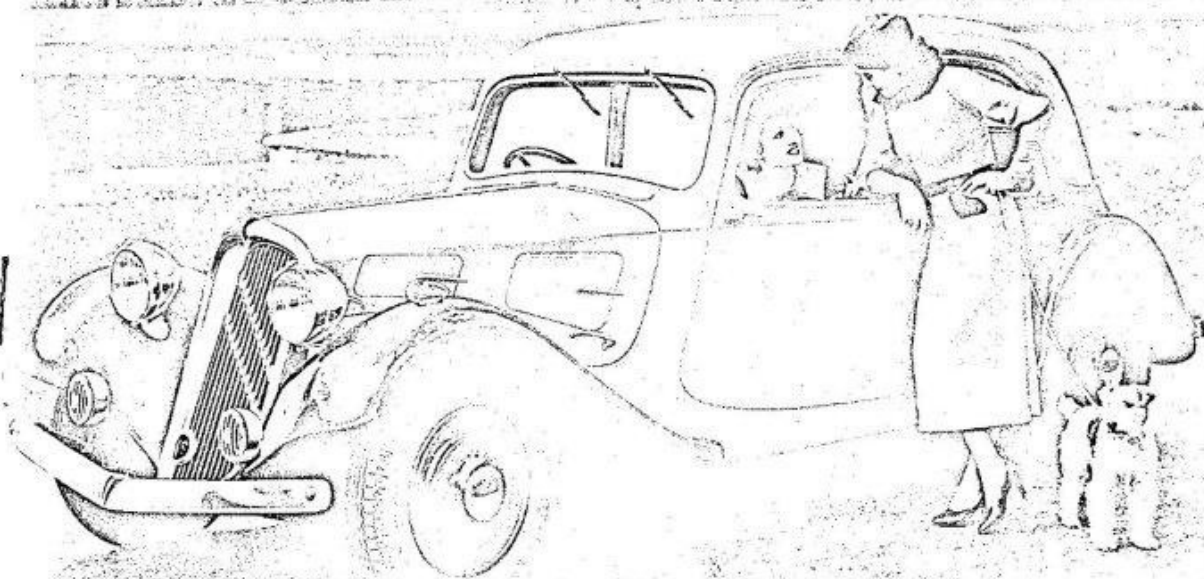


THE TWELVE

The Super Modern Car



CITROËN

A CAR OF ENTIRELY THE "TWELVE"

For many years motor car design has remained fundamentally unchanged, and it was necessary to seek an entirely new method of design to meet the ever-increasing demand for a **LIGHTER, MORE ECONOMICAL AND SAFER CAR.**

The Citroën "Twelve" is conceived along entirely new lines, new in principle, new in construction, new in elaboration. Bringing new ideas of design into practice and incorporating a great number of highly interesting technical features, the result has been the production of a car on super-modern aerodynamic lines with the weight and economy of a small car yet possessing unequalled body accommodation, comfort and visibility.

The type of construction adopted sets up a new factor of safety not approached by any other method, and the inherent stability, exceptional springing and road

NEW CONCEPTION

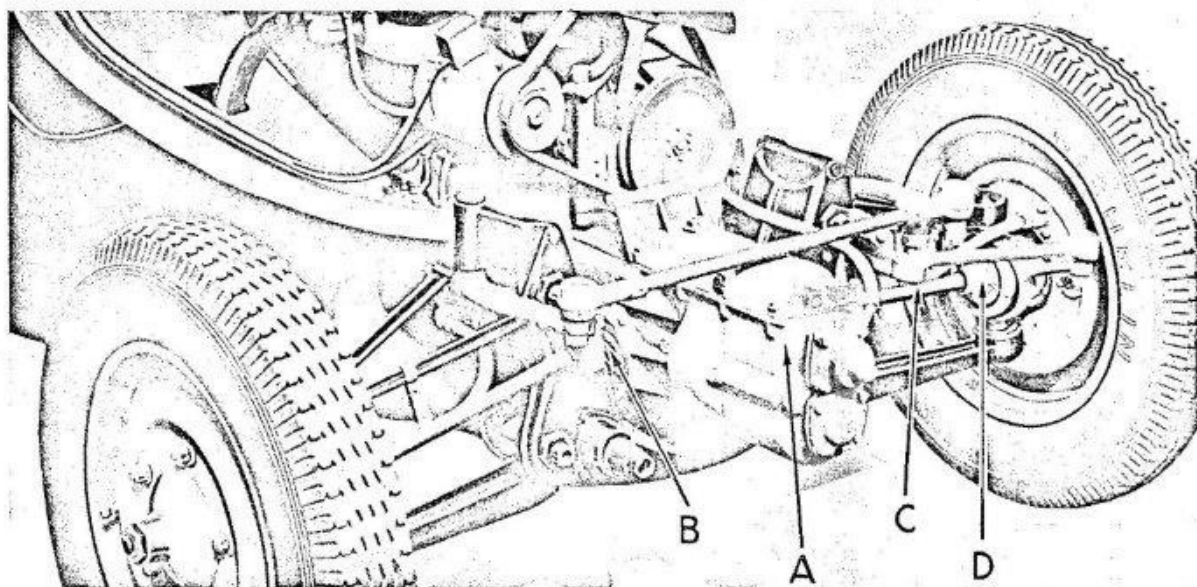
CITROËN...

holding qualities of the car marks a new standard from which all others must now be judged.

Breaking away from old traditions and adopting new ideas, the value of which have been conclusively proved by submitting them to the most severe tests which have taken several years to complete, the Citroën Organisation introduces the frameless, front wheel drive "Twelve" with independent front wheel suspension, torsion bar springing, hydraulic brakes and "Monoshell" body built on aerodynamic lines.

Beautiful in shape, luxuriously appointed, economical to run and with unequalled riding comfort and exceptional performance, it is no exaggeration to say that this car is two years ahead of current motor car construction.

FRONT WHEEL DRIVE



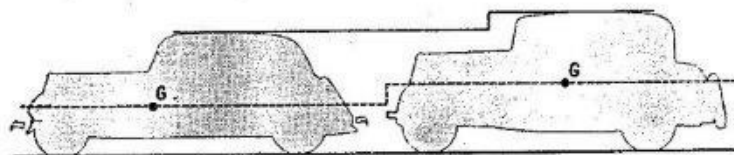
In the above illustration, those parts obstructing the view of the front wheel drive mechanism have been removed. In the centre at (A) will be seen the silent synchronised gear-box. At the point (B) is the coupling for the driving shaft (C) which transmits the power to the road wheels through the spherical joint (D). These joints are constructed in such a way that the drive is perfectly transmitted whatever the angle of wheel lock.

Front wheel drive constitutes the ideal method of propulsion for a light car. It simplifies construction, reduces the number of parts and permits the weight of the car to be lessened whilst considerably increasing the strength. There is a better distribution of the load on the four wheels, and, finally, it is possible to considerably lower the centre of gravity, a feature only possible with front wheel drive if the maximum comfort for the passengers is to be retained. All these advantages give to the Citroën "Twelve" qualities of stability and road holding to a degree that no other car can claim.

FRONT WHEEL DRIVE

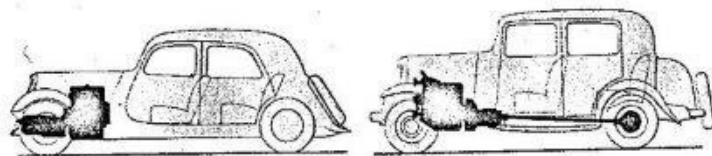
Lower centre of gravity

In the body of a Front Wheel Drive Car no provision has to be made for the gearbox, rear axle and propeller shaft as with cars having the conventional type of drive; such a design provides more room and greater seating comfort with the absence of floor wells. Being more than 8 inches lower, it is practically impossible for the car to be overturned.



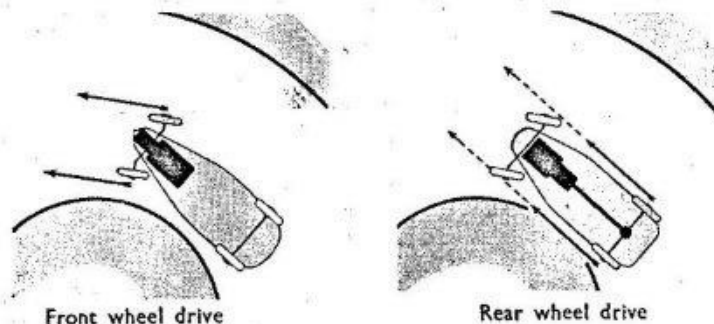
Better weight distribution

With front wheel drive the unit acting as the driving axle is suitably loaded and gives perfect road grip for the driving wheels, which obviously increases the road holding qualities and braking efficiency of the car.

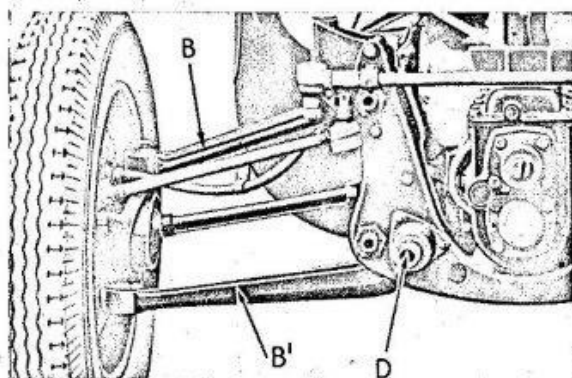


Cornering at higher speed without danger of skidding

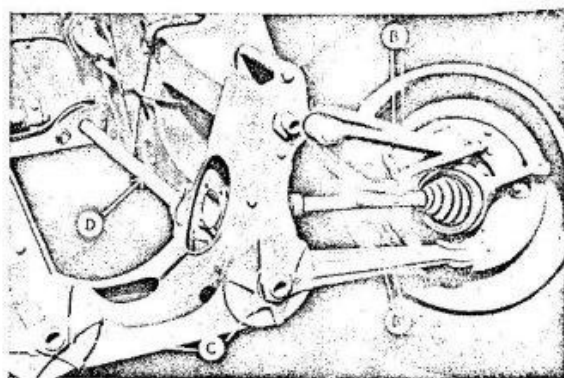
Due to the fact that with front wheel drive the driving effort invariably acts in the direction of the steering wheels, there is a great improvement in cornering and the car naturally follows the curve of the road. This makes it possible to corner without danger at greater speed than with a rear wheel drive where the driving effort is in the opposite direction tending to carry the car to the outside.



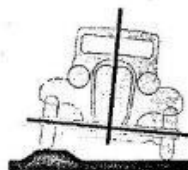
INDEPENDENT WHEELS



One of the principal reasons for the superiority of the Citroën Suspension is the torsion bars. These replace the old leaf springs which rust and squeak and become misshapen with age. The flexibility of the torsion bar is constant, whereas that of the leaf spring varies. Given an equal flexibility the torsion bar is half the weight and twice as strong. It requires no attention whatever. Metallurgical research has made it the spring of the future.

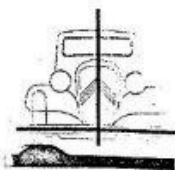


The system of suspension by independent front wheels and torsion bars comprises a pressed steel unit of box section to which is attached rigid arms of unequal length (B, B'), making a distortionless transverse parallelogram. This exclusive type of design cuts out wobble, keeps the wheels in the same vertical plane, maintains an absolutely parallel wheel track and gives longer tyre life. The lower arms are connected to shock absorbers (C) and torsion bars (D).



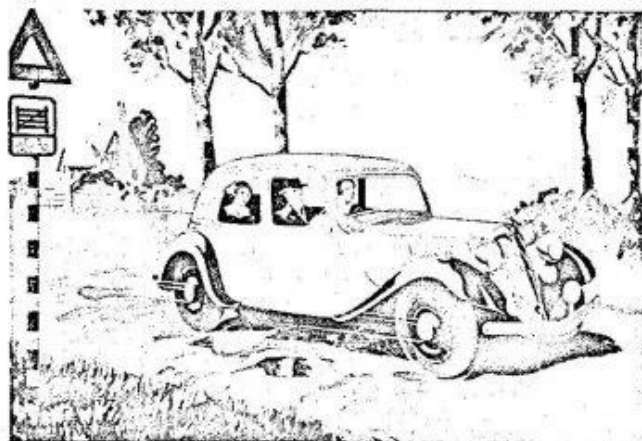
Old style springing
The whole car rises when a bump is hit.

After long study and severe tests Citroën has adopted a system of suspension with independent wheels and torsion bars which is an indisputable advance over any other existing type of suspension, without exception. The advantages of independent wheels are known—they absorb all the road shocks without transmitting them to the car. Avoiding all errors of previous designs Citroën has perfected a system of suspension which gives a riding comfort to all occupants of the car—front and rear—which must be tried to be appreciated.



Independent wheel suspension
Only the wheel striking the bump rises, the car remaining level.

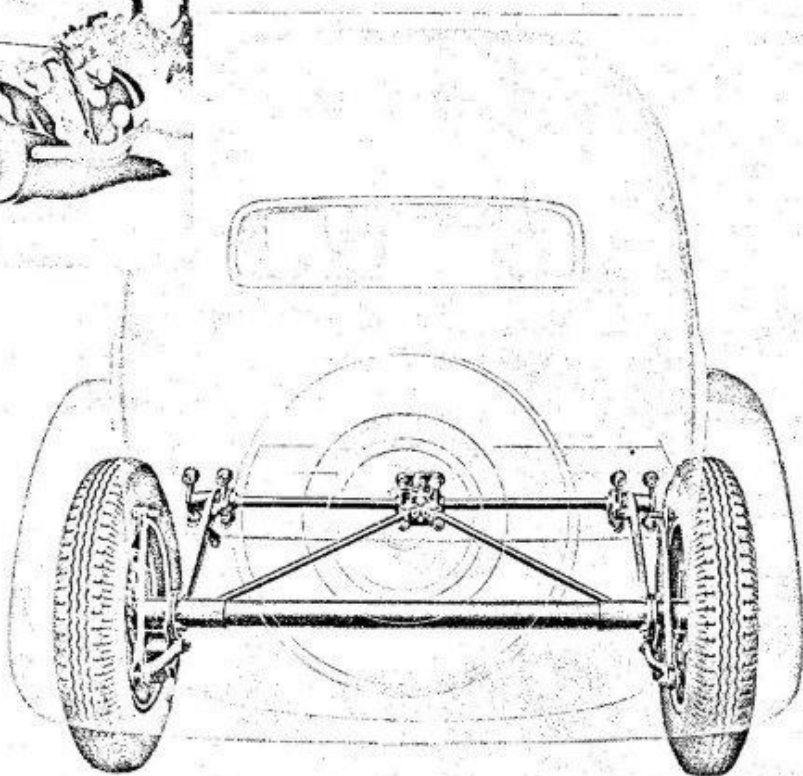
TORSION BARS



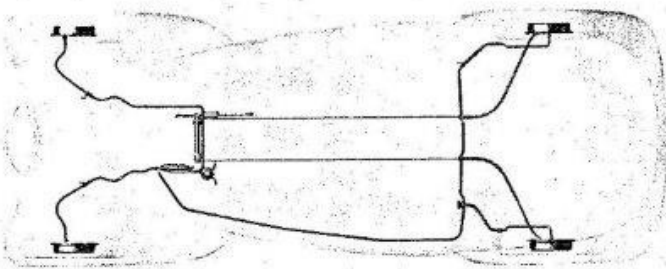
The "Twelve" rides as comfortably on an uneven and pot-hole road as on a smooth main road.

Rear Suspension by Stabilised Independent Wheels

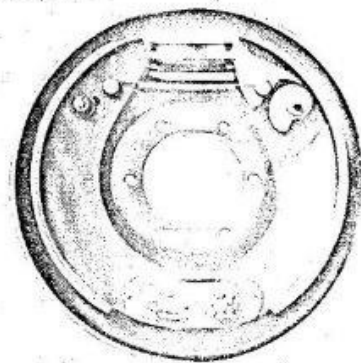
This comprises a rear axle formed by a tubular member sliding within sleeves attached to the rear hubs. Its function is to keep the wheels constantly parallel and perpendicular to the ground. Longitudinal links, torsion bars, hydraulic shock absorbers and stabilising rods complete the unit. The arrangement is simple, easily adjustable and gives exceptional riding comfort. The action of the various parts gives the car wonderful stability and freedom from rolling when cornering.



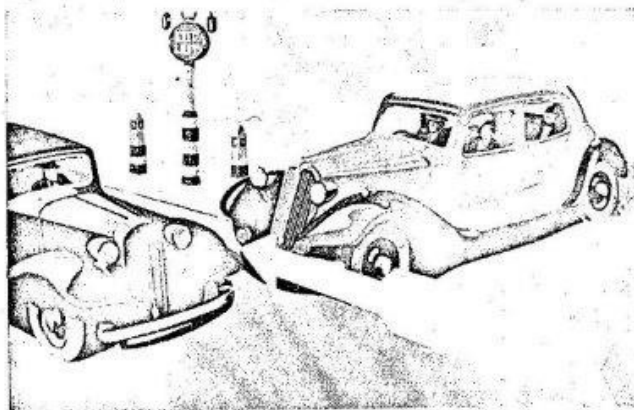
HYDRAULIC BRAKES



Lay-out of the braking arrangements showing the master cylinder and pipe lines for the hydraulic four-wheel brakes, which are very sweet and powerful in action. The cables for operating the hand-controlled rear brake are also shown.



View of brake drum showing receiving cylinder in section, the pistons which operate the shoes. A spring returns the shoes to the off position.



Page Light

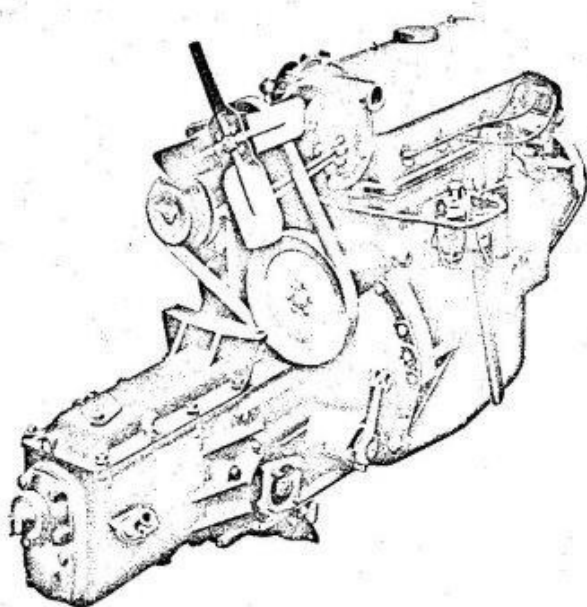
Good brakes are vital for any car; those fitted to the "Twelve" cars of the **Lockheed** type, the most efficient and best known.

They provide increased power, unvarying braking effort, freedom from adjustment, and absolutely balanced action on all four wheels—eliminating side swerve.

An independent cable-operated hand brake is also fitted.

Hydraulic brakes never get out of adjustment; they enable one to stop in the shortest possible distance.

OVERHEAD VALVE ENGINE



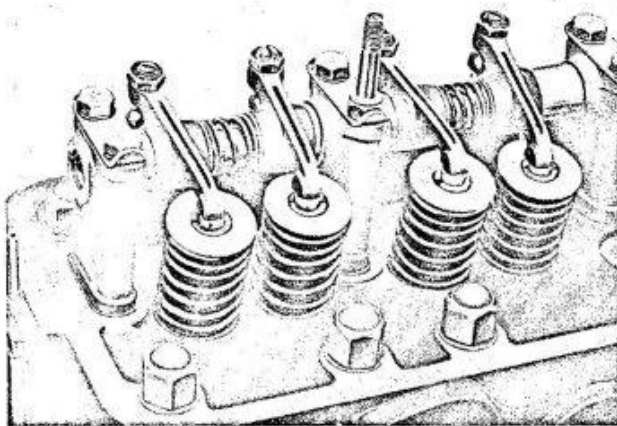
The overhead valves are operated by push rods and rockers, the camshaft being driven by a silent double roller chain.

A great deal of attention has been paid to the shape of the combustion space and the gas passages, with the result that the engine is **highly efficient and very economical.**

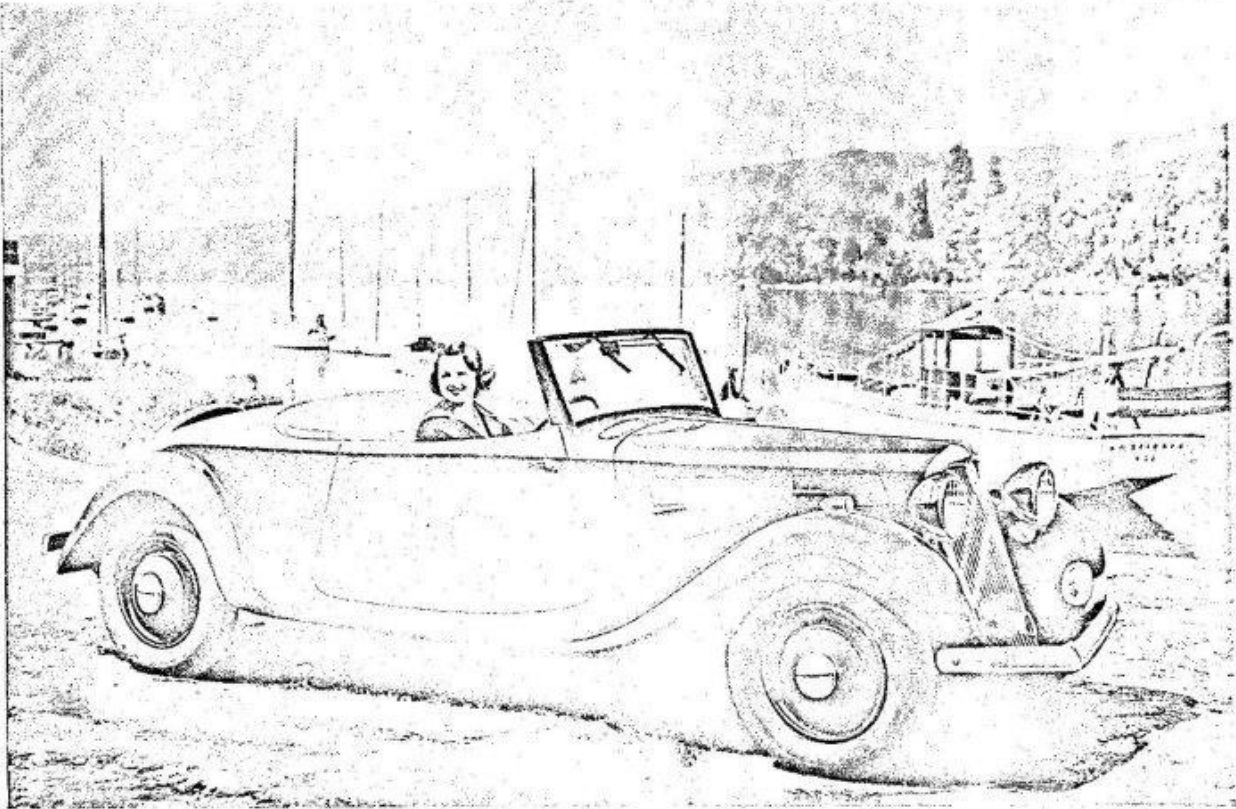
The "Twelve" is fitted with a highly efficient and smooth running four cylinder overhead valve engine. The well-known "Floating Power" flexible suspension (Chrysler license) is used for its mounting which absorbs all vibrations due to the power reactions.

The design of the engine embodies the most up-to-date practice, an important feature being the fitting of detachable and interchangeable wet cylinder barrels which are cast in special wear resisting and corrosion proof material, giving long life.

The illustration shows the complete engine unit, in the front being the silent synchronised gearbox; at the rear of this will be noticed the coupling where the drive shafts are connected for transmitting the power to the wheels.

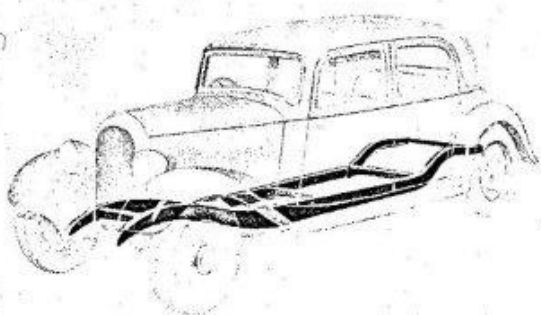


THE ROADSTER



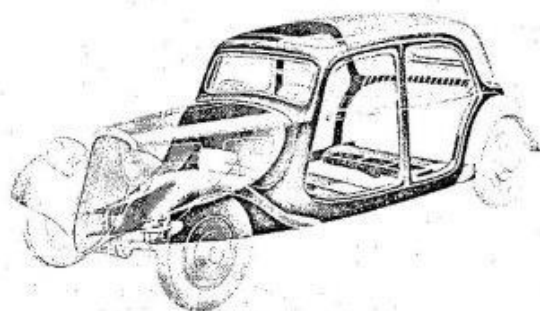
This attractive open model has "All-Steel Monoshell" coachwork. The wide front seat will hold three people and the dickey seat provides further accommodation and ample luggage space. The windscreen folds and the efficient all-weather hood disappears neatly inside the body.

THE FRAMELESS "TWELVE"



Car with orthodox frame

The darkened part of the illustration shows the conventional frame on which the body rests. In this case the comparatively narrow frame has to take the road shocks, the driving and braking stresses, and, at the same time, the weight of the body and its passengers.



The frameless "Twelve"

Here the darkened part shows the Citroën "Monoshell" construction. A bridgework of steel forming one unit of enormous strength, over which the various stresses are evenly and uniformly distributed.

The "Twelve" is a frameless car; instead of a frame, Citroën has substituted an extremely rigid metallic structure of astonishing strength, yet very light. There is no longer a frame and body bolted together, but a single all-steel unit composed of a steel hull, capped by the steel body panels which are welded together, forming a rigid structure capable of resisting any shock without distortion. Immeasurably stronger than a chassis with normal body (wood framing with metal panels) it is the strongest and safest form of construction yet devised.

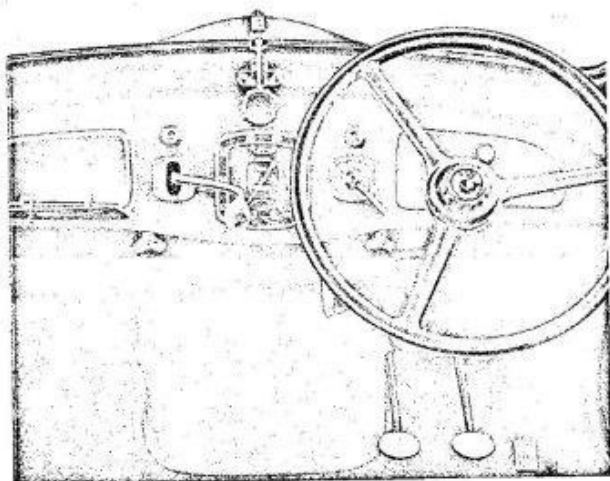
Citroën is the pioneer of "All-Steel" coachwork in Europe

REDUCED WEIGHT — ECONOMY

COACHWORK

FRONT SEATS

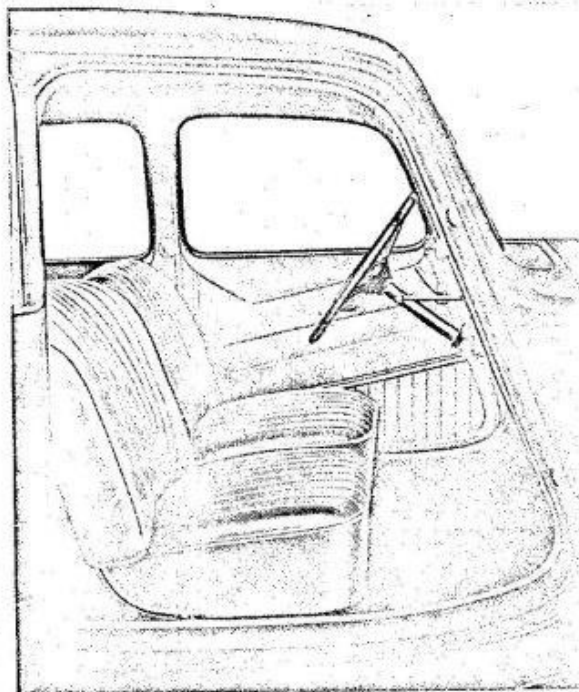
The front seats are separate and individually adjustable and the well-sprung upholstery makes them exceedingly comfortable. They are made to hinge forward to give easy access to the tool-box which is underneath. The absence of the conventional gear and brake levers leaves a clear floor, making it easy to move across the car or seat a third person on occasion.



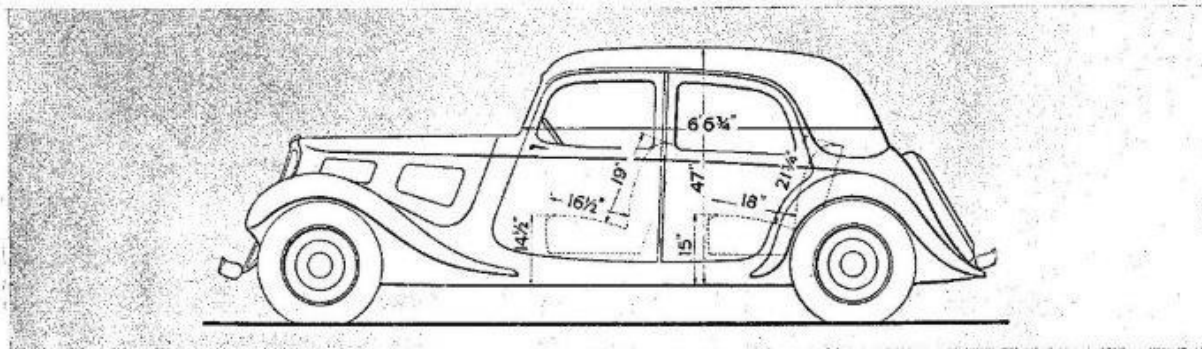
DASH BOARD

The dash board has the instruments and controls attractively grouped on it and two receptacles are provided for gloves and small objects.

In the centre is an instrument panel of new design, which is well lit and easily readable; it combines a speedometer with trip and total mileage, an ammeter, oil and petrol gauges and a clock. On the left of this is the change speed lever and on the right the ignition switch and lighting controls, whilst above it is the windscreen adjusting lever. The horn button and dipping controls are fitted to the centre of steering wheel. Below the dash-board can be seen the knobs for operating the dash ventilators and the hand brake lever.



GENERAL INFORMATION



GENERAL DIMENSIONS.—Track 4 ft. 4 ins., wheelbase 9 ft. 6 1/2 ins., overall length 14 ft. 2 ins., overall width 5 ft. 2 ins., overall height 4 ft. 10 1/2 ins., weight of Saloon de luxe 18 cwt.

BODY SPECIFICATION.—"All-Steel Monoshell" aerodynamic body. Flat floor without wells. Four wide doors with winding windows on Saloon de luxe, two doors on Roadster and Coupé. Safety glass all round. Safety catches to doors. Door locks. Remote door controls. Adjustable windscreen with locking device, folding windscreen on Roadster. Twin automatic screen wiper. Driving mirror. Ash trays. Pockets on doors. Two glove pockets in dash. Parcel net on Saloon de luxe. Interior light and rear blind on Saloon de luxe and Coupé. Luggage compartment at the rear. Ventilation system controlled by two knobs on dashboard operating two ventilators in the scuttle, ensuring a pleasant ventilation of the interior. Leather Upholstery of the best quality.

THE SALOON DE LUXE.—The above illustration gives the majority of the interior dimensions. The rear seat is 50 ins. wide and can seat three persons in comfort. Each of the front seats is 22 1/2 ins. wide, and, although individually adjustable, a third person can be seated in the centre if the occasion should arise. It is fitted with sunshine roof with one-hand control.

THE ROADSTER has a single front seat 47 ins. wide, and three people can be seated abreast. The dicky seat holds two additional passengers and provides ample luggage space. The windscreen is hinged and will fold flat. A neatly folding hood disappears into the body and is concealed when not in use.

THE FIXED HEAD COUPÉ has two individually adjustable front seats, each 22 1/2 ins. wide; behind them are fitted two comfortable occasional seats providing further accommodation. The doors are wide and the large windows give excellent visibility. The boot at the rear is of large size and provides exceptional luggage accommodation.

COLOURS AND LEATHER UPHOLSTERY.—A number of attractive colour schemes are available, see separate particulars.

CONDITIONS OF SALE.

PRICES.—All prices (see separate list) are for delivery ex our Slough Works, are subject to change without notice, and do not apply outside Great Britain and Northern Ireland.

SPECIFICATION.—The specifications of cars in the catalogue are subject to revision without notice, as the Manufacturer may find necessary or desirable. Any deviation from catalogue specification will entail an extra charge and delay in delivery. No allowance can be made in respect of any article of catalogue equipment not required.

GUARANTEE.—All Citroën cars are sold subject to and with the benefit of the Citroën guarantee as issued to the individual purchaser, and all other conditions and warranties whatsoever are excluded.

TECHNICAL SPECIFICATION

ENGINE.—Four cylinder 72 mm. bore, 12.8 h.p. (R.A.C. rating). "Floating power" suspension (Chrysler licence). Overhead valves operated by push rods and rockers; detachable cylinder barrels cast in special wear-resisting and corrosion-proof material; three-bearing crankshaft statically and dynamically balanced; pistons of special alloy with four rings; three-bearing camshaft driven by double silent roller chain.

LUBRICATION.—Pressure feed by gear type pump forcing oil to bearings, timing chain and rocker arms.

COOLING.—Pump assisted. Four-bladed fan.

CARBURATION.—By horizontal Solex Carburettor with "Starter" device. Fuel is fed to the carburettor by a mechanically driven pump drawing supply from rear tank. A filter is fitted. The tank has a capacity of 8½ gallons.

IGNITION.—By coil and distributor, 12 volt; automatic advance and hand control.

CLUTCH.—Single dry plate having a special flexible centre. Lubrication of the thrust-bearing is automatic.

GEAR-BOX AND DIFFERENTIAL.—In unit with engine; three speeds and reverse. Synchronised gear change with silent top and second gears, controlled by dash-board lever. Differential placed between gear-box and clutch, the drive being taken through the gear-box primary and secondary shafts back to the bevel pinion. This method ensures absolute rigidity of the final spiral bevel drive.

FRONT-WHEEL DRIVE.—Power is transmitted from the differential to each road wheel by means of a universally jointed sliding cardan shaft. A needle bearing universal joint is fitted at the differential end, and a constant angular velocity universal joint connects it to the stub axle.

FRONT SUSPENSION.—By independent wheels and torsion bar springing. Parallelograms with unequal but rigid arms are

articulated at the one end with a pressed steel box-type member, and at the other end with the stub axles. The lower arms of the parallelograms operate the torsion bars, whose action is checked by powerful friction-type shock absorbers.

REAR SUSPENSION.—The rear axle has semi-independent wheels with torsion bar springing. It embodies a tubular axle which is free to slide in the rear hub mountings. Hydraulic shock absorbers are fitted.

STEERING.—The steering has an hourglass worm and roller type sector, the latter supported by a needle bearing.

BRAKES.—Internal expanding Lockheed hydraulic on the four wheels. The hand brake acts independently by servo action on the rear wheels, and is cable operated.

WHEELS.—Five disc wheels with chromium-plated hub covers.

INSTRUMENT PANEL, comprising:—Speedometer with a large dial and trip and total mileage indicators; ammeter, oil and petrol gauges and an 8-day clock. The dials are indirectly lighted.

ELECTRICAL EQUIPMENT.—Coil and distributor ignition, 12 volt 57 A.H. battery, automatic advance and hand control. Variable charge dynamo, electric starter. Battery located under the bonnet in a particularly accessible position with special device for ventilation. Two large headlamps with dipping device, two side lamps and tail lamp, all chromium-plated. Battery master switch. Ignition lock. Automatic red stop-lights on each rear wing. Two electric horns.

OTHER EQUIPMENT.—Chromium-plated bumpers, front and rear. Spare wheel sunk in rear panel with metal cover and chromium-plated rim; ventilating shutters in bonnet sides; easy-grip bonnet catches; all bright parts chromium-plated. Number plates, licence holder, kit of tools.

PRODUCED AT CITROËN WORKS, SLOUGH, BUCKS.