD changer audio system with 14 speakers, integrated satellite radio with a 90-day XM Satellite Radio trial subscription, Bluetooth and an auxiliary audio jack/USB port.

Additional standard features exclusive to the Sequoia Platinum grade include 12-way adjustable power driver's seat and simulated wood-trim; 20-inch diamond cut-finish alloy wheels; rear load-leveling air suspension; power seat memory package; second-row heated seats; steering wheel with a simulated wood trim. The electrochromic rear view mirror on the Platinum grade also adds a garage door opener function. The Platinum grade also features a standard DVD navigation system with a backup camera and JBL Synthesis AM/FM/MP3 four-disc CD changer audio system with 14 speakers, integrated satellite radio with a XM Satellite Radio and NavTraffic 90-day trial subscription, Bluetooth and an auxiliary audio jack/USB port.

Options

With its array of standard features, the 2010 Sequoia has a small menu of factory options. The lone option on all SR5 grades is a Sport Appearance Package that includes seven passenger seating, 20-inch super chrome alloy wheels, color-keyed grille, and black seat fabric. Exterior colors for the Sport Appearance Package is limited to Black, White and Silver.

The Limited grade offers three options: a Rear Seat Entertainment System that includes a DVD player with rear audio controls and a 115V outlet; a DVD navigation system with a backup camera and JBL Synthesis AM/FM/MP3 four-disc CD changer audio system with a 90-day trial subscription to XM Satellite Radio and NavTraffic; and captain's chairs for the second row of seats.

The lone option on the Platinum grade is a rich White Pearl exterior paint.

Exterior Design

The new-generation Sequoia is larger than the previous model. Overall length, width and height are increased, wheelbase is lengthened and its front and rear track is widened. Front and rear overhangs, meanwhile, are reduced. The 0.36 drag coefficient is comparable to smaller crossover-type vehicles and helps reduce wind-noise. The vehicle's mirrors, wipers, A-pillar and roof header are shaped to maximize aerodynamic efficiency and minimize wind noise. The Sequoia's underside is optimized to reduce drag and wind noise and to help improve directional control.

Headlamp washers are standard on all grades for improved visibility. On the Limited grade, the large side-view mirrors feature power retraction, automatic glare-resistance, and turn-signal lamps. In addition to these features, the Platinum grade mirrors also include puddle lamps, position memory and reverse-linked tilt functions.

The rear door-opening angle is 10 degrees wider than the previous model, providing easier passenger ingress/egress and child seat installation. Standard on the Limited and Platinum models are front and rear parking sonar sensors that emit an audible warning to alert the driver of the position of solid objects, and their distance from the vehicle.

Interior Design

The cabin interior is longer, wider and taller than the previous-generation Sequoia. Space sufficient to comfortably accommodate people well above normal height is available in each of Sequoia's eight seating positions. The same efficient packaging that allows class-leading interior comfort also allows carrying items up to 11 feet long. Fold the second and third row seats flat and you've got 120.1 cubic feet of cargo space.

The dash incorporates a modular instrument panel structure and, like other interior surfaces, features a finish similar to fine luxury cars. All three grades offer two interior color choices of Graphite and Sand Beige. A Red Rock interior is also available on the Platinum grade and a Black interior is exclusive to the SR5 when equipped with the Sport Appearance Package.

Comfortable, spacious seats are used in all positions. The driver's seat is standard-equipped with power lumbar support, and an available option on the front passenger seat.

The second-row bench-type seat is split 40:20:40 and is equipped with a seat-slide mechanism that offers an adjustment range of 5.9 inches. This seat can also be folded down flat and uses an easy-slide action to allow passenger access to the third-row seat. If a seven-passenger seating configuration is desired, second row captain's seats are available. A second-row seat heater is standard with the Platinum grade, and child-seat restraints for the second row are standard on all grades.

The third-row seat is split 60:40, has a seatback reclining mechanism and can be easily folded flat. A power tilting mechanism is available. Closing the rear door requires less force than on the previous Sequoia, and the rear door glass can be opened and closed for easy loading with the turn of a key. The cargo area is equipped with handy hooks for grocery bags. Sequoia provides 16 extra-large cup bottle holders, (18 on the Platinum grade) as well as convenient storage spaces. The glove box measures 9.5 liters, and the second-row console box will hold 12 CDs or four DVD cases.