

The Audi S4 Biturbo

A buyers guide

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The Audi S4 Biturbo

OK – So now you’ve done your homework – you’ve decided that you want a fast yet understated saloon or estate car (sedan or station wagon).

You’ll want a car that will last, a car that is safe, sure footed, and to a certain degree a car that you can “grow” with.

You want a six-speed manual or tiptronic transmission, permanent four-wheel drive, and a six cylinder turbocharged engine with the very latest five-valve per cylinder technology, superb build quality, and lots of “go”.

You’ve convinced your better half and your bank manager, you’ve checked with the insurance company that you can be covered and you’ve satisfied your conscience that you’ve made the “right” choice.

You’ve made the decision to buy an Audi S4. Here’s how to make the vision into reality...

Model Specifics

Where do you go from here? Well, firstly you might want to appreciate that the Audi S4 biturbo was first released in Europe in 1998, with North America and Canada being introduced to the model in 2000, so there are actually two different models available in Europe.

The external differences can be seen quite quickly, with early vehicles featuring square side-repeaters, thin body-mouldings, flush mounted door handles, and

Xenon headlamps with separate indicators. It takes quite an eye to see, but you may also note that the door-mirrors on earlier cars are not quite as “angular” as those of its successor.

You’ll also need to know when browsing through local classifieds and dealer pages that an S4 listed as circa 1994 is not a misprint, and while it is a fabulous car, you do not want to waste valuable time looking at it!

The early S4’s (or urS4’s as they are sometimes referred to) are based on the last model Audi 100 cars, and feature a 20-valve 5-cylinder turbocharged engine as found in the Audi S2.



Audi S4's V6 Biturbo Power Plant

Choosing a vehicle

By choosing an Audi S4 biturbo, you’ve actually cut out some major hassles usually associated with car buying right from the start.

At the time of writing, the oldest Audi S4 biturbos have only been in circulation for under 3-years. This means that in most cases, you can rely on them having relatively low mileages, having been well looked after, sporting service history from the main dealer, and still benefiting from the manufacturers warranty.

Problems such as rust, mechanical wear, and other such issues do not really come into the equation when buying an S4, especially since the car is fully galvanised and because it is exceptionally robust. But, as with all cars (and there is a but), there are some issues you do need to be made aware of – most of which stem from cars that have been modified, cars that have been poorly repaired after accidents and cars that have been repaired after vandalism.

Be aware that although the Audi S4 biturbo is limited to a low annual production figure, there is a good quantity available on the market to choose from, so if at first you don’t find quite what you’re looking for, try the next one!

For worry free motoring it is recommended that you choose an example with low to average mileage, a

guide figure being 12,000 miles annually, no modifications, and full details depicting the car's history in terms of servicing, manufacturer recalls and warranty.

This is only a guideline, but as with many things, there are exceptions to the rule.

It's usually cars that have not been modified which are the most desirable and sought after.

The downside of being a desirable vehicle is that the S4 is also prone to "ringing" – that is a vehicle which has had its identity changed after being stolen or repaired following serious accident damage – we'll go into how to safeguard yourself as much as possible from this later when we discuss "screening".

Options

The Audi S4 can be specified with a myriad of options, almost equating to a third of the cost of the basic car. This provides for the original purchaser to tailor a car that is very unique indeed.

It's also one of the reasons that one S4 can be difficult to price in comparison with another.

Our advice is firstly to define your choices in terms of basics such as Colour, Interior, and then "niceties", such as sunroof, CD player, Satellite navigation and the like.



Available S4 Colours

The car is available in nine colours, Laser red, Black, Cactus green, Hibiscus red, Imola yellow, Santorin blue, Nogaro blue, Pearl white and Silver. The most expensive paint finishes are Pearl white, Nogaro blue and Imola yellow, all of which are available by special order.

The interior is available in a selection of three material combinations - Jacquard satin cloth, leather, or a

combination of leather and Alcantara – a man made suede-like material available in a vivid blue or platinum.



Blue Alcantara Interior

Door and Dash inserts are available in three variants, walnut burr, silver aluminium and carbon fibre – note that not all finishes are available in all markets – for example, walnut burr is not available in the UK.

So, once you've established a basic specification for your potential used S4, decide on what you would compromise should push come to shove. You might bely a sunroof in favour of satellite navigation, or alcantara for leather – give yourself some flexibility.

Finding an S4

Finding the car you want shouldn't be too tasking. The most preferred way to buy a used S4 is to source one via an Audi main dealer or an approved Audi main dealer Internet network, but if you want to save money and are prepared to do some legwork, take a look at the local classifieds. "Auto Trader", "Car Finder", "Exchange and Mart" are all excellent ways of locating a car and saving money over dealer prices.

If you have access to the Internet, you may wish to try using a search engine from the many available, to locate a suitable vehicle in your vicinity.

Draw up a list of potential vehicles – unless you're at a dealership, don't visit more than four cars in a day. Exceeding this number usually results in an impulse buy when you are tired and running out of steam, or will facilitate you in missing important clues that may come to haunt you later.

The phone call

Using your list of potential vehicles, give the owner a call – do speak to the owner. Ask them the type of questions you feel you need answered.

Arrange where possible to view the car during daylight hours. In your initial call, you should look to find out basic information.

Firstly, try to discover why they are selling the car. Check that their rationale is reasonable. Remember, the car you'll be looking at will be less than three-years old, so you need to find out why it's being sold. Ensure you are happy with the mileage - ask questions regarding the condition of bodywork, the wheels and tyres, details of when the car was last serviced and by whom.

Find out if the car is 6-speed or Tiptronic, what remaining manufacturer's warranty there is, and if the car has been modified. Check to see if the car has been garaged when not in use. Ask if the vehicle has been subject to any accidents or damage of any kind and if so, enquire who carried out the repairs.

Is the car under a finance agreement? Does the owner have documentation to substantiate the car is not owned by someone else?

After ascertaining the address of where the vehicle can be viewed, ask the owner if this is their home address.



Always be wary of owners that offer to meet you at locations other than their home. Check with the owner that they are happy to allow you to test drive the car, and if

they will give their consent to have the car screened by Carfax or HPI (vehicle verification agencies) before purchase.

With regards to the test drive, check with the owner that you will be insured to drive the vehicle – be it under the owner's policy or your own. Never take the risk of driving without checking this first – the consequences of this can be dire!

You'll need to feel comfortable with the responses you are given. If you are in doubt or your suspicions are raised, it's best to make your excuses and phone the owner of the next car on your list.

At the end of this article is a used car buyer's checklist that you should use when you view the vehicle.

Modifications

Now depending on your own personal preferences, you may wish to purchase an original vehicle or a vehicle that has been modified.

If you elect to go for the latter, depending on which country or state you live in, you may be required to pay additional insurance premiums depending on the modifications rendered.

These cars usually tend to have issues that the main dealer may be unable or unwilling to assist you with, and you'll want to note that Audi have recently revised their policies with regard to warrantable work on modified cars in the USA and the UK with other countries following suit, meaning that in the event of a problem, you'll foot the bill.

The most popular modification to an S4 is “chip tuning” also known as “chipping” or “engine remapping”.

Such modifications allow the BHP and torque of the vehicle to be increased dramatically.

Prolonged use or sustained hard driving of a modified car can result in expensive component failure. The most common failures being leaking intercooler pipes which give way due to the increased pressure carried by them and failed turbos (usually the oil seals) requiring the engine to be removed for replacement – a very costly procedure.



The smooth lines of the S4

Early cars pre “1999.5” as they are called, use an early version of the K03 turbo charger and were fitted with less resilient intercooler hoses. Audi did put a recall out for these vehicles to have the hoses replaced under warranty, but not all dealerships seem to do this voluntarily – you will need to ask them to perform the work if it's not already been done when you take the car in for service.

2000 model year cars seem to fare a lot better on the modification front. The hoses used are stronger and the K03 turbos are allegedly of a revised design.

Other popular modifications include lowering the ride-height of the car to gain additional stability during cornering, short shifters, to lessen the throw of the gear lever and to give a more “solid” feel during changes, alloy wheel upgrades and various spoiler and grille options.

With any sort of lowering, it's a good idea to have geometric check done on the car to check camber and alignment, which can prove invaluable in the long run.

The more radical of these cars can sport up to 470BHP using parts from the later Audi RS4 and after some expensive tuning work.

Bodywork

Avoid vehicles with panels that do not line up, cars with spoilers or body kits that have not been correctly fitted and look out for any signs of poorly repaired accident damage or forced entry.

The Audi S4 comes fully galvanised and has a 10-year anti-corrosion perforation warranty. This puts the “rust-bug” nicely to sleep.

If a car has replacement alloy wheels, enquire as to where the originals are. This way you can replace them if you don't like the ones fitted or have yourself an extra set of winter tires.

Ensure that the wheels are free of scrapes and chips – any signs of such are an indication of neglect and hard driving.

Open all the doors, one at a time and close them – check that doors have not dropped on their hinges and that they close first time without slamming or bouncing off the rubber seals in the doorway. Do the same with the bonnet and boot-lid (hood and trunk).

If the car exhibits rust of any kind on the body or under the bonnet, you should walk away.



Check for stone chips or other damage

Check in the boot under the spare tyre. All S4s come with a full size spare and tools including a jack. Look for signs of damage or repair. Check under the cars sills for damage by poor jacking. Many garages (and some owners) fail to pay attention to the jacking points and damage suspension, plastic trim or floor pans.

Make sure that the key for the locking wheel bolts is available and safely stored.

If the car has been lowered, check under the wheel arches and see if any rubbing of tyres and paintwork has occurred. Turn the steering wheel to the left and right and again, check for rubbing or wear.

Servicing

Regular servicing and maintenance always pays dividends. Late model Audi S4s can go 20,000 miles without servicing due to advancements in oil, filter and spark plug technology. In the US, servicing is recommended every 3,000 miles, quite possibly due to the amount of stop-start driving done in the cities.



Ideally, all servicing should be carried out by the main dealer

The S4 should always be serviced using synthetic oil, never mineral or semi-synthetic blends.

Ensure that a service history document is available and check that the book exhibits all the correct stamps and endorsements. Don't forget to check the latter pages to see if scheduled brake fluid changes have been performed. From the factory, the S4 is supplied with a glycol-based brake fluid of DOT 4 specification. Be wary of cars that have been topped up with silicone brake fluids, as glycol and silicone fluids are not compatible.

It's important to check that the brake fluid is changed at regular intervals as glycol fluids are hygroscopic, meaning that it absorbs water over time and loses its efficiency.

Don't compromise by viewing or selecting a car that has not been well cared for. To do so will result in problems and regrets soon after purchase.

Usually, the issuing main dealer services most cars. This means that all the stamps in the service booklet should match. You can always check with Audi customer services if you are in any doubt about the authenticity of such entries.

Cars with differing stamps do not indicate any sort of foul play, as it is conceivable that owners move from one area to another, or may even have had bad experiences with some dealerships.

Recalls

We touched briefly on factory recalls when we covered modifications. At the time of printing, we could only find recalls pertaining to the following:

1. Intercooler hoses – early models weak
2. Dust caps on tie rod ends – early models weak
3. Vehicle with tiptronic transmission – Brake control valve

Note that not all of these will apply to later vehicles.

Successfully completed recalls are marked in the service history booklet and are stamped by the main dealer, usually with a code.

Test Drive

By now you've looked over the car you've found and are more than comfortable. You just can't wait much longer to get in and take it for a spin – but before you do – you need to check that you are sufficiently covered by your own or the owners insurance policy.



Choose a route which emulates most driving types

Before driving off, check the condition of the tyres, and check the fluid levels under the bonnet – oil, water, brake fluid, power steering and washer bottle. Be aware of any unusual smells – burning, brake or clutch lining, fuel and the like, both before and after the test drive.

Adjust your seat, headrest, mirrors and steering column to a position that suits you.

Locate equipment such as lights, indicators, wipers, park brake, and emergency hazard light switches before you pull away.

When switching on the ignition, check for any warning lights that stay on after the car is started. Pay particular

attention to lights including Airbag, Brakes and temperature.



The understated lines of the S4 Saloon

When you're comfortable, take the car for a drive. To test the car as best as possible, you'll need at least five miles of road, including a fast section of motorway.

Ideally you should insist on seeing the car when the engine is cold – if not on the first visit, then the next.

Drive the car gently at first until the engine has warmed up.

Transmission

Check the car in all gears – changes should be smooth and there should be no sign of crunch or stiffness on a good manual gearbox, with no signs of the clutch slipping or snatching.

Turn off the radio and listen. Listen for knocks and grinds, squeaks and thuds – If you hear any – start asking questions...

The car should pull smoothly from all gears and is capable of pulling from 30mph in top gear without the need to change down a cog.

A healthy car should cruise quietly and effortlessly. Push the throttle and you should feel an immense surge, and no loud sounds of air escaping from the intercooler or hoses, or whining from the transmission or driveline.

Brakes

Test the brakes – the car shouldn't dive excessively or pull to either side, but remain composed through straights and bends, with a firm pedal feel.



S4 with modified rear braking system

Check for brake squeal, and vibration on the steering under braking.

Be wary of cars with a spongy pedal feel and improperly fitted aftermarket brakes.

Electrical

When you are happy that you've established a good feel for the car, switch on the radio, check the CD player and tape – tune in radio stations, set the air conditioning to both cold and warm positions, verify the full travel of all windows, mirrors and all the electrical equipment that you can lay your hands on.

If the car is fitted with a self-dipping mirror, check its operation by covering with your finger the forward facing hole on the right hand side. If it is operational, you'll see the mirror darken.

Pay attention to all the switchgear – especially illumination and cruise control.

With the engine running and the headlights switched on, close the doors and windows and activate the windshield washers. From below the bonnet – check that the “robot” washers push up from the front bumper and fire at the headlamps.

Get out of the car leaving the windows open – check the operation of the “closure” system – operating the alarm and holding down the “arm” button will automatically close the windows.

The Audi S4 comes highly specced even in basic form, meaning that it could accrue potential electrical gremlins.

Remember, anything that doesn't work and that's not covered under warranty will doubtless cost you to repair.

Engine

The engine is one of Audi's most modern and advanced power plants, and as such, you'll be hard pushed to find

a bad one that smokes and splutters. If you do, walk away!

From cold, check the oil and water levels. If you find the oil to be dirty or the anti-freeze to be weak or off colour (usually a pinky red or greeny blue colour if all is in order), then insist it is changed prior to purchase.

Start the engine and check for signs of leaks, unusual noise and fumes.

Ensure that the cosmetics under the bonnet are all present and undamaged. Look for ring clips that have been over tightened or have damaged screw heads.

Don't necessarily be suspicious of a very clean engine bay, as these cars seem to keep clean of their own accord.

After the test drive and the engine has warmed up, check again for leaks, fumes and noises.

Check that there are no severe vibrations in the cabin – this may suggest signs of worn engine mountings, or poorly fitted exhausts in the case of modified cars.

Interior

With the exception of the Leather Alcantara combination, the interior of all S4s is durable. Alcantara although a strong man-made fabric, is prone to staining and marking, and requires a great deal of discipline to keep it clean and looking good.

All cars are fitted with a three-spoke leather steering wheel and leather gear knob.

Sound system is in the shape of Audi badged Symphony, Concert or Full Navigation systems featuring a TFT screen.

Later vehicles were offered with the option of electrically adjustable front seats and recaros.



The S4 in base form is well equipped

Be wary of cars with poorly fitted aftermarket mobile phone cradles, turbo gauges and stereo equipment.

Cars fitted with pearlescent paintwork, sunroofs, BOSE audio and leather or leather and alcantara combinations usually command the highest prices.

Severe marks or holes in plastic trim can be costly to repair and due to the overall high build quality of the car, can be time consuming to replace resulting in hefty bills.

Again, check that everything works – open the sunroof, check the operation of the heated seats and the ventilation. Check that the fine “fins” in the air conditioning vents are not broken or damaged. Sit in the back of the car and examine the headlining and map pockets on the back of the front seats.

The car comes with four keys – two housing the remote device for the alarm, a valet key which doesn’t open the glove compartment, rear seats (saloon) or boot lid, and an emergency wafer thin key that fits into a purse or wallet. Make sure you have them all and ask the owner if they have any copies that they need to give to you.

Check that the main keys operate all locks, including on the saloon the locks for the fold down seats in the rear.

Examine the condition of the main keys, looking for any cracks or tears in the plastic. Walk a distance away from the car and check that the remote on the main key will lock and open the car from at least the distance of a couple of cars away – this will determine the condition of the battery in the key.

Always be courteous. If you find a vehicle you don’t like, explain politely to the owner that it’s not quite what you’re looking for and walk-away...

Ask the owner to show you the Radio and locking wheel bolt codes. If they are unable to do so and suggest that the dealership knows the codes, check with the dealer before you commit yourself to any purchase.

Screening

In this day and age of uncertainty with high insurance premiums, theft at an all time high and unscrupulous individuals “ringing” and “chopping”, “cutting” and “shutting”, you’ll want to know that the car you are buying is not stolen, that it’s not an insurance write-off and that it’s safe and poses no danger to you or your friends and loved-ones.

In the US, and the UK, it’s possible to approach agencies like www.Carfax.com and www.HPI.co.uk, who check the history of vehicles nationwide.

Vehicle History Reports can reveal important background information and unearth hidden problems in a vehicle's past which may affect its safety and resale value.

They can reveal using the seventeen-digit Vehicle Identification Number the following types of risks:

- Totalled in an accident or salvaged
- Flood damage
- Odometer rollbacks
- Lemon histories
- Emissions inspection results
- Lien/Finance activity
- Vehicle usage (taxi, rental, lease, etc.)

Before you purchase any vehicle, it’s always wise to use such an agency to verify the authenticity of your intended purchase.



Ensure you are comfortable before committing to any deal

A time to buy...

After you’ve researched a vehicle to your satisfaction, you’ll now be in a position to make the transaction.

When you visit the car, check that it’s in the same condition as when you last saw it. Check that the owner hasn’t removed anything essential such as tools, decals or what was originally interpreted as part of the deal. Check that the tyres haven’t been swapped or changed and that there has been no new damage sustained since your last inspection

Buyers Checklist

On the next page, you'll find a buyers checklist detailing all the points you'll need to cover when you visit a prospective car.

Check with the owner before you visit that they have time for you and are not in any hurry to dash off to take the little one to a school play or grandma to the hospital during your visit.

Take your time – don't be rushed or pressured into doing anything you are not comfortable with. A major part of buying any car is careful preparation and homework.

Ensure that they have all the paperwork needed and that you will be able to start the car from cold when you arrive.



Agree on a preferred method of payment in advance

Do take some sort of ID with you to reassure the potential seller that you are genuine. If possible, go with a friend – never with more than two or three people in total. If you can – take someone with you who is knowledgeable about cars.

If you don't feel happy about carrying out an inspection, take an expert with you.

Remember, the checklist is a guide to assist you in deciding whether a car is worth buying. If you find yourself answering "Yes" to a lot of questions, it may be best to make your excuses and walk away.

While completing the checklist, bear in mind the following:

Exterior

- Look for unmatched paint or poor body fit (may indicate collision damage).
- Check for body filler (use a refrigerator magnet wrapped in tissue paper on suspicious spots).

- Look for signs of rust, especially at wheel wells, under doors, in the boot (trunk).
- Musty smell or dampness in the boot may indicate collision damage.
- If car appears newly painted, ask why.

Tyres

- Wear should be even on each tyre and among the set.
- Tyres should be the same size, rating and preferably the same make.
- Wear should be consistent with odometer mileage.
- Insist on a spare, jack, and wheel brace if they're missing. Check for the locking wheel key.

Suspension

- Push down and release each corner of car. If it bounces more than once, car may need struts or shocks.
- Push and pull on each wheel from beside the car. If wheel moves in or out, bearings or CV joints may be in bad condition.
- Uneven tire wear may indicate suspension problems. If car has new tires, be extra careful in checking suspension.
- Check CV joint boots on either end of front and rear axles (should be a total of eight). If torn or missing, you may expect trouble with replacing expensive joints!

Interior

- Wear of seats, steering wheel, etc. should be consistent with odometer mileage.
- Pay particular attention to the amount of wear on pedal rubbers.
- Musty smell or new carpet may indicate flood damage.
- Make sure windows, safety belts, etc. all work.
- Check glove compartment contents. You should have an owner's manual. Look for repair orders that show the car's mileage. Make sure mileage is consistent with the current odometer reading.

Engine & Transmission

- Check that all fluid levels are correct.
- Oil should not smell burnt or contain water.
- Coolant should be pinky red or greeny blue, but not rusty.
- On tiptronic cars, transmission fluid should be red or pink and not smell burnt.
- Look for leaks around radiator and hoses.
- Spots on the ground under the car may indicate leaks. To be sure, place a clean newspaper on ground under the car after driving it. Check in a few minutes for spots.

Audi S4 Biturbo - Buyers Checklist

Colour	
Interior	
Transmission	
Mileage	
VIN	

Seller's Name	
Seller's Phone	
Modified?	
Asking Price	
Other	

	Vehicle condition	Yes	No
1	Is there any sign of rust or damage on the vehicle?		
2	Are there any leaks or damaged hoses or belts under the bonnet?		
3	Are the tyres and wheels damaged or worn?		
4	Are all the seatbelts in good order?		
5	Do the doors windows and sunroof show any signs of leakage or damage?		
6	Are there any electrical problems? (Dashboard warning, lights, switches)		
7	Has the car ever been in an accident?		
8	Have any body panels been repaired rather than replaced?		
9	Does the car have a good colour match all over?		
10	Check the boot (trunk) for spare tyre, tools and damage – anything missing?		
11	Has the cars identity been tampered with (VIN numbers)?		
12	Is there any damage to the glass on the car – scratches, chips?		

	Test drive		
1	Are the brakes defective?		
2	Does the car pull to one side when braking?		
3	Do the brakes squeal?		
4	Are there any unusual noises or smells?		
5	Does the park brake work?		
6	Does the steering wheel shake or vibrate?		
7	Does the car pull to one side?		
8	Is changing gear difficult?		
9	Does the gear lever jump on acceleration or braking?		
10	Does the clutch slip or snatch?		
11	Does the engine sound different when the clutch is pressed on idle?		
12	Is there a strong smell of petrol, oil or brake/clutch lining?		

	Post test drive		
1	Does the engine rattle or make other noise?		
2	Are there water or oil leaks?		
3	Is there any smoke from the exhaust?		
4	Has the car been clocked? Has the instrument cluster been tampered with?		
5	Is there any heavy wear and tear signs that are inconsistent with mileage?		
6	Does the mileage on service documentation contradict the odometer reading?		
7	Are any of the four keys missing?		
8	Does the sound system exhibit any faults – CD & Tape?		
9	Does the interior require any repairs?		
10	Are there any poorly fitted modifications?		

Use reverse of sheet for additional notes and observations