

buyers guide CITROËN TRACTION AVANT

State-of-the-art style-setters or dangerous rust-traps? Malcolm McKay takes advice on buying Citroën's front-wheel-drive pioneer

FOR SHEER panache and standing out from the crowd, a Citroën Traction Avant takes a lot of beating among affordable saloon cars. They're big enough for a family, even in their smallest form (small-boot style gave way to big-boot in 1952), while the big Familiales can take the grandparents, too. With a Commerciale, the pioneering hatchback saloon, you can run a small business. The ultra-rare roadsters and fixed-head coupés are pre-war only with stratospheric prices, but they're gorgeous and reliable if you can find one.

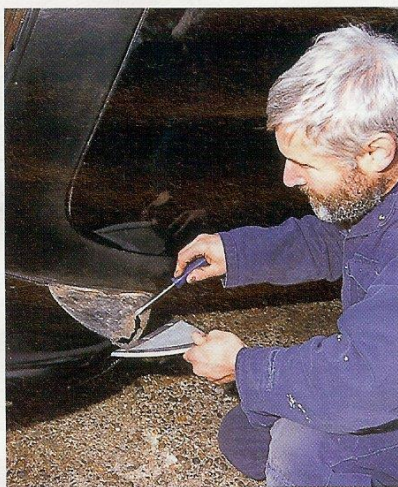
Performance was never a Traction strength, and not helped by the three-speed gearbox, so a few have been fitted with early DS engines (a crossflow version of the Traction unit) and four-speed gearboxes that transform them into relaxed 75mph cruisers. But it's a major job. The other option is to track down a rare six-cylinder car. This was offered during the last couple of years with the option of hydro-pneumatic suspension, a predecessor to the DS system that is largely interchangeable with early IDs.

Even before the hydro-pneumatic, roadholding was a Traction's forté, giving it the ability to keep up with much more powerful cars over twisty roads and to transport passengers in remarkable comfort. Its style and pioneering front-wheel-drive, torsion bar independent front suspension, rack-and-pinion steering and monocoque bodyside make it the classic of choice for discerning artists, architects and photographers. Built in Slough as well as in France, both versions have their strengths and followers.

The Slough cars are distinctly English with chromed grilles, large chromed bumpers from 1952, leather and wood trim, Wilmot Breeden door and window winder handles and Lucas 12-volt electrics. French cars are more austere with painted grilles, slim blade steel bumpers, cloth trim and rubber front floor mats, with Ducellier six-volt electrics.

BODYWORK

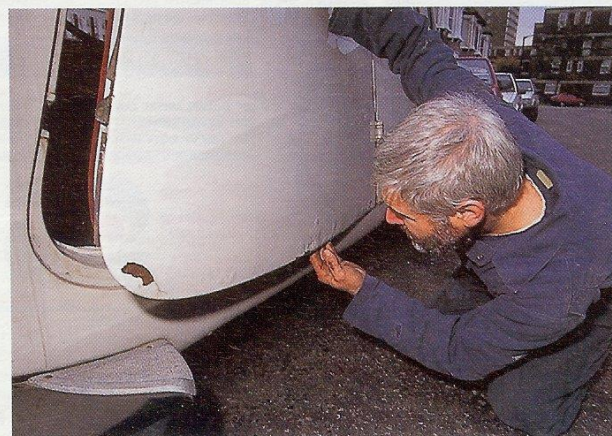
'A GOOD monocoque will save you considerable heartache and expense,' says John Gillard, proprietor of Traction



The tail of the front wing is a mud trap with an extra brace inside and an external aluminium treadplate.

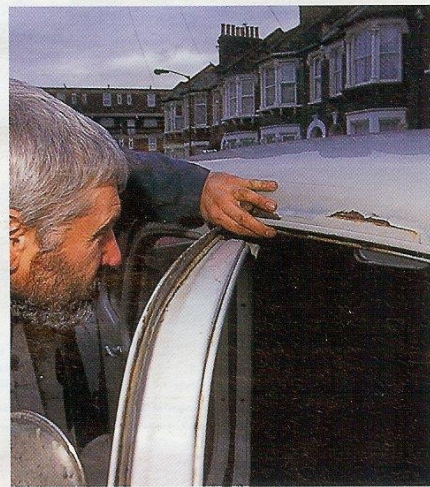
specialist Classic Restorations. So how do you make sure you buy a good one?

The most critical area is on the inner sills where the rear suspension mounts. It hangs off two legs bolted to the inner sills, and weakness at these points will lead to dangerous back axle movement. The inner sill is open at the back and water gets in and rots it out. It's a major job to take all the suspension off and repair the sills properly, so watch out for plates welded over the whole area, a common bodge that will add considerably to the cost of repairing it properly.



LEFT: look along the bottom of the door for rust or bulging. Bad doors can add £1000 to the cost of a restoration.

RIGHT: door gaps as tight as this mean something is wrong: doors may have dropped or the car may have been in an accident.



Check above doors for rust between roof and welded gutter: it's tricky to repair and causes poor door fit.

The front suspension is carried on twin steel tubes each side. These pass through horns in the front of the central monocoque and are welded to the firewall. Any frontal impact will transfer into the monocoque through these horns, so watch out for tell-tale ripples in the bulkhead and distortion under the floor.

All cars are prone to stress cracks under the floor at the back of the engine bay. In extreme cases, you also get cracking at the rear of the sills and the panel in front of the doors.

Outer sills and floorpans rot, like all



Citroën Traction Avant, 1934-57. Four-door Légère (Light), Normale (Big), Familiale (eight/nine-seater), Commerciale (hatchback), roadster or fixed-head coupé. Spacious, advanced and usable cars with fair parts supply. Slough-built Tractions more sought-after than French equivalents. £2500-£10,000.

cars. Just in front of the windscreen is an air vent, which should open with an internal lever. Rust often starts around it, causing leaks which rot out the floor; so check that it works and seals well.

Replacing rotten floors is possible, but requires care to avoid distortion. Slough-built cars often have metal sunroofs that leak. The roof's centre panel is a separate, drop-in section that is soldered or leaded in place. Many cars show some unevenness in the roof where the panels join.

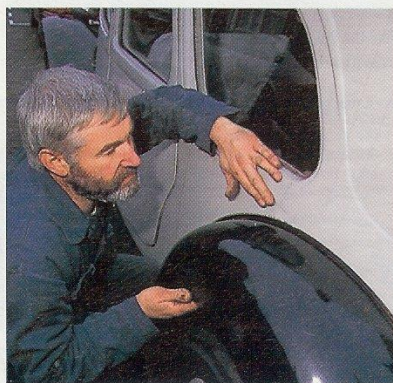
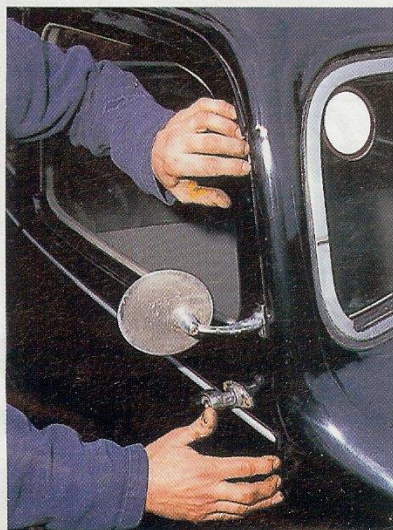
Poor door fit is an indication of weakness in the monocoque, so check for an

even gap all round. If one is tight at the top, the gutters may have dropped; they are spot-welded in place and rust can get in between and force them down onto the doors. Replacing the gutters is possible, but time-consuming.

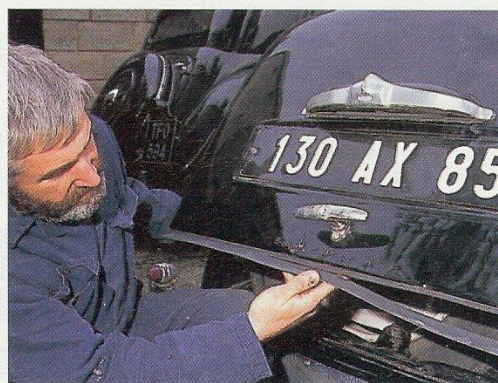
At the bottom of the doors, rust starts in the door skin at the hinge end and works its way along the bottom; bulging doors are a sign of filled rot. Lower half skins are available and fit well, but a badly rusted seal-retaining flange around the top of the door is tricky enough to write the door off.

Rusty window regulators can cause windows to drop, but this is easy to fix. The bottom edge of the bootlid on big-boot cars is also prone to rust, as are the hinge-mounting areas. Small-boot cars face the problem of the boot floor rusting away.

Both wings and body can rust around their joins, while the tail ends of the front wings are particularly prone to rust due to the mud-trapping brace on the inside and an aluminium tread plate screwed to the outside. It's worth getting a screwdriver and checking under the plates. ➡



The seams between wings and body are a favourite start-point for corrosion, so check these carefully.



Look along the bottom edge and around the hinges on big bootlids, and at the floor inside on small-boot cars.

BUYING CITROËN TRACTION AVANT

It's a fallacy to suggest that Slough-built cars used poorer-quality steel, says John. All the body pressings were imported for assembly in Britain.

However, make sure the car you're buying is what it claims to be — much paper swapping took place in the past, especially with French imports. There were many changes during production. For example, four-cylinder cars were built on no less than three different wheelbases. Pre-war cars had opening flaps on the bonnet sides, while post-war cars had louvres.

Finally, if you want a French car, don't expect bright colours. Post-war, left-hand-drive cars were all black until the end, when dark grey or blue joined the list.

ENGINE

WHEN FIRST introduced in 1934, 1302cc engines were offered, but it's unlikely that you'll find one now. You might just find a 1628cc 7CV (British 12hp), but it'll be slow and you may be tempted to uprate it to 1911cc. The rugged engines use wet liner construction (Standard copied it post-war for the Vanguard/TR/Ferguson engine), so fitting bigger pistons and liners is simplicity itself.

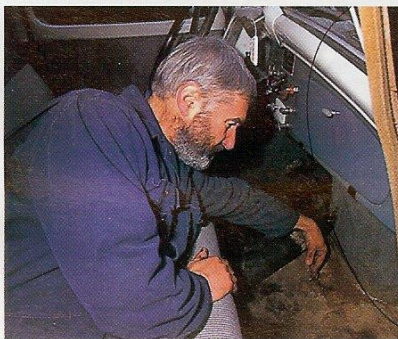
Up until 1954, all bearings were white metal, which are expensive to rebuild. Big ends adopted shell bearings for the slightly more powerful 11D engines, which featured repositioned rockers for better breathing.

From 1952, head studs were replaced by bolts. These are prone to splitting the block if overtightened. The problem is caused by modern head gaskets that don't contain asbestos — slight imperfections in liner alignment cause leaks and tempt owners to overtighten heads, with disastrous effects.

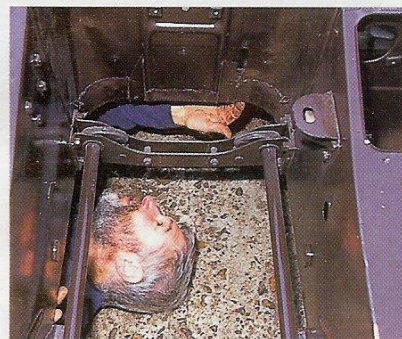
Piston rings can break on engines left standing for months and valves can burn out. Timing chain noise is unavoidable as there is no tensioner, so regular replacement helps. Six-cylinder engines have the starter ring gear mounted on a tri-ax — a hub with three spokes, like a rimless wheel — which must be mounted tightly or it can work loose and wreck itself. So beware of rattles when starting.

Water pumps are prone to leaks, which run down into the bellhousing and cause the clutch to seize. Also look out for cracks along the length of blocks on the manifold side caused by freezing.

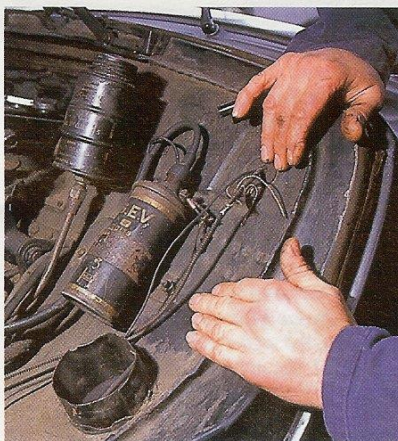
Style and spaciousness are Traction characteristics, while its handling compensates for a slight lack of performance in four-cylinder cars.



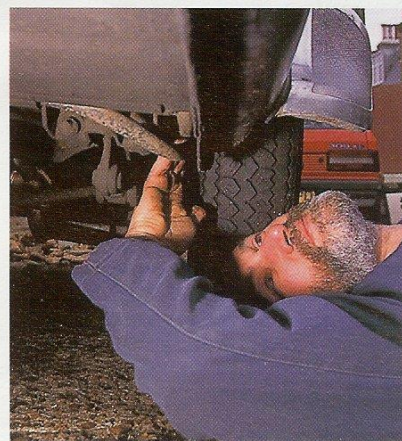
Lift the mats to check the floorpan underneath — a major task to replace. Leaks will soon rot out the floor.



Crawl underneath to check the bottom of the bulkhead behind the engine for stress cracks or poor repairs.



Feel the bulkhead above the two side arms for ripples, indicating the car has been in a front-end accident.

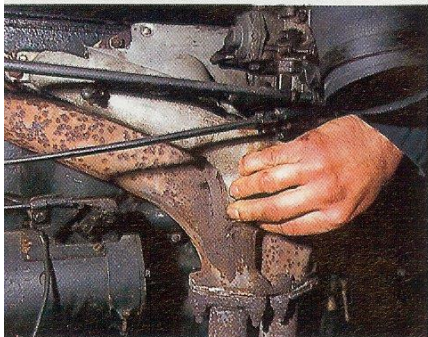
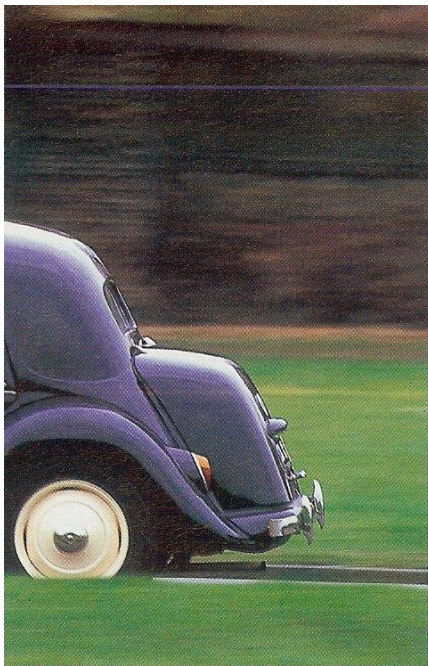


Crawl under the rear wheels to check the sill-to-suspension mounting area: this is a critical rot spot.

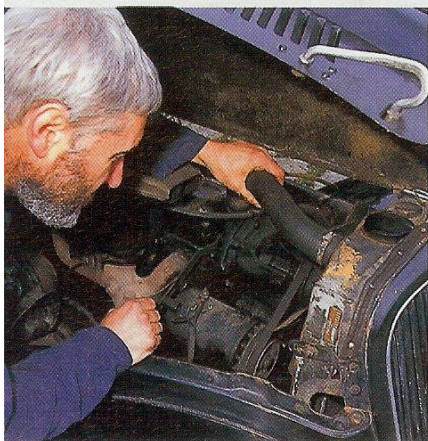
CITROËN
TRACTION AVANT 1934-1957

LAUNCHED IN 1934 WITH 3-SPEED GEARBOX MOUNTED IN THE NOSE AND DRIVING THE FRONT WHEELS. TORSION BAR SUSPENSION ALL AROUND, PLUS HYDRAULIC BRAKES AND UNITARY BODYWORK.

7CV (12 IN UK) 1934-35 SALON, ROADSTER AND COUPE WITH 1302cc ENGINE. 7C 1935-40 1628cc. 11 LEGERE 1935-40 (SPORTS 12, LIGHT 15) 1911cc. NORMALE 1935-40 (BIG 15) 6-SEATER WITH 12 1/2 INCH WHEELBASE. LARGE MODEL NEVER IN UK WITH 129 INCH WHEELBASE 'FAMILIALE' 7-9 SEATER, ALSO COMMERCIALS FITTED WITH A TAILGATE.



Inspect the exhaust manifold for splits, common on six- (here) and four-cyl engines; spares are hard to find.



Under the bonnet, check for a leaking water pump which may leave a tell-tale puddle in the fan-drive area.

As six-cylinder engines run hot in traffic, a Kenlowe fan is vital. It's certainly a wise precaution on four-cylinder cars, too, if used in city traffic.

Exhaust manifolds are prone to cracking, so check that the exhaust tie to the bellhousing is in place to reduce the load on the manifold.

Rock the engine sideways to assess the condition of engine mountings, which make a big difference to clutch judder. The rear one is concealed behind a four-bolt plate inside the car in the centre of the front bulkhead.

TRANSMISSION

VERY SLIGHT judder is almost inevitable, but a bad clutch requires urgent attention before it wrecks the gearbox, the Achilles heel of the Traction. On a Light 15 (small body), clutch attention means an engine-out job. It can be replaced with a more modern diaphragm-spring clutch plate. Attempts to free a clutch by bump-starting can blow the gearbox apart, and even bump or tow starting can cause severe damage.

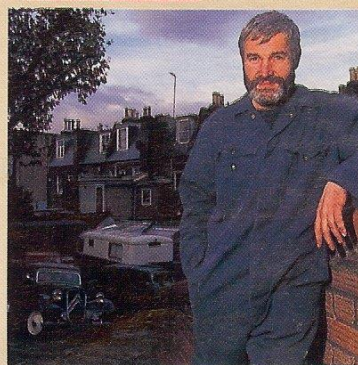
Jumping out of gear is a sign of weakness. Any excessive noise from the gearbox demands attention as it can turn into expensive stripped gears or a broken 'box casing. The final drive is weakly located and easily stripped too. A replacement crownwheel and pinion costs £400, but the upside is you can fit a higher ratio. Six-cylinder gearboxes are stronger, but suffer from a weak first gear.

SUSPENSION

LOOK FOR unevenly worn tyres or a tendency for the car to list to one side. This indicates that the large rubber collars linking the torsion bars to the suspension have gone soggy or de-bonded. Replacement is a major task, requiring complete axle removal at the back and major dismantling at the front (engine removal on sixes). So don't balk at crawling underneath to have a good look.

Check the spare tyre and ask to see bills for suspension work. In extreme cases, cars can wear out front tyres in 100 miles, and they're not cheap. Michelin designed its 165 x 400 Pilote tyre for the Traction in 1938, fitting them to desirable slatted wheels. Earlier wheels are designed for 140 x 40 crossplies and later tyres don't fit properly. When the Michelin X radial

OUR EXPERT

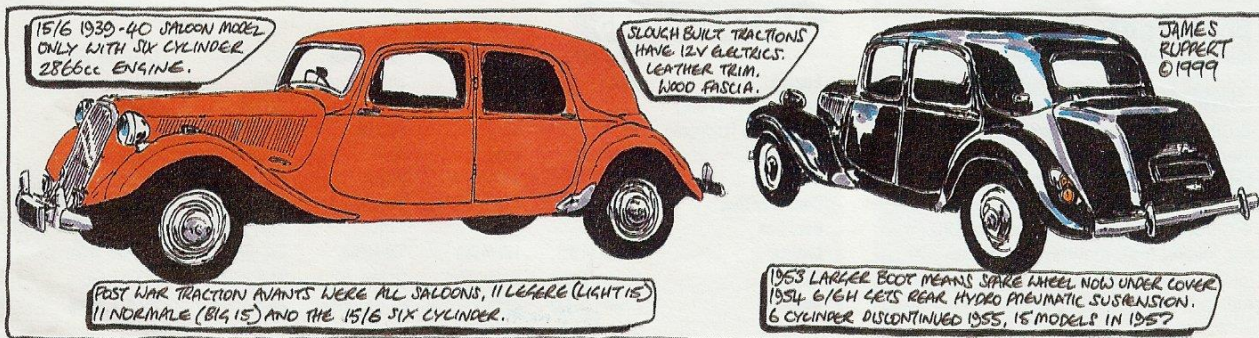


JOHN GILLARD qualified as an accountant before specialising in his hobby. A car enthusiast from childhood, he was attracted to the shape, beauty and elegance of a Citroën when out looking for a pre-war Riley.

So instead he bought a Citroën, loved it and helped to start the Traction Owners Club. Involvement in the club's spares scheme led to working on other people's cars, and Classic Restorations grew from there. His business grew to occupy a warren-like railway arch at Waterloo from 1978 to 1998. Last year, a monumental move took him to the spacious first floor of an old garage in the Old Kent Road. He also keeps a huge stock of secondhand parts.

DRIVING

- ❖ Great fun on twisty roads due to its stiff monocoque, wheel-at-each-corner design, torsion bar suspension and rack-and-pinion steering.
- ❖ You can pull away from 5mph in top, but will get overtaken by trucks on motorways unless you fit a high-ratio crownwheel and pinion.
- ❖ Few Traction drive as well as they look due to the cost and complexity of suspension rebuilds, but the work is well rewarded in driving pleasure.
- ❖ Performance is leisurely and the three-speed gearbox requires gentle changing. However, once you get into the Traction rhythm, you can make surprisingly rapid progress.
- ❖ Be prepared for loads of attention. Some people choose these cars as everyday transport just for their looks.



BUYING CITROËN TRACTION AVANT

came out, it suited the Traction perfectly and this is the best choice, but it costs £117.50 each. For rallying, a solution is to weld 16in London taxi rims to Traction wheel centres.

Rack-and-pinion steering (standard from 1936) is excellent, but often suffers from lack of lubrication. If it's stiff or has signs of play, a rebuild will transform it. Suspension lubrication points, wish-bone bushes and swivels need regular lubrication, at least every 1000 miles, to avoid premature wear. Shimming worn swivels is unwise as it leads to stiffness on high spots. Reproduction swivels are often of very poor quality.

Check driveshafts for wear by gripping and twisting them. They are seldom fit for reconditioning in standard form. Replacements are available at £275 each with modern Hardy Spicer CV joints, but fitting them requires major dismantling.

Front hub/drums are located on a taper and keyway which must be tight as they can strip if worn. A conversion to splined location is available. Brakes are all-hydraulic, and all cylinders are available. Most cars use 12in front drums, 10in rear, though 7CVs are 10in all round while Familiales are 12in all round.

RUNNING ON UNLEADED

Though Traction do not have hardened valve seats, like most cars of the period, a Traction that has run on leaded for a long time and is not thrashed about will run happily for years on LRP or unleaded with an approved additive.

WILL IT FIT YOU, SIR?

Seat back to pedals: 32-36in (81-91cm)

Seat base to roof: 39.5in (100cm)

Seat base to dash-top level: 17.5in (44cm)

Steering wheel to seat back: 10-14in (25-36cm)

IDENTIFYING MARKS

❖ **Right-hand-drive cars:** chassis plate screwed to nearside of bulkhead; production number stamped into offside monocoque horn.

❖ **Left-hand-drive cars:** chassis plate riveted to offside of bulkhead; production number alongside.

BEST BOOK

Classic Citroëns Vol 1, Traction Avant 1934-57, by James Taylor, £9.95 from specialist car bookshops.

BEST WEBSITE

Key in: Traction Owners Club

JOIN A CLUB See page 154

❖ Citroën Traction Owners Club: membership £25, award-winning bi-monthly magazine, discounted spares, 13 regional groups, over 500 members.

❖ Citroën Car Club: membership £30 (inc joining fee), monthly magazine, insurance scheme, club shop, regional/model sections.



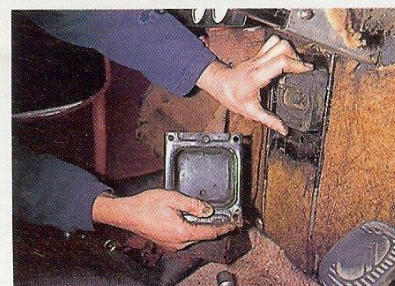
Look for tell-tale wear on the inside edge of tyres. It spells front suspension trouble and can become severe.



Rock driveshafts to see if there is play in the CV joints; complete shaft replacement is the best bet these days.

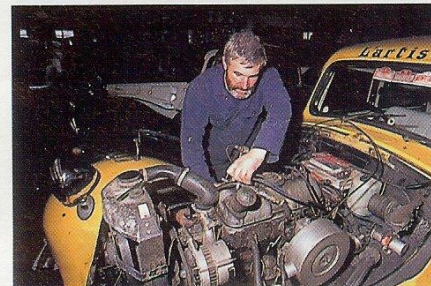


Front suspension bushes weaken with age and oil contamination, and replacement is a major operation.



By removing the four bolts inside the car, you can easily inspect the rear-engine mounting rubber.

Traction's great roadholding and vintage looks mean it's excellent fun in modern traffic.



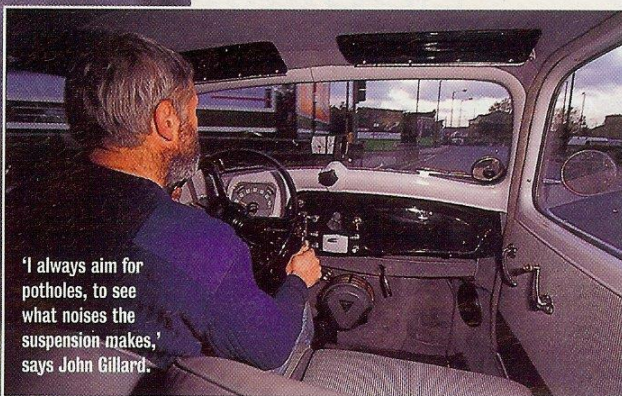
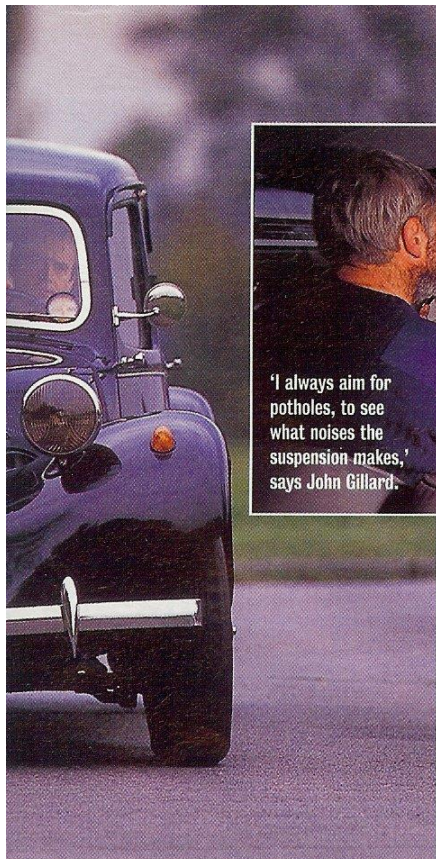
It's possible to fit the crossflow version of the Traction engine from an early DS for improved performance.



Look for tatty door trim (cloth on French cars, leather-cloth on British ones); both can be retrimmed easily.

SPECIFICATIONS

	12hp 1935	15hp 1939	15hp 1949	Six 1949	Light 15 1952
Engine	1628cc	1911cc	2866cc	1911cc	
Power (bhp@rpm)	n/a	42/3200	56/4250	76/3800	56/4250
Torque (lb ft@rpm)	n/a	n/a	88/2000	138/2000	90/2200
Top speed	63mph	75mph	76mph	83mph	78mph
0-60mph	n/a	34.9sec	20.6sec	21.9sec	22.1sec
Consumption	25mpg	23mpg	23mpg	19mpg	26mpg
Gearbox	3-spd	3-spd	3-spd	3-spd	3-spd
Length	14ft 2in (4.3m)	14ft (4.3m)	14ft (4.3m)	15ft 11in (4.9m)	15ft 6.5in (4.7m)
Width	5ft 2in (1.6m)	5ft 5in (1.7m)	5ft 5in (1.7m)	5ft 10in (1.8m)	5ft 10in (1.8m)
Weight	2268lb (1031kg)	2394lb (1088kg)	2457lb (1117kg)	2912lb (1324kg)	2632lb (1196kg)



'I always aim for potholes, to see what noises the suspension makes,' says John Gillard.

BODGEWATCH

- ❖ Poorly repaired accident damage to monocoque, or rear suspension welded to plated inner sills.
- ❖ Tyres swapped to disguise knackered front suspension.
- ❖ Sealed-down scuttle air vent to stop leaks from rust holes.
- ❖ French-built cars with non-original or British papers; early cars with later papers.

TRIM AND BRIGHTWORK

SLOUGH-BUILT cars have leather trim, wooden dashboards, chromed grilles and bumpers and differ in every detail from the trim of the more austere French-built cars. Cloth (which is still available by the roll) was used for French trim, which tends to wear out on the front seats. On doors, this wears around handles on the panels and suffers from water staining. Pre-war cars had thinner, firmer seats with chrome grab handles (for rear-seat passengers) around their tops.

Two-spoke Bakelite steering wheels are prone to cracking and unobtainable now. The only reasonable option is the three-spoke wheel fitted to the Traction-derived Citroën H-van, which was made up to 1980.

VERDICT

IF YOU'RE thinking of buying a Traction, don't be put off by all the possible problems. Check all potential purchases carefully and don't be afraid to walk away if you're not happy with what you see.

The mechanical side may have been sadly neglected on pretty-looking cars, so remember to check suspension carefully and ask to see bills.

A good Traction will give superb service as everyday transport, on family outings, for posing or even for moving furniture, depending on which model you choose. They're perfectly capable of keeping up with modern traffic and are infinitely more stylish.

THANKS TO

John Gillard of Classic Restorations.



WHAT TO PAY

Prices vary according to model, with genuine pre-war Roadsters the most desirable (over £20,000 for a tidy one), followed by pre-war hardtop coupés.

Sixes range from £3000 for a wreck to £15,000 for a sparkler, while big- and small-boot four-cylinder cars can be found at under £2000 for a French restoration project to £10,000 tops.

A good usable Paris car should be yours for £5500 while a Slough car is obtainable for £6500. Be prepared to pay £1000 more for pre-war examples.

SPECIALISTS

PARTS, RESTORATION, SERVICE

- ❖ Classic Restorations, London (0171 358 9969)
- ❖ Family Repair Service, Andover (01264 323144)
- ❖ Southbound Motor Trimmers, Stockbridge (01264 810080)
- ❖ Traction Renaissance Services, Glos (01453 883935)

PARTS

- ❖ Jonathan Howard, Oxon (01608 643065)
- ❖ Mike Tennant, 49 Holywell Rd, Mitcheldean, Glos GL17 0DL (rubber parts)
- ❖ Roger Williams, Hull (01482 863344)
- ❖ Traction Owners Club Spares, Chichester (01243 511378)
- ❖ Traction Owners Club Shop, Staffs (01782 618497)

IMPORTANT PRICES

Retrim seats and doors: £932 French, £1294 UK (Southbound)

Front bumper: £141 (French-spec, stainless)

Exhaust: £147 (mild steel), £323 (stainless)

Grille: £100 (French, secondhand)

Clutch kit: £153

CHEAP

Wing end repair: £41

Dampers: £35 (alternative spec)

STEEP

Front wing: £600 (Traction Owners Club)

DIY full engine rebuild: £1500

All prices from Classic Restorations unless otherwise stated.

INSURANCE COSTS

❖ **£332** for 25yo, 1953 Light 15, 2yrs NCB, only car, no garage, clean licence, unlimited miles, lives in Peterborough.

❖ **£72** for 42yo, 1955 Six, full NCB, second car, garaged, clean licence, 3000 miles, lives in Peterborough.

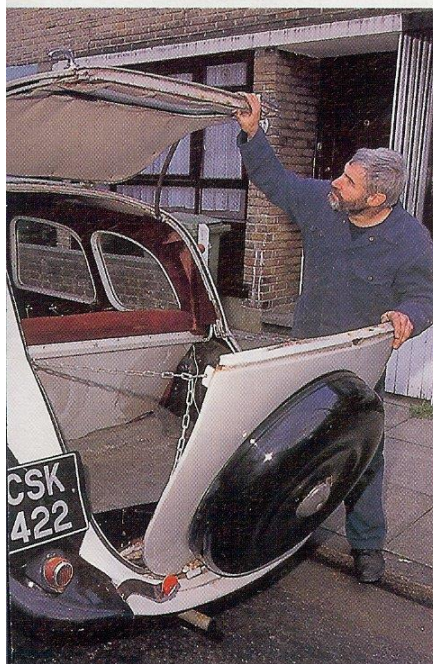
Quotes from Firebond (07000 347326)

UNAVAILABLE SPARES

- ❖ New factory body panels
- ❖ Valves
- ❖ Gears
- ❖ Oil pump gears
- ❖ Some French electrical parts
- ❖ A few British trim items



Cracked steering wheels are common, and the only acceptable replacement is an H-van three-spoke.



You won't find many like this: the pre-war Commerciale had a split tailgate. Post-war it became one-piece.