

CZECH MATES

Dougie Armstrong tells the tale of his trip to Czechoslovakia in 1959
in a Triumph Herald, and of the many surprises
that the Skoda and Tatra companies had in store for him ...



The Triumph Herald caused a stir in Czechoslovakia in 1959 and always drew fascinated onlookers

It all started at the 1959 Geneva Salon, which in those days used to be staged in the city and not as now on the French border by the airport. We (an Australian journalist friend and I) were viewing, because it was very unusual, Skoda's works sports racing car, a 1089cc, twin ohc, four-cylinder two-seater with steel-tube spaceframe, all-independent suspension, inboard rear brakes, and five-speed gearbox/final-drive mounted on the aft-end of the chassis. The twin overhead camshaft, eight-valve head was attached to what was in basis a production Skoda Octavia/Felicia touring engine, and it was all very well carried out. We were impressed, particularly as we had no idea that Skoda went in for that sort of thing.

That year, Skoda had taken a sort of smart pavilion at the Show, complete with various floor-levels, and a Stately Home-type series of stone (or cement) staircases to reach the different floors. The nationalised Czech enterprise used this rather upper-class edifice to display their products, and also, presumably to provide a picture of their technical expertise, one of their works racing cars. It worked, for we found it something of an eye-opener.

As we stood and stared at the little OHC racer we were soon aware that a pair of eyes was in turn staring at us.

The eyes advanced and we were soon swapping names, the Skoda man being one Václav Vlk who asked us, as we seemed interested, if we would like to meet the designer of the sports racer. Which we did, there and then. His name Ing František Šajdl. Our new acquaintance, Mr Vlk, turned out to be an ex-motocross rider and racing driver of some repute in Czechoslovakia, and was unquestionably a motoring enthusiast. Neither he nor the Skoda designer were high on English but we struggled along, as one is apt to do when the subject is dear to all. Then, out of the blue, Mr Vlk (who was actually deputy general manager of Motokov, the Czech overseas sales organisation) suggested we should visit Czechoslovakia, as his department's guests, to tour the

country's car and motorcycle industry. He also invited us to try his own personal (rear-engined) Tatra 603 V8 which was parked outside the Salon, as well as the new (rear-drive) Skoda Felicia cabriolet which was being introduced to Europe at the Salon.

We were somewhat taken aback at the invitation to Czechoslovakia but it seemed an excellent idea, a good source of articles, and we asked what was a propitious time of the year.

"Czechoslovakia is good in June," said Mr Vlk very slowly and distinctly. "It is warm and sunny, and the flowers are in bloom," he added. We looked through the Salon windows. It was cold and miserable outside, so with a mental picture of heat haze and roses we heard ourselves saying: "Yes please".

But the trip was some three months away, so for the moment we concentrated on sampling the two Czech cars, and they were certainly interesting. I remember being very impressed with the big air-cooled Tatra's streamlining and looks, not to mention its real six-seater accommodation and fine engineering. Not that I thought the engine was in the right place! In spite of the bulk of the 603, its light-alloy pushrod ohv engine was of only 2.5-litres, maximum power output with two twin-choke carburettors being a claimed 100bhp. The Tatra actually handled better than I thought it would, what with its motor mounted aft of the rear suspension, and the latter being dead simple swing axles! But when you pushed it, the back end would quickly break away, and one found oneself pretty busy in the office. Apart from a faint whirr of cooling fans the 'oversquare' (75x72mm) V8 engine was very quiet – but it was of course some ten feet away from the front seat occupants. I was most taken with the smoothness of the controls, the accelerator being incredibly sensitive in spite of the distance from the Jikov carbs. The steering column gear-lever was very effective too (about the size of a dipswitch!) and controlled the all-indirect four-speed all-synchro gearbox with amazingly modest, light movements. The all-independent suspension (coil springs all round) gave an excellent

ride with only a modest wheelbase (1400mm), and the 603 was fast too with a claimed maximum of 160kmh. But more anon.

It's a pity there isn't the space to tell you about the caper of getting visas for the trip, and so on, but suffice to say we decided to take something new and British on our run, so we asked Triumph if we could borrow one of their recently-introduced Herald coupés (oh yes, we were driving, not flying). Triumph responded magnificently, and in about three months we were hurtling across Germany en route to Prague in 'our' 1.2-litre steel-top, mindful of the rear swing-axes. We had so much gear in the boot, though, that the rear wheels displayed comforting negative camber most of the time!

We stopped off in Frankfurt/Main and indulged in a spot of shopping (radios, tape recorders, cameras and so on were so cheap in Germany in those days!), then pressed on in the Herald towards the Czech border.

En route to Frankfurt we had discovered a facet of the little Triumph that did nothing to endear itself to us. It would have been all right if it hadn't rained, but it did (often), and that swept roof leaked water into the interior. What's more, the rain entered the doors and sidetrim, and when the sun came out we had to put up with an odour that put Grimsby in the shade. We learned later that a new form of fish glue was used for trim adhesion on the Herald production line, and when it stood in the sun after being rained on it was enough to put you off kippers for life.

That Friday evening in Germany was pretty advanced as we approached the Czech frontier, so we decided to stay the night on the capitalist side. We found a likely-looking pub in, I think, Altenstadt, where we had dinner in the bar. After dining we thought we'd have a look round, so we once again entered the Herald and followed our noses. After a few kilometres a pleasant-looking inn hove in sight on a small village, so we applied the (drum) brakes, and made for the bar. I think the village was Waidhaus – it was certainly very close to the border – and if they ever change the name to Wildhaus I won't be surprised!

We were sitting in the modest bar, quaffing our foaming pils and trying to make conversation over the roar of the slot jukebox when we were conscious of the fact that the 'public bar' lads were gathering around the bead curtains that separated the two bars. Clutching their half-emptied (large) glasses these bucolics looked as though they knew something was going to happen. And how right they were. Suddenly, through the other bead curtains appeared a blonde lady of Wagnerian proportions, who gyrated slightly to the music and took off her clothes without a by-your-leave. There was none of your a-little-at-a-time and overhead-twirling-of-stockings as the more-travelled of you will have witnessed in the strip emporiums of the world, but a performance more in tune with a girl who is keen to get to bed. For sleep I mean ... oh, I don't know though.

Through the bead curtains appeared a blonde lady of Wagnerian proportions

The lads from the four-ale rolled their eyes and followed Gretchen's every movement. They took quick, cooling draughts from time to time, and obviously found the show exciting. As for the near-naked *fraulein*, she was unmoved by the lascivious, libidinous looks as she moved slowly around the bar wearing (almost) nothing but a blank expression. We never saw anything like that in Czechoslovakia, I can tell you ...

Next morning at the border the young Czech policeman was very unhappy about the new 'Magnetophones' (tape recorders) we had bought with us, and he examined our cameras and lenses inside out. Finally, after filling in all sorts of paper forms, everything was declared satisfactory and we were waved into the country. So there we were, on a

The steel connecting-rods too were specially-forged, and polished all over. Each camshaft ran in plain bearings, operating 90-degree valves (in hemispherical combustion chambers) through interposed levers, and each turned a (horizontally-mounted) Scintilla Vertex magneto. The twin mags fed two sparking plugs per cylinder (the camshaft drives could be quickly switched to distributors and battery/coil ignition if desired), and though all development work was carried out on 87 octane petrol (pump fuel in Czechoslovakia was of poor quality at the time of our visit) the creditable power output of 95bhp/7700rpm was achieved with complete reliability, using a compression ratio of 9.25:1. Carburetors were twin double-choke horizontal Jikov instruments, Czech-produced items with more than a passing resemblance to Webers, although Pal Pohil units were an alternative induction arrangement. The standard 1089cc Skoda 440 ohv production saloon engine of the time developed 40bhp/4200rpm, so Sajdl had more than doubled output – and with poor quality fuel.

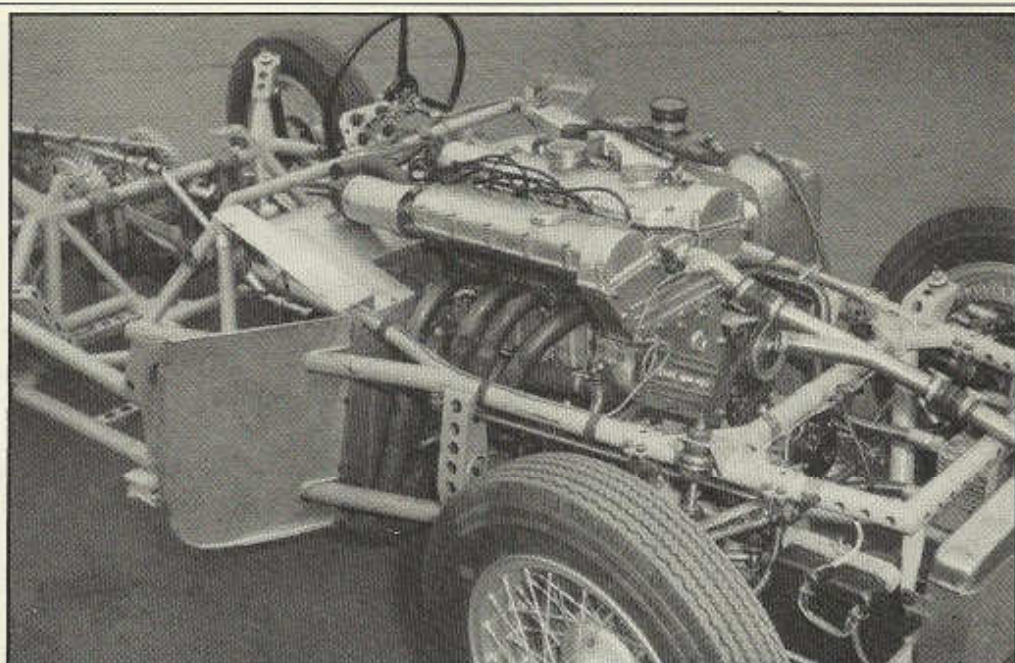
The multi-tube chassis looked a trifle weighty compared to British competition structures of the time, but the car's unladen weight of 1210lbs was certainly nothing to be ashamed of. The Skoda experimental department had obviously worked very hard to reduce the avoirdupois, for throughout the front and centre chassis areas there was copious tube drilling in evidence. By reducing head weight of the already-light aluminium four-cylinder engines, and by massing weight rearwards with diff-mounted gearbox, Ing Sajdl's team had achieved the 'ideal' weight distribution of 50/50, and there was no doubt the team cars handled very well indeed.

Suspension was independent all round by torsion bars and wishbones, diagonal trailing arms and interconnected wishbones combining at the rear to positively locate the swing-axle suspension. All four (hydraulic) non-servo drum brakes were of cast iron with shrunk-on light-alloy cooling fins, the rear drums being mounted close-up to the final-drive unit. Unusually, Sajdl had chosen an all-trailing shoe layout to obviate, so he claimed, any chance of wheel-locking under racing conditions!

The good-looking bodywork was of GRP, produced on wooden formers in-house by Skoda. Bonnet and tail panels were of aluminium, and to minimise weight, the road (wire centre-lock) wheels had Dural rims. No wind-tunnel work had been attempted but Sajdl said the cars were easily capable of around 130mph (which I thought a little optimistic). The designer also informed me that he hoped to produce an ultra-light magnesium crankcase, gearbox, and final-drive castings for the cars.

The Skoda OHC was indeed a very fine effort, particularly as it was conceived, designed, built, and undergoing tests in just 12 months. I said how impressed I was and how I would have loved to have seen the cars in a race. Mr Vlk quickly pointed out that we would be seeing just that at the 'round-the-houses' meeting that coming Sunday in Mladá Boleslav, Skoda's home town!

In the meantime, we motored off to the Tatra factory at Kopřivnice (even more difficult to pronounce!). Fellow journalist Dev and I set off in the Herald one afternoon following our Motokov friends in their Tatra 603, for Kopřivnice was a longish



Light alloy engine of Skoda OHC gave maximum power of 95bhp @ 7700rpm on 87 octane petrol...



Massed Skoda specials start at Mladá Boleslav

trip, and they knew the way! One point that strikes the traveller in Czechoslovakia is the surfeit of railway crossings. They appear all the time, and it was on that journey we pulled up by the track to await a train, when I was amazed to see a local (presumably) literally appear from behind a bush close by the road, announcing to us that "I was in the RAF in Leamington Spa!" He'd obviously seen the GB plate, and wanted to exercise his English.

We stayed up in the mountains at a splendid, large wooden hotel, quite near Kopřivnice, and at dinner we were joined by the local bigwigs and commissars. I was somewhat amused to be followed, every time I visited the gents, by our East German waiter, who questioned me thoroughly about my political beliefs and so on. During dinner I could see him reporting in detail to the party chief. As journalists we were obviously regarded as suspect.

It developed into quite an evening, and I remember (amazingly) that after the Commie brass had departed, we and our Motokov mates somehow or other took over the hotel band, and I can still see of Vlk banging away on the drums late into the night. We were still drinking Slivovice when the sun came up, although I don't remember actually going to bed.

Next morning, or rather that same morning, Tatra were due to send a car for us, after breakfast, to visit the works. My colleague came wafting into my room about 8am, or something equally absurd, and started rambling on about the car being due. I dutifully vacated my bed, shaved, teetered about, then returned to my downy couch. "If they want me," I remember announcing, "they will have to send a car for me after lunch-time." I'd had about two hours' sleep, I was hung-over like I'd never known before, and to have attempted a walk around a factory would have been disastrous. I heard Dev leave in the Tatra, and I slipped back into Morpheus' welcome arms. It was noon before I knew where I was (and I'm not kidding), so I immersed myself in the bath and tried all the rejuvenation tricks I knew.

Anyway, I was (sort of) ready when I heard the



One Mladá Boleslav entrant even had wire wheels!

Tatra re-ascending the hill. I sat up-front with the driver, who it seemed, besides being an employee of the factory, was also the marque's ace rally driver. He was a large, cheerful lad, and he certainly had the measure of that large rear-engined device. The way down the hill to the works was all hairpins, but he knew just how far he could go with the Tatra (with rear swing axles and a V8 engine aft of the rear suspension line!). In spite of my condition I found our progress interesting, for he was always one jump ahead of the configuration, as it were, opposite-locking our way down to the factory. Amazingly I wasn't sick.

Down the hill to the works was all hairpins, but he knew just how far he could go with the Tatra

When I got out of the car the chums were awaiting luncheon for me, which I thought pretty civilised, and although I didn't really want to eat (gawd, I felt dreadful) anything, I was finally convinced by someone that a dish of soup would be just the thing to put me to rights. So I acquiesced, and in it came. I'm bound to say it tasted good and I spent some time gathering up the last bits of noodle.

"What soup was that?" I asked, for I'd certainly enjoyed it.

"It was the cow's stomach soup," one of my Czech friends informed me. My 'noodles', of course, were the unfortunate animal's intestines, so from then on I didn't ask what I'd been eating.

The Tatra works was a real old-world engineering base, the factory producing both cars and big trucks. The cars, in those days at any rate, were available only to top people like diplomats, industry controllers, politicians, and so on, and in fact weren't manufactured in large numbers, but Tatra (and their predecessors) have now been making cars for some 88 years.



Curious MG K3-Skoda hybrid was pre-war remnant

The 603 was designed by a group of Tatra engineers, and although they would never admit it, the car (still in production today but designated Type 613 with restyled body and enlarged 3.5-litre V8 air-cooled motor) follows the general design philosophy of the late, great Dr Hans Ledwinka who started working for Tatra (or the Nesselsdorfer Wagenbau which preceded that enterprise) in 1897. Ledwinka realised that Europe's rough roads called for something revolutionary as far as suspension was concerned, and his 1922 Type 12 Tatra featured a steel-tube backbone chassis, all-independent suspension, and (front-mounted) twin-cylinder air-cooled 'boxer-motor' of 1100cc. It was a design philosophy he adhered to (apart from later moving on to rear-mounted engines, and baseplate-reinforced backbone structures) for the rest of his long life. Like his great friend Professor Ferdinand Porsche, Ledwinka was imprisoned for six years in 1945, and was then expelled from Czechoslovakia. He was still alive in 1959 when I visited Tatra, and at 81 was living in Munich where he later died, but the Czechs wouldn't even talk about him. Ledwinka was a genius who designed cars of unusual technical interest (not that I'm a rear-engined fan!), and in the commercial vehicle field he was the first to evolve an air-cooled 12-cylinder diesel motor, which developed 210bhp.

Having said that, the post-Ledwinka 603 Tatra incorporated some clever thinking, the Kopřivnice engineers obtaining a claimed weight distribution of 47/53 front-rear. The layout was achieved mainly by utilising a relatively lightweight power unit, and with the complete absence of a propeller shaft, the car was built quite low, was well-streamlined (I've no idea of the drag figures), and capable of accommodating three-across on each of the two bench seats. The 603 was notable for generous suspension movement which provided an excellent ride.

The 603 was preceded by a four-cylinder model, the Tatrapiplan (which stemmed from the pre-war Type 97 introduced in 1937), and while we were at the factory we were shown photographs of a special-bodied Tatrapiplan that was presented to none other than USSR President Stalin. I'm pretty sure the car was bodied specially for a post-war European show, and judging by the photographs it looks very elegant, particularly for 27 years ago. Coachwork was by Carrosserie Sodomka, the Czechoslovakian firm.

While at the Tatra works we were taken to the museum in the grounds, and among many interesting exhibits was the 2490cc 'Monopost', a single-seater, rear-engined, air-cooled V8 which was originally built to develop components of the (then) forthcoming 603 saloon. The Monopost in fact had its 603-based engine reduced to 2.5-litres (from 2545cc) to bring it within the capacity limit for the then-prevailing FIA Formula 1, although the cars (two were built) were raced only in national events (like the Skoda OHC). The 90-degree air-cooled V8 was of course rear-mounted, but unlike the 603 the motor was ahead of the rear suspension. Maximum power output was said to be 200bhp/8500rpm, and top speed about 145mph.

I was interested to note that although the Monopost was not intended for full-scale Grand Prix racing, more for component-proving, it was equipped with centre-lock wire wheels!

Tatra seemed enthusiastic about developing



The Tatra plant of the time was not automated!



While normal Tatrapiplans are being made, this one-off, Sodomka-bodied example was built for Stalin



Tatra's 2.5-litre 'Monopost' was 603 testbed car

engines, transmissions, and whatever in competition, for the 2-litre Tatrapiplan saloon was preceded in 1950 by an aerodynamic racer designated Tatra Sports which competed in Czechoslovakia and neighbouring countries. There was an example of Tatra Sports in the museum – and it *didn't* have centre-lock wire wheels!

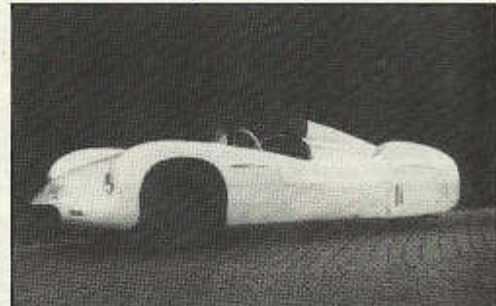
The visit to Tatra had been full of interest, but on the second day we were on our way back to Prague. The next morning we once again visited the Skoda factory at Mladá Boleslav where I was interested to note the four-cylinder engine's 'wet' cylinder liners were pressed-in by women operatives with a tool which was really nothing more than a steel clamp and long nut and bolt. The procedure functioned well enough, but it was hardly volume production stuff! As we toured the works, a brand new factory was being built alongside, and I'm quite sure the production methods improved dramatically when the new plant came on stream.

Amusingly, we were always steered away from a tarpaulin-covered car we spotted in the works driveway, but after pumping some of our Czech friends, it became obvious it was one of the rear-engined prototypes which was to supersede the front-engined Skoda Octavia, and to become the basis of the current Skoda range. At that stage of the motor manufacturing game the VW Beetle was regarded as the world's most successful car, so Skoda decided front-engined models were all over!

A visit to the Jawa motorcycle factory was stimulating, for the Czechs know about good two-wheeled design, and have made some noteworthy machines.

But then Sunday was upon us and we drove out of Prague en route for the Mladá Boleslav meeting, and that was a real eye-opener. The town was teeming with people, it was a hot sunny day, and the paddock, full of cars and motorbikes, was a hive of activity. Even in 1959 I was amazed at the safety arrangements – or rather, lack of them!

Spectators sat in the gutters and on the pavement



1950 Tatrapiplan tried Tatrapiplan components

curbs (as well as in the grandstand!), eating their ice-creams and sausage (not at the same time, at least I don't think so) as the practising motorcycles blasted past just a few centimetres away! The event had a real carnival atmosphere, and Dev and I were somewhat surprised to be referred to in a PA announcement as important British journalists who were visiting the meeting. That was after the commentator had announced the presence of a Soviet official of course. It was obvious, after a couple of visits to the paddock (where a PAL van looked after competitors' needs for ignition parts, PAL being the official sporting body), that virtually all the racing cars were derived from Skodas. Souped-up motors in lowered chassis with special bodies were the order of the day, and certainly some of the lads drove in determined fashion. In among that lot were the two works Skoda OHC cars, and, amazingly, an MG K3 Magnette which had been raced in and around the country before the war by a wealthy Czech. It was still racing in somewhat modified form, but powered by the inevitable four-cylinder Skoda engine!

There were races for motorcycles, production cars, then several heats and a final for the sports racers. I kept my fingers crossed for the safety of the spectators who lined the street circuit, and although there was some pretty spirited driving, there were no accidents. It was interesting too that both works Skodas retired, and although I remember it was engine trouble, I forget what the actual bother was. Or maybe they didn't tell me!

And that brought our visit to Czechoslovakia and its motor and motorcycle industry to an end. We left the country the following day, bidding farewell to our Motokov friends who had gone out of their way to show us all they could, and entertain us royally (if they'll pardon the expression!). It had all been great fun – even when the frontier guard took all my Czech money as I left the country. Apparently, it was not permitted to take Czech currency out of its native land. But we'd had our money's worth ...