TOYOTA SEQUOIA GAINS E85 FLEX FUEL MODEL FOR 2009

The second-generation Toyota Sequoia full-size sport utility vehicle, introduced in the fall of 2007 as a 2008 model, gains E85 flex fuel models and a new Sport Appearance Package for 2009. The Sequoia is available in three grades – SR5, Limited and Platinum.

Sold in non-California emissions states, the 5.7-liter four-wheel drive flex fuel Sequoia will run on E85 fuel – an 85 percent ethanol / 15 percent gasoline mix.

The new Sport Appearance Package is available for the Toyota SR5 grade 5.7-liter models with 2WD or 4WD. The package includes seven-passenger seating, 20-inch alloy wheels with a unique finish, color-keyed sport grille, rear spoiler, fog lamps, power driver's seat, and a black fabric interior. The Sport Appearance Package is available in three colors: Super White, Silver Sky Metallic and Black.

Performance

Sequoia is available with a choice of two V8 engines, running on regular-grade fuel. The standard Sequoia engine for the SR5 is the 4.7-liter iForce with 276 horsepower at 5,400 RPM and 314 lb.-ft. of peak torque at 3,400 RPM. The 4.7-liter iForce is teamed to a five-speed automatic electronically controlled automatic transmission and can tow up to 7,800 lbs.

The Limited and Platinum grades feature a standard iForce DOHC 5.7-liter V8 engine teamed to a six-speed electronically controlled automatic transmission; 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 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's advanced Dual Variable Valve Timing with intelligence (VVT-i) system controls valve timing and overlap on both the intake and exhaust camshafts, which helps to optimize power, fuel efficiency and emissions. The 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.

Both transmissions are equipped with torque converters that use Toyota's flexible lock-up control for enhanced fuel efficiency and can be shifted sequentially. Additionally, the six-speed transmission's torque converter will lock up in fourth and fifth gear, as well as in sixth gear.

Four-wheel-drive models use a two-speed transfer case with a lockable TORSEN® limited-slip center differential to power the front and rear wheels. This transfer case, with its 1:1 high-range gear ratio and its 2.618:1 low-range gear ratio, uses a durable six-gear planetary ring instead of the more usual four-gear ring. The transfer case is shifted electronically via a rotary knob, and it locks with the push of a button. The differentials measure 8.7 inches in diameter (front) and 9.9 inches (rear). The standard differential ratio is 3.9:1, with a 4.3:1 ratio available as part of the optional towing package.

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 stability. 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 standard suspension of the Platinum model is an Adaptive Variable Suspension (AVS), which adjusts damper response with settings for comfort, normal and sport. AVS improves the ride comfort and augments the Sequoia's ability to tow and haul heavy loads while maintaining an appropriate ride height and chassis attitude. Standard 18-inch aluminum wheels have 275/65 R18 tires, and 275/55 R20 tires on 20-inch aluminum wheels are available.

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 2009 Sequoia is equipped with Toyota's STAR Safety System, which includes VSC (Vehicle Stability Control), TRAC (Traction Control) on 2WD models or A-TRAC (Active-Traction Control) on 4WD models, and ABS with EBD and BA. Sequoia's collision safety performance is enhanced by driver and passenger seat-mounted side airbags and roll-sensing side curtain airbags for all three seating rows.

Comfort and Convenience

The list of standard items on the Sequoia SR5 includes seating for eight passengers; engine immobilizer with alarm; direct tire pressure monitoring system; eightway manually adjustable driver's seat; four-way manually adjustable front passenger's seat; 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; AM/FM/CD eight-speaker audio system with a jack for iPod® compatibility; rear wiper and defogger; tilt/telescope steering wheel; cruise control; spare tire; and mud guards.

Limited and Platinum grades have a steering wheel which integrates controls for the Sequoia's air conditioning system, Bluetooth®-capable phones and other functions. The steering column offers both tilt and telescopic functions, and a powered memory feature is available. The tri-zone automatic climate control uses solar sensors and can be adjusted in each of the three seating rows. A multi-layer filter is designed to catch dust, pollen and other contaminants.

The Limited grade adds front and rear parking sonar; fog lamps; heated front leather-trimmed seats; 10-way-adjustable driver's seat; leather-trimmed steering wheel and gear shift knob; Optitron gauges; multi-information display; roof rack; running boards; and a JBL Synthesis audio system with Bluetooth capability. The auto-dimming electrochromic rear-view mirror integrates a compass, a map lamp and garage-door-opener functions.

The Sequoia Platinum grade includes all of the above, and 20-inch diamond cutfinish alloy wheels; rear load-leveling air suspension; power seat memory package; heated and ventilated front seats (driver and first-row passenger); second-row heated seats; rear spoiler; power back door; sunroof; headlamp cleaner; and navigation system with a backup camera.

Options

A laser adaptive cruise control system is available exclusively for the Platinum grade. Standard for the Limited and Platinum grades and optional for the SR5 is the 660-watt JBL Synthesis 14-speaker audio system. The JBL systems are Bluetooth®-compatible and XM® Satellite radio-capable with the appropriately installed equipment and service subscription. A jack accommodates portable music players. A newgeneration navigation system with a reinvented menu screen and improved seven-inch display is available in conjunction with the JBL audio system. The available rear-seat entertainment system uses a DVD player and nine-inch display.

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 overhang, meanwhile, is 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, also is optimized to reduce drag and wind noise, and to help improve directional control.

Headlamp washers are available 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. An optional intuitive parking uses sensors and 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.

The dash incorporates a modular instrument panel structure and, like other interior surfaces, features a finish and feel like those of fine luxury cars. Three interior colors are available: Red Rock/Black, available only in the Platinum grade, gray and

Sand Beige for all grades.

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. Heated front seats are available.

The second-row bench-type seat is split 40:20:40 and is equipped with a seatslide 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 thirdrow 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. For convenience, a power tilting mechanism is available. Closing the back door requires less force than on previous the Sequoia, and the back-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.