

Correspondence

Dear TOC,

The story of my Traction ownership is a sad one for it had been my dream for many years to ride in a Traction, never mind own one. Then by chance I found myself with an unexpected windfall, and sometime later I saw an advertisement in THE TIMES for a Traction described as being in excellent condition and having been completely rebuilt, resprayed, refitted, and most important of all, the original engine rebuilt. It was priced at £4,000, much more money than I wanted to spend, but I felt that as it was in such good condition it would be a lot easier to look after, as I am not mechanically minded at all! I tried to dismiss the thought but it would not go away and when I broached the subject with my wife, far from putting me off she thought it a great idea: (I had laid the ground by hiring a Traction for our wedding day!). So, off we shot and went to Oxford to see it, and it was indeed beautiful. It had been resprayed in buttermilk and everything about it looked well done. The owner was a Vicar and told us that the work had been carried out by the local Citroen agent who was well known to him, and it all seemed to make sense.

A few days later we agreed a price and I became the proud owner. I had been unable to test drive the car on the road due to tax and insurance reasons, so my first drive was when I picked it up. As I turned the first bend I felt a little nervous, partly because of the car, and even more so because of the smoke that came through the dash-board! I resisted the temptation to turn round and go back, telling myself that the car had not been used for at least four months, and so on. However, worse was to follow as the car faded away and stopped about half way home, and it took some considerable time from the AA to put us back on the road again. Over the next few days we motored about, but still there seemed to be an electrical problem. Several rescues from the AA followed, and then suddenly the ammeter burst into life and the battery was able to charge itself.

I had spoken to Fred Annels before the purchase, and so called to tell him that I had now actually bought one, and found out that there was the Traction celebrations in Paris a week later. So off we set to Bracknell just after dawn and found the gathering, had our photo taken by the press, and off we set for a great journey. For me to actually drive round Paris in a Traction was a dream which fortunately was not shattered until about 30 miles from Calais on the way home, when the car began to make some dreadful noises. We kept filling her with oil and moved along at a snail's pace, and eventually made it to the boat. On board was Bryn from Classic Restorations who cheered me up no end by confirming our worst fears. The AA had to 'carry' us home this time, even if they did take all night to do it. I immediately wrote to the vendor telling him what had happened and saying that this was not what I expected from a rebuilt engine, to which I received a

Solicitor's letter in reply saying basically, 'Tough Luck!' Classic Restorations stripped the engine down to discover that the engine had clearly never been rebuilt in its life and was in total disrepair. Two years of legal battle later, almost to the day of purchase, resulted in the original vendor buying back the car, together with my legal expenses etc.

So, although I have owned a Traction for two years, I was only able to drive it for two weeks, and instead spent many hours tapping away at the computer writing letters.

I thought at one time that I should write something for the excellent magazine, but I feel a bit awkward now that the car has been bought back. However, there are no doubt some lessons to be learnt here, and I know that I am not alone in making rash purchases of this kind of car!

Best wishes to all the friends I made in the TOC.

Mike Grenville
Windsor, Berks.

Dear Steve,

We have all been very busy at Peacock Engineering over the past few months, and in addition to our long-term restoration projects we have been spending a great deal of time and money on research work. As a result we can now offer brand new Driveshafts built entirely by us to the exact dimensions of the original Citroen shafts. The need for new driveshafts has arisen on account of the considerable reconditioning work we have performed on existing Citroen driveshafts; many of these have become too worn to be of any further use. Admittedly new and reconditioned shafts are available from foreign sources, but these are not of a

sufficiently high quality for the long-term use demanded by any 'real' Citroen enthusiast.

Our careful research into materials, machining methods and the use of a CV joint in place of the original tandem universal joints, has enabled us to produce shafts of a much superior quality which will provide many more miles of safe motoring. These shafts are currently available from Classic Restorations, or direct from ourselves.

Another main research project has again risen from the lack of suitable reconditionable material, ie the Citroen Roadster. Roadsters are becoming so scarce that we are now finding only complete 'wrecks' available for rebuilding. Working on such cars has given us the knowledge and the necessary skills to build entire Roadster bodysells from scratch. We have chosen this method of fabrication in favour of converting the much easier to obtain Saloon bodysells, mainly because the strength of the Roadster monocoque structure is much greater than that of the Saloon monocoque. To improve the Saloon monocoque to a sufficient degree would, in our opinion, be completely impractical unless starting with single saloon panels – not a worthwhile alternative.

To date we have managed to produce all the panels for the Roadster monocoques, as we are currently building three bodysells and are progressing well into the outside 'skin' panels.

Should any Traction enthusiast wish to come and have a look around our workshops we are always ready to offer and receive advice or help on any aspect of the Traction Avant.

We would like to wish all TOC members a very Happy New Year.

Regards,
Mick, Lawrence, Sid and Caroline.

Peacock Engineering,
Old Hathern Station,
Normanton-on-Soar,
Near Loughborough,
Leicestershire LE12 5EH.
Tel: 0509-842560



Brand new drive shaft from Peacock Engineering

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Floating Power

Volume 12, Number 1

March, Nineteen Hundred and Eighty Seven

CAR RESTORATION is an emotive subject which to some people means stripping a vehicle down to the last nut and bolt and religiously overhauling every part, whereas to others it merely conjures up thoughts of cleaning and touching-up the paintwork, and perhaps changing the fan belt and plugs! Mind you, I do suppose it depends, to a great extent, on the condition of the vehicle in the first place. I well remember when I first had the urge (but we won't go into that now!), and reading through one of the Classic Car magazines I realised that owning an old car need not cost an arm and a leg. In appreciating that fact, however, it would have still paid dividends if I had gone about my purchase and restoration in the right way, and first priority I now realise, should have been to join the Club. Had I done this simple act first I would have saved myself a lot of time, money, heartache and, no doubt, a few of the now-valuable grey hairs, as I let my enthusiasm run amok and bought what is politely referred to in diplomatic circles as a 'Bummer'! Joining the TOC provided the advice and guidance that was sadly lacking at the beginning and eventually everything turned out well with me offsetting the 'heap' against the splendid Traction I now own. At the risk of stating the obvious, what this all boils down to, is **think before you act**, whether it be the purchase or the restoration of your Traction and get as much advice as you can from fellow Club members.

An even more emotive subject is the cost of a restoration which always seems to come as a shock and surprise, especially if you tender the work out for those more specialised jobs. I remember once reading that as a general yardstick for calculating the cost of your restoration, you should 'double' the original calculation and then add a bit on for luck, and you might be nearer the correct figure, if such a figure exists! There may be some truth in that, but you can at least control your outlay to some extent by doing some of the work yourself. Obviously, if you do not have the experience then specialist jobs like bodywork repairs, or engine/gearbox overhauls, will need to be left to the experts, but most other jobs should be within the scope of the average enthusiast. To help you even further we begin in this issue a series of articles on the restoration of a Traction by that eminent expert, Mr C. B. A. Marchal. As CB (as he likes to be called) says, the articles are aimed at the relative beginner and are intended as a guide and advice on the best way to tackle the full restoration of a Traction. Such advice is always welcome and invaluable not only for the beginner, but to the comparative 'expert Traction mechanic' as well,

and should help and inspire you into making your Traction roadworthy again.

Besides, I am sure you would not want to be left out of all those events that I mentioned in the last issue, details of which have since been sent out to you with the Newsletter. We will, of course, be publishing more details about these events as and when we receive them, but meanwhile it should be emphasised that most events now definitely cater for all tastes and for all the family, and are not, as many people still seem to think, just for the oily-rag brigade to hang over open bonnets discussing each other's dip-sticks!

Organisers now usually go to great lengths when choosing sites and venues to ensure that alternative entertainment is available nearby for other members of the family to visit and enjoy. One type of event that I do not advise taking the family to, however, is the Autojumble, as invariably they get thoroughly bored before you have reached the end of the first stall, and there-after its just moan and groan, and how long are you going to be looking at all this junk, etc.! Leave them all at home, is my advice, and you can browse to your heart's content and take all the time in the world to seek out that elusive part. It also pays to delve into those areas where you would not expect to find anything Citroen or Traction, as I did at a local Autojumble last year when I found a folder containing an Experimental Report on the Light 15. The folder, which was prepared by Vauxhall Motors in 1947, was amongst many others and filed in the Vauxhall section, and a chance quick look through brought this one to light, which just goes to show that things need not be where you would expect them to be and that you can still 'come up trumps' once in a while if you dig deep enough. An edited version of the report is included in this issue which I hope you find of interest as it gives an insight as to how Citroen's competitors viewed the model at the time and were, I like to think, no doubt envious of its more advanced features.

As usual at this time of the year, it is appropriate to remind you not to forget to renew your membership. Thorny subject this, I know, but as was mentioned in the November issue, the rate this year has had to be increased to £16.00 and it is in your own interests to renew promptly. Besides, as Bob Gelfod would say, 'We need your money!'

Finally, the quote of the month from a TOC member, 'Of course my mechanic is good. If he wasn't, I wouldn't keep going back to him each week!'

Safe motoring . . . Traction style,
Bob Wade

Restoring A Light 15

by CBA Marchal

Part I

THIS ARTICLE is mainly intended for those owners of a Light 15 or Big 15 with limited mechanical knowledge, giving guidance on the best sequence to adopt, as so many new owners of these cars tackle a restoration in the wrong way which sometimes results in the loss of enthusiasm and interest. In these cases the car usually gets sold at a great financial loss or at the worst, ends up getting scrapped!

As with all jobs, use the rule of commonsense and invest in decent tools and equipment, plus a workshop manual (which can be loaned from the Club library), but most of all have regard for your safety and that of any others who help you.

Having managed to purchase your 'Project' and you tell yourself that you are going to return the car to its former glory, STOP for just a few minutes and think of the letters C - T - E, the initial letters of three very important words. They could mean 'Citroen Traction Enthusiast'!, but in this case however, they mean:

CASH: have you got sufficient funds available? It can be very costly if you have to get professional help or expertise, and some parts are expensive if they need to be renewed, but overall, the total amount spent obviously depends on the work required to be done.

TIME: and a suitable place to work, with Warmth, Light, and enough Space. Winter is NOT an ideal time to do it without these, I speak from experience, and it will also put a great strain on your enthusiasm.

ENTHUSIASM: of which you will, no doubt, have plenty in the beginning, but if you find you are running a bit low then go along to a Club meeting or two and contact other owners. Advice is always at hand, for that is what the Club is all about, and you will go away with renewed vigour and that much more knowledge.

So let us assume that you have all three of these things and are now ready to start.

First read the workshop manual and get a good idea of how the car is constructed. Work out, if possible, how many hours each week you can spend on the task and do not try to get the car to 'look nice' by hurrying. Have a 'job card' or chart made out with a list of parts needed, and keep it in a

prominent place so that as you complete and check each job, tick it off on the chart so that you can see how you are progressing at any time.

Wooden boxes or trays divided into compartments are very useful. Label all the sections or keep a record card, and in this way you will not waste time in looking for that odd part. Plenty of clean rags are essential for cleaning all parts as you proceed. Use paraffin and NEVER petrol, because if you are near to an oil heater petrol vapour can drift across a garage and you could have a fire with 'grave' results!

When cleaning the engine compartment, place some plastic sheeting down onto the floor to collect the muck as it falls, and you can then fold it and dispose of it much easier.

Make the mechanical work your first priority.

If the engine and gearbox is to be removed use a block and tackle or an engine hoist. They can be easily hired (no pun intended) and it is worth taking the trouble to do this as it makes the job so much easier and safer. Always lift the unit at

the centre of balance, being the water-pump, as illustrated in the workshop manual. Once removed clean the unit down, again over a sheet of plastic which will keep the floor free from oil and grease. If the engine is to be stripped down, drain the sump at this stage and place the unit on one side. There will be time enough to check for a possible rebuild later, and maybe you will require help and guidance on this, so deal with the less complicated but more important units at this stage.

Your first priority should be a complete brake overhaul, and you should make a start at the rear of the car. Why the rear, you may ask?, well, once you have dealt with the rear brakes, you can deal with the front brakes followed by the drive-shafts, ball-joints and wishbone pins and bushes in that order.

Do each side completely, checking the linings and wheel cylinders, and make sure they are in good condition without any signs of rusting or pitting. If you can fit new parts do so, as these are readily available from the Club spares. For cleaning of all brake parts use methylated spirits.

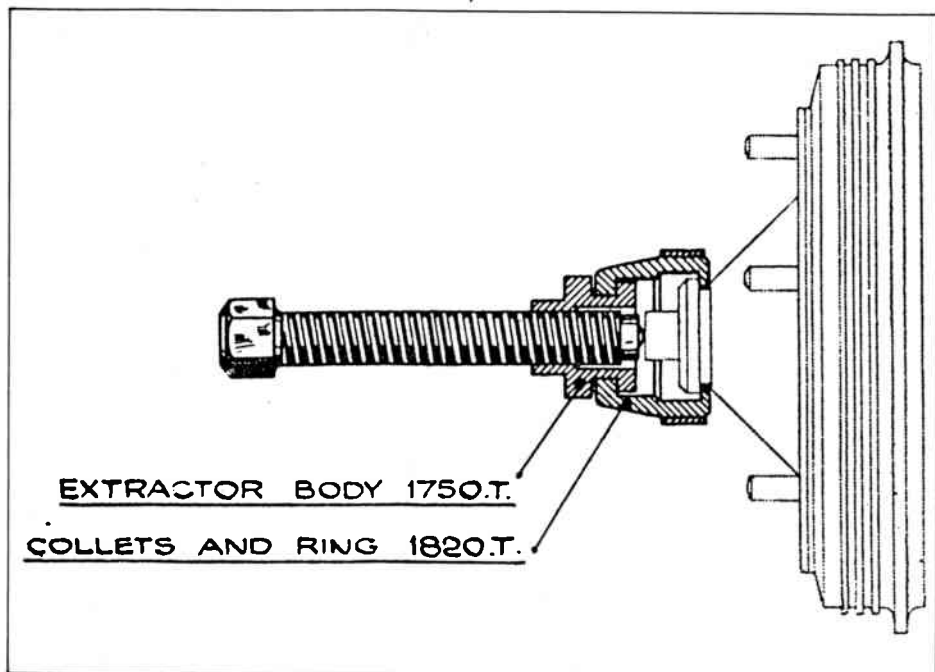


Fig 1 Extracting hub

Disconnect the hand-brake cables from the shaft just behind the engine compartment and pull them as far out as possible from the back-plate. Work them back and forth feeding grease (type 'Castrolase' or similar) into the casings – no grease nipples were provided. Pay particular attention to the rubber hoses, and if you have any doubts with any part then RENEW, as all the brake parts are available.

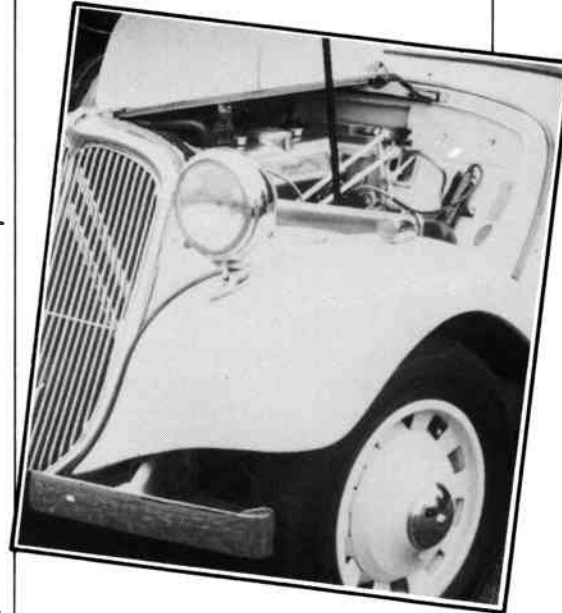
If your car is Post 1948 you will most likely find that the brake pipes are made of steel, and my advice is to change them for the new "Kunifer" copper/nickel alloy type. Pre-war cars had copper tube protected by a steel coil wound over it. Refer to the workshop manual for setting up the brakes when completed, put the wheels back on but only lightly tighten the wheel nuts as the wheels will have to come off again when bleeding the system. This will be done when the front end of the car has been dealt with.

Front brake drum removal is a job best tackled in the following manner: Place a jack under the lower link arm at the point below the shock absorber, but do not lift the car, however, just touch it. Slacken off the wheel nuts, remove the split pin and undo the large nut, clockwise for the driver's side on R/H drive cars as it has a left hand thread. Place the correct hub puller onto the hub, slacken off the brake adjusters – these turn downwards for the off position – and just 'break' the taper of the drive shaft brake drum. Now jack up the car and make it safe with stand jacks, or similar, under the lower link, remove the wheel and drum together,

then separate and put the wheel nuts onto the studs.

Remove the small lock tab on the large slotted ring nut, and unscrew this from the housing (try not to damage the slots, if the correct tool is not available, use a soft aluminium or copper drift). Disconnect the rubber brake hose and take care not to loose the copper washer between this and the wheel cylinder. Remember the same checks of all parts and renew if any doubt exists.

Bend back the lock tabs on the nuts and bolts holding the back plate to the hub, but before removing it make a reference mark showing the position it has in relation to the housing for when you replace it. Remove the back plate complete with the wheel cylinder and brake shoes. You can now work on the bench and make sure each adjuster moves freely. Deal with each side of the car in this manner, and when the metal pipework has also been dealt with, check the master cylinder. For pre-war 1948 cars that have the master cylinder in the engine bay, it will pay to fit a new one at this stage and so save trouble once the engine is back in position. If, however, you've got rubber arms four foot long, you'll be OK! The system has to be checked for leaks and that it is working perfectly at a later stage, because the time has come to leave it and deal with the drive-shafts, top and bottom ball joints, wishbone pins and bushes. When these units have been dealt with, the back plates can be re-fitted and the braking system checked and completed.



If any members have questions or queries related to their restoration, or if they have any hints, tips and advice they would like to pass on to other members, then please drop a line to the Editor.

Whilst every effort is made to ensure the accuracy of the information and advice published in this magazine, neither the TOC or the officers and members thereof, or the authors, accept any liability whatsoever for such information and advice.

SLING IN POSITION.

MAXIMUM LOAD:- 250 KG (4.75 cwt)

ANNEALED MILD STEEL.

DIMENSIONS CONFORM TO STANDARDS
CNM 601 OR CNM 602 FOR LIFTING
CHAINS, RINGS AND EYES ACCORDING
TO GENERAL PRACTICE.

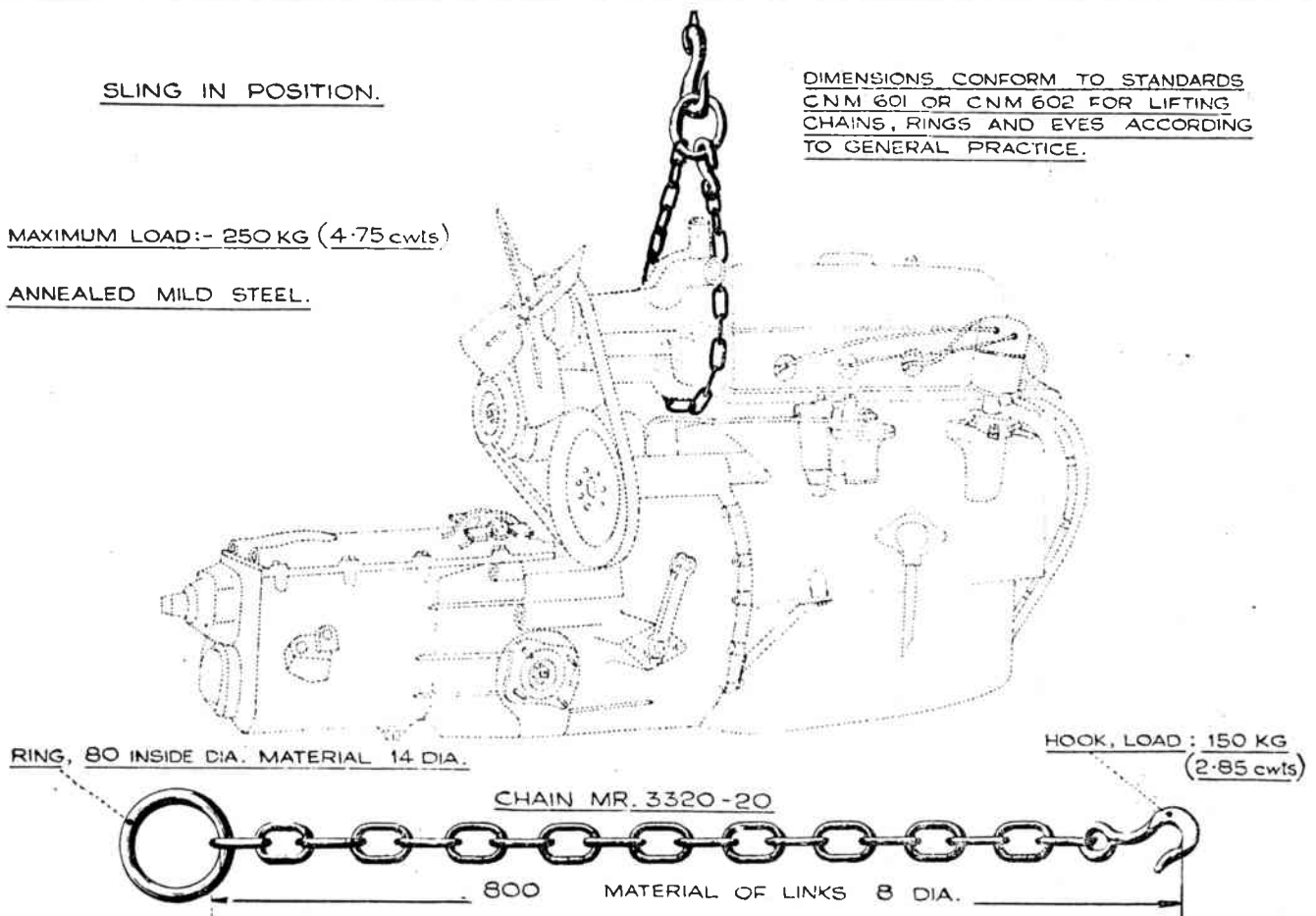


Fig 2 Lifting Engine

TRACTION ARRIERE

Reproduced by kind permission from *The Motor*, February 21, 1928

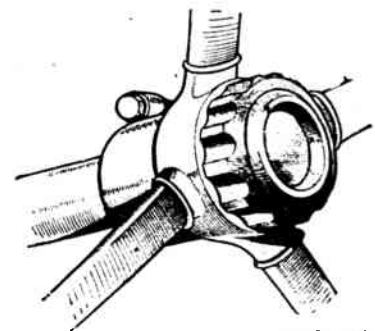
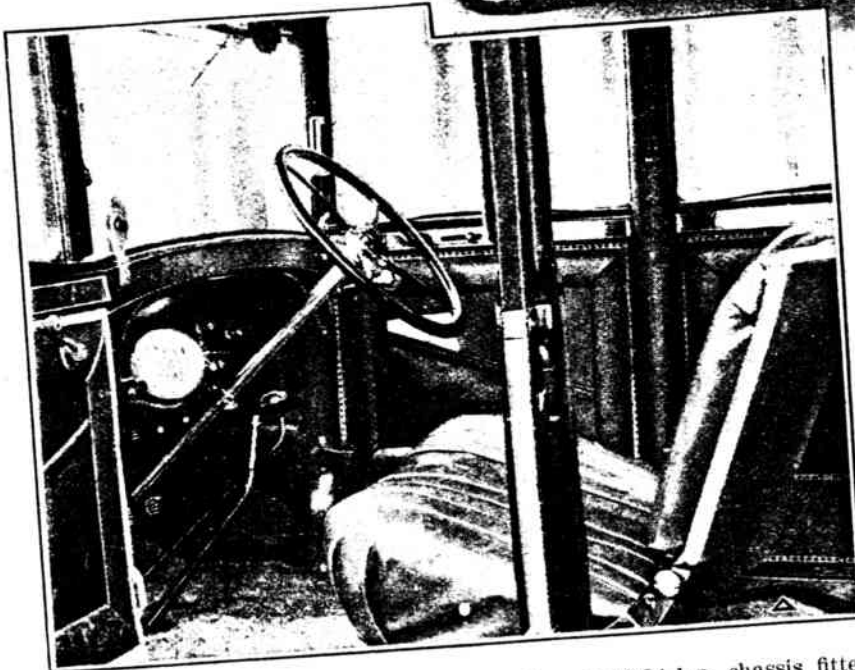
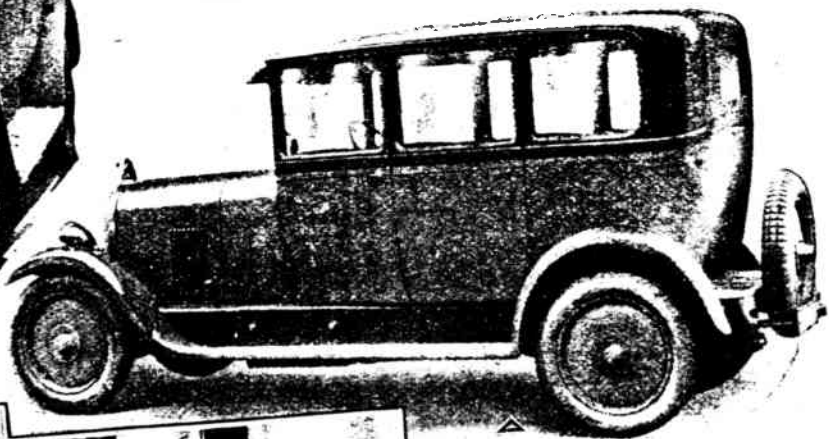
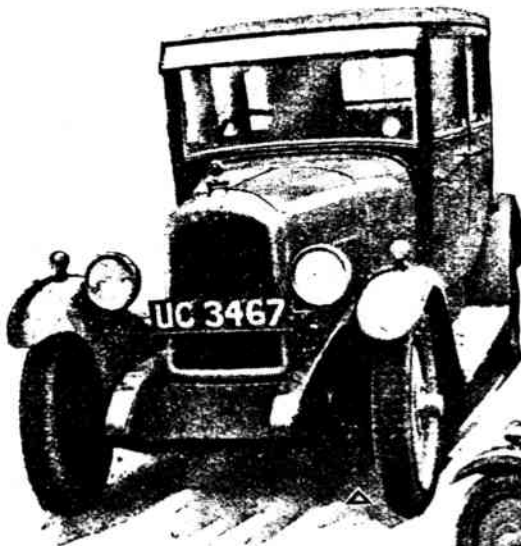
Road Tests Showing Principal Characteristics.

The 12-24 h.p. Citroën Saloon de Luxe. A Comfortable Low-priced Family Car with Flexible Engine and Excellent Servo-operated Brakes.

Views which give a good idea of the improved lines of the de luxe saloon model tested and the comfortable interior. Note the rounded rear quarters, valanced front dumb-irons, neat instrument panel and conveniently placed controls.

of this size and weight. One particularly bad stretch of road which limits many cars to 20 m.p.h. was traversed with only two up in the Citroën at 35 m.p.h. without discomfort.

Another notable feature in the road performance is the way in which the car will keep up 45 m.p.h.



Lamps and horn are conveniently controlled by means of a disc and ring respectively, fitted at the top of the steering column.

AS everyone knows, Citroën cars sell in greater numbers than any other European make and have been consistently improved, so that to-day the various models which are listed represent excellent value for money. Furthermore, it has been the policy of the Citroën company to open factories in the various countries in which their cars are sold, the English works being situated at Slough, Bucks, where the bulk of the chassis and bodywork is now produced. The model which we selected for trial was the

well-known 12-24 h.p. chassis fitted with saloon-de-luxe bodywork, the price of which is £225; a similar model but with less complete equipment sells at £205.

One of the changes introduced in the chassis for 1928 is found in the suspension system, the semi-elliptic springs being now damped by a new transverse-fitting type of frictional shock absorber and being splayed at the rear to prevent rolling on corners. We found this new system to be very successful, riding comfort being exceptionally good for a car

or so for mile after mile on a straight main road without any signs of distress; after 200 miles of full throttle work the engine and transmission ran just as sweetly as at the start. The most comfortable cruising speed, however, is somewhat lower—about 38 m.p.h.—owing to the fact that a slight tremor is set up by the engine when running all out, which is a little fatiguing to the driver. There is, however, no drumming or other noise from the enclosed bodywork.

Easy to Drive.

In the design of the engine power output at high speeds would seem to have been sacrificed to some extent to obtain a very good torque at

CITROËN.—Contd.

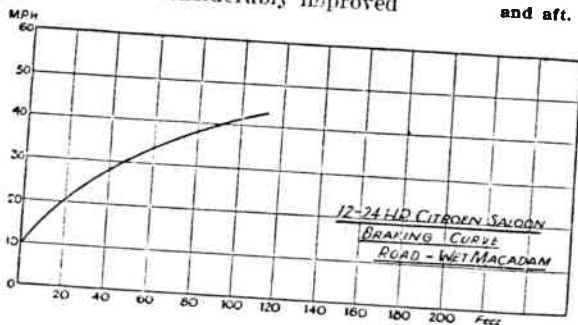
lower speeds, with the result that the Citroën is just about as easy a car to drive in traffic as one could wish, pulling evenly and sweetly down to about 4 m.p.h. on top gear; there seems no limit to the slow pulling capabilities of the engine. On the other hand acceleration is rather slow and it does not take a very steep main-road gradient to diminish the speed of the car considerably, although once down to about 28 m.p.h. on top gear the engine will continue pulling gamely, so that the anticipated change down to second is not required.

Gradients such as the new Dashwood Hill on the London-Oxford road or the lengthy climb out of Cheltenham on the Cheltenham-Oxford road can be climbed steadily in top gear in this way. Steeper gradients which require a change down limit the car to about 25 m.p.h. on second, although it will actually touch 32 m.p.h. on this gear on the level. The maximum speed on top gear on the level was timed to be 50 m.p.h.

Effective Servo Brakes.

The braking system is very effective and on the car tested is fitted with a servo motor built by the Citroën company under Westinghouse licence, which is operated by the suction of the engine. This gives a light control for the driver, and the stopping distances obtained were very creditable; for example, on a wet road the car was stopped in 20 ft. from 20 m.p.h. The brakes also proved safe in operation, it being possible to drive the car on greasy roads in as care-free a manner as on a dry surface.

The steering gear, which was redesigned and considerably improved



(Above and right) Braking and acceleration figures obtained on wet road surfaces.

a year or so ago, is in keeping with the ease of control typical of this car, as it is light to operate, absolutely steady at speed and affords a good lock. Gear-changing, up or down, is an easy process needing no particular skill or practice.

The bodywork of this de luxe model represents a great advance in refinement, appearance and comfort, the back being well rounded to enhance the generally pleasing lines. Four doors are, of course, fitted, of ample width to give easy access to the interior. Independent seats are provided at the front which are

more than usually adjustable in that they can be both slid fore and aft and adjusted for height by means of screwed feet provided underneath. The comfort of the driver is also studied by fitting easily adjustable pedals.

Four of the six windows can be

blinds for the quarter lights, a blind for the rear light, which is operated by a cord from the driver's seat, a neat interior light and instruments grouped on an oval cream panel covered by glass and provided with non-glare lighting.

The body is of the all-steel variety, giving exceptional strength and durability, together with the most satisfactory type of surface on which to apply cellulose finish. This finish, incidentally, is carried out in two colours set off by a neat waist line, and a choice of three colour combinations is provided. Other practical points are the control of the head and side lamps by a knurled ring at the top of the steering column, a reserve supply of petrol made available by turning a tap which can easily be reached from the driver's seat, and the accessible housing of the tools and accumulators in containers behind the valances at each side of the scuttle.

Fresh-air Body.

An important point which we noticed particularly in this car is the entire absence of fumes or heat in the body even after it was driven at full throttle for a considerable time in a completely closed condition, owing to heavy rain. Furthermore, it proved perfectly waterproof in these circumstances. The windscreen, incidentally, is of the single-pane type and a sun shield is fitted above it which, in our English climate, serves admirably to deflect rain!

Summing up, the 12-24 h.p.

CAR TESTED: 12-24 h.p. Citroën saloon de luxe; price, £225, servo motor £5 extra.

ENGINE: Four cylinders, side valves; bore, 70 mm.; stroke, 100 mm.; capacity, 1,539 c.c.; R.A.C. rating, 12.2 h.p.

TRANSMISSION: Three-forward-speed gearbox, central control, open propeller shaft and spiral-bevel drive.

SPEEDS ON THE GEARS: Top (4.8 to 1), 50 m.p.h.; 2nd (8.8 to 1), 32 m.p.h.; first-gear ratio, 15.3 to 1.

BRAKES: On all four wheels, applied by vacuum servo motor made under Westinghouse licence.

PETROL SYSTEM: Dashboard tank with reserve compartment; consumption, 32 m.p.g.; capacity, 7½ gallons.

WEIGHT (as tested with two up): 26 cwt.

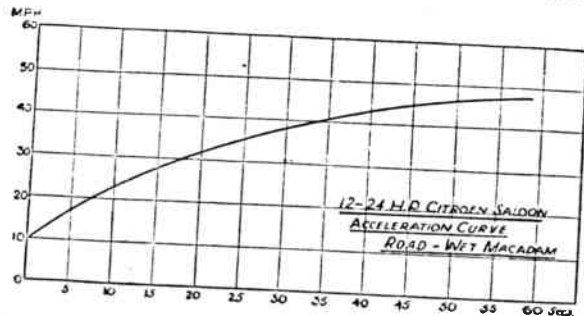
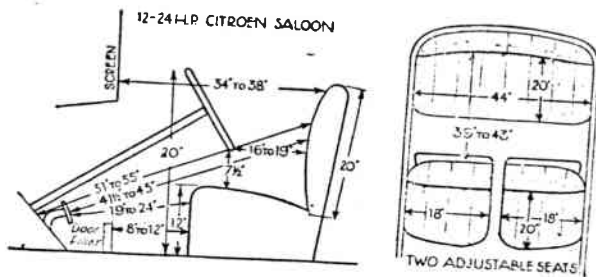
TURNING CIRCLE: 44 ft.

DIMENSIONS: Track, 4 ft. 0 in.; wheelbase, 9 ft. 5 ins.; overall width, 4 ft. 11 ins.; length, 13 ft. 7½ ins.; height, 5 ft. 11 ins.

CITROËN CARS, LTD.,
Hammersmith, W.,
and Devonshire House, Piccadilly, W.1.

raised or lowered by rotary winders, and these are notable for the fact that although very easy to operate only about a turn and a half of the handle is needed to send the glass from top to bottom, or vice

(Right) Bodywork dimensions; the pedals are adjustable and the seats can be slid fore and aft.



versa. The rear light is of ample size and a good view of the road behind can be obtained through it via the driving mirror, which is placed above the windscreen.

The interior of the body is upholstered in a good grade of leather cloth and all the fittings are in excellent taste; they include

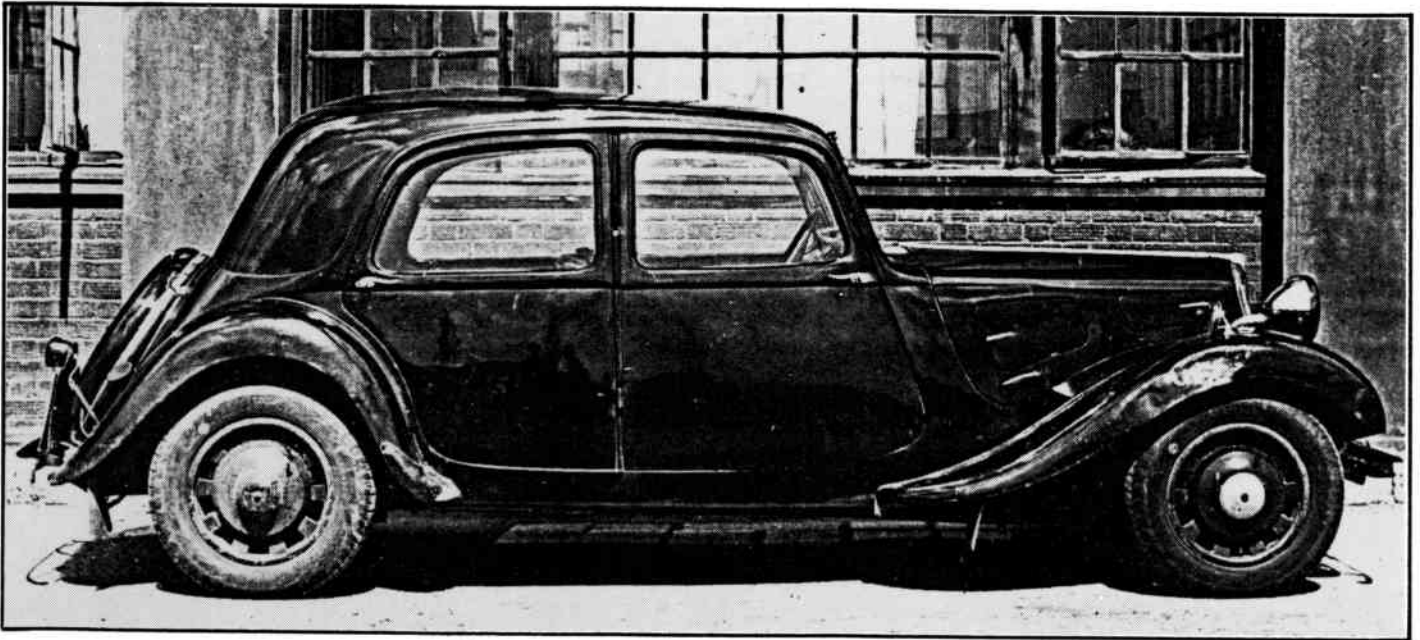
Citroën saloon represents a very practical type of car for the man who wishes to carry four people in comfort under any sort of weather conditions and at reasonable speeds. It is pre-eminently a car which is easy to control and should therefore, we imagine, make a particular appeal to the lady driver.

VAUXHALL MOTORS LIMITED
Engineering Department
EXPERIMENTAL REPORT

*Subject Group: Passenger Vehicle Data.
Report No: 1244 Model: Competitive
Date of present addition: 16 MAY 1947*

Report on CITROËN LIGHT FIFTEEN

Date of Manufacture (1940 Model): 1939
Chassis No: 125013
Engine No: DY.6633/HCL4



Foreword

As it was desired to check the handling and other interesting characteristics of the front wheel drive Citroën, enquiries were made regarding delivery dates for a new Light Fifteen. It was found that the waiting period was excessive and on Messrs. Citroën's recommendation we obtained a secondhand car from their London agent. The vehicle had been used by Messrs. Alvis for experimental purposes and had obviously had hard usage. It was passed to Messrs. Citroën with the request that it should be put into first-class mechanical condition. Unfortunately, owing to lack of spares, particularly engine and gearbox parts, the overhaul was not as thorough as we intended.

It was hoped that it would be possible to recondition the engine in the Experimental Division but, after trying from April to October to obtain the necessary spares, it was decided to sell the vehicle as it could not be considered sufficiently representative.

Owing to the poor condition of the engine, it was decided that no worthwhile results would be obtained from performance testing.

Introduction

The front wheel drive Citroën is of particular historical interest for several reasons. It is the only front wheel drive car that has been in large scale production over a long period;

other front wheel drive cars that have been in production a reasonable length of time are the Cord (in the high price cars), the BSA, the Alder, and the DKW (in the low price austerity class). Other makes of front wheel drive cars have not been made in large numbers, nor have individual models been in continuous production for any length of time.

The front wheel drive Citroën was first introduced early in 1934, and it is a remarkable testimony to the design that the 1940 models differ from the original only in a few minor details; again the post-war vehicles remain practically identical to those produced prior to the war. Although from a Styling point of view, the car is beginning to date, it will still bear comparison with many current British cars. When the vehicle was first produced, it was undoubtedly ahead of its time; the specification included the following features:

Integral frameless construction, torsion bar suspension all-round, dash located gearshift, hydraulic brakes, flat floor, wet cylinder liners, 14mm plugs, and improved engine mountings.

Description

The front wheel drive Citroën has been in production long enough for most people to be familiar with its construction. The following is a summary of the more important features:

Integral construction is used, the sills are

continued forward and downwards forming wedge-shaped boxes on either side of the engine. Across the front of these side members, a cradle-shaped pressing (forming the front suspension and drive assembly), is attached by four horizontal tubes, it carries the steering mechanism, wishbones, bottom links, and front ends of the longitudinal torsion bars. The two links which are free to move vertically are mounted on bronze bushes (which can be adjusted horizontally) and the lower arms are carried on rubber bushes.

The power plant is supported at the front by a rubber mount attached to the top of the gearbox, (the gearbox being in front of the engine). The rear engine mount is situated in the horizontal wall of the dash, it takes the form of a square extension from the engine surrounded by a rubber moulding housed in a square pressing. There is a slight taper to allow for easy removal of the engine. The engine is steadied by a volute spring at either side, the effect of which may be varied by adjusting the spring loads.

The clutch (which is of a single dry plate type fitted with a spring centre), is located at the front of the engine, the differential and spiral bevel final drive is situated between the clutch and the forward mounted gearbox at a lower level, so that the drive passes over it to the gearbox mainshaft and is returned through an extension of the driven shaft on

the end of which is the spiral bevel pinion. The drive is therefore always indirect.

The three-speed gearbox is provided with single helical gears and synchronised change on second and top. First gear is obtained in an unusual manner, drive is taken from a gear at the rear of the upper shaft on to an idler gear on the lower shaft, integral with this gear is a single helical gear which returns the drive to a similar gear which is siamesed with the second speed gear. Drive is thus brought back to the lower part of the gearbox (via second speed constants), but this time to the driven shaft. Reverse is obtained in the same manner with the addition of an idler in the gear train. Fore and aft adjustment of the final drive bevel pinion is obtained by movement of the driven shaft, the location of which may be altered by the addition or deletion of shims between the forward bearing housing and the gear case. Side adjustment is obtained in the usual manner. The speedometer drive is situated between top and second speed gears on the driven shaft.

A locking mechanism is provided which if properly adjusted, renders it impossible to change gear unless the clutch is fully disengaged. This is accomplished by a wedge-shaped locking shaft that pushes two balls outwards, locking each selector shaft in the required gear position. The device was probably installed as much to cure jump-out as to protect the gearbox. Two ball joint rods connect the selector shafts to a change speed lever, which is mounted on the dash.

The whole transmission system is housed in two iron castings bolted together at the centreline of the crown wheel, the foremost unit houses the gearbox and half the final drive assembly and the rear casting encloses the clutch and half the final drive assembly. Dividing walls separate the gearbox and also the clutch from the final drive compartment. The front wheels are driven by short shafts extended from the sides of the transmission housing, having Hardy-Spicer universal joints at each end.

The steering gear utilises a rack and pinion mechanism (having a ratio of 14.3:1) and a divided track rod is used. The swivel pins are spherical in shape.

Suspension

Front

The top wishbone swings freely, but each bottom arm operates a longitudinally disposed torsion bar, the front end of which is mounted in rubber and the back end attached to a transverse member under the rear of the engine. An easy means is provided for adjusting standing heights. Newton direct acting telescopic shock absorbers are used.

Rear

Rear suspension is by means of transverse torsion bars actuated by trailing links attached to the axle adjacent to the wheels. The torsion bar is operated by the trailing link or suspension arm, through a linkage which provides a ready means of adjusting standing heights. A straight rigid axle joins both wheels. The rear shock absorbers are also Newton telescopic. The rear axle is controlled laterally by means of a single panhard rod, rubber mounted at each end.

Engine

For reasons previously mentioned, the engine was not stripped. The following brief details may however be of interest. Wet liners are used, thin gaskets seal the bottom joint of the liners with the cylinder block and the barrels stand 0.002"-0.004" proud, so that they are sealed by the action of bolting down the cylinder head. The crankshaft and camshaft are each provided with three bearings. The camshaft is mounted high up on the cylinder casing enabling short push rods to be used. A helical gear integral with the camshaft, drives the distributor and oil pump. The AC mechanical petrol pump is driven off the forward end. An extension of the camshaft passes through the clutch housing casting and takes a pulley, which drives the fan and dynamo by means of a 'V' belt.

Brakes

Lockheed hydraulic brakes operate on all wheels actuated by the foot pedal, whereas the hand-brake lever operates rear wheels only by means of two cables attached to a cross-shaft. The foot-pedal is of the high fulcrum point type necessitating a downward action of the foot. (See also comments under ROAD IMPRESSIONS.) The handbrake lever has an umbrella type handle, the brake is applied by pulling, and retained by twisting the handle so that a catch in the inside tubular member locates in holes in the outside tube.

The instruments include, speedometer, petrol gauge, oil pressure warning indicator, ammeter and clock. In view of the provision of an oil pressure warning indicator, it has been considered unnecessary to add an ignition warning light. The self-cancelling trafficators are controlled from an arm on the right of the steering column; the horn button and dipping switch are also located in this arm. Electric system is 12V with compensated voltage control, the battery capacity is stated to be 75 ampere hours. The windscreen wipers are mounted above the windscreen, operated by an electric motor; the arrangement is out of date even for a 1939 vehicle. (NB 1946 model has wipers mounted under the screen of the fully parking type.) An opening windscreen is provided, but the opening mechanism is clumsy and unsightly.

The chief body features are its low height and flat floor of which more is said under heading of ROAD IMPRESSIONS. A very simple form of body heating is standard, its chief merit being cheapness. It merely constitutes a funnel clamped against the edge of the radiator with a pipe from it to the inside of the vehicle, where it is provided with an elementary sliding lid control.

Road Impressions

The following remarks represent a consensus of opinion of the various people that have tried the car; there will be instances where opinions differ, but the views expressed are those of the majority. Undoubtedly, the outstanding feature of the car is its handling characteristics. A driver quite new to the vehicle becomes at ease as far as handling is concerned and soon can confidently negotiate wet twisty lanes at high speeds. When travelling round the bend, it is of course, preferable to drive around it, but

even if corners are taken fast, the effect of changing from drive to overdrive is not embarrassing. The cornering power of the car is somewhat offset by tyre squeal, but turns can be taken at considerably higher speeds than that at which squeal commences. It is possible that this squeal may be attributed to the Michelin tyres as much as to the front wheel drive.

The stability of the vehicle is aided by the wide track, low centre of gravity and it has been pointed out that the stiff shock absorber setting, high roll axis due to the form of rear axle, Michelin wide based tyres, and Michelin staggered spoke wheels, may be contributory factors.

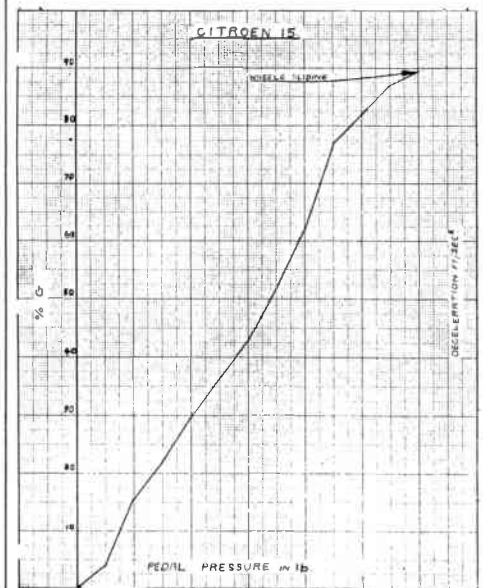
The vehicle has remarkable directional stability; it is possible to drive for a considerable distance on the straight with hands off the steering wheel. The steering is very heavy, especially to those accustomed to driving Vauxhall cars. There is, however, very little build-up of friction with increase of steering wheel angle. One can become accustomed to this heavy steering when driving on main roads, but driving in traffic can be very fatiguing. There is appreciably more castor-action when the front wheels are driving, but even on the overdrive feed back is more than adequate. An appreciable amount of wheel fight is present, the rack and pinion steering with its high reverse of efficiency is probably a contributory factor.

The suspension seems unduly hard and one gets the impression that the full use is not being made of the independent suspension; added to this it is obviously over-damped.

The brakes are very effective and progressive in action, the handbrake also holds the car well, but most people found it awkward to operate. Also it is necessary to push it home to ensure that it is fully free.

A certain amount of lumpiness may be inherent in the transmission, but in the vehicle tested, it was probably aggravated by the general sloppiness in various components. There is a marked tendency for the bolts to work loose in the Hardy-Spicer universal joints.

There is an appreciable whine from the gearbox, but this is not surprising after



having inspected the unit. (The plain bearings were found to be badly worn, the ball bearings at the clutch end sloppy, and the second speed constants deeply pitted.) Synchromesh is reasonably effective, if not unduly rushed and provided the pedal is fully depressed to clear the interlock.

Some people found the gear lever difficult to become accustomed to, this is due to the fact that its position is unaltered for a RH drive car. When driving a LH drive Citroën, the gear lever comes readily to hand and is natural in action. The spring bias is towards the right (1st and reverse), this is suitable for LH drive because the weight of the hand readily overcomes it, but it would be better in the other direction for a RH drive car when it can assist the left hand in reaching upwards and away from the body. With one exception, most people find the high fulcrum points brake and clutch pedals awkward and difficult to get used to, everybody agrees that the accelerator pedal action is very awkward.

The general opinion is that there is less sag noticeable than on our 'J'-type, but the front mudguards are attached rather flimsily, giving rise to waggle which gives an exaggerated impression of lack of torsional stiffness. Torsional stiffness tests of the complete vehicle showed it to be below average in this respect, but the figures obtained may have been very appreciably lower than normal, owing to the poor condition of the sheet metal work (underneath the boot, it was completely rusted away).

The condition of the engine render fair comment impossible, since the car tested was found to be generally very noisy, having an appreciable amount of piston slap. It is difficult to assess the smoothness, from a

vibration point of view of an engine that is excessively noisy, but the method of mounting appears to be successful, resulting in an engine that is smooth for a 4-cylinder, especially when one considers its size.

The Burgess type of air silencer was largely ineffective. When received the car was found to suffer from excessive intake noise and the element was found to be in doubtful condition; it was replaced by a new one, but although the noise was slightly reduced, it remained at an unreasonably high level; the engine sounded more like that of a Sports car than that of a conventional Saloon.

A feature of the body is the flat floor which is a particular praiseworthy point of the rear passenger accommodation; the provision of bucket seats and the interference of the engine compartment under the dash, render the flat floor less advantageous at the front. The continental Citroën which is equipped with a bench-type front seat, makes more use of this feature. The benefits of a flat floor are somewhat offset however, by the high sills which make getting in and out a little difficult and render the car difficult to clean, in marked contrast to the almost flat floor of the Jowett, which can be readily brushed out.

Due to the poor condition of the engine, it was not considered worthwhile doing any performance tests, since the results would have been no true indication of the car's capabilities. When the car was first received, it seemed very lively, but it was subsequently found that it was fitted with the wrong axle ratio (4.9:1 instead of 4.3:1 which is applicable to the Light 15). The correct ratio was subsequently fitted.

The maximum speed we obtained with this not very representative Citroën under most favourable conditions was 62.

Skid Pad Test

The results of the tests carried out with this vehicle on the 108' radius of the skid pad, bear out the impression of stability gained on road testing, in that the car shows a steady but small increase of steering wheel angle with increasing speed, ie, it has a well defined understeer tendency.

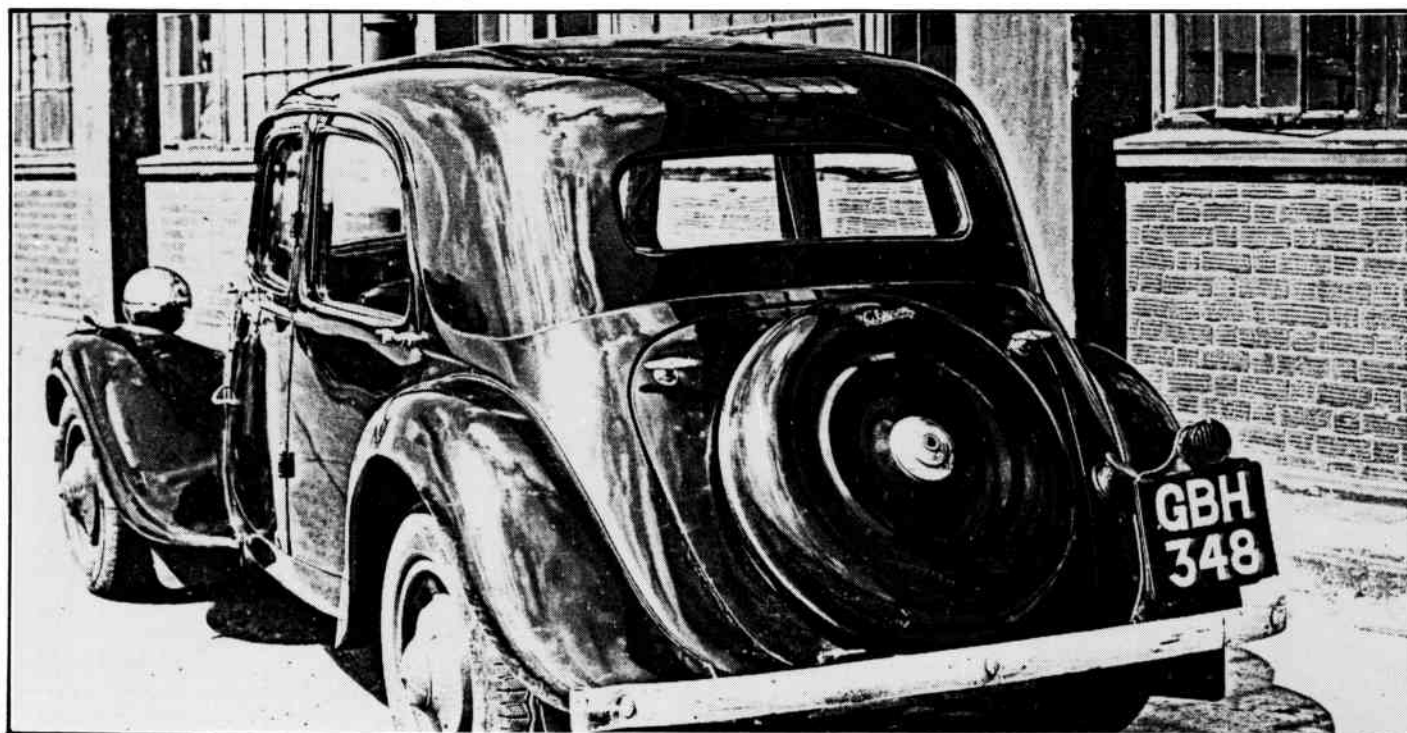
The understeer up to the maximum speed attainable is not such as to give unduly high front slip angles, a characteristic presumably in large measure due to the front wheel drive; also the speed attainable (lateral acceleration of slightly over 50% G), is slightly higher than is attained with Vauxhall cars, again apparently due to the reasonable front slip angle at speed.

Braking Tests

The results plotted on the graph were obtained by a tapley meter attached to the instrument panel. Reading were taken at pedal pressures from 10 lb to 120 lb in 10 lb increments, this was done in both directions and the average of the two figures plotted. Readings of the meter were taken at approximately 20 mph. Only minor adjustments were made to the brakes prior to the test. The results show powerful braking at moderate pedal pressures and indicate the progressive character of the brakes.

Handbrake

The handbrake was found to give a maximum deceleration of 25% G, when stopping from 20 mph.



Reverse Braking

It was found that 25 lb pedal pressure was necessary to stop the vehicle on the point of rolling backwards down a slope of 1 in 4. This compares with 48 lb for our J.15239 (CP3 liners at 5,000 miles) and 53 lb for HIX.44925.

Range of Vision

Generally speaking it can be said that the forward visibility is very good, also the blind

area on either side of the car is less than usual. The blind spots caused by the front pillars exceed the recommendations referred to, but even so can be considered above average.

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IN DEPTH

by Roger Dyer

The Past

IT HAS NEVER ceased to amaze me, when using the Traction, how many people approach and admire the car, and usually comment that their Father or Uncle or other relation used to own one. It is also true that Tractions are often mistaken as Renaults, Rovers or Rileys . . . I suppose there is a little resemblance to these marques!

My own earliest recollection of an interest in old cars was on a visit to Brighton at the age of nine, where I remember seeing various Austins and Morris etc. having been abandoned by their owners in large numbers on bomb-sites around the city. Most of them, as I recall, were in excellent shape, their previous owners no doubt, now driving Austin A50's, Fords and, perhaps, a few Tractions. I wished then that I could take them home, and now I wish I had!

It was not until the mid-sixties that the reality of having my own car became true. As students studying A-level science subjects, we had numerous 'free periods', and one of these fell conveniently on Thursday morning when, of course, the *Exchange & Mart* was, and still is, published. This was avidly read by all of us who were interested in cars. At that time the norm for a student was usually an Austin 7 or 8 which could be bought for as little as £35-£45. I remember at the time that one local second-hand car dealer quite often had a Light 15 for sale, and these were always much admired, but they cost around £75-£100 and were therefore out of our reach. In any case we then had fears of their complexity - how ignorant we were then! It was to be another ten years before I eventually realised my ambition to own a Traction.

There is no doubt that the Traction is something special, not only because it was the first truly mass-produced front wheel drive car, nor its other well known 'modern' characteristics, which firmly put it into a unique class of its own. So why is it so special and arouses so much interest? Let's try and

analyse the reasons behind this.

Modern it certainly was at the time, but also it was probably one of the first marques to be made and sold on a very international basis, having been manufactured in France, England, Belgium and Italy. It came to be the favourite transport of various drivers and organisations such as Police Forces, who used them to catch the Villain's Tractions, and wartime Resistance Groups who used them no doubt to escape the attentions of the Gestapo! One can only imagine how good the roadholding characteristics were appreciated at a time when most other vehicles must have seemed to be decidedly unstable by comparison! This is confirmed in a Research Report carried out by Vauxhall Motors on a pre-war Traction in very bad condition! The Traction has a pleasing yet sinister shape which adds to its popularity today. It has been featured in so many films that it is difficult to keep track of them; but one, however, must stand out, that being the *Maigret* television series by Georges Simenon, with Rupert Davies playing the famous Detective with his 6H Traction. This is the series that the public clearly identify the Traction with, and it is most frequently referred to as a *Maigret* car! Members of other one-make car clubs must envy the availability of Traction scale models in almost any size and made in metal, plastic and even wood and pottery, especially when they would be hard-pressed just to find even one model!

The Present

So what of the present? Like many other classic cars, spares for the Traction are in fact becoming easier to obtain. Our Club alone has built up large stocks of new parts so that members can carry out good quality restorations, and again for our benefit, due to the Traction's popularity in many countries, other Traction Clubs around the world are producing new spares in which we all can share.

Government legislation has brought

problems for the enthusiast, namely MOT regulations, screen washers etc, but we 'escaped' the seat belt law and the idea to have a Road Tax on all cars whether used or not, luckily seems to have been shelved for the moment at least. It may interest members to know that even though we are in the EEC, regulations differ, for instance, the French are exempt on Road Tax on old cars, but however, they have to comply with a new rule that all cars show a certificate of insurance on the windscreen!

The Future

It would seem that the next problem to confront classic car owners will be the introduction of lead free petrol. This may well be a particular problem to the owners of cars built in the last fifties to the present day, as supplies of Four Star fuel gradually disappear. It is not yet known how lead free petrol will affect the Traction with its low compression engine, although in theory it should work satisfactorily as the engine was designed before lead was added to fuel. Setting the Ignition Timing back to the 'old' 8° advance instead of the current 12°, and having to decoke more frequently may be the price we will have to pay!

Citroën cars have in the past held a reputation for depreciating quickly due in part, unjustifiably, to their complexity and idiosyncrasy, but it can also be said that few cars reach 'Classic' status faster, with the SM being the most rapid of all! The ID/DS range are now most certainly appreciating quickly, but which model will be next?

My guess would be the CX and 2CV range, and for the latter model there already exists the 2CVGB Club as well as a strong following in the Citroën Car Club. It would, however, seem to me that when Citroën finally decide to discontinue the 2CV, an ideal opportunity could arise for some entrepreneur to purchase the rights to continue to manufacture and develop the model, as there is surely a market for it for some time to come! Food for thought!

LIVING with a 4-SPEED CONVERSION

by Jonathan Howard

IN FEBRUARY 1984 I journeyed to Roger Williams at Beverley, where he and I converted my *Commerciale* to an ID engine and 4-speed box. Since then the car has covered several tens of thousands of miles, during which time the advantages of this conversion have been manifest, as well as a few defects. In my view the advantages won the day so well that I applied this conversion to a *Slough Light 15*. There were several reservations expressed which I can answer, i.e.

1. The converted car will be irretrievably mutilated, and originality lost.
2. The converted car will eat driveshafts.
3. On a *Light 15* the radiator will be too small to cool the engine adequately.
4. The brakes will be inadequate for the extra speed attainable.
5. The installation is likely to be troublesome in terms of linkages and controls.

To answer these points one by one, it would be eminently possible to reconvert back to original specification if so desired, with only one small patch on the scuttle to show what had been undone. Conventional driveshafts (Peacock Engineering reconditioned) had an average life of 20,000 miles on my *Commerciale*. This seems reasonable, in view of the fact that a few years ago I could expect a life of 5-10,000 miles from the Dutch-reconditioned shafts used on a conventional *Big 15*. I will say that inner cardan shafts seem to wear rapidly (about 10,000 miles) but Peacock Engineering are producing a slightly improved version of these, which I have yet to try over long distances. Better still, they have recently come on stream with their all-new driveshafts, which consist of Range-Rover front axle constant-velocity joints with fully Traction-compatible end fittings. My *Commerciale* was the first Traction to be fitted with these, and to date they have fitted and worked perfectly, with a projected lifespan of at least twice that of their antecedents. Experience has shown that a *Light 15* fitted with a DS19 engine but with its original radiator does not boil up. The brakes on a Traction were often praised for their effectiveness when the cars were current. Whilst like all drum brakes they do fade if applied hard at very high speed, they are still reassuringly adequate, and tyre adhesion is still their main limiting factor.

I have a set of front linings supplied by Classic Restorations still safely in service after

14,500 miles on my *Commerciale*. As for linkages and controls, Roger Williams's setup performs very well, and clutch and throttle linkages are straight-forward enough.

Working from front to back of the D-gearbox/engine assembly, we first encounter the crank-starting arrangement. Doubtless this worked well when the gearbox was in its original car, where the long starting handle was well supported. In a Traction it is not, and so attempts to start the engine with a handle are likely to break the aluminium bearing housing, so this should only be used as a facility to turn the motor over slowly in order to set points and tappets. Inside the gearbox things are very different from the Traction box, despite an external similarity. I have heard the idea being mooted of transferring all the 4-speed internals into the Traction casing. I take the opportunity of stating that it simply is not on, for dimensional and logistical reasons. It is true that there were proprietary 4-speed boxes made for Traction in nearly identical casings, but in order to fit all the necessary wheels in the box the synchromesh had to be dispensed with, and some wheels were so thin that great care had to be taken to avoid breakage. The ID box was a tremendous advance over the 3-speed Traction box, since it was not only endowed with an extra gear but also with effective synchromesh. The absence of straight-cut gears in first eliminates the whine in that gear. Synchro into second is by an extraordinary method I have never encountered before. It does not always work, I have discovered. Synchro on 3rd and 4th is excellent, and permits very rapid changes. A major hazard with these boxes is a whine in top gear. On a good box this will be just audible at certain speeds, but I have had a box which was so noisy as to be painful. The problem appears to be a fault in the original machining of the wheels, aggravated by wear. Cures such as oil additives, or replacing the nose bearing are to no avail. The crownwheel and pinion assembly does not break like that of the Traction is prone to, but it can wear badly which again leads to appalling groaning and whining. So a bad box can perform well, but drives its operator bonkers with a cacophony of wails, groans and shrieks etc.

The clutch on the D was again a tremendous advance, as they are smooth, and not as maintenance-intensive as the Traction's. Their only vice is a very slight

tendency to drag when the engine is very hot. Above it, the water pump is similar to that of the 11D in construction, but is shorter, and is of cast aluminium. This means that the carbon sealing gland is running on aluminium, consequently the housing can wear extravagantly, causing leaks and silly noises. The fanbelt used is QBA 914. On pre-1962 D engines the camshaft could in some instances develop an infuriating rattle at low engine speeds on the spline drive to the pulley shaft. This was clearly an acknowledged problem, since the design was modified, and the rattle eliminated. The flywheel of the D engine is stupidly heavy at 56 pounds. Theories abound to explain this, such as that it was to mask the indifferent balancing of the crank and rods, or that it would give a ponderous response suited to the hydraulic gearchange. But I wonder how much note was taken of the gyroscopic effect inevitably engendered. In any event, the flywheel can be lightened down to 21 pounds, and in conjunction with a balanced crank, and conrods, of equal weight, the motor is much more responsive, and pleasantly smooth, besides being 35 pounds lighter. It is possible to fit the motor that was fitted with a damper into a Traction, which I achieved by fitting a truncated cast iron timing chain cover over the original aluminium one with the hole and oil seal for the damper. This arrangement worked well on a motor which was otherwise a failure, but I was not entirely convinced as to its ultimate longevity, so I abandoned the idea and amputated the damper with no ill effects.

The crank itself runs in shell bearings, which makes for cheaper and simpler repair, and it is worth remembering to inform the people doing the regrinding that as the engine is installed with the flywheel facing forward, it turns the opposite way from convention, and so should be ground accordingly. It is also essential to remove the brass plugs in the big end journal drillings, in order to clear out the sludge traps, or bearing failure is likely.

The D head was again a major advance on the Traction item, permitting a power increase from the 56 BHP up to 83 BHP from the same bore and stroke. To touch briefly on Citorèn history, by the early fifties the traction was showing its age, and the motoring press was becoming less than flattering about its performance and mechanical attributes. The DS was developed amid great secrecy, and

was intended to be powered by an all-new flat-six engine of about 1600 c.c. either water or air cooled. The rest of the car was well advanced in design when the ghastly realisation was made that the motor was for various reasons a dud, and should not be used. It was therefore determined to soup up the existing Traction engine and apply it to the new bolide de reve. In order that the bottom end of the engine would stand up to the power increase, the main bearings and conrods were made fatter, and the block casting stiffened. The head, which is a compound-angle crossflow device, was advanced for its day, and ingenious in its operation. However, there are three important points to consider with these alloy heads. If the motor overheats, they can warp, with consequent sealing problems. They are susceptible to corrosion, and can dissolve gradually into the coolant. They lack the robust charm of the original Traction head, and if they have been worked on by a heavy-handed individual, will display a fine collection of stripped threads. Check carefully if the casting has cracked between the valve seats and the plug hole. In service the D engine has two noticeable peculiarities. If left parked for a while, oil runs down the valve guides in some quantity causing an impressive smoke-screen when the engine is restarted. The other is a loud pop in the inlet manifold just as the engine catches. If the two occur together, this is guaranteed to arouse concern from passers-by, but it is harmless

exuberance. The D motors did have something of a reputation for being hard on plugs. I have found that it is a dreadful mistake to fit cheap ones as they are in trouble after 1500 miles. NGK BP5HS plugs work beautifully and will easily last over 10,000 miles.

D thermostats are, in the words of one Citroën agent, 'criminally expensive'. A Quinton Hazel QTH 140 intended for a Peugeot fits perfectly, and costs about a quarter of the price. However I can strongly recommend testing the stat in a pan of water just to be sure. I have been sold a dud which would not open at any temperature, causing a boilup, which in turn warped the head, leading to a voracious thirst for water. The engine is supposed to have anti-freeze in it all the year round. An accompanying dose of Bars Leaks is a good ploy, as it also helps to prevent corrosion of the alloy head. In service any water loss should be promptly investigated as it may well be to do with the head not sealing properly. This will in turn lead to other problems. As the engine has no oil filter (Citroën were evidently keen to maintain demand for replacement engines), change the oil at least every 2,000 miles. Oil pressure peaks at 55 psi and pressure at tick-over with the engine hot is only about 10 psi. If you are rebuilding the engine it is worth examining the camshaft bearing and journals, as many people make the sign of the cross over them and pass over the repair. Whilst if worn they do not make much

protesting noise, they do lead to a considerable loss of oil pressure. On a D engine, particularly a DS, the timing chain will almost certainly be well-worn, owing to the hydraulic pump being driven by the camshaft. An annoying problem which can occur is that rainwater can find its way into the spark plug wells, despite all the little rubber hats fitted, moreover the Citroën system of threaded rods, bakelite inserts, and rubber hats is stupidly fiddly. In the 60's, the Daimler V8 engine fitted to their Jaguar clone had plugs down wells, with beautifully made bakelite plug adaptors. I thoroughly recommend the fitting of these.

Finally, there is the general performance and fuel consumption of the converted car. A Big 15 fitted with an ID engine is a fair match for a 15CV, and on a motorway would easily outrun it. My Commerciale (ID engine) will very happily cruise at the legal maximum, and if driven sensibly on a long run will manage 33 mpg. Thrashing down motorways and driving around town reduced this to 25 mpg. The Light 15 (DS engine) is extremely quick, that is to say it is eminently possible to get the speedo needle well off the end of the scale, and when I entered a contest consisting of timed laps around a banger-racing circuit, my times were marginally better than those of a DS23, a DS20, and a CX. I have to admit though, that driving in this fashion will produce ruinous figures in the low twenties. But you certainly get the excitement you pay for.



Nigel Webb (left in picture) sent us this photo, gleaned from his local paper, of last August's Round Britain Rally at Glastonbury.

CLUB NEWS

CITROËN IN GERMANY

Immo Mikloweit has written to us from Cologne, asking if any TOC member knows information about the German production of pre-war Citroëns at Citroën Automobil AG Koln-Poll. He continues as follows:

"Only a small minority know that Citroën automobiles were produced in Germany before the 2nd world war.

Particularly during the eight year production activity and the later following war crisis, only very few information items were kept about this interesting piece of history.

I have therefore taken on the task of collating various material and all destroyed information in an archive.

Overall, after several years' investigation it is my intention to publish a book.

For this reason I am appealing to you for help to uncover the buried knowledge of Citroën-Germany from this era.

Even seemingly unimportant information can be of importance or can strengthen any other known facts. For example I would be interested in:

Photos, newspaper items, adverts, prospectus, work descriptions, repair hand

books, replacement part catalogues, advice for German Citroën – vehicles and similar etc.

I would be very pleased if you would contact me should you be able to uncover any information."

Immo Mikloweit can be contacted at D-5000 Koln 91 (Neubruck), Weismantelweg 8, West Germany.

DEFINITELY WELL-WICKED

The Sunday Telegraph isn't normally a paper to be associated with the trend-setting glitterati, so I was somewhat surprised when a neighbour thrust into my hands a copy of this colour supplement containing an article headed 'Top Dog Status Makers' by a resoundingly fashionable-sounding Anoop Parikh (sic!). And, first recommendation under the classification 'Trendy Transport' was – you've guessed it! – "Citroën Light 15 (French police cars)". Admittedly, the list did go on to propose Volvo Amazons and VW Beetles, though I did quite fancy the idea of "Campagnolo bicycles". But how many Traction owners, I wonder, wear "Chanel baseball caps", holiday in "Macao with

RATES AND CONDITIONS OF ADVERTISING:

Private Adverts (classified).

Members and non-members of T.O.C., buying or selling Citroën Cars or parts (pre 1957) – NO CHARGE.

Trade Adverts

1/8 page, £30 per insertion. Advertisers must supply 'camera-ready' artwork. Where this is not available, the T.O.C. will provide it, after agreement with the Editor, on format and cost.

Inserts (loose)

Any size up to A4, £30 per issue plus handling charges, to be agreed with Editor. Artwork as above.

Terms of acceptance

Cash with order, all cheques and money orders will be cleared by the Club before the acceptance of any advert.

The Club reserves the right to refuse any advert which it considers unsuitable for publication.

All advertisements should be submitted to the Editor.

Chinese gamblers" or drink nothing but "Badoit mineral water", to quote from some of the other categories. Well, I'm off to don my Jean-Paul Gaultier and make my way down to the Java Brasserie.

Sam Wells



Events

Seventh ICCCR

If you are planning to join us at the ICCCR at Loreley in Germany on 4-6 September 1987, please contact John Gillard as soon as possible. We are trying to arrange cheaper ferry bookings, and should be able to answer your questions concerning the event, accommodation etc, as well as to facilitate easy administration for the event organisers.



4. - 6. Sept. 1987

Tour de Belgique

The Club Belge des Anciennes, Citroën's tour of Belgium, 28th-31st May, commemorating the Club's fifteenth anniversary.

Diary Dates

WEST MIDLANDS SOCIAL SECTION MEETINGS

1st Wednesday of each month: at the Swan, Whittington, Worcester, 200 yards off Junction 7, M5. *Please contact: Simon Saint, 'Snigs End', Danes Green, Glaines, Worcester. Tel. 54961 for directions or further information.*

LONDON SECTION MEETINGS

28 April
The Sun Inn,
Church Road,
Barnes SW13.

26 May
The Anchor,
Bankside,
London SE1.

30 June
The Ship,
Wandsworth Bridge
(south-west corner),
Wandsworth.

NORTHERN SECTION MEETINGS

Fourth Thursday of each month, at the White Hart, Rooley Lane, Bradford, at 8 pm. *Please contact: Liz or Jim Rogers, 11 Wilmer Drive, Heaton, Bradford BD9 4AR. Telephone 0274-45600 for further information.*

Classified

For Sale

1949 Slough built Light 15. Bodywork restored, engine rebuilt - Only a small amount of interior work now required. Tel: Rod Smallwood on Kingsland (0568 81) 379.

Wanted

Three wheels on my wagon, and I'm not rolling along! Two 'Easiclean' 14 Hole Wheels still required. Contact Editor on Midhurst 073 081-3714.

New traction Driveshafts

As manufactured by Peacock Engineering. Fit and look like original shafts but have greater strength, are longer lasting, and are maintenance free. Now available from Classic Restorations, Arch 124, Cornwall Road. London SE1. Tel: 01-928-6613.

For Sale

1978 Citroën 2CV spares. Engine. Gearbox. Seats. Chassis. Doors. Bonnet. Plus all other bits. All going cheap! Contact Editor on 073 081-3714.

For Sale

1922 Citroën 5 HP. LHD (possible change to RHD). Very careful restoration. Sound and reliable car with many spares. Value in France 45,000 FF (approx. £4,800). Would exchange for Morris 8 or 10, or similar in same condition. Contact Daniel Cabart, 24, Rue de Banniers, 14790 Verson, France. Or for further details Tel:

Colin Molyneux on Emsworth 371355.

For Sale

1955 Paris built Big 15, LHD. Fully restored including new interior. New project forces sale. Possible part exchange on similar type. £3,950. For further details contact Robert McCarthy. Tel: 0222 867499 office or 0222 888073 home.

For Sale

RHD Big 15, totally restored, maroon with cream pilot wheels, this car has won a number of con-course shows, and must be the best Big 15 around. £8,000.

Also Legere grill in primer £50. Legere or Lt. 15 rear near side door £50. Both in very good condition. Phone: 0243 864173.

For Sale

Traction sweaters. Crew-neck, long sleeve sweater with Traction front view on chest, approx. 14" across, in pure new wool.

State your chest size, your choice of car colour and background colour.

£60, or £65 with your registration number on right or left sleeve.

Contact Terry Homewood, 3 Lanark Close, Ealing, London W5 1SN. Tel. 01-998-0224.

Service

4-Speed gearbox conversion complete with gearchange mounted behind dash as per original. See article in this issue of FP. Contact Roger Williams, 37 Wood Lane, Beverley, North Humberside HU17 8BS. Tel. 0482-881220.

Wishbone Spindles Reconditioned

£30 pair plus p&p. Brake Drums Skimmed £20 pair plus p&p. Contact Roger Williams on 0482-881220.

Mobile Car Service

Welding and body repairs for your Traction. Light 15 door exchange service, supply and fit. Distance no object. Contact Michael Waller, 17 Chapel Avenue, Long Stratton, Norwich, Norfolk NR15 2TE. Tel. 0508-31199.

For Sale

1978 2CV parts. Engine, gearbox, seats, doors, wheels, chassis etc., etc. All cheap. Contact Editor on 073081-3714.

Club Tools for Hire

Front hub and outer bearing puller
Deposit: £25 Hire: £2.50

Top ball breaker
Deposit: £15 Hire: £1.50

Bottom ball breaker
Deposit: £25 Hire: £2.50

Inner bearing unit
Deposit: £15 Hire: £1.50

Hires are for nominal periods of 7 days, although earlier return is appreciated. Deposits are refundable only on SAFE return. Any damage to tools will be deducted from deposits. Person hiring fetches and returns. Prior booking ensures availability. ALL

AVAILABLE FROM PETER SIMPER,
215 Whitton Road, Twickenham,
Middlesex TW2 7QZ.

Workshop Manual Loan Service

The Club has Light 15, Light 12 and Big 6 manuals for loan; please send details of your car, with name, address, work and home phone number together with a deposit

cheque for £25 made payable to the T.O.C. - this will be cashed but your deposit will be returned if the manual is sent back in a complete and good condition. Please also send a separate postal order for £2.50 for postage, made payable to A. D. Sibley. Enclose a S.A.E. for return of your deposit. Manuals available from Allan Sibley, 174C St. Ann's Road, London N15 5RP.

Club Shop Price List

Models
Burago 15CV/20.....£4.95

Back No's Floating Power
1 copy.....£2.00
2-9.....£1.50
10+.....£1.25

Posters
Les Tractions.....£2.00
Traction Avant.....£1.25

T-Shirts
New style 'Citroën'.....£3.75
Amaze your friends.....£2.50
TOC.....£2.50

Sweat Shirts

New style 'Citroën'.....£7.75
Assorted 'ICCCR'.....£4.00

Badges

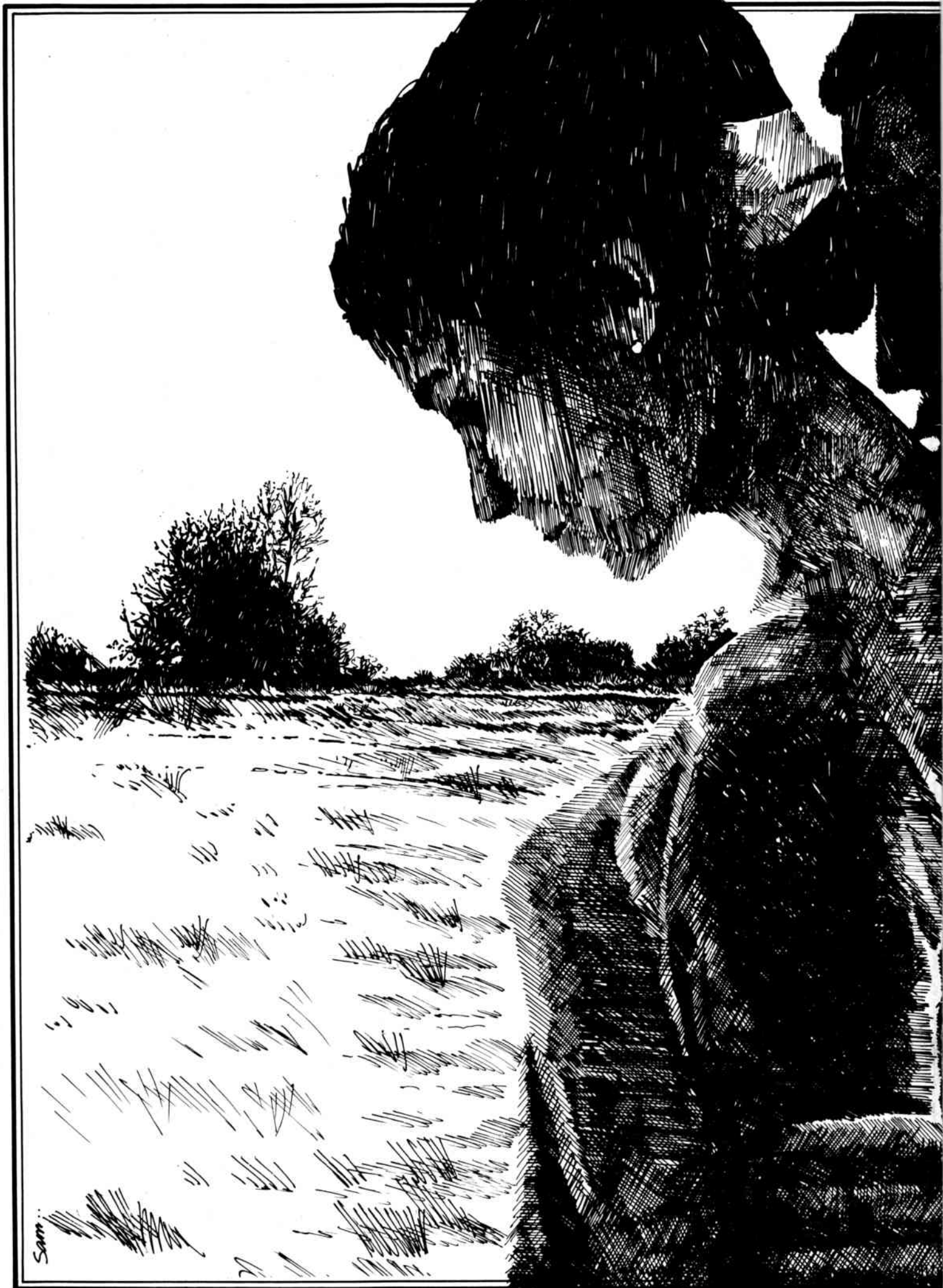
Metal TOC.....£10.00
Button.....£0.50
Enamel Brooches.....£2.00
Set of three.....£5.00
Windscreen Stickers TOC.....£1.00

Place your orders with the Club Shop (see page 2 for new arrangements).

All prices exclude post and packing. Cheques to be made payable to T.O.C.

SPARES SCHEME: When ordering spares, please send remittance with order, using current spares list prices. Any extra will be invoiced at time of despatch of your order.

FOREIGN MEMBERS: Please note that an International Money Order is required with overseas orders, payable in Sterling for full amount after any bank charges have been deducted.



Sam