Buying a pre-owned G-Wagen

or some, a brand spanking new G-Wagen is just out of reach. But because there are so many 4-wheel enthusiasts convinced that a pre-owned G-Wagen from Mercedes-Benz is still a cut above the many new vehicles on the market, the classic still commands good prices. Thanks to sound Mercedes-Benz engineering, there is not much you need to beware of when it comes to buying a second-hand G-Wagen of more mature years - provided the owner or owners were conscientious enough in how they treated the vehicle. However, this is something you can check out without too much expense, and if the service record booklet provides evidence that all the services have been duly and correctly carried out, the AC system, electric windows, lights, electric heat and mirror adjusters and the radio, CD player or navigation system are in good working order, you can approach your purchase with a fair degree of confidence. Particularly if all the keys are available – also the one to release the lockable wheel bolt on the light alloy wheels, where fitted.

Apart from unavoidable stone chipping marks, the bodywork should not show any signs of damage to the paintwork or of rust damage. One indication of extreme cross-country use can be abrasion marks on the underride guard under the tank or the floor assembly.

The important thing is which model year or technical specification you decide to go for. Might you be interested in a G 500 with the pre-update interior fittings? In this case the last version could be the right choice for you, featuring the multi-



function steering wheel which can be used as a control center for the telephone or command system. Complete with ancillary heating, CD changer and navigation system, this SUV offers everything the pampered driver could possibly hope for. However, it is missing the ESP and ETS for greater driving safety and the AC system for added comfort. These features are only in evidence in post 2001 models. In the meantime, although the G-Class had been blessed with a new interior and automatic AC control, as well TV and a range of the very latest technological features, it was still without the electronic stability program and electronic traction system.

A handy tip for would-be SUV buyers looking to travel long distance or particularly those who aim to use the vehicle commercially: The G 290 Turbodiesel series 461, which was built right up to the start of 2001. Although with part-time four-wheel drive and 122 bhp it offers fewer creature comforts that the current G 270 CDI, it certainly lives up to its G-Wagen status. Favorable consumption, good acceleration capacity and enormous traction, thanks to the wide speed band over which it delivers maximum torque - all these are characteristic attributes of this G-Wagen model. Your only problem will be that there are not many of them about. making the search for a second-hand model a laborious process.

Anyone interested in buying a second-hand G-Wagen which is not more than three or four years old should be clear about one thing, whatever the model: There will be a long search before you find what you are looking for. The G 500, in particular, is thin on the ground, and the G 320, G 400 CDI and G 270 CDI are among the most sought-after second-hand vehicles of all.

Whether you are interested in the long or the short wheelbase version depends largely on what you intend to use the vehicle for. The short G-Wagen is more maneuverable both on and off road, while the long wheelbase version offers more storage space, particularly for families and on long trips, and is also quieter when it comes to freeway driving. As regards deciding whether to opt for auto-

matic or manual in the more vintage G-Class models, the choice is not so difficult: Always plump for the automatic version if you can. Automatic transmissions from Mercedes-Benz have proven themselves highly durable, offer around 1.8 more start-off torque due to the converter and also, whether you are towing or breaking out across country, they provide a steady, uninterrupted flow of power where a manual shift could leave you in some sticky situations.

Buying older pre-owned G-Wagen models

When considering investing in one of the older G-Wagen models, buyers benefit from the solid workmanship which is among the last examples of true mechanical engineering left in today's generation of automobiles. If we are looking at G-Wagen models of more mature years, there are endless choices to be made: from long or short wheelbase through to convertible. Series 460 and 461 were also produced in the form of a pick-up.

Over the 25-year history of this model there have been a range of different engines on offer, stretching from the original 99 bhp five-cylinder normally aspirated diesel engine through the 2.3 liter four-cylinder, the 2.8 liter in-line gasoline engine, the 3.2 liter in-line and V6-cylinder or the V8 two-valve engine built into the special 1993 series to the turbocharged diesel engine in the G 350 and G 300.

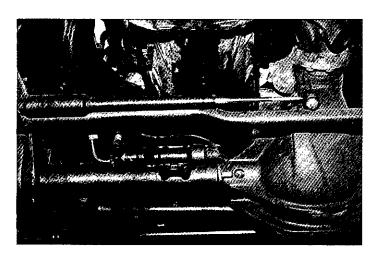
Which engine to opt for is a decision only you can make. The same goes for the long or short wheelbase issue, or automatic versus manual transmission. But to help you towards making that choice, here are a few handy tips you may find useful:

- For everyday urban driving and on short-haul trips, as well as for relaxed holiday traveling, the tried and tested diesel models dated 1979 and after are a good bet. However, the 300 GD, 240 GD and 250 GD are models perhaps more suited to true diesel enthusiasts who rate low fuel consumption above high end speeds.
- An attractive option is the 350 Turbodiesel. The first turbocharged diesel

Advisory manual

engine built into a G-Wagen was launched at the beginning of the nineties, when it was competing head to head with the 300 GE carrying the six-cylinder inline petrol engine. While the driving performance of the turbocharged compression ignition engine was rated as top notch, by today's standards its fuel consumption is rather on the high side. The 3.5 liter model drinks between 17 and 18 liters of diesel for every 100 kilometers traveled on average. Added to this is the susceptibility of the engine to thermal stress when driving at top speeds. This can make for potential cylinder head gasket problems in second-hand vehicles which have topped 70,000 or 80,000 kilometers on the clock, and makes it particularly important that any 350 Turbodiesel you are thinking about buying should be fit-

Are the drag link / tie rod bent and is there any sign of moisture under the floor mats?





ted with the subsequently introduced reinforced water pump.

- In terms of engine performance, the 3-liter 6-cylinder normally aspirated diesel engine in the 463 series is a good bet. This is also noted for its modest consumption, but offers up a tangibly more beefy performance on long uphill highway stretches or when overtaking.
- Noted among the old-timers for possessing the torque of a traction engine is the 500 GE, which was produced in a special series of around 300 in Germany in 1993 but even veterans with well in excess of 150,000 km on the clock are hardly to be had under 22,000 Euro.

By comparison, the 300 GE and the G 320 with in-line engine offer far better value for money.

Anyone interested in one of the older petrol engine G-Wagen models will have to be prepared to put up with the consumption levels still considered acceptable in the eighties, but which can be a drain on today's wallets. The first carburetor models of the 230 are particularly thirsty. Even the 280 GE, despite a gleaming driving performance and a normally compressed, durable engine satisfied to consume normal gasoline, is a touch on the greedy side. Consumption of well over 20 liters per 100 km can certainly be seen as realistic if you enjoy fast driving.

If you are looking for a G-Wagen as a companion for a long-haul trip, and will be driving to countries where the juice costs well under 50 cents, then fuel consumption could be a secondary issue. If in doubt, a somewhat larger spare tank might be a good idea.

Checklist when buying older pre-owned models

The points listed below are a summary of the most frequently occurring defects in the older G-Wagen models which can often have clocked up 300,000 km and more. Whether or not these defects will actually occur depends on how well the vehicles have been looked after and primarily also driven by their previous owners. A G-Wagen which has been driven long and hard over all terrain is certain to

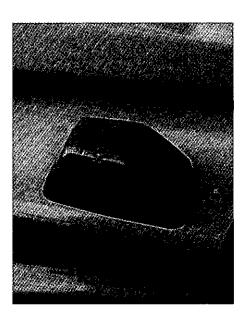
show more traces of wear and tear than the 4-wheeler driven by a country doctor to do his rounds. When doing your check, look for the following points:

- When you test drive it, the engine should start from cold without problems, idle smoothly without any extraneous noises, respond willingly to the gas pedal and pull well through the gears.
- Make sure that there is no radiator water escaping at the engine or at the individual hose connectors. Foam or traces of oil in the radiator water are indications of a defective cylinder head gasket.
- In all older-vintage 230 G, 280 GE, 240 GD and 300 GD models, take the plug out of the clutch bell housing. If there is oil flowing out of the opening, the Borgmann ring on the rear crank shaft gasket is leaking.
- Are the underbody and brake line largely clear of rust? When doing a brake check, the brakes should act evenly and must not squeak. They should respond evenly after the pedal is pushed halfway down at the latest. If you need to pump on the brakes, either there is air in the braking system or the linings are worn. The leverage distance of the handbrake should not be too long.
- Examine the G-Wagen over a pit to check whether the flange on the manual transmission is loose, whether there are any fine cracks in the exhaust manifold and whether the brake and fuel lines are in good condition.
- The braking system, shock absorbers, oil pan, transmission and diffs should be losing oil / brake fluid.
- How does the gear shift feel? Is the gearshift linkage out of adjustment, are the synchronizer rings for the third and fourth gears still OK in the old four-speed gearbox?
- The clutch should operate smoothly without slipping through, the degree of clutch play at the pedal should be around two centimeters. The gear changes should be smooth and flawless. Is the gearshift linkage out of adjustment, are the synchronizer rings for the third and fourth gears still OK in the old four-speed gearbox?
- The steering wheel should not vibrate while you are driving, otherwise the

wheels are not correctly balanced or the tracking is out of alignment. If the steering wheel is difficult to turn, check whether the two universal joints in the pitman shaft have become rusted.

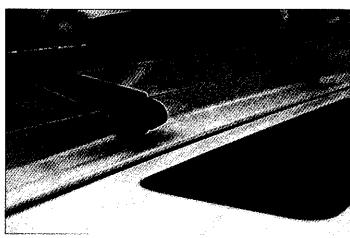
- Do the differential locks work? To check this, while the G-Wagen is rolling slowly lock the diffs and steer a snake line. The pilot lamps for the differential locks should light up (two in the 460/461, three in the 463).
- With 4-wheel drive activated (in the 460/461) drive in tight left-hand and right-hand circles. If you hear a clacking noise, you can assume that the universal joint on the front drive shaft is defective.
- A humming noise while driving is an indication that you have a defective drive shaft.
- In vehicles which have seen a lot of all-terrain driving, check the rubber bushings in the leading / trailing links. Also check whether the tie rod or drag link are bent, whether the underride guard under the tank has been dented or the diff covers have been pressed in.
- The exhaust should be mounted in unscathed rubber bearings and should not demonstrate any holes or leaking flanges.
- The tires should still have a minimum 4 millimeter tread and have been

You should not be able to see any sign of moisture in the turn signal indicator lamps.



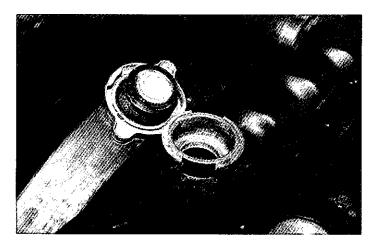
Advisory manual





An out-of-adjustment windshield wiper block will lead to moisture and traces of rust on the front right of the central console.

Foam or traces of oil in the radiator water are indicative of a defective cylinder head gasket.



evenly worn. Uneven abrasion is an indication of a defective axle geometry or faulty balancing.

- The bodywork should be free of rust patches. It is particularly important when inspecting vehicles dating back to the eighties to look at the bottom edge of the rear door, the rear cladding, the tank filler neck surround, the metal of the door sills on the right and left underneath the rubber strips, the floor underneath the foot well mats and the material between the metal guard and the tank for signs of rusting. Color differences, blind spots or paint residues on rubber window seals or moldings are all evidence of repainting or unprofessionally performed repairs.
- The doors, hood and trunk must all close perfectly. The gap dimension on fenders and doors should each be equal on both sides of the vehicle.
- Door and window seals should neither be porous nor brittle, there should be no moisture under the foot well mats and in the truck.
- Lenses and reflectors of headlamps, turn signal lamps and rear lamps should not be stained or rusted.
- If there are traces of rust on the front right of the central console, these point towards water entry. In most cases, this is an indication that the windshield wiper block is leaking. If there is water in the storage compartment in the central console in the 460 models, then the rubber lip of the water drainage opening in the air intake is stuck.
- There should be no abrasions or cuts on the seat belts, and they should not be frayed at the edges. The belt retractor should roll the belt up evenly.
- The heating and fan should work perfectly, as should all the instruments. Important: Any ancillary heating system should ignite on your latest switching attempt at the latest, and then run quietly and with minimal exhaust emissions.

Pre-owned series 460 classics

Anyone interested in purchasing one of the very first G-Wagen models - i.e. from 1979 onwards - either because they are looking for a good deal or because th-

ey are simply a veteran SUV enthusiast should be absolutely clear about one thing: Even a G-Wagen will some day reach the end of its serviceable life and will be subject to the signs of ageing like all the rest of us. In fact these classics are practically indestructible - but ironically this very fact means that certain owners think they can cut corners when it comes to the necessary maintenance. The basic rule of thumb: The cheaper the G-Wagen, the higher the likelihood that it will have some rot lurking somewhere and will require a thorough overhaul. So from the start, you will find yourself investing more than you may have bargained for into the object of your enthusiasm. Because spares are expensive. Paneling sections bought from accessory retailers are often far from fitting like the originals, so penny-pinching here can end up costing you more. The same applies to all the other components. You can only expect to get the requisite standard of quality if the name Mercedes-Benz is on the part somewhere.

Like all automobiles, the degree of rusting is in direct correlation to the amount of care lavished on the vehicle by its previous owners. The chassis itself is not a critical factor, and in any case no welding work should ever be carried out on it. In case of serious accident damage, it should therefore have been completely exchanged. This is not true of the retaining brackets on the rear axle for the springs. These will rust through after many years unless someone has taken the trouble to ensure that the water drainage holes are kept clear. To solve this problem, Mercedes supplies weld-in replacement brakkets. But be careful: there are different versions of this on the market. The later version used with the long wheelbase model has a thread on the top for screwing in the rubber buffer. Just in front of this, the fixture for the shock absorber retainer is located on the extension arm - another quiet little corner where rust can eat away unnoticed. When repairing the old fixture or welding in the new one, proceed with extreme caution in order to ensure identical shock absorber angles on both sides. These are the only major weak spots in the area of the otherwise indestructible chassis, however. We all know that rust is created as a result of moisture. Moisture, in turn, is efficiently stored by the dirt thrown up by the tires. As accumulated dirt forms first and foremost in inaccessible nooks and crannies. the most seriously affected are the front fenders, particularly in the area of the headlamp housings, which then rust though, as well as at the front edges above the headlamp housings. Rust patches in these areas can generally be repaired by welding, although the more elegant solution is to exchange the whole fender. Generally speaking, where there is one rust blister in evidence, there will usually be more...

Also critical are attachments made of rubber with vulcanized-in metal parts acting as fixtures. These metal parts are not immune to the effects of rusting. This affects, for example, the covers surrounding the headlamps. The rubber strips in the sill area should also be checked, as experience has shown this area to be highly susceptible to rusting. All original breakthrough points in the metal paneling which are fitted with plastic dowels can also be affected. The front fenders can also be attacked by rust. The next location which can show signs of rusting is the lower area of the bulkhead between the engine and passenger compartments. Firstly, rust likes to fester away here under thick layers of underbody protective coats which have sprung cracks over time. It is also possible for water to penetrate through defective windshield seals or jellified wiper arm shafts.

The windshield frame of some very ancient SUVs will occasionally also demonstrate blistering, which must be dealt with without fail. However, as the windshield in the G-Wagen is perfectly flat, it is relatively cheap to replace.

The lower edges of the doors should always be closely examined prior to a purchase. Here, it may necessary for the lower part of the door paneling and the base of the door to be reworked or even a new door mounted. Incidentally, the side of the vehicle facing the curb is more at risk than the one facing into the road, as there is more dirt and moisture curbside waiting to be thrown up – with the ob-

Advisory manual

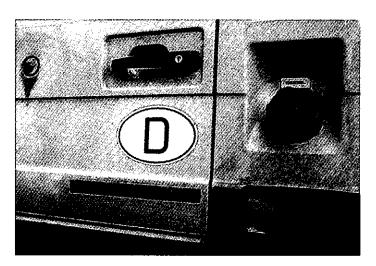
vious consequences. This is the reason why it is so important to keep water drainage holes clean and clear of clogged dirt.

Rust can also lurk in the sill area. Although the sills have no bearing function, the test inspectorate engineer will still be unhappy to see his probing screwdriver pushing its way right through to the other side. The dirt thrown up by the rear wheels gathers in the beading of the rear cladding, resulting in damaged wheel arches. There are spare paneling sections available which can be fitted here.

As the very early models were not fitted with a guard plate to protect the lower end spar (under the rear door or rear doors) from dirt thrown up by the tires, frequently a humid, rust-breeding biotope was created in this area. The resulting corrosion can affect not only the horizontal spars but also the vertical ones on which the doors are mounted. Blistering is particularly prolific around the rear lamps and on the right above the tank filler neck.

Also susceptible to rust is the sheet metal tank, where the electrical terminals of the tank sensor are often a favorite target. The shafts of the windshield wipers also tend to corrode or seize up; the remedy here is to procure spare parts or treat the existing ones, i.e. by welding

Areas at risk from rusting: The bottom edge of the rear door and the area around the tank filler neck and also the rear lights.



open and machining down the shaft in order to reduce the excessive play.

Shafts that have seized up place such excessive strain on the windshield wiper motor that it can run hot, so ruining the rotor.

In the braking system, which in itself is not generally critical, it can happen that one of the four brake pistons allocated to each of the calipers at the front can seize up, resulting in uneven wear of the brake lining.

Jacking up the vehicle will allow you to check the play of the wheel bearings. Should this be out of adjustment – made noticeable by noises and vibrations when driving – they will have to be replaced. You should also check whether there is a sufficient supply of grease within the front axle.

The narrow steering damper used in the early models is no longer available – if one is needed you will have no alternative but to fit the reinforced version used in subsequent models.

Anyone investing in an early G-Wagen model should assume that all the pressed-in rubber parts of the steering drag link will have to be replaced. This also applies to the tie rod ends. And finally, the springs can also be suffering the effects of fatigue or even be broken, and the radiator also merits a check.

Engines, though, are generally a non-critical area. These load-resistant long-distance runners are capable of surviving the neglect of uncaring previous owners over long periods, and provided you ensure they have sufficient oil and the prescribed degree of valve play, running periods of over half a million kilometers are not uncommon. However, with this degree of usage it can happen that the glow plugs have lost some of their sparkle, or that the injector nozzles need replacing – but these are the normal symptoms of wear and tear.

So - opting for one of the veterans of the G-Wagen class is not a leap in the dark. Compared to other ancient SUVs you will be getting a lot of vehicle for your money. Incidentally Switzerland is a good place to start your search for a well maintained old-timer, as the more stringent requirements in place there mean that greater care is generally lavished on vehicles.

The best addresses

Alongside your local Mercedes-Benz dealer, who will be able to check the preowned vehicle computer database to trace any branch or German dealer selling a potentially suitable G-Wagen, there are three main Mercedes-Benz SUV centers in Germany, located in Munich, Berlin and Hamburg.

A call to the Mercedes Pre-owned Vehicle Center in Stuttgart could also be helpful. This is where all used cars are registered, and where would-be buyers can obtain data, prices and locations of potentially suitable vehicles free of charge.

You can also scan the central inventory of pre-owned vehicles on the website www.mercedes-benz.de. The pre-owned vehicles on offer average between six and fifteen months old.

Would-be buyers can request suggestions at the PC according to model, color, equipment, mileage and price. Alternatively, they can investigate what is on offer from the total inventory of the various dealerships.

Entering your zip code causes the system to search initially in your area, and then nationwide. An individual view provides detailed information on specifications and non-standard equipment features for the model matches found.

Potential buyers can find out in detail about current pricing levels from Mercedes-Benz branches or dealers. Anyone consulting the German "Schwacke" website price list should be aware that the prices listed here fall slightly short of the currently charged dealership prices.

Other points to note when buying

To spare yourself any nasty surprises when you buy pre-owned, you should check for example that the information provided by the vendor tallies with the data in the vehicle registration document and certificate. Any subsequent changes such as wider rims and tires, particularly, should be entered in the documentation.

The vendor should also be asked to confirm in writing that the vehicle has not been involved in any accidents and that the milometer reading reflects the actual mileage. Also check when the next big services and exhaust emission checks are due, and if applicable have the vendor do the honors here. The service manual will tell you whether services have been regularly carried out by a reputable workshop.

You would be well advised not to rush a used vehicle purchase, and to carry out a thorough check of the vehicle in daylight. If you do not feel competent to do this yourself, then have it checked out by an expert. Mercedes workshops will check over the vehicle in case of doubt for possible concealed damage. The modest price you will pay for this service can be a good investment if it saves you the hassle and expense of costly repairs later on.

