fine until doused by an oncoming vehicle running on 12 volt gas discharge lamps or LEDs! 6 volt halogens can be bought but if the car is to be used as regular transport at night converting to 12 volts can be a worthwhile investment and is cheap and easy.



In 1956 Mike Hawthorn road tested the new Isabella Saloon TS for the Sunday Express: "If only the German Borgward Isabella T.S. were British! Top speed was a decimal point below 100 mph. It goes! And it goes in comfort, and the petrol pumps are spaced a very long way apart."

In 1958 John Bolster from Autoport tested the Isabella Coupé:

"The Borgward Coupé is an exceptionally attractive car, thoroughly well made, and with a very high quality finish. Isabella has all the character you could possibly want. If you drive her flat out, mile after mile, fairly flinging her through the corners, she just seems to laugh at you, and challenge you to drive harder. I have driven more powerful and faster cars that gave me far less pleasure. In my opinion it is a really good car and I only wish it were made in Birmingham instead of Bremen."

#### Values

£2,000 will buy you a non-roadworthy Saloon. £9,000 will buy you a usable Saloon but requiring work. £27,000 will buy you a Saloon in perfect condition, with no defects, damage or wear. £2,500 will buy you a non-roadworthy Combi. £10,500 will buy you a usable Combi but requiring work. £29,500 will buy you a Combi in perfect condition, with no defects, damage or wear. £5,900 will buy you a nonroadworthy Coupé. £28,500 will buy you a usable Coupé but requiring work. £50,000 will buy you a Coupé in perfect condition, with no defects, damage or wear, £9,900 will buy you a non-roadworthy Isabella Cabriolet. £39,500 will buy you a usable Isabella Cabriolet but requiring work, £86,000 will buy you an Isabella Cabriolet in perfect condition, with no defects, damage or wear. £5,600 will buy you a non-roadworthy P100. £19,000 will buy you a usable P100 but requiring work. £48,000 will buy you a P100 in perfect condition, with no defects, damage or wear, £1,100 will buy you a non-roadworthy Hansa 1500/1800. £11,000 will buy you a usable Hansa 1500/1800 but requiring work. £20,500 will buy you a Hansa 1500/1800 in perfect condition, with no

defects, damage or wear. £18,000 will buy you a non-roadworthy Hansa Pullman. £59,000 will buy you a usable Hansa Pullman but requiring work. £130,000 will buy you a Hansa Pullman in perfect condition, with no defects, damage or wear.

#### Brief History of the marques

Carl Friedrich Wilhelm Borgward was born on 10 November 1890 in a Hamburg suburb. After leaving school at 16 years old he became an apprentice locksmith but World War 1 intervened. He joined a company that produced tyres but with Carl Borgward they switched to making radiators and body panels for the firm Hansa-Lloyd. By 1921 Carl had been repeatedly promoted until he became the sole owner of the Bremer Kühlerfabrik Borgward and Co. G. m. b. H. in Bremen

He was desperate to manufacture his own cars but lack of financial help forced him to abandon development of a 2 cylinder sports car project but he did however manage to



produce a three-wheeled 120cc delivery cart, with a single front wheel, for the post office in 1924 called 'Blitzkarren'. In 1926 his next model was the first 'Goliath' and had a single rear wheel with a two stroke 200/250cc engine. The Goliath rapid and similar 350cc Goliath Standard was joined by two four wheel models in 1929 and 1930, the 'Express', a two cylinder two stroke 600 and 'Superior', a four stroke 2,350 cc 4 cylinder 1.5 tonne lorry forging the Goliath Werke so successfully forward that by 1931 it had successfully taken over Hansa-Lloyd.

After producing his first car, a 200cc three wheeler with a single front wheel and 'Dickey Seat' and top speed of 35 miles per hour Carl Borgward produced the four wheeled Hansa 400/500 followed in 1934 by the beautiful four stroke Hansa 1100 and Hansa 1700 models including cabriolets and the fast and elegant



Hansa twin carburettored 1700 Sport-Cabriolet. From 1938 the range was further enlarged to the Hansa 2000cc and Hansa 3500 but from 1939 the Hansa 2000 became the Borgward 2000 and the Borgward 2300 the first cars to be made under the Borgward name.

During World War 2 Borgward's plant became an armaments factory and Carl Borgward returned to what was left of his factories in 1948. He decided that the best way of increasing his raw materials allocation was to have three different car companies......three times the amount of raw materials! The companies were Goliath, Lloyd and Borgward Hansa. This was a great idea but in practice having three entirely separate engineering, styling and sales departments was rather costly and in one instance it resulted in Lloyd managing to develop a new 900cc flat four water-cooled engine, when Goliath already had something similar! Subaru actually used the Lloyd powerplant as a prototype for its boxer engines in Japan.

The Borgward Hansa 1500, in production between 1949 and 1952 was the first new car to be built after the war. From '52 to '54 came the Borgward Hansa 1800, same body style but a new dashboard which was to emerge again later. This lead onto the much more technically advanced 'Isabella' the most important model the company ever produced. The 1954 'Isabella' was known as a Borgward, not a Borgward Hansa, although the cars kept the Hansa name on the bodywork until 1957. The 'Borgward Hansa', as such, was continued with the 2400 fast back '52-'55 and the big luxury Pullmann-Limousine from 1955-'58. Lloyd produced the little 2 cylinder 300cc two stroke through various models to the four stroke air cooled two cylinder LP 600, Alexander and the 1959 Lloyd Arabella 4 cylinder boxer engined



900cc. From 1950 Goliath produced the GP 700 (2 cyl.) including the beautiful Rometsch bodied GP 700 Sport to the Goliath 1100 (4 cyl.) from '57 and and the not too dissimilar and slightly more powerful Hansa 1100 from



'58 both available in extremely stylish Coupés. The big Combine, Borgward, Hansa, Goliath and Lloyd also produced an absolutely vast array of diesel and petrol lorries, commercial vehicles vans, buses, army vehicles, fire engines, stationary engines, tanks, boats electric vehicles and even a helicopter!

### The Isabella ("the Belle from Bremen") through to the P100

For years large car manufacturers have disguised their preproduction prototypes so in the Spring of 1954 the Borgward Combine sent out their new Hansa 1500 Saloon on their last few road tests before its official release. The engineers asked Carl for a name to replace the nameplate on the cars. Carl Borgward, not only the founder and owner of the company but the chief technician and designer, told them "It does not matter what you put on it, you might as well call it "Isabella"." It stuck!

The 'Isabella' had a 1493cc inline 4 cylinder OHV engine of 75 x 84.5 mm bore and stroke with a single downdraft carburettor fitted to an extremely short intake manifold inside the rocker box. This actually gave the appearance of an OHC engine as opposed to it being an extremely efficient pushrod powerplant of 60 bhp din (65 bhp SAE). The pretty car was spacious, thoroughly well made and comparatively light for its size at 1,000 kg. Light aluminium alloys were used extensively for the gearbox, cylinder head and on many engine parts, covers etc. as opposed to the cheaper and noisier pressed steel.

The body not only looked ultra new for 1954 it comprised a unit construction body and separate front and rear sub frames, the front one being rubber mounted. The front suspension featured unequal wishbones, coil springs and telescopic shock absorbers checked by an anti roll bar. At the rear was a fully independent swing axle again featuring coil springs and telescopic shock absorbers. The front of the axle was located by radius arms pivoting in rubber bearings, the differential being mounted to the rear subframe in large rubber bushes. Very large hydraulic drum brakes were used with twin leading shoes at the front and single leading at the rear complete with wide aluminium alloy shoes.

The gearbox had four all synchromeshed forward speeds and one reverse and was actuated by an extremely efficient and precise column gearchange marred only by its rather long throws. The handbrake was mounted under the dashboard and was the umbrella type, which with the bench seat allowed three across the front and three across the back. A true 5 and occasional 6 seater. The polished bakelite dashboard contained three large gauges; a clock temperature gauge, petrol gauge and the speedometer. There was a cigarette lighter with a plug in map reading light, three ashtrays, one under the dashboard and two in the rear side panels. Ample storage space was provided comprising two door pockets glove box and later supplemented by two retractable cord strung tubular framed map holders mounted on the side of each footwell.

Unusually, the doors had separate wind down quarter lights providing draft free ventilation. Separate heaters for driver and passenger were provided as were separate controls. The large white steering wheel actuated a lightly weighted and rubber coupled worm and peg or worm and roller steering box with three turns from lock to lock. The steering was very precise with a turning circle of around 32 feet, later cars being fitted with a hydraulic telescopic steering damper.

The very well balanced weight distribution coupled with the low centre of gravity and all round independent suspension endowed the car with very high cornering powers. The fuel consumption was low at around 34 mpg and the top speed was 87 mph yet Carl F. W. Borgward kept the price low by a mixed price calculation with his other products.

The only real vices were the vertical fixing of the front bulkhead to the floor making it slightly awkward to rest your feet and the rather low driving position of the front seats, but these were only minor faults against all the advantages. Although the factory reconditioned units for items such as the engine and back axle were relatively expensive, in 1954 there were portials.



In 1955 the Isabella Combi an Estate version was added to the range. The special coach builder, Karl Deutsch of Cologne produced a 2+2 Convertible version of the Saloon the Isabella Cabriolet and 2+2 fixed head Coupé called the Deutsch Coupé. The Isabella Cabriolet was an outstandingly attractive car and at the time was thought of as one of most beautiful cars built in Germany. Although only 23 were built of the Deutsch Coupé this was an important car as it was the 'Missing Link' between the Isabella Saloon and the vet to be built (totally by the factory) Isabella Coupé. Output rose to 26,378 cars and Borgward were now in second place behind Volkswagen in the German sales statistics!



At the Frankfurt Motor Show (IAA) in September 1955 the company demonstrated the new Isabella TS. The compression ratio was increased from 7.2:1 to 8.2:1. the exhaust and

inlet valves were enlarged, pistons and bearings strengthened and the original carburettor was replaced by a large twin choke downdraft Solex. Engine output was increased to 75 bhp din (82 bhp SAE) with the rpm increasing to 5200. This resulted in the car really flying. Top speed was up to 98mph and the freely revving engine was now able to propel the big car to 60 mph in 15.8 seconds. (The figures compare very favourably to Jaquar 2.4.) The bench seat was replaced by individual reclining front seats so the seating was now a very generous 5 seater and it was adorned with more chrome; rear lights parking lights/additional indicators, extra sidestrips and around the window framework. It was now mooted to be probably the fastest 1500cc volume produced standard 5 seater saloon car in the world! All this, and the fuel consumption had been improved to 38

However output fell to 20,993 in 1956 because of some losses on the export market and other manufacturers had brought their cars up to date. In February 1957 the company released the 'patron's' masterpiece, the Isabella twoseater Coupé. Carl Borgward had put a lot of effort into the design of the car. He felt that it should have its own body style but it should have a general similarity to the rest of the Isabella range. A new dashboard was added with push button controls very similar, except in cream with white instruments, to the Borgward Hansa 1500/1800 and with a soft padded top. The slightly plump yet flat shape of the original Isabella was replaced by a Coke bottle style and the top parking lights/ indicators were the only indicators atop the front wings. Electric windscreen washers were fitted as standard. The rear wings sported totally new boomerang shaped rear lights paying a subtle homage to the American fashion for fins. The original Deutsch Coupé had obviously been an influence but this was a sleeker and much more luxurious car. The new Coupé replaced the Deutsch Coupé, so Karl Deutsch of Cologne introduced a Coupé Cabriolet 10,000 DM above the basic Coupé.

Because of the large price gap between the new Coupé and the TS Saloon the TS De Luxe, complete with two tone paintwork and extra chrome, was introduced to fill it. The range had minor improvements such as a new 10.5 gallon petrol tank, longer gear lever, improved suspension, new recessed steering wheel, new upholstery and a new instrument cluster. The Frankfurt stand exhibited a violet Isabella Borgward's 500,00th car since 1948. For August 1958 the Saloon, TS, De Luxe and Combi gained enlarged boots and by 1959 had the same rear lights to the Coupé and all had smaller diamond shaped emblems on the front grille. 1959 was the largest output of Isabellas ever 38,000 out of a total production of 105.000.

1959 also saw the introduction of the P100 Big-Six four door saloon. It was a good looking 100 mph car with very up to date styling and was powered by a new 100 bhp six cylinder engine. The P100 was the first German car to have pneumatic suspension and it was a major rival to the Mercedes-Benz 220 but its development was very costly. to Mexico and the Impulsora Mexicana Automotriz carried on production of the P100 Big-Six but not the Isabella.

Many of the key Borgward personnel went to work for BMW and the old Borgward factory is used by Mercedes Benz to produce estates and the 190.



The Lloyd Arabella, which had also been introduced in 1959, was technically excellent but it was priced too low and was rushed into production with insufficient development. As a consequence there were problems with water leaks and with the gearbox so many had to be recalled, thus costing the company vast sums of money. Carl Borgward approached the Bremen Senate to lend him some money so that the banks would provide a further loan. There was nothing odd in this but at the time the shipbuilding yards were desperate for workers so he was unable to use the threat of sacking his staff as ransom. On 31st January 1961 a sensational newspaper headline appeared "Borgward Stops Payment!" and suppliers' credit lines were cut off and all cash flow was stopped by the Bremen Senate. Less than a year earlier Senator Eggers and Dr. Johannes Semler had 'saved' BMW, which had been in a far worse state than Borgward. They came in to help but rumour has it that Herbert Quandt of BMW did everything in his power to hinder any rescue of Borgward. The situation became worse with the Press demanding action frightening prospective buyers and as a result sales plummeted especially in the US. On 4th February 1961 the Bremen Senate took over the company and Dr. Borgward resigned. Companies such as BMC were interested in buying the company but they stalled to get the best deal. Finally a cooperative set up by the Borgward dealership, suppliers and customers failed. Therefore the total output of the Isabella between July 1954 and September 1961 was 202,862 cars. Carl F. W. Borgward died a broken man.

The replacement Isabella with its new 1600cc engine never came to fruition, however its Frua styled body became the basis of the Glas 1700 eventually to become a BMW. In March 1963 all the equipment from the factory was shipped

#### Racing History

In 1914 Hansas took the team prize in the Austrian Alpine Trial. The 66bhp 1500 streamliner took 12 international class records at Montlhéry as well as the 1,000 miles at 107.3mph in 1950. In 1951 Brudes, Steiner, Hartmann, Koch-Bodes and Polensky broke 19 long distance and speed records in the 750cc class in a streamlined Goliath. 1952 saw the fall of further class F records and a special Hansa based on the 1800 D diesel Saloon added 14 more class E records in 1953. For the 1951 Frankfurt show the company exhibited a 135 bhp dohc 1,500cc prototype with a 5 speed gearbox. Karl Brandt used conventional pushrods on a hemispherical head for the first of his Borgward Rennsports putting out 100bhp through a De Dion back axle. Unfortunately Borgward were always handicapped, in their racing career by lack of money and the development time for competition was literally stolen from their production car programme whenever possible. They had a victory at Grenzlandring at 121.54 mph and they won their class at the AVUS. For the 1954 season they used a new engine based on the Isabella block but with fuel injection which resulted in Bechem winning the Eiffelrennen. Hammernick and Bechem were leading the Porsche opposition in the Carrera Pan Americana when they were unfortunately eliminated by crashes.

Brudes, Ricker and Schäufele broke 14 international long distance and speed records in a 350cc Lloyd Rekordwagen and 13 International records in the 500cc class. The 1955 Mille Miglia saw a 1600cc class win but the season generally was used by Brandt to develop a new twin

overhead camshaft wet liner 5-bearing fuel injected 1500cc engine putting out 172bhp. For 1957 Herrmann managed 2nd place in the European mountain championships. At the German Grand Prix for 1958 Borgwards took 2nd 4th and 6th places but in the Freiburg hill-climb Bonnier put up a brilliant performance of 7 minutes 32.6 seconds setting an absolute record. This beat both Hans Stuck's pre-war time record with the Auto Union and Zellar's on a BMW motorcycle. They came in 2nd and 3rd in the mountain championships of 1958 behind Porsche.

The Isabella TS was very successful in saloon car

racing with class victories at Spa and in the Gran Premio Argentino in 1957. At the Daily Express International Trophy meeting at Silverstone in 1956 Reg Parnell won his category in the Production Touring Race. Bill Blydenstein won his class at Brands Hatch in 1959 starting the success rolling for his partnership with his own Isabella TS, 'UUV 75' as a private entrant against Works prepared teams. He followed this with a win at Goodwood and he won his class for the August International at Brands Hatch, On 28th February he won the up to 2,000cc class speed trial at Brands Hatch following this with a class win up to 2.000 cc at the Harley Ford Hill Climb. He also won his class at the Goodwood International race setting a record lap of 1min 57.2 secs The Cibie cup race meeting at Goodwood in May resulted in a win for Blydenstein and again in August at Oulton Park also winning his class at Aintree, whilst setting up a lap record. His last win of the season was at the Harley Ford Hill Climb in September. For the Cibie Cup, Blydenstein had achieved 2 outright wins 3 third and 1 fifth place in the 6 races totting up 26 points, 4 points ahead of his nearest rival in a Works supported Riley. He was awarded the Cibie cup by the then French ambassador Jean Chauvel. By 1961 he was achieving 84 bhp at the rear wheels and in May won the Spa Grand Prix averaging 92.8mph for 45 minutes finishing ahead of Alan Hutcheson's works Riley and 40 secs in front of Hacquin's Ecurie Nationale Belge Alpha, In 1959, Cooper formula 2 racing cars, powered by the Borgward 1500cc fuel injected engine, won all 19 major races in their class with Stirling Moss winning the Rouen and Syracuse Grand Prix.

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# BORGWARD DRIVERS' CLUB

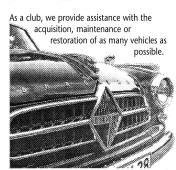


## CAR AND CLUB INFORMATION

#### The Borgward Drivers' Club

The club was founded in 1980 by Robert Richmond-Jones and we now have nearly 100 members. The current Secretary is: Norman Williams, 158 Willow Avenue, Edgbaston, Birmingham B17 8HG.

Our aim is to promote enthusiasm for, and interest in, the marques; Borgward, Hansa, Lloyd and Goliath, which despite their excellence have only had sporadic coverage by the motoring press.



The spares situation is very good. All parts necessary to keep an Isabella on the road are readily obtainable. Other models are catered for as well. Acquisition of parts is aided by contacts in other clubs across the world.

We can also provide technical and practical help, from the accumulated knowledge and literature of our members, in overcoming any difficulties which any prospective Borgward owner or enthusiast is likely to encounter. With other car clubs, we can fight legislation that may eventually ban us from the road.

The club is run by a committee, elected at the A. G. M. All work is done on a voluntary and unpaid basis, and involves many hours of hard work. We are in contact with Borgward clubs in Germany, Australia, Eire, the USA, Sweden, Denmark, Italy, South Africa, Austria and Belgium and are affiliated with the 'Borgward Interessengemeinschaft' of Essen which has 700, or so, members. In recent years, we have welcomed overseas enthusiasts to our UK International Meetings at Brooklands, Arundel Castle and Chatham Dockyard and have also held meetings at venues such as the Bluebell Railway, Duxford

Air museum and places of historic Air museum and places of historic interest. In the past we have included Sprint type test days at racing circuits such as Castle Combe and Goodwood. The club regularly exhibits at the indoor Classic Motor Show at the N.E.C in Birmingham and outdoor shows such as Enfield Pageant of Motoring and every second Tuesday of the month some members attend a Classic Car meeting at Brooklands Motor Museum from 7:00 until 11:00pm. Every August, as many as seven Borgwards and many more club members drive to the International meeting in Germany, hosted by the 'Borgward Interessengemeinschaft', where they join around 200 other vehicles, which include, Borgward, Lloyd, Hansa and Goliath cars as well as commercial transport This too offers an opportunity to buy parts for our rarer vehicles.

Members are kept in touch with club activities and information, through communications such as a regular Newsletter, occasional Journal and a comprehensive and informative website. The membership annual fee is a modest one and new members will receive a membership card, the latest Newsletter and recent Journal. The website also provides copies available online of, the Workshop Manual, Owner's Handbook, other technical information and Road tests.

We encourage overseas members as well and indeed these have come from; Australia, Eire, Malaysia, South Africa, USA, Italy, Germany, Austria, Belgium, Malta and Gibraltar.

Easily the mainstay of the Club, the most popular model is the Isabella and although the Saloon was at one time the most prevalent of the range, the Coupe is now definitely seen in far greater numbers. Driving a

representative Isabella today, especially a TS, immediately instils confidence and actively encourages the driver to drive with exuberance and flair. Everything works as it should with total precision and total lack of vagueness. The handling of the car is very modern and it always feels like a driver's car.

It is a car that wills you on with precious little restraint. The engine is always willing, right from cold, and revs quite happily at the top end just surging the big car forward. It is always difficult to believe that a mere 1500cc can achieve such a performance and with such utter flexibility, cruising effortlessly at 82mph. One can floor the car in third, without any hesitation from as low as 15 mph and then straight on up to 80mph. Doing the same thing in top gear at around 60mph shoves the driver back into seat and the car soars to well over 95mph.

The column change may appear a bit out of touch with the engine at first, but its sheer preciseness, coupled with an excellent all synchro box, makes it a joy to shift gear. In this respect, design has turned full circle. Present day cars feature a gearchange at the steering wheel albeit using paddle change technology. The biggest pleasure of all is the handling. The precise steering feeds all the information back to the driver that is needed. The all independent suspension and excellent weight distribution, between the front and rear (nearly 50/50 on the Coupe), endows the car with extremely high cornering powers. The car wills the driver to corner harder and harder all the time, especially in the wet. It will oversteer eventually but provided the driver keeps the power on tap it will always be gradual and easily correctable. Even sudden braking, on a bend, does not exhibit the sudden and vicious oversteer slide exhibited in other swing axle cars.



The brakes are good drum brakes, as drum brakes go, but they are obviously not as good as modem disc system.

Having said that, they will stop well from 80 or 90mph provided the driver allows them to cool slightly before a repeat performance. The only real reservation about the car is the 6 volt electrical system. Although it is very reliable and does everything it should, the headlights are