



# Sochaux Streamliner

Peugeot's 402 took on the Citroën *Traction* by hiding orthodox engineering under a stunning streamlined body. Jon Pressnell tries a couple

**T**hey called it the *Fuseau Sochaux* - the 'Sochaux Streamliner' - and even 60 years on from its 1935 launch the Peugeot 402 turns heads like no other mass-production car of the era.

The 402 was a master stroke for Peugeot, normally regarded as the epitome of cautious conservatism. That was before Citroën's 1934 *Traction Avant*. The most advanced family saloon in the world, the *Traction* laid down a message of modernity which rival French manufacturers ignored at their peril. Renault largely did just that, persisting with both embarrassingly archaic engineering and styling that was broadly conventional.

Peugeot was more canny. It had no intention of falling into the trap of being too clever in engineering terms, a decision vindicated as it watched Citroën suffer 18 months of catastrophic mechanical and structural problems with the *Traction*. It thus took the safer route of seeking to trump Citroën not in engineering but in styling.

So the men at Sochaux for the most part refined what they'd already evolved over the years: an independent front suspension by transverse leaf, their robust *Bloctube* box-section chassis, and a worm-drive live back axle suspended on cantilever springs and located by torque tube. There were novelties, though, the most notable being a new 1991cc overhead-valve 'four'. The rear suspension was revised, with the springs no longer hung Bugatti-style from the rear of the chassis but instead mounted forward of the axle, just behind the front seats.

The real departure was therefore in the styling for the strong all-steel body. Taking cues from the Chrysler Airflow, it was an altogether more successful exercise, with the distinctive feature of the headlamps hidden behind the large shield-like grille. So utterly of its era, the 402 is a striking piece of art deco sculpture, from its long, smooth and elegantly tapering bonnet to its delightful detailing - the stylised lion on the rear spats, the extravagant bonnet vents, the teardrop sidelamps, the lion mascot atop that waterfall grille.

Back at Peugeot's centenary bash in 1990 I was seduced, and managed to wangle a drive in two superb 402s - a freshly-restored two-

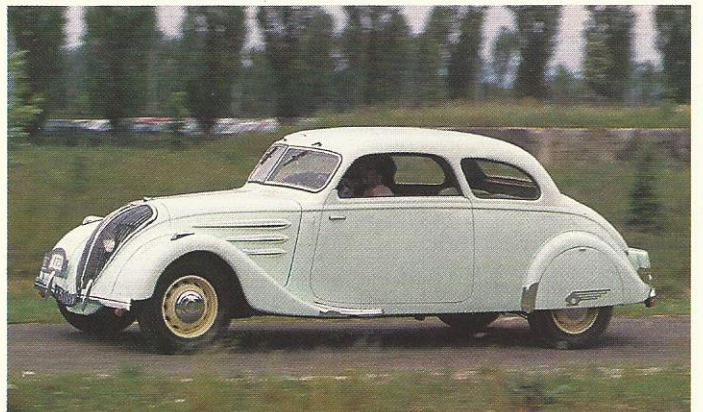


**Eclipse models its retractable roof; car is a 402, and not a later 402B. Alongside is 402 coach from 1936 - but wearing grille from a 402B. Unlike the coach body on 402B, car has centre pillars rather than pillarless hardtop roof. Confused? Complex range is unscrambled on final page**

JOHN COLLEY



**Contrasting tails;**  
**on four-door 402B**  
**models, protruding**  
**boot was used**  
**instead of exposed**  
**spare. Interior of**  
**coach (right) is**  
**plush, spacious.**  
**Both cars drive**  
**extremely well**





**Driving compartment of *coach*: note dash-centre push-pull gearchange – Portuguese car uses Cotal 'box with steering-column control lever**



door *coach* and a wonderfully original example of the aristocrat of the range, the extraordinary Paulin-designed Eclipse, or *coach décapotable métallique*, with its retractable steel top.

The memory stayed with me, which is why last summer saw me scything through Portuguese rain in the most stunning of the 'Sochaux Streamliners', that green Eclipse. Why Portugal? It's a long story, but that's what makes the car in question not just imposing but also very much unique.

Back in 1936 a successful French businessman in Portugal set his heart on owning an Eclipse. But there was a snag: as a result of a First World War injury he was blind in the right eye. To motor with a modicum of safety in France and Portugal, where one drove on the right, a right-hand-drive car was necessary.

Peugeot, however, refused to build a one-off RHD 402, and after a correspondence stretching over two years the aggrieved industrialist told Peugeot to forget it – he'd buy an English car instead. This had the desired effect, and Peugeot decided that after all it would build a special right-hand-drive Eclipse – possibly motivated not only by a sense of national pride but also by the size of the final bill, which was nearly big enough to have bought a Rolls-Royce.

The gentleman kept the car until the late '80s, but carefully laid it up in his Lisbon garage in 1964, when it had a mere 22,000 miles on the clock. New owner Rui Bevilacqua put a battery in the Peugeot, and it started first time; since then it's had a repaint, new rubbers and a new head gasket, but is otherwise just as it left Sochaux back in 1938.

"It's a very quiet car, and it's very agreeable to drive, happily cruising at 50-55mph," says Rui. "But it's so big that I couldn't park it in my garage without help, which started to annoy me, so I eventually sold it to finance an XK120."

Fortunately for me, Rui keeps in touch with the new owner, and was able to arrange for me to drive the 402 again, on a generously long trip south of Porto. Would the car measure up to its flamboyant looks?

Certainly the Eclipse's looks measure up. Literally: built on the the longest 402 wheelbase of 11ft, it registers a total length of 17ft – and most of that is in the tail. But if it makes a Jaguar XJ-S seem like a masterpiece of packaging, the Eclipse justifies its extravagance with that wonderful roof, a crowd-pleaser every bit as effective as Ford's Skyliner of 20 years later.

This particular example has manual actuation, but once you see how easy this is you can't help wondering whether the optional electric operation is a needless complication. Release the roof at the front by slackening two turn-knobs, undo two beefy over-centre catches at the rear, and open the tail panel by turning two

Thandles. The roof then pivots on its arms and can be pushed up and down with one finger, so spookily efficient is the counterbalancing.

The pay-off is a miserable little wooden box as a boot, but at least the passenger compartment isn't compromised: it's beautifully spacious in the back, where you sit low, protected by wind-up windows and bolstered by side armrests with concealed cubby holes. Up front there's a split bench seat with a central armrest; the backrest – relatively reclined – is held in place by train-like side-straps.

Upholstered in unfluted bottle-green leather, it's a tasteful but surprisingly austere interior – especially when you come to the painted-metal dashboard with its single combination dial. Plainer than a Morris Ten, the ambiance is characteristically mid-range '30s French, but somehow less plush than in the *coach* that I drove back in 1990, which has rather more opulent cloth upholstery.

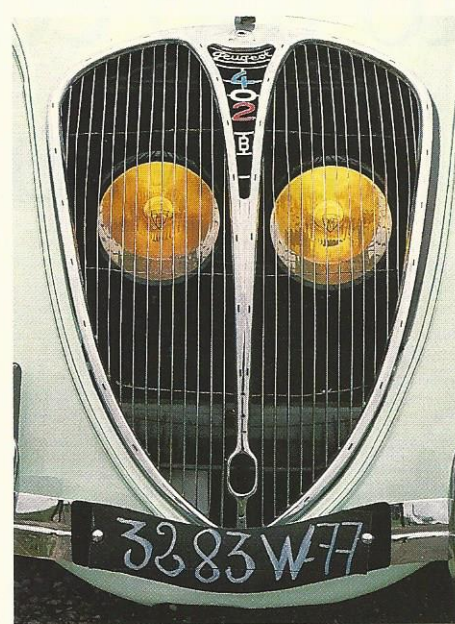
The *coach* in question also differs in having manual transmission – a three-speeder, synchronised on second and third and with a push-pull dashboard change. It works easily, if a bit slowly on downchanges, and has a predictably high top gear. The Eclipse, however, has the optional-extra four-speed electro-magnetically operated Cotal gearbox.

It's a surprisingly co-operative transmission. Select forward or reverse by

pushing or pulling the hefty knob on the dashboard, dip the clutch and engage first on the steering-column quadrant, and off you go. In theory you can then change up and down the box without using the clutch, merely click-clicking the well-oiled, delicate lever from one position to another. In practice this is only the case on up-changes, and even then the big and typically French gap between third and top demands a well-judged pause on this final up-change, to allow the revs to die. On downchanges you really need to use the clutch, to avoid transmission snatch, although you can get away with it if you make the effort to synchronise the engine revs accurately.

Drive with this compromise mixture of clutched and clutchless changes and progress is smooth and adequately rapid, with quick pick-up through the first three gears being accompanied by a turbine-like transmission noise as the revs rise. The only disappointment is the high take-up for the clutch, which I suspect is not representative; still, at least it's judder-free and decently weighted.

The engine impresses. It's a torquey unit, as you'd expect, but feels very sweet at low revs. Push the 58bhp 'big four' and it becomes more robust, but without the coarseness of the similarly-sized *Traction Avant* engine. With the high fourth there's not a lot of zip in top, but the car churns away happily at 50mph, 20mph inside the probable maximum.



On Portuguese motorway the 402's stability is exemplary and the ride comfortable. Firm and well-damped, it has a resilience which means it copes well with the cobbles of Porto's ancient streets – surfaces which unsurprisingly provoke some rattles from the car's structure. As for the steering, that's a bit unwieldy at low speed, but light enough on the move, without the penalty of any lost movement. If there's a

black spot, it's the brakes: Bendix mechanicals, as opposed to Citroën's hydraulics, they're fine for check braking but have a long travel and a spongy action which together demand a good lean for ultimate stopping power.

But you take these characteristics on board, because overall the 402 is such a tolerant and undemanding package – and one which wears its years lightly. I felt at ease both coping with

miserable rain-drenched motorway and trickling through rush-hour Porto traffic in second gear. The 402 might lack the rough-edged immediacy of the *Traction*, but it offers a relaxed performance and a refinement denied its cheaper rival.

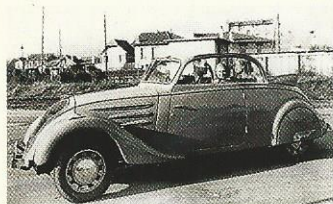
Wafting back to France for his summer holidays, top down, the original Portuguese owner must have been a happy man indeed. **CLASSIC**

## CONFUSING 'FUSEAUX': UNSCRAMBLING THE 402 RANGE



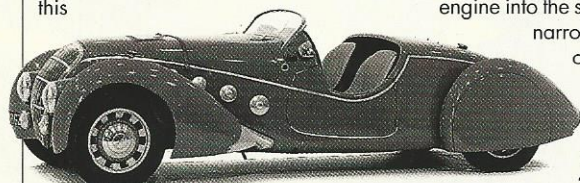
**Six-light 402 limousine has same long wheelbase as Eclipse**

At its launch at the 1935 Paris salon the 402 was available in two wheelbase lengths. On the normal 10ft 6in wheelbase Peugeot offered



**402 légère coach décapotable**

a six-light *limousine*, a square-tailed hatchback *commerciale*, a coach two-door, a cabriolet, and a roadster-cabriolet with fold-flat screen and dicky seat. On the longer 11ft wheelbase were built a *familiale* with two central jumpseats, a short-lived taxi, and the *coach décapotable métallique* with a Paulin-designed retractable hardtop actuated either manually or by electrics. After a short time the short wheelbase *commerciale* gave way to a long wheelbase version with the same body as the *familiale*. Three equipment levels – *luxe*, *grand luxe* and *grand tourisme* – were offered, with the last having a heater/demister as standard, this



**302DS – Darl'Mat roadster, designed by Paulin**

being claimed as a 'first' on a series-production passenger car.

For 1938 the *grand luxe* and the *grand tourisme* received a power boost from 55bhp to 58bhp, thanks to a higher-compression head in Alpac alloy. All models now featured engines with dry liners. For 1939 there was a further power hike when the engine was given wet liners and taken out to 2142cc. With the Alpac head standardised on all but the *commerciale*, power output was now 63bhp. Externally unchanged



**402 légère coach – pillarless**

but for a revised grille and the addition of a projecting boot on four-door models, the cars were designated **402B**.

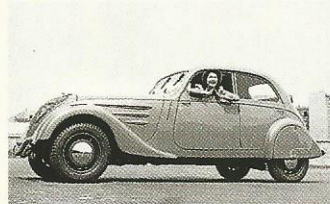
Meanwhile, though, the range had expanded downwards with the 1936 introduction of a smaller 'streamliner', the 1758cc **302**. Peugeot decided putting the 402 engine into the shorter,

narrower and lighter car made sense and in Oct 1937 – after a pre-series of about 20 **302 SS** – it launched a new

model which was known as the **402 légère**. Body styles were a four-light *berline*, a two-door *coach*, and a *coach*

*décapotable* with fabric hood. The **402 N4X** was Andreau study for 'aero' four-door latter two had pillarless sides, a styling innovation taken up by the 402B *coach*. But the 402 *légère* was short-lived: the 302 was deleted in April 1938 and the *légère* followed soon after, in June of the same year.

Peugeot then decided on a further



**402B légère berline: 202 body**

rationalisation, drawing on the 1131cc **202** it had introduced at the beginning of 1938. The result was the **402B légère**, a cocktail of the 402 engine, the 302 chassis, and the even shorter and narrower 202 body. Available only as a four-light *berline* and as a fabric-roofed *berline décapotable*, the new hybrid looked over-bonneted but offered an attractive blend of performance and economy, thanks to its 63bhp engine and light weight.

There was also the **402**



**Later commerciale, with same sloped-tail body as limousine**

**Darl'Mat**, a sports/competition two-seater of which more than half the run of 104 cars were, strictly speaking, called the 302 Darl'Mat, shortened to 302 DS. Worthy of a story in themselves, these rakish roadsters (also available as a cabriolet and a closed coupé) acquitted themselves honourably at Le Mans. Then there was the **402 N4X**, an aerodynamic study for an advanced four-seater saloon, conceived by Jean Andreau and first shown in 1937.

The 402 was not reintroduced after the war; the total production was 58,748 402s and 402Bs, plus 16,320 402 *légères* and 402B



**402 légère berline: 302 body**

*légères* – nowhere near the 159,000 or so 11CV *Tractions* turned out between 1934 and 1942, but respectable all the same.