

## A6 Hybrid Test Drive

2012-10-06 08:09:58 by audioc

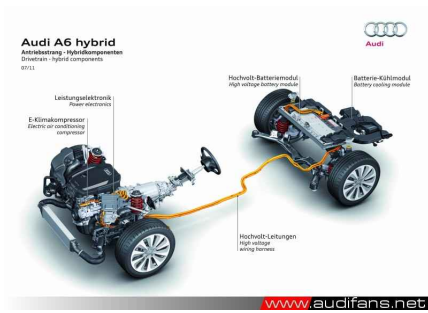


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During our [trip to Copenhagen & Sweden](#), as well as [driving the new A3 in 3 door form](#), the S6, S7 & S8 on the track, we also managed to sample the new A6 2.0TFSI Hybrid.

Now available in the UK, the A6 Hybrid 2.0 TFSI tiptronic with 245bhp is available from £42,700.00

Find out what we thought about the car, and the technology....



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Audi began volume production of the A6 hybrid in early 2012 for the seventh generation A6.

Designed as a parallel hybrid, it produces a combined total of 180 kW (245 hp) of system output and 480 Nm (354.03 lb-ft) of system torque.

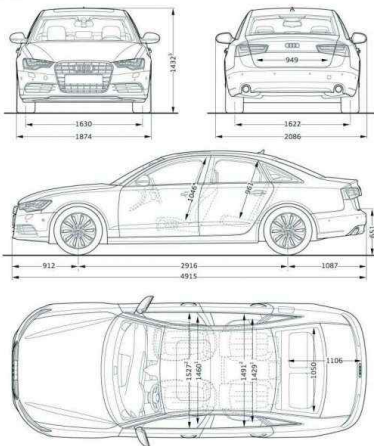
The combustion engine, a 2.0 TFSI with 155 kW (211 hp) and 350 Nm (258.15 lb-ft) of torque, combines the power of a V6 engine with the consumption of a four-cylinder unit, generating CO2 emissions of less than 233.35 grammes per mile.

This works together with an electric motor producing 40 kW (54 hp) and 210 Nm (154.89 lb-ft) of torque. The electric motor is mounted directly behind the TFSI in the space usually occupied by the torque converter in front of the modified eight-speed tiptronic. The gearbox sends the power to the front wheels.

Acceleration from 0 to 62 mph comes up in under 7.5 seconds and reaches a top speed of 149 mph and has a combined fuel consumption of 45.6 mpg

**Audi A6 hybrid**

Dimensions  
04/12



1 Shoulder width  
2 Elbow width  
3 Height with roof aerial 1445 mm  
• Maximum headroom  
• Dimensions in millimeters

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The light and compact lithium-ion battery has a nominal capacity of 1.3 kWh and is located in a crash-proof area in boot and delivers 40 kW of power. Two different methods are used to air cool the battery, depending on n



eed: with air blown from the passenger compartment by a fan and via a separate cooling circuit coupled to the deluxe automatic air conditioning system. This technology keeps the battery within the suitable temperature window over a broad range, ensuring a relatively large proportion of electric driving.

All this additional kit to produce the hybrid usually comes with a space and weight cost; the new A6 weighs approximately 80% of the previous model, but with Hybrid it weighs approximately the same as the previous model.

**How does this relate in real world?**

Actually, very impressive, and really smooth. This is the first Hybrid we have experienced, and looking back, the first thing I can think of comparing it to is a Prius.... and although they are "de rigueur" with the Hollywood "A list", it's well documented that if you do journeys such as Birmingham to London, they are no way as economic as expected- something such as a BMW

M5 is more economical... so it's not a really "worthwhile" comparison (plus I have no driving experience of a Prius (<shudder>))



The car is taken as it is; it did not feel "overweight", and as the official figures suggest- it's no slouch. Using the full amount of power available, it doesn't hang about, if required.

The transition between electric power through to combined hybrid to full on petrol is smooth and unnoticeable. Floor the throttle, and the car feels like it has more power than a 2 litre- especially considering the cars size and weight. Putting your foot on the accelerator to start and move off takes some getting used to, with no engine noise or any "vibration" as you would normally get with a "normal" car- but it makes the car appear as if it's moving effortlessly... Something I could feel comfortable with driving & owning- grace, pace, classy & loaded with "all the toys"



you would expect AND it comes complete with "green" credentials. I was particularly impressed with when you hit reverse; the MMI display turns into a screen, complete with distance markers and direction markers overlaid onto the rear view provided by a camera. Turn the wheel, and the direction markers move, showing you the direction the car will take- ideal in tricky reversing manouvers. You would also think that a lot of space would be "lost" in the rear/ boot for the batteries and everything that goes with it. Admittedly you don't get a flat floor, but there are still 375 litres of useful space (although thats a considerable loss from the standard front wheel drive A6's 530 litres.



**How does it work?**

If off throttle, ("coasting") this transforms kinetic energy to electric energy. If you use the brakes, it charges the batteries quicker under braking conditions.

If you use boost mode in a 2 tonne car with just electric power, the battery goes flat very quickly. "Boost" mode gives higher torque and more power. With both running, green and orange. If the status is only green it indicates power is via battery only.

A combination of information on the 6.5" MMI display in the centre of the dash and the dial in the "standard" binnacle (where you would expect a rev counter to be) shows the various states; Ready for operation- dash indicates "ready" and MMI shows green. Petrol engine- at this point is off.

Recuperation (charging) will show the level of charging in the binnacle, and the green arrows on the MMI display go towards the front of the car from the left, typically when under braking.

Electric Driving (using only the vehicles batteries) shows the efficiency of driving in the binnacle, and the MMI displays



green arrows moving towards the rear of the car.

Driving with combustion engine - this will show the efficiency of the driving on the binnacle, with the engine lit up "orange" on the MMI, with orange arrows moving towards the rear of the car.

Boosting. Full on, "mad as a bag of wasps" driving mode (and utilised by many on the day)- this is full power from the engine AND the battery system, giving maximum power (although this can only be sustained for as long as there is charge in the battery)



The specification, as you expect, is fairly comprehensive for a car in the sector, and is based on the SE model, but with a few "extras"

Completely electric mode is possible (using the EV button), and this simulates complete electric-keeping the combustion engine off. If you engage "kickdown" it changes and starts the engine. Range on EV alone is quoted at just under 2 miles..

This A6 Hybrid is a step towards the Full electric e-tron models. BUT; you also need to look into the figures, and compare-with the rest of the range.

Why?

Engine	PS	Transmission	CO2 (g/km)	Combin ed mpg	VE D b and	BIK band	Price (ROTR)
Hybrid 2.0 TFSI	245	tiptronic	145	45.6	F	20%	£43,480
2.0 TDI	177	multitronic	132	56.5	E	20%	£32,145
3.0 TFSI quattro	310	S tronic	190	34.4	J	29%	£39,655



Sure, the 3.0 litre TFSI is not much different in price, offers an extra 65bhp, at a cost of higher emissions and 11.2mpg less. (Model for compariason is quattro & not in the same trim level)

The 2.0 litre Tdi has 68bhp less, BUT 10.9 mpg MORE than the Hybrid- and starts at over £11,000 less..

I thoroughly enjoyed driving the car; and the A6 Hybrid is situated between the diesel and petrol offerings- in terms of price, performance and economy (although with "greener" credentials). My suggestion would be to not dismiss the idea of a Hybrid if you are in the market for an A6. Five or ten years down the line when the batteries may need replacing, and at what cost, is a different matter altogether...

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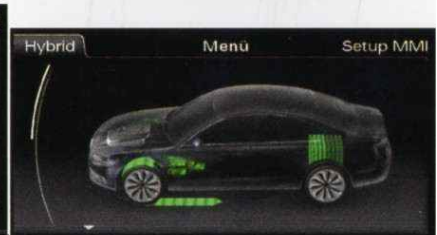
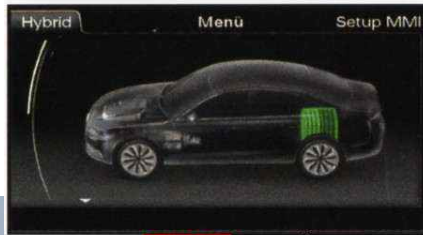
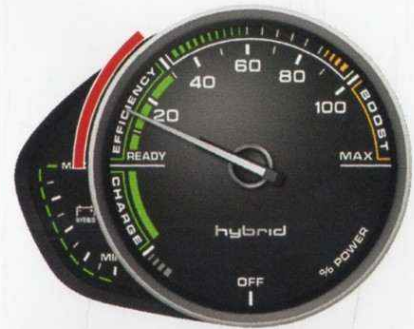


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Ready for operation  
"Ready"



Electric driving



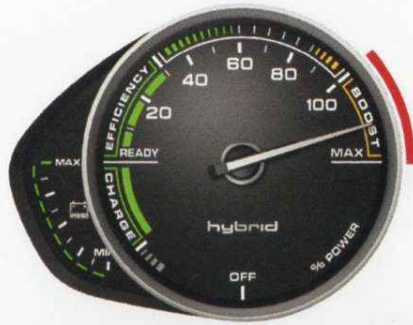
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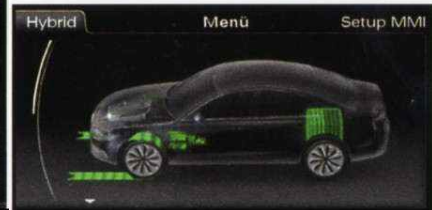
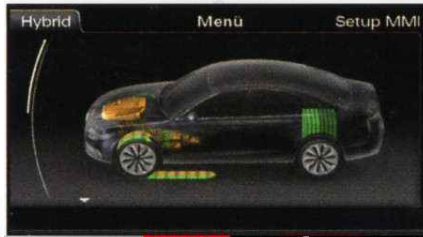


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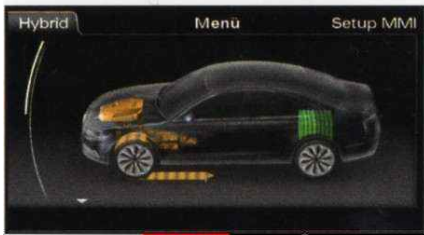
### Boosting



### Recuperation



### Driving with combustion engine



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