Latest Suzuki Ignis 1.2 Dualjet Hybrid SZ5 ALLGRIP– Road Test

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Suzuki’s Ignis Hybrid gets the Kim Henson treatment…

…test-driven by Kim Henson.

(All photographs by Kim).

About an hour ago, a relatively small but big-hearted blue car departed from my home after spending a week in my care, and I was as sorry to see it go as the summer skies that have also recently gone away. Here’s why…

During the last few years, since its introduction to British buyers at the start of 2017 (and first unveiled for Europe at the 2016 Paris Motor Show), Suzuki’s Ignis has established itself as a likeable, individualistic ‘compact crossover’ model.

When I road-tested a special edition Ignis ‘Adventure’ two years ago, I rated the car as ‘smart and cleverly different (in a positive way)’. I also found it to be a practical and very cost-effective vehicle in everyday use. So what, if anything, has changed since then?

Well in essence the fundamental strengths of the Ignis have been retained and further built upon by Suzuki. The latest versions (launched in the UK in August 2020) have been facelifted, externally to provide the looks of a compact SUV (including a new front grille and bumpers), internally (with a new instrument panel style and fresh upholstery designs) and under the skin (to enhance emissions and fuel consumption performance). Suzuki says that the revised Ignis is unique in being the only ultra-compact SUV on the market.

When the first Ignis was developed, under the ‘SUZUKI NEXT 100’ plan unveiled at the 2015 Frankfurt Motor Show, the company planned a new platform strategy for its future models, aimed at increasing rigidity and reducing weight. The first Suzuki with this new generation platform to arrive in Europe was the Baleno, followed by the Ignis, then, in 2017, by the Swift.

Powering all variants of the latest Ignis is a new version of Suzuki’s proven Dualjet engine; a 1.2 litre four cylinder motor, enhanced for efficiency and working in conjunction with an upgraded 12 volt hybrid system (providing expanded system capacity compared with the previous set-up), set up to seamlessly assist the petrol unit, and to harness energy during braking.



The WLTP Combined fuel consumption figure for the two wheel drive manual Ignis is a commendable 55.7 mpg, and the CO2 emissions figure is just 114 g/km.

By contrast, the corresponding figures for the four wheel drive ALLGRIP version I tested (more of which anon) are 51.9 mpg and 123 g/km, respectively.

Compared with the original Ignis, the new model incorporates additional body reinforcements within the floor, suspension mountings, roof panel and tailgate frame, plus new and comprehensive sound and vibration insulation measures have been applied throughout the vehicle. These include the use of improved sound insulation materials, also double glazed (but light in weight) door seals.

In terms of specification steps, Ignis buyers can choose between SZ3, SZ-T and range-topping SZ5 designations; all are well-equipped and incorporate a wide variety of safety-related, useful and practical features. In addition there are three new colours available (giving 13 in total), plus a range of 'personalisation' options.

SAFETY FIRST

Safety systems and features abound on all Ignis variants; indeed I could fill this article with details, but suffice to say that this aspect has been taken very seriously by Suzuki engineers, in providing a raft of active and passive safety measures.

Suzuki's 'Total Effective Control Technology' (TECT) has been applied, a concept for occupant-protecting impact absorption and low weight. The widespread use of high tensile steel and computer-aided design technologies has ensured that the body shell is light in weight and protective in crash situations, as well as being fuel and emissions-efficient. In fact the weight of top specification Ignis SZ5 models varies between just 895 and 940 kg (1,973 and 2,072 lb); it is said to be the lightest compact crossover among the competition, with weight reduction measures having been applied throughout the vehicle.

Electronic Stability Control is a standard-fit safety system, and helps to ensure vehicle stability.

The adoption, across the range, of front, side and curtain airbags (six in total) offers further reassurance.

COMPREHENSIVE EQUIPMENT LEVELS

I am not going to list all the features, but, for example, all Ignis models come as standard with six airbags (as already mentioned), LED headlamps, air conditioning, DAB Radio with Bluetooth, electrically operated front windows and rear privacy glass.

SZ-T buyers additionally gain a rear view camera, individual sliding rear seats, Smartphone

Link Display Audio with Apple Carplay and Android Auto, 16-inch aluminium alloy road wheels, also wheel arch extensions, side mouldings and roof rails.

Further features on the SZ5 include satellite navigation, cruise control/speed limiter, automatic air conditioning, keyless entry and engine start, Dual Camera Brake Support, Lane Departure Warning and Weaving Alert (these three functions linked to twin 'stereo' cameras, one on either side of the car's interior rear view mirror), plus electrically operated rear windows, front fog lamps and door mirror mounted repeater indicators.

Available on the mid-range SZ-T and the top line SZ5 versions in two wheel drive form, is a newly-developed CVT (Constantly Variable Transmission) drivetrain.

Those choosing the SZ5 model have the option of choosing Suzuki's ALLGRIP 'AUTO' four wheel drive system.

Prices start at £13,999 for the SZ3 with two wheel drive and a manual gearbox, rising through £15,499 for the manual transmission SZ-T (or £16,499 for the CVT Auto SZ-T) to £17,499 for the range-topping SZ5 with ALLGRIP four wheel drive transmission. The same price applies to the SZ5 if fitted with Suzuki's CVT transmission and two wheel drive. In each case metallic single tone paintwork adds £465, or £650 for dual-tone metallic paint.

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REAR SEATS

It is interesting – and important if you are thinking of buying an Ignis – to note that the SZ3 model (only) comes as standard with a 'fixed position' rear seat that will take three people (it still has a folding backrest, usefully divided 60/40), yet the higher specification SZ-T and SZ5 versions can only accommodate two rear seat occupants. On the other hand the two rear seats in these versions can individually slide fore and aft by up to 165 mm (6.50 in), thus varying the compromise between rear seat leg room and luggage space. The 50/50 split backrests on the two seats also have a built-in two position recline facility.

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Collectively these features come into their own in everyday motoring, and with the SZ-T and SZ5, provided that you don’t need to carry three people in the back of the car, the fact that there are only two rear seats means that available shoulder and hip room is very generous for up to two passengers in the rear.

CONVENIENCE AND CONNECTIVITY FEATURES



Within the passenger compartment is a twin stage glovebox, plus bottle holders/storage compartments in the centre and rear consoles, also in each of the four passenger doors (long compartments on the front doors), plus there's an elasticated pocket suitable for maps, etc, built into the back of the front passenger seat.

All Ignis models feature a 'Guide Me Lights' facility, which enables the car's dipped headlamps to illuminate for 10 seconds (and adjustable up to 25 seconds if required) when the car is locked/unlocked.

On SZ-T and SZ5 models, there's a seven inch touch panel display in the centre of the facia,

and this can be used in conjunction with Apple CarPlay (multiple uses for iPhone owners), Android Auto (extends the Android mobile phone platform) or Mirrorlink (smartphone apps appear on the car's touch screen) connection, with satellite navigation and a three dimensional map standard-fit on SZ5 versions.

SZ-T buyers can optionally upgrade to sat nav operation via an SD card system.

ENGINUITY



Under the bonnet of all Ignis versions is Suzuki's K12D 1.2 litre four cylinder 16 valve petrol engine. This has been developed from the successful and much-praised K12C Dualjet power unit which it replaces, and which made its debut in 2014. The K12C motor was first used in the Swift, then in the Baleno (from the summer of 2016) and the first Ignis (from early in 2017).

The enhanced K12D engine provides improved fuel consumption and emissions figures, compared with the already impressive K12C motor.

State of the art features of the revised engine include… A new fuel injection set-up, with two injectors per cylinder, electric actuation for the variable valve timing (VVT) system for the inlet valves (a conventional hydraulic VVT system operates for the exhaust valves), a variable displacement oil pump and electrically controlled piston cooling jets (which help to keep down internal temperatures).

The fuel injectors have been positioned as close as possible to the inlet valves, thus producing a finer atomisation of the petrol mixture and a more efficient transfer to the cylinders, with a revised design of inlet port and combustion chamber also being incorporated.

Greater air turbulence within the combustion chamber has been achieved by using piston crowns with a slight 'bowl' shape.

An Exhaust Gas Recirculation (EGR) system has also been built-in, to prevent unwanted abnormal combustion ('knocking').

The overall aim of these changes has been to minimise emissions and fuel consumption, while still providing effective accelerator response and performance. The revised engine develops 83 PS, and maximum torque output is 107 Nm (79 lb.ft) at 2,800 rpm. According to my calculations these figures are a little lower than those for the equivalent original Ignis, but mpg and emissions figures are better.

HYBRID SYSTEM ENHANCED

The latest Ignis models are all equipped with a self-charging hybrid system; this remains at 12 volts but incorporates a new lithium-ion battery, featuring an improved capacity of 10Ah (up from 3 Ah) to enhance energy recovery efficiency. The battery is located under the front passenger seat.

The system uses a compact, lightweight belt-driven 'Integrated Starter Generator' (ISG) which operates as a generator and starter motor, and assists the petrol engine during initial

movement from rest and acceleration; it also generates electricity, harnessed through regenerative braking (in other words the transfer of kinetic heat energy to electrical energy).

The ISG unit is more efficient than a standard alternator, and when the brake pedal is operated the system senses this and harnesses the power thus developed, recharging both the car's special lithium ion battery and its conventional 12 volt battery.

In addition the ISG also operates an idle stop function, and once the engine has been first started from cold, using its conventional separate starter motor, the ISG is used at all other times to restart the engine smoothly and quietly.

In terms of output, the ISG, which adds just 6.2 kg (13.7 lb) to the weight of the vehicle, develops 2.3 kW and a torque figure of 50 Nm (37 lb.ft).

The built-in Engine Auto Stop System (EASS) helps to minimise fuel consumption by shutting off the supply of petrol to the engine when the car starts to decelerate, turning it on once more when the vehicle starts moving again.

The engine is at rest for longer periods than with traditional stop start systems, and the system operates at speeds below 10 mph when the driver's foot is taken off the clutch pedal and the gearbox is in in neutral (or, on CVT versions, when the brake pedal is operated). The engine then restarts instantly when the clutch pedal is depressed. This all happens 'instantly' and, I found, imperceptibly.

TRANSMISSION

Standard fare on all Ignis models is a five speed manual gearbox, already proven in service and notable for its easy, sweet-changing nature. (Power is delivered to the front wheels only, except on ALLGRIP-equipped four wheel drive variants).

However, as an alternative to the manual gearbox, and available for the first time on hybrid

Ignis models, Suzuki's Constantly Variable Transmission (CVT) automatic set-up is optionally offered on two wheel drive SZ-T and SZ5 versions.

It takes the form of a fully automatic, electrically-controlled transaxle assembly, incorporating a continuously speed-variable transmission arrangement, in conjunction with a two stage planetary gear and a single speed reverse gear. Suzuki says that the use of a planetary gear set-up enables expansion of the gear ratio ranges, thus providing good acceleration response as well as quieter running at high speeds.

The three element, one step and two phase type torque converter features an automatically-operated lock-up mechanism.

The gear change unit provides seven 'step gear' programmes, and comprises a planetary gear unit, multiple disc clutch assembly, multiple disc brake assembly, a steel belt and both primary and secondary pulleys.

ALLGRIP AUTO

2020 marks the 50th anniversary of Suzuki 4×4 models, and the firm is still the only company to offer four wheel drive across all its model ranges – Ignis, Swift, Jimny, Vitara and S-Cross (the system type – all well-proven – varying in complexity and mode of operation according to each model range).

In the case of the Ignis, four wheel drive is only available in conjunction with the SZ5 specification level, and with manual transmission.

The ALLGRIP AUTO arrangement used in the Ignis was first used on the Swift, and is a permanent, fully automatic and straightforward system, which, when required, automatically feeds power to the rear wheels via a viscous coupling, thereby aiding cornering ability and traction when required. It is a reassuring aid for people living in country districts (for example).

Effectively the viscous coupling acts as a centre differential, linking the front and rear axles. It comprises two sets of annular metal plates which rotate within a housing containing a high viscosity silicon type fluid. In normal front wheel drive operation, the two sets of plates turn at the same rate, but if a front wheel starts to slip the silicon fluid rapidly becomes highly viscous ('thickens') as it is heated by the increased friction and shear created by the speed differences between the two rotating sets of plates.

As this happens the viscous coupling locks and transfers power to the rear axle.

Further refinements built into the system are Hill Descent Control and Grip Control.

Hill Descent Control is activated by the driver when the car is travelling on a slope at less than around 15 mph in first or second gear.

By contrast, Grip Control operates at speeds of under 18 mph and also comes into play when activated by the driver, and is used when slippery surfaces are encountered; it delivers torque to the wheels that have grip and applies braking to a spinning wheel.

The deliberate use of small, light in weight components for the ALLGRIP system means that versions thus equipped are only 45 kg (99 lb) heavier than equivalent two wheel drive variants.

The fuel consumption and emissions figures are still impressive for the SZ5 ALLGRIP Auto models, at 51.9 mpg (WLTP Combined figure) and 123 g/km, respectively.

It is worth noting that when this four wheel drive set-up is specified, the inevitable rearward positioning of the rear differential slightly reduces the boot's minimum luggage capacity to 204 litres (7.20 cu.ft), compared with 260 litres (9.18 cu.ft) for the two wheel drive equivalents.

SUSPENSION AND BRAKING

MacPherson strut front suspension is utilised, plus beam type rear suspension, with coil springs and with a stabiliser bar installed within the intermediate Torsion beam.

Disc brakes are fitted at the front of the car, with drum brakes at the rear.

THOUGHT IN DESIGN

As I have noted with other Suzuki models, the Ignis engine bay provides plenty of space around the main power unit, and easy access to ancillary components. I feel that this is excellent news for ease of servicing and helps to minimise the time required, helping owners as well as Suzuki dealer technicians.

I should mention too that the car's handbook is much more comprehensive in coverage than many, and very helpful for owners, including information on maintenance check aspects and servicing intervals, etc.

ON THE ROAD

I have just spent a week with the range-topping SZ5 variant of the latest Ignis, with ALLGRIP four wheel drive system, and priced at £17,964 including £465 for its metallic Speedy Blue paintwork, which I found attractive.



All those who encountered the Suzuki during my time with it seemed to like the inherent cheeky character of the car, ingeniously different in appearance compared with most compact cars of today; they also praised the colour.



I should add that in these strange and uncertain times, every time I looked at the Ignis, its cheerful ‘face’ lifted my spirits!

At the outset, in giving my thoughts on the way that the car performed, I should say that during much of my motoring with this car, the road conditions were abysmal, with heavy rain and strong headwinds to contend with for several days. However, in such particularly challenging conditions the Suzuki acquitted itself well.

The Ignis is not intended to be a sports car, it is more about versatility, fuel economy and low emissions. That said, our test vehicle was always willing to perform, with sufficient power available during acceleration from rest and when on the move. The engine soon warmed up from cold and, imperceptibly aided by the ISG and the built-in engine stop/start

set-up, even in local town use the car was delivering fuel consumption figures of around 57 to 59 miles per gallon.

The engine and its ISG were smooth and quiet in operation (with truly seamless activation of the ISG), and, in town and when outside urban boundaries, during long journeys, performance was lively enough, provided that the engine was kept spinning above about 2,500 rpm.

The power train's easy delivery of the available power and torque was helped by the slick-changing five speed gearbox. On long main road uphill gradients it was sometimes necessary to change down from top (fifth) gear to fourth to maintain momentum, but that was not a chore.

Fast cruising was relaxing and hushed too; an indicated 70 mph required just 3,000 or so rpm as indicated by the tacho needle.

At higher speeds a little wind noise and a subdued rumble from the tyres was evident, but overall the Ignis felt very quiet, smooth and refined.

Strong headwinds and crosswinds were shrugged off admirably by the Suzuki, which felt stable in all the adverse conditions I encountered. I should also say that I was impressed by the degree of power assistance provided by the steering, at all speeds. It felt positive at high speeds, and low speed manouvres, with greater assistance, were made easy too – helped by a usefully small turning circle. I felt that the variable calibration was 'spot-on'.

The accommodating seats proved to be comfortable for all occupants, including on long trips, and there was a very generous amount of head and leg room for rear seat passengers, not always the case in a small car. As mentioned, with only two rear seats in our SZ5 version, there was also plenty of shoulder and hip room for those travelling in the back.





The suspension felt well-damped and the ride was commendably well-controlled; not soft, but accommodating of main and side road undulations and potholes etc.

Handling and roadholding qualities were impressive too; although the car has a ‘tall’ appearance it cornered with minimal levels of body roll.

According to the car’s on-board computer, the driving range on a brim-full tank of petrol is 299 miles; the tank capacity is 6.6 Imperial gallons or 30 litres on the ALLGRIP versions; 7.0 gallons or 32 litres on the two wheel drive variants.

I LIKED…

I liked the relatively high driving position, and appreciated the car’s excellent forward visibility, also, when reversing, the very clear rear view camera. Unlike some, this did not become clouded by mud during my time with the car. The camera was a real boon, especially as the rising rear/bodywork lines towards the rear of the car did somewhat restrict rearward visibility.

The screenwashers, wipers and lights all worked well. The headlamps gave an especially effective spread of light on both dipped and main beam settings, and this was welcomed by me during hours of night-time driving in the rain…

The large touch screen in the centre of the facia worked well and intuitively, including the sat nav set-up. I feel that it is commendable that to operate, for example, the heating/air con systems, these are controlled by separate, straightforward controls beneath the touch screen, rather than, as with some of today’s cars, from a menu that has to be operated from within the touch screen.

Located in the centre of the facia are separate, logical controls for the Hill Descent Control, Grip Control and other dynamic functions of the vehicle.

I especially welcome the fact that this Ignis has a conventional mechanical handbrake, a

plus point for me if I was buying one. It worked very effectively too, on some steep test slopes that I regularly use.

I did not venture off road in the Ignis (it's not intended to be used in this way), but during my time with the Suzuki, many of the roads were covered in mud and wet leaves, and it was reassuring to have the benefit of the car's four wheel drive system that switched in/out imperceptibly when required.

On one occasion it was necessary for me to re-start the vehicle on a very steep slope in a wet and slippery country lane; the transmission instantly fed the traction to all four wheels and off we went, no problem!

I thought that the luggage compartment was very clever, with its individually sliding rear seats, multi-position backrests and 50/50 split folding rear seat backs providing a wide variety of seating/load carrying options. The individual twin seat backs fold forwards and open up a great deal of load space, although they do not fold fully flat to floor level.

Sadly the car does not come with a spare wheel, but an 'emergency inflation kit' is provided, housed beneath the boot floor.

Inside the car, the front door bins and bottle holders, plus bottle holders in the rear doors, the glove box and the centre console compartments, plus the 'map' pocket built into the back of the front passenger seat, collectively provide plenty of space for carrying small items.

FUEL ECONOMY

As a starting point/benchmark, the official WLTP rating for 'Combined' fuel consumption for the SZ5 ALLGRIP version as tested, is 51.9 miles per gallon (compared with 55.7 mpg for the two wheel drive variant with a manual gearbox; 51.3 mpg for the CVT auto).

For the first 125 miles I covered, including a fair amount of in-town driving and many miles

of countryside touring, the car's on-board computer showed a very creditable average consumption of 62.3 miles per gallon.

During my week of road-testing, amounting to some 410 miles, many of which were covered in atrocious weather and road conditions, the overall figure shown by the Suzuki's computer was 57.2 mpg. In fact this was some 5.3 mpg (10.2%) better than the official WLTP Combined figure of 51.9 mpg, and gives an indication of just how economical the car would be in more normal conditions.



It should also be mentioned that my test car had fewer than 1,000 recorded miles on the clock at the start of my evaluation, and the figures might well improve further in terms of economy, as mileage increases.



VERDICT

Just the job. As stated at the start of this report, this was (another) Suzuki that I was reluctant to see driving away up the road, after an entirely happy week with it.

The Ignis is a compact car that's full of positivity and individualistic character, as well as useful safety and convenience features. It's easy to drive and to live with, and provides a cheerful, different appearance.

It also features much better than usual interior space within minimal external dimensions, excellent fuel economy in real life motoring, and in the case of the example I tested, with the

added reassurance of four wheel drive when needed.

Oh, and in today’s market it gives good value for money too.

Did I mention that I like it?

WHEELS-ALIVE TECH. SPEC IN BRIEF:

Suzuki Ignis 1.2 Dualjet SZ5 ALLGRIP


KV20 YST

Built in: Sagara, Japan.

Price: £17,499, plus £465 for ‘Speedy Blue’ single tone metallic paintwork, totalling £17,964.

Engine: K12D ‘Dualjet’ four cylinder, 16 valve 1.2 litre (1197cc), direct fuel injection petrol; Euro 6 compliant.

Transmission: Five speed manual gearbox; four wheel drive

Power: 83 PS @ 6,000 rpm.

Torque: 107 Nm (79 lb.ft) @ 2,800 rpm.

Performance:

0-62 mph: 12.8 seconds

Top speed: 103 mph.

Fuel consumption (‘Official’ figures):

WLTP figure: Combined, 51.9 mpg (2WD manual, 55.7 mpg; 2WD CVT, 51.3 mpg).

On test, over 410 miles, average 57.2 mpg.

Fuel tank capacity: 30 litres (6.6 Imperial gallons).

Approximate range on full tank, as indicated by the car’s on-board computer: 299 miles.

CO2 Emissions, WLTP: 123 g/km (2WD manual, 114 g/km; 2WD CVT, 124 g/km).

Road Tax: First year £165, later years £140.

Warranty: Three years/60,000 miles.

Insurance Group: 19P

Dimensions: Length 3,700 mm (12.14 ft), Width, SZ3: 1,660 mm (5.45 ft); Width, SZ-T and SZ5, 1,690 mm (5.54 ft), Height 1,605 mm (5.27 ft), Wheelbase 2,435 mm (7.99 ft), Turning circle, 9.4 m (30.84 ft), Kerb weight 940 kg (2,072 lb).

Luggage capacity, four wheel drive SZ-T and SZ5, 204 to 1,086 litres (7.20 to 38.35 cu.ft). Note: SZ3, with ‘fixed’ rear seat, luggage capacity 267 litres (9.43 cu.ft) with seat back in upright position); two wheel drive SZ-T and SZ5, 260 litres (9.18 cu.ft).

