

Toyota RAV4 Hybrid Road Test

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Fourth Generation Toyota RAV4 SUV Range includes Hybrid Versions By David Miles (Miles Better News Agency)

For the first time in its history Toyota's mid-sized, five door RAV4 SUV range includes a



petrol/electric hybrid power source option in its line up of two and four wheel drive, petrol and diesel models.

The 2016 range now includes a new 2.0 litre D-4D 141 bhp turbodiesel engine for 2WD versions, a revised 2.0 litre 149 bhp petrol unit for 4WD variants, also the new 2.5 litre petrol/electric motor 194 bhp Hybrid set-up for 2WD models, plus a second rear positioned electric motor for 4WD versions.

Already there is high demand from UK customers for the newly added petrol/electric Hybrid RAV4. Out of an expected 8,400 RAV4 sales this year, 4000 will be for the Hybrid and already 2,931 orders have been taken, accounting for 73% of the Hybrid's sales target.

Specification levels for the 2016 RAV4 range are, depending on the power source chosen, Active (diesel), Business Edition (diesel), Business Edition Plus (Hybrid), Icon and Excel – with both these levels having petrol, diesel and Hybrid power choices. Diesel models have a six-speed manual gearbox and petrol and Hybrid versions use an automatic transmission. Prices start at £23,695 for the Active diesel manual 2WD and rise to £30,795 for the Excel Hybrid petrol which has a CVT auto gearbox as standard.

The move to add a petrol/hybrid option to the range follows the trend for rugged hard working 4x4s to become more sophisticated soft SUVs and even softer, car platform derived Crossovers. The customer base for such vehicles has changed over recent years from the traditional users such as country folk, farmers and contract towing operators through to urban Chelsea Tractor users and now to urbanites and company car drivers who like the styling of an SUV but want the running costs closer to those of a family car.

The modern SUV/Crossover class of vehicles moved to the top of the new car sales league in Europe last year and UK sales increased by 21% to 355,118 registrations – making it the third largest selling sector after Supermini and Lower Medium cars.

Hybrid models have become popular because of their lower CO2 emissions which determine VED road tax costs for all UK customers and Benefit in Kind tax for company car drivers.



Unfortunately the Toyota hybrid/petrol system does not have the more fuel efficient plug-in function which significantly reduces the official CO2 figures. However the RAV4 Hybrid versions have CO2 figures of 115 to 118 g/km, depending on the spec chosen, whilst diesel models are 123/124 g/km and petrol 151 g/km, so there are tax cost savings to be had – but not as much as a full-blown PHEV plug-in hybrid.

When it comes to choosing the right model it needs careful consideration and depends on what role your new RAV4 is going to fulfil. I have just had a test driving spell with the petrol/electric Hybrid version with its 2.5-litre, four-cylinder DOHC petrol engine, two electric motors, auto gearbox with 4WD and the top of the range Excel specification. This version costs £30,795 and with its CO2 emissions of 118 g/km the VED road tax is £0 for the First Year rate and then £30 thereafter. Benefit-in-Kind company car tax is rated at 20%.





By comparison a diesel version, available with only front wheel drive and manual gearbox with the same Excel spec, costs £27,995 and has CO2 emissions of 124 g/km so VED is £0/£110 and BIK tax 24%. The petrol model with its auto gearbox, 4WD and with Excel spec costs £29,300, CO2 emissions are 152 g/km, VED £185 each year and BIK tax is 27%. Also as a comparison the official EU Combined Cycle fuel economy for the Excel spec level versions shows 60.1 mpg for the diesel with its only option of 2WD, 43.5 mpg for the petrol and 55.4 mpg for the Hybrid Petrol – and both have 4WD as standard with Excel spec.

Company car drivers are likely to choose the Hybrid RAV4 model because of its lower Benefit-in-Kind costs, those customers who want a more fuel-efficient SUV will go for diesel and a few retail customers who cover fewer annual miles, but want more driving refinement, will choose the petrol option. Overall I think the RAV4 diesel version would make more sense for more people until Toyota offers a plug-in PHEV hybrid version. The biggest negative issue is that the diesel models no longer offer a 4WD version so for those who tow or travel off-road, a previous core market in the UK for similar sized SUVs, this could be a major problem. It could be why the demand is high for the 4WD Hybrid model and it also has a braked towing capacity of 1,650 kg (3,637 lb) for recreational or business towing use.

Common changes and upgrades to all new 2016 model year RAV4s are refreshed styling for the exterior, an improvement in what Toyota says is 'tactile quality' for the interior, additional safety and driver support functions, plus improved ride comfort and driving dynamics. Toyota's Safety Sense active system, which includes adaptive cruise control, lane keep assist, auto high beam headlights and road sign assist, is standard on all models except the entry-level Active version. A 4.2-inch multi-information display in the centre of the instrument binnacle is standard fit, as is a 7.0-inch touchscreen which operates the audio system, Bluetooth, rear view camera and, on Business Edition and higher spec versions, it also operates the sat-nav function. All versions have LED daytime running lights, electrically operated windows and door mirrors, air-con, remote central locking and reclining rear seats. Amongst the extra spec on the Excel version I tested are heated front seats, leather upholstery and 18-inch alloy wheels.



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Despite the improvements there are still lots of hard plastic trim areas for the interior. However the interior is roomy, with plenty of legroom in the rear for the Hybrid model, as there is no transmission tunnel – because the drive to the rear wheels comes from the rear electric motor and not the front petrol engine. With an electric motor and batteries positioned under the boot floor, this makes it bumper height so there is no rear sill to lift items over. The boot still offers 501 litres (17.69 cu.ft) of carrying space and with the 60/40 split folding rear seats down this goes up to a useful 1,633 litres (57.67 cu.ft) although the load floor is not completely flat.

As for the driving performance; on motorways the RAV4 Hybrid travels quietly so long journeys are relaxing and 70 mph cruising is easy work. On country A/B winding roads the progress can also be refined as long has you don't press the accelerator too hard and cause the CVT automatic gearbox to make the engine revs rise to provide more power. Under brisk acceleration the petrol unit becomes noisy and sounds stressed. That said there is response, with zero to 62 mph taking 8.4 seconds and the top speed is 112 mph. Around town the petrol/electric hybrid unit was responsive, smooth and hushed as the electric motors and engine are under lighter load. There is a full electric mode which can be chosen for driving under 30 mph for emission-free driving in town, but the battery capacity I found would only allow around one mile of electric travel before the petrol engine fired into life. Overall the test drive fuel economy was 41.9 mpg, good for a 2.5 litre petrol engine, but still well short of the official 55.4 mpg Combined Cycle figure, even with the help of two electric motors.

Ride comfort was mainly good, slightly on the soft side which caused some body-roll during cornering, but the suspension was compliant and ironed out many of the thumps and bumps from our poor road surfaces.





VERDICT

Overall the new Toyota RAV4 Hybrid is already proving popular with UK customers. It bridges the gap between hard working rugged mid-sized 4x4s and the popular soft SUV styled Crossovers, and for some customers that fits their requirements. But higher mileage drivers and those who want a tough SUV for work need to consider the less expensive to buy diesel version. But the big let-down with the diesel is – no 4WD – surely a mistake. But Toyota GB says the demand currently is for 2WD models and their customers are moving more towards hybrid versions which do offer 4WD variants.

For: Hybrid option for the range, encouraging UK sales so far, lower running costs and



taxes, improved exterior/interior styling, comfortable ride, relaxed motorway cruising, 4WD traction.

Against: No plug-in facility for the hybrid system to reduce CO2 emissions further, no 4WD option for turbodiesel powered models, expensive with Excel spec, not as fuel or CO2 efficient as it could be if it were a plug-in hybrid, still some hard plastic interior trim despite the upgrades.

MILESTONES AND WHEELS-ALIVE TECH. SPEC. IN BRIEF:

New 2016 Toyota RAV4, 2.5 Petrol/Electric Hybrid Excel 4WD auto.

Powertrain: 2.5 litre, 4-cylinder, DOHC petrol engine, 1 front and 1 rear electric motor, total power output 195 bhp, electric CVT auto gearbox, all wheel drive.

Performance:

0-62mph: 8.4 seconds.

Top speed:112 mph.

Fuel consumption: Combined Cycle 55.4 mpg (41.9 mpg on test).

Emissions and taxation: CO2 118 g/km, VED road tax £0/£30, BIK company car tax 20%. Insurance Group: 29.

Warranty: 5 years/100,000 miles.

Dimensions/capacities: 5 doors/5 seats, L 4,605 mm (15.11 ft), W 1,845 mm (6.05 ft), H 1,675 mm (5.50 ft), boot/load area 501 to 1,633 litres (16.69 to 57.67 cu.ft).



Price: £30,795.

