

# Electrifying Development: Refreshed 2016 RAV4 Line Offers Toyota's Eighth Hybrid

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Looking at the expansive crossover landscape today, Toyota can proudly point to the first RAV4 as the pioneering model two decades ago. The RAV4 was a new kind of vehicle that combined SUV versatility with car-like handling, ride comfort and fuel economy. What began as a niche exploded into a category, with the RAV4 remaining one of its leaders. That leadership shows once again for 2016 with the introduction of the first RAV4 Hybrid as part of a refreshed RAV4 line that also includes a sporty new SE grade.

A few years after the first RAV4 arrived, Toyota began offering what would become the world's best-selling hybrid vehicle, the Prius. The 2016 RAV4 Hybrid brings the number of Toyota hybrid models to eight (plus six more in the Lexus luxury division). The RAV4 Hybrid is a no compromise vehicle aimed at active young couples who put high fuel economy at the top of a priority list that also includes utility, style, versatility and capability. The fuel economy estimates are expected to be high, as Toyota anticipates to receive EPA ratings of 34 mpg city / 31 mpg highway / 33 mpg combined for both 2016 RAV4 Hybrid models. The RAV4 Hybrid comes in two premium grades: XLE and Limited. The RAV4 gas version comes in four grades: LE, XLE, Limited and the new SE.

### Drives Great, Less Fill-Ups

Whoever chooses a 2016 RAV4 Hybrid — couples, singles or small families — will be enjoying a more powerful and quicker-accelerating RAV4. The all-weather capability is there, too, as both Hybrid grades come equipped with an Electronic On-Demand All-Wheel-Drive System with intelligence (AWD-i) as standard. A second, independent electric motor drives the rear wheels when needed to help maintain optimal traction.

Toyota Hybrid Synergy Drive has long been the platinum standard for seamless hybrid performance, high efficiency and exemplary dependability. Drivers love the way it works, because they cannot feel it working, and that's the point. The 2016 RAV4 Hybrid combines output from a 2.5-liter Atkinson cycle four-cylinder engine and a small high-torque electric motor through its unique transaxle. The RAV4 Hybrid delivers a jolt of performance from a combined 194 system horsepower. The versatile RAV4 Hybrid will zoom from zero to 60 mph in 8.1 seconds (nearly one second quicker than its gas counterparts).

The system varies power between the gas engine and electric motor, or combines both as needed, all seamlessly. Regenerative braking changes the electric motor to a generator that captures the kinetic energy of the still-turning wheels when the brake is applied, storing it in the nickel-metal hydride (NiMH) hybrid battery pack.

The RAV4 Hybrid driver can play an active role in conserving fuel by selecting one of the several operating modes. Choosing ECO mode (on Hybrid and Gas models) optimizes throttle response and air conditioning output to help prioritize fuel economy. In EV mode, the RAV4 Hybrid, under certain conditions, will run solely on the electric motor for up to 0.6 miles at lower speeds (below approximately 25 mph). A Hybrid System Indicator and fuel consumption indicator, located in a 4.2-inch TFT screen, helps coach the driver to operate the vehicle as economically as possible.

### New Look Outside

The 2016 RAV4 line ushers in refreshed exterior styling that lends the vehicle a sleeker, more dynamic stance. A bolder looking front fascia seems to come alive when equipped with the available LED combo of headlights, daytime running lights and Hi-Lo Headlights. The new rocker panels sharpen the sides and tie in restyled front and rear bumpers for a more flowing profile. Available LED taillights add a premium touch.

New front and rear silver skid plate garnishes on most models, new wheel designs and a standard shark fin antenna on all grades further accent the freshened look of the 2016 RAV4. Capping the restyle in high style are three additions to the color palette: Silver Sky Metallic, Black Currant Metallic and Electric Storm Blue.

On some grades, the revised gauge cluster contains an available 4.2-inch TFT multi-information display, and a

7-inch touch-sensitive display audio touch screen is also available. Among new conveniences are LED illumination on the lower center console, a 12V power outlet added to the rear area, and a revised cup holder design to hold tall mugs with handles. There's also a new holder for sunglasses.

#### New Safety Tech Everywhere

The 2016 RAV4 will be among the first U.S. models to offer Toyota Safety Sense (TSS), a new multi-feature advanced safety package anchored by automated pre-collision braking. TSS, which is standard on 2016 RAV4 Limited grades (gas and Hybrid) and available on XLE (gas and Hybrid) and SE grades, bundles cutting edge safety technologies including Pre-Collision System (with Forward Collision Warning and automatic emergency brake), Lane Departure Alert, Automatic High Beams, Pedestrian Pre-Collision System and Dynamic Radar Cruise Control. In addition to TSS, RAV4 LE gas and XLE gas and hybrid models will feature a standard Blind Spot Mirror and the SE gas and Limited gas and hybrid grades have a standard Blind Spot Monitor with Rear Cross Traffic Alert.

The 2016 RAV4 debuts new technologies to bolster convenience, entertainment and information. Smart Key, standard on SE and Limited (gas and Hybrid) grades, and a Homelink<sup>®</sup> garage door opener (standard on Limited gas and Hybrid grades), add convenience and security. Available front and rear parking sonar helps make parking easy and safe, and now the RAV4 offers the ultimate technology for that purpose, a new Bird's Eye View Camera with Perimeter Scan. This Toyota-first technology employs four cameras that are mounted on the front, the side mirrors and rear of the vehicle to project a panoramic view of the vehicle's surroundings on the central seven-inch touch display. The system offers drivers assistance when parallel parking, and when pulling in and out of parking spaces. The Bird's Eye View Monitor system also debuts a Toyota-first feature called Perimeter Scan, which provides a live rotating 360-degree view around the vehicle, helping the driver to see potential obstacles.

For 2016, the RAV4 XLE and SE feature the standard Scout<sup>®</sup> GPS Link cell phone-based navigation system (available on LE). And for entertainment, RAV4 XLE, SE and Limited models come equipped with SiriusXM All-Access Radio with a 3-month complimentary trial subscription.

#### RAV4 SE: Sporty New Look and Attitude

Gaining the versatility of a crossover shouldn't have to mean giving up on sporty driving. The refreshed 2016 Toyota RAV4 line adds an athletic new member to the family, the SE, featuring sport-tuned suspension, 18-inch alloy wheels and paddle shifters for the six-speed automatic transmission. While providing a more dynamic and responsive driving experience, the RAV4 SE shows off its sporty attitude with LED headlights and taillights and exclusive bumper and lower grill design. Its most distinctive exterior feature is the S-Code paint design, which combines one of three available upper colors (Super White, Black Sand Pearl and Electric Storm Blue) over Classic Silver Metallic on the vehicle's lower trim.

The SE continues the sporty, upscale theme inside with SofTex<sup>®</sup>-trimmed seats featuring a power driver's seat (also on Limited) and contrast stitching, and a choice of two interior colors (Black and Black/Cinnamon), along with a Black headliner, Black A&B-pillar covers, sport floor mats and door sill protectors and Gunmetal Gray trim.

The SE instrument panel features twin dials with red illumination and red pointers, along with a standard 4.2-inch color TFT multi-information display.

#### Where Practicality Meets Fun

The RAV4 gets down the road with authority from a 2.5-liter direct-injection four-cylinder engine that smoothly delivers 176 horsepower at 6,000 rpm and 172 lb.-ft. of torque at 4,100 rpm. It's teamed to a standard six-speed automatic transmission, and the combination yields EPA-estimated fuel economy ratings of 24 mpg city / 31

mpg highway/26 mpg combined. With Dynamic Torque Control All-Wheel Drive, the EPA estimates are 22/29/25 mpg.

As seen on premium vehicles, the Toyota RAV4 comes with driver-selectable operating modes. Select Eco mode and the RAV4 optimizes powertrain operation to maximize fuel economy. Switch to Sport mode, and you'll experience sharpened shift timing, throttle response and steering feel. Downshifting will "blip" the throttle, as the driver in a stick-shift vehicle would do to maintain driving smoothness. On RAV4 models with Dynamic Torque Control All-Wheel Drive, Sport mode also alters torque distribution to enhance agility.

#### Dynamic Torque Control All-Wheel Drive (AWD)

With standard front-drive, the RAV4 gas model has a special traction helper called Automatic Limited Slip Differential (Auto LSD). Essentially a second layer of computer logic in the Traction Control system, Auto LSD can be engaged at speeds below 25 mph to provide the function of a mechanical limited-slip differential. Unlike Traction Control, it doesn't cut into engine power. This helps give the driver control and distributes power where it's most effective. On all RAV4 gas models, standard Hill-start Assist Control (HAC) helps prevent the vehicle from rolling backward when starting off on an incline when the brake pedal is released. All RAV4 models (except SE) are equipped with standard Trailer Sway Control. A function of Vehicle Stability Control, Trailer Sway Control helps counteract handling forces that can cause trailer sway during towing by applying brakes to individual wheels.

For maximum traction capability in all conditions, the RAV4 gas models offer the sophisticated Dynamic Torque Control AWD system that's also offered on the larger Highlander model. Taking input from various sensors (vehicle speed, steering speed and angle, throttle angle and yaw rate), Dynamic Torque Control continuously monitors and actively governs torque distribution to the rear wheels, as needed, via an electromagnetically controlled coupling positioned in the rear differential. Front to rear torque distribution can vary from 100:0 to 50:50, with front-wheel drive automatically engaged under normal driving conditions to help reduce fuel consumption.

When accelerating, Dynamic Torque Control automatically shifts to AWD to help prevent front wheel slippage, or when sensors detect wheel slippage. New for 2016, torque transfer to the rear wheels starts from the moment the steering wheel is turned to reduce the load on the front tires in all Drive Modes (previously only in Sport Mode on 2015 AWD RAV4s). If wheel slip occurs, the system transfers up to 50 percent of torque to the rear wheels to reduce front tire loading, thereby enhancing lateral grip. Pushing an AWD Lock button fixes torque distribution at 50:50 at speeds up to about 25 mph to help maximize grip for off-pavement driving or slippery conditions. Above that speed, the system reverts to Auto mode.

#### Inner Strength

A body structure that makes extensive use of high-strength steel provides a robust and stiff, yet light platform and is the foundation for the RAV4's smooth ride, handling agility and cabin quietness. The rear suspension member has increased spots welds and support mounts to help enhance rigidity and reduce vibration transfer to the vehicle occupants. The MacPherson strut front suspension and double-wishbone rear suspension let the RAV4 absorb bumps, ruts and railroad crossings with composure. A strut tower bar links the tops of the front strut towers to the main bulkhead, helping to increase torsional rigidity.

Front and rear shock absorbers and coils have been retuned in all RAV4 grades to help enhance stability and increase comfort. The SE grade receives unique sport-tuned shock absorbers and coils for enhanced sport driving composure.

Vehicle-speed-sensitive rack-and-pinion electric power steering provides precision feel and quick response, and it has no messy hydraulic fluid to be checked or changed. The RAV4 LE rolls on standard 17-inch steel wheels

with wheel covers and P225/65R17 all-season tires. The XLE Hybrid upgrades to unique 17-inch 5-spoke alloy wheels with 225/65R17 tires and XLE gas rides on 18-inch 5-spoke alloy wheels with 235/55R18 tires, while the Limited and SE grades get 18-inch alloy wheels with P235/55R18 all-season tires.

### Cavernous Cabin

The easy-to-maneuver, easy-to-park RAV4 takes up little space outside but offers cavernous space inside. There's ample room for five adults, including competitive 37.2 inches of rear legroom and, behind the rear seat, 38.4 cu. ft. of cargo capacity (35.6 cu. ft. for Hybrid). With the 60/40 split rear seats folded, that space expands to 73.4 cu. ft. (70.6 cu. ft. for Hybrid). The rear seatbacks recline several degrees for added passenger comfort, and rear privacy glass is standard on all RAV4 models.

The RAV4 Limited brings in the luxury SofTex-trimmed seats, dash and door panels. The driver gets an eight-way power seat with memory and lumbar adjustment, and the front seats are two-stage heated. Added conveniences include the Smart Key system with push button start, remote power liftgate, a frameless auto-dimming rear-view mirror with Homelink<sup>®</sup> and SofTex-covered sliding center armrest with a console storage compartment.

Special attention was directed towards improving cabin quietness with the addition of sound insulation materials in the rear cargo area, floor pan, and side and rear doors to help reduce road noise and create a premium feel.

### Tune in With Entune<sup>™</sup>

There's no shortage of music and information choices in the 2016 RAV4, thanks to a line of four available Entune<sup>™</sup> audio systems. In the RAV4 LE, the standard Entune Audio system features a 6.1-in. touchscreen, AM/FM/CD, Bluetooth<sup>®</sup> hands-free phone connectivity and audio streaming, iPod<sup>®</sup> connectivity and control, USB 2.0, AUX mini-jack, Advanced Voice Recognition, and six speakers. Siri<sup>®</sup> Eyes Free is also new for 2016. The Entune touchscreen, which also serves as the display for the standard backup camera, allows the driver and front passenger to operate the audio system, and more.

Standard on XLE grade, Entune Audio Plus with Connected Navigation App adds high-resolution to the 6.1-inch touch screen, HD Radio<sup>®</sup> with iTunes<sup>®</sup> tagging, SiriusXM<sup>®</sup> Satellite (with 3-month complimentary All Access Trial), HD Radio<sup>®</sup> Traffic/Weather (metro areas only), Connected Navigation via Scout<sup>®</sup> GPS Link app (includes cell-phone driven navigation, voice activated search, traffic-based commute information, and more) operated through a 6.1-inch high resolution touch screen with Customizable Home Screen. In the RAV4 Limited (and optional for the XLE), Entune Premium Audio adds a 7.0-inch high resolution touchscreen with Customizable Home Screen, Integrated Navigation and the subscription-free Entune<sup>®</sup> App Suite. Entune Premium Audio adds AM/FM Cache Radio pairs with the user's mobile smartphone to provide a richer in-vehicle experience with fully integrated access to navigation, music and information services. Mobile apps include Destination Search, iHeartRadio, MovieTickets.com, OpenTable<sup>®</sup>, Yelp, Facebook Places, Slacker Radio, and Pandora<sup>®</sup>, plus real-time traffic, weather, fuel prices, sports and stocks. Customers can also download available Entune updates.

Reserved as an option for the Limited and SE, the Entune Premium JBL<sup>®</sup> Audio with Navigation system brings your music to life with 576 watts (maximum) pumped through 11 JBL<sup>®</sup> GreenEdge<sup>™</sup> Technology speakers in seven locations, including a subwoofer and JBL amplifier. The eight-channel amplifier and Green Edge speakers reduce electrical draw on the vehicle compared to other systems of comparable output.

### Star Safety

Like every 2016 Toyota, RAV4 is equipped with the Star Safety System<sup>™</sup> that includes: Traction Control (TRAC), Electronic Brake-force Distribution (EBD), Enhanced Vehicle Stability Control (VSC), Brake Assist (BA), Anti-lock Braking System (ABS) and Smart Stop Technology (SST). Eight standard airbags include dual

stage advanced driver and front passenger airbags; front seat-mounted airbags; first and second row side curtain airbags; driver knee airbag and a front passenger seat cushion airbag. Whiplash Injury Lessening (WIL) front seats are designed to help support the driver's and front passenger's heads during certain types of rear-end collisions.

### **Value Pricing**

The manufacturer's suggested retail price (MSRP) for the 2016 RAV4 gas models will range from \$24,350 for the LE 2WD to \$32,910 for the AWD Limited.

The MSRP for the 2016 RAV4 Hybrid will be \$28,370 for the AWD XLE and \$33,610 for the AWD Limited.

The MSRP for all RAV4 models does not include the delivery, processing, and handling (DPH) fee of \$900. The DPH fee for vehicles distributed by Southeast Toyota (SET) and Gulf States Toyota (GST) may vary.

### **Limited Warranty**

Toyota's 36-month/36,000 mile basic new-vehicle warranty applies to all components other than normal wear and maintenance items. Additional 60-month warranties cover the powertrain for 60,000 miles and against corrosion with no mileage limitation.

The hybrid-related components, including the HV battery, battery control module, hybrid control module and inverter with converter, are covered for eight years/100,000 miles. In applicable states hybrid-related component coverage is 15 years/150,000 miles with the exception of the hybrid battery, which is covered for 10 years/150,000 miles.

The 2016 RAV4 also comes standard with Toyota Care, a complimentary plan covering normal factory-scheduled maintenance and 24-hour roadside assistance for two years or 25,000 miles, whichever comes first.

### 2016 RAV4 Pricing

Model #	Model	Drive	Gas		MSRP
			Transmission	Grade	
4430	RAV4	2WD	A/T	LE	\$24,350
4440	RAV4	2WD	A/T	XLE	\$26,270
4470	RAV4	2WD	A/T	SE	\$29,265
4450	RAV4	2WD	A/T	LTD	\$31,510
4432	RAV4	AWD	A/T	LE	\$25,750
4442	RAV4	AWD	A/T	XLE	\$27,670
4472	RAV4	AWD	A/T	SE	\$30,665
4452	RAV4	AWD	A/T	LTD	\$32,910

Model #	Model	Drive	Hybrid		MSRP
			Transmission	Grade	
4444	RAV4	AWD	CVT	XLE	\$28,370
4454	RAV4	AWD	CVT	LTD	\$33,610

*All prices listed above exclude the Delivery, Processing, and Handling (DPH) fee. Fleet models excluded.*