



Citroën Kégresse

All the models



Version 1.1

Jens Møller Nicolaisen 12.02.2011

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Photo credits

Most photos: Citroën Communication.

A special thanks to the staff at Conservatoire Citroën!

The Danish Veteran Car Club (DVK), Citroën Denmark, Bue David-Andersen, Knud O. Pedersen, Sæmundur Ásgeirsson, Wouter Jansen and the owners of the pictured existing cars.

...and some photos from our own archives.

About this document

This document is dedicated to the different Citroën Kegresse models. How to get an overview and to know the difference when you see one. And that's it.

It is not the story about the creation and adventures of these fantastic cars, neither an attempt to explain their technical features and details.

It's hard to find reliable information about the Citroën Kegresses. By going through all the different models and showing examples of their widespread uses, I hope to make it easier to recognize and distinguish them, and to give a fair impression of the evolution of the cars during the 20 years of production.

Hopefully it will inspire you to read more about the birth of the Kegresse-cars, their history, the great expeditions and their impact on the world – and all of the many stories and anecdotes you'll find anywhere... you can start at <http://kegresse.dk>!

A special credit to Pascal Honegger from Switzerland, who has done a great job creating a very comprehensive article (in French), placing the different types of Kegresses in a system. Each type is described with lots of technical specifications and various information. Pascal has produced some very nice drawings to clarify the designs of the track systems. Thanks to Pascal, this work can also be seen and downloaded from kegresse.dk.

Mistakes and errors

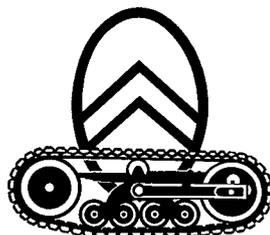
When you read about Kegresse cars in books and magazines, you'll find a lot of mistakes. Some are understandable since the cars are often referred to with the model name of the (passenger) car serving as basis. There's no doubt that this document holds a lot of embarrassing mistakes too.

Luckily it's digital = not static! You are looking at version 1.0 - and when (not if) you find things to be corrected - or if you think there's anything missing or subject to discussion, do not hesitate to write me an email:

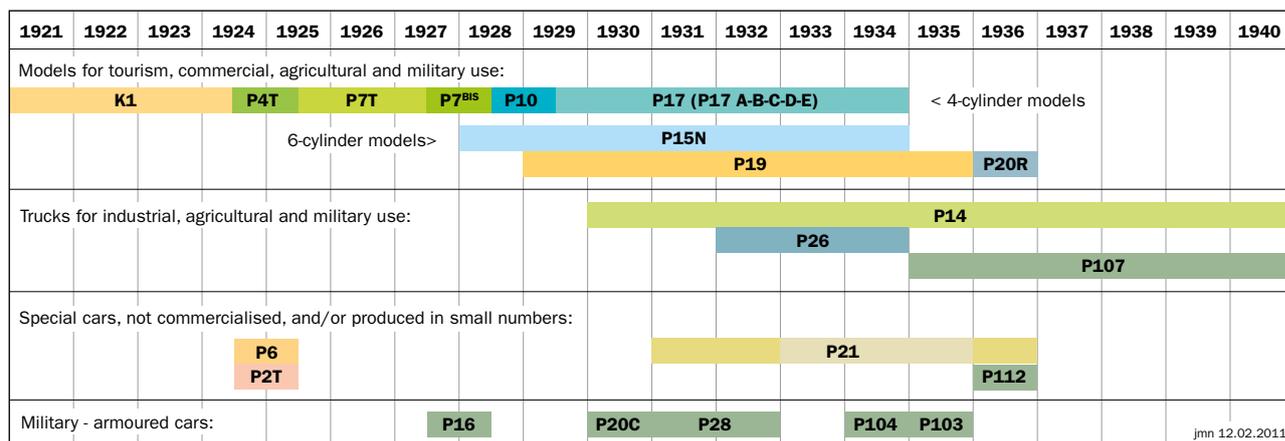
jmn@traction.dk

Only with your help - this document can be improved in the future!

Jens Møller Nicolaisen, 18th of November 2010.



Overview - types of Kegresse cars....



jmn 12.02.2011

With more than 20 different basic models – not counting all the body variations, "sub-types" and evolutions – it's easy to get confused. I hope this graphic view can simplify it!

The cars are divided into four groups according to their purposes and placed on a timeline. You can see which models were produced in parallel, and which were produced as sequels (the 4-cylinder range: From K1 to P17E). All models are described in this document.

Production figures

Production figures are hard to find. In his book about the Croisière Noire, Jacques Wolgensinger, former head of Citroën Relations Publiques, mentions a total of **5.795** cars produced by Citroën.

The early 10hp cars based on the B2 (K1, P4T, P7T), known as the first generation of Kegresses, were produced until 1927 in a number of 1.134 (same source).

A few years ago, some documents were found by the Conservatoire Citroën, verifying this number with figures for each year: 8 cars in 1921, 118 in 1922, 317 in 1923, 68 in 1924, 619 in 1925 and 4 in 1926 (also published in the book "Citroën 10 HP" by B. Laurent).

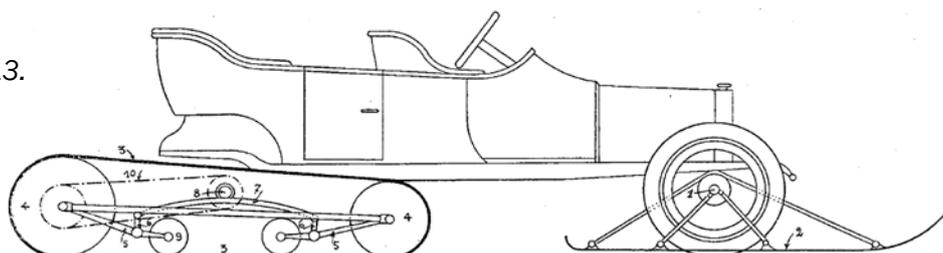
Presumably the 1927-37 period (4.661 cars) starts with the P7^{bis} (with metal brackets on the caterpillars). Out of these 1.150 were produced in 1931 and 915 in 1933 (Wolgensinger).

A more detailed list of production figures must be subject to future investigations - it seems that no official list of production exists. It might be possible to put together a "theoretical" list by looking at the chassis numbers. This will be a big job: Some series of cars will have to be found among the "parent" models like the B2 or the C6. Other series have their own numberings (e.g. the P17 series C, D and E), but until the present day no specific records of these cars have been found anywhere.

The total of 5.795 cars might be higher. Projects and prototypes and other cars owned by Citroën are probably not included in the number. And what about the last years, 1938-40?

The Kegresse-Hinstin tracks were also licenced to other car manufacturers: FN, Renault, Schneider, Somua, Unic, Burford, Crossley and Alfa Romeo. If you add their production, including the 3.276 P107 produced 1937-40 by Unic, the total amount probably exceeds 10.000 cars.

Adolphe Kégresse:
patent drawing from 1913.



Prototypes

Adolphe Kégresse obtained his patent for the half-tracks as early as 1913 and the system was seen and tested on several cars (including the RR Silver Ghost of the Russian Tzar) before he came to Citroën in 1920. This story is not to be told here; this is all about Citroën!



Surely a proto: The car is a model A and the track system (snow type) is not the final design.

The picture is from 1920 and some sources claim that the man behind the steering wheel is none but Adolphe Kégresse himself!

Below: a quite similar car - maybe a prototype as well, visiting a hotel...!



Type K1

1921 -1924

Based on the 10hp type B2.

First model to be commercialised! Used by the army in France and other countries, but also used for a great variety of civilian purposes such as tourism (winther sports) and agricultural use. Specially equipped K1s were used for the first Sahara crossing in 1922.



A test drive with the King of Denmark in the rear seat.



Traction on the rear pulleys.



The original Scarabée d'Or from Sahara 1922-23 belonging to Conservatoire Citroën.

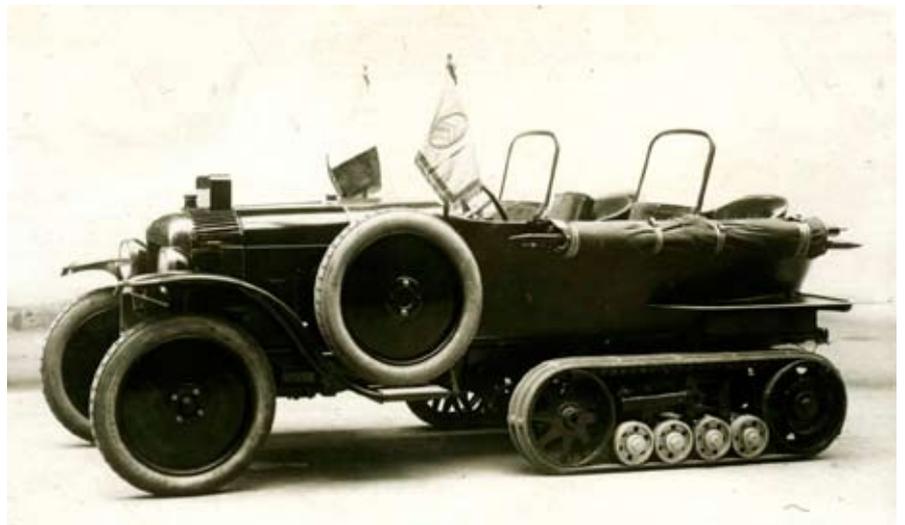


The K1 was available in several different versions. Type »Tous Terrains« and type »Nèige«. Also optional was the chassis, with a normal or long wheelbase - and numerous different body styles.



Military ambulance - or a nice little runabout to drive around in Chamonix in the winter. The K1 covers all needs...

The Personal car of André Citroën, used at a very special event: Meeting the First Sahara Cruise, when they returned...



Left: Surely not a standard car! B2 Caddy Sport with track and snow equipment during a test in Haute Savoie, with Lucien Rosengart behind the steering-wheel. This picture is from a postcard - several photos exists from the same occasion.

Below: This picture is taken Februar 1923, and found in Popular Mechanics magazine. Three cars are being tested in Norway. Note the different layout of the rubber belts on the tracks. The B2 Caddy Sport is now registered with a Norwegian intermediate license plate.

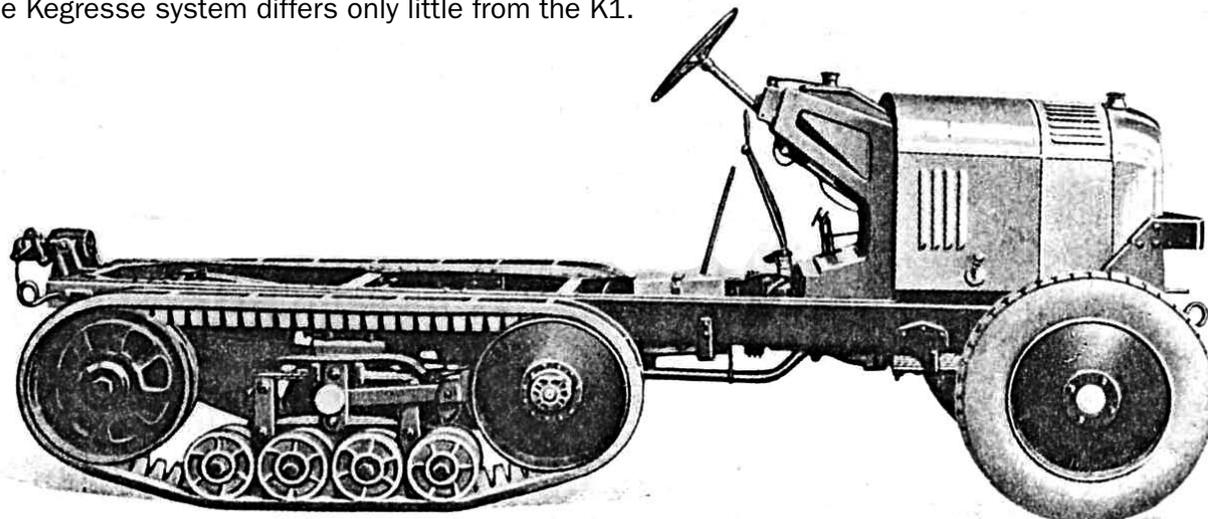


Type P4T

1924 > 1925

Based upon the 10hp (B2/B10/B12) and the direct **successor of the K1**. Easily recognizable from the K1 by the flat radiator with its 9 separate elements.

Also commercialized for many purposes and military use. The technical specifications and design of the Kegresse system differs only little from the K1.



Pulling skiers at Mont Revard...



P4T at work - this one has spokes in the front pulley (snow type?).



The cars being used for the Croisière Noire (1924-25) were types P4T supplied with an enlarged cooling system: A central radiator nearly similar to the P2T (see page 7) including additional large radiators at the sides.

Torpédo-bodied army car.



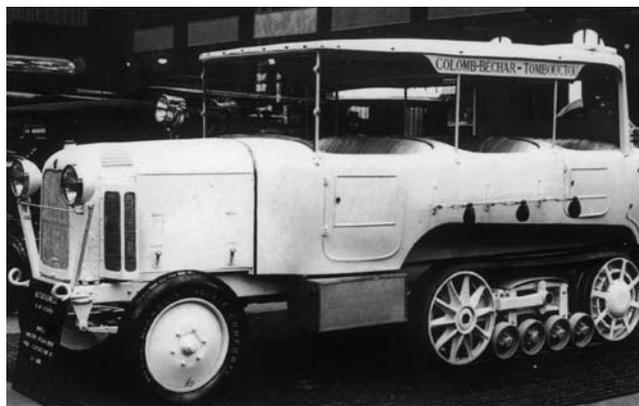
Type P6

1924–25

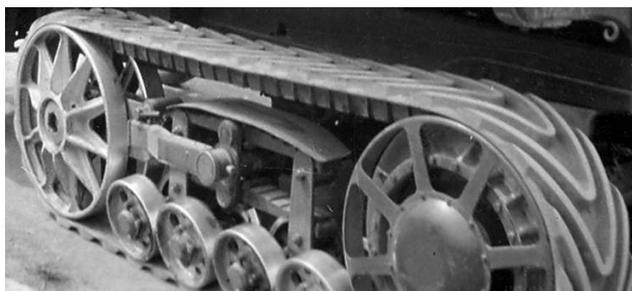
Never commercialised, but especially designed for the »Citracit« company (Compagnie Transafricaine Citroën) for the Sahara Routes. Only few cars made.

The engines were Mors 4 cylinder 2,8 liter (15CV).

The pulleys are extraordinary large, with a diameter of 700mm. But the cars were later supplied with the P4T track system.



Citracit car exhibited at the 1924 Paris Salon.



P6 track system (fitted on a Danish Triangel truck).



With the Citracit car in the background: Another P6, but with the tracks of type P4T. Similar cars are seen as fire engines and army vehicles.

Type P2T

1924–25

Another **not-commercialized** Citracit car. Based on the Type FS (car with wheels). Engine: again Mors 15CV.

The track system is very special (most parts not recognizable from other models) with a "positive" drive; traction on the front pulleys! A feature to come on later models. The number of manufactured cars is probably down to a handful.



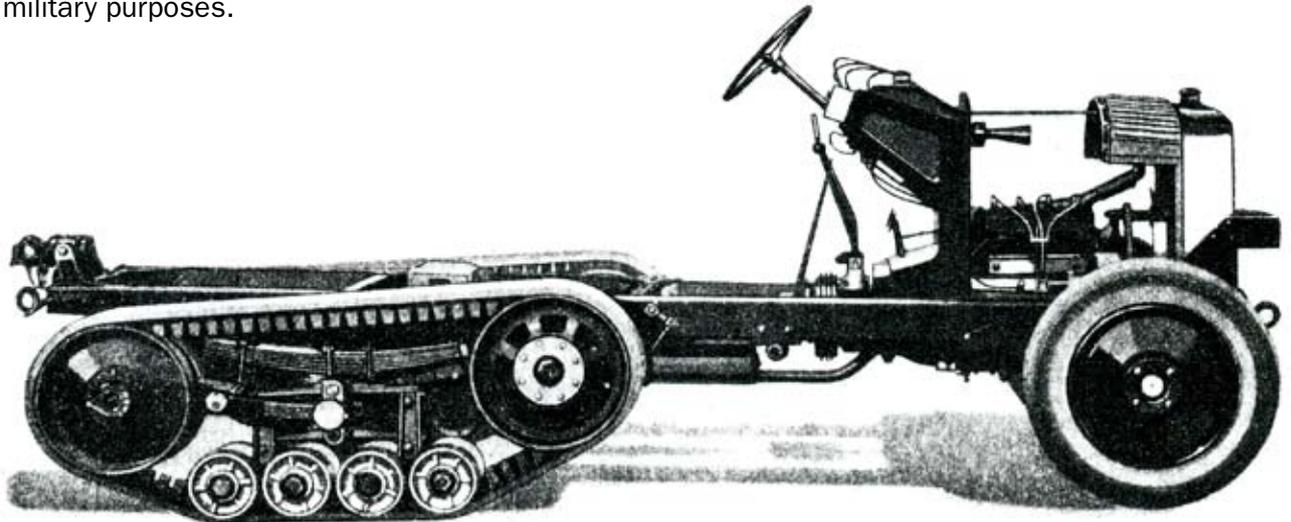
Type P7T

1925-1927

An **evolution of the P4T** and very similar, but with the Kegresse system turned 180°! Now the traction power is on the front pulleys instead of the rear. Consequently the rear axle/differential (and weight) is moved forward and the driveshaft is shorter. The engine is a B12.

Apart from being turned around, the design of the Kegresse system is exactly as the previous P4T, with the rubber bands moulded in one piece.

Like its predecessors, the P7T was available in many variations and body-styles for both civilian and military purposes.



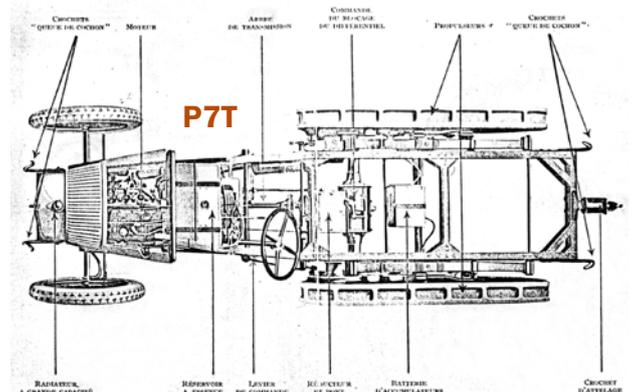
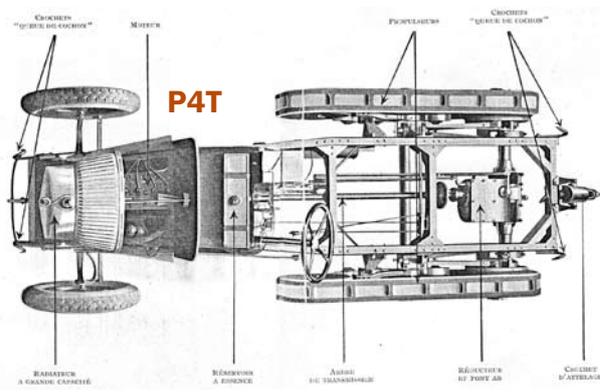
P7T chassis (compare with P4T on page 8).



Greetings from Deauville - sent 1927...



P7T at Conservatoire Citroën, 2010.

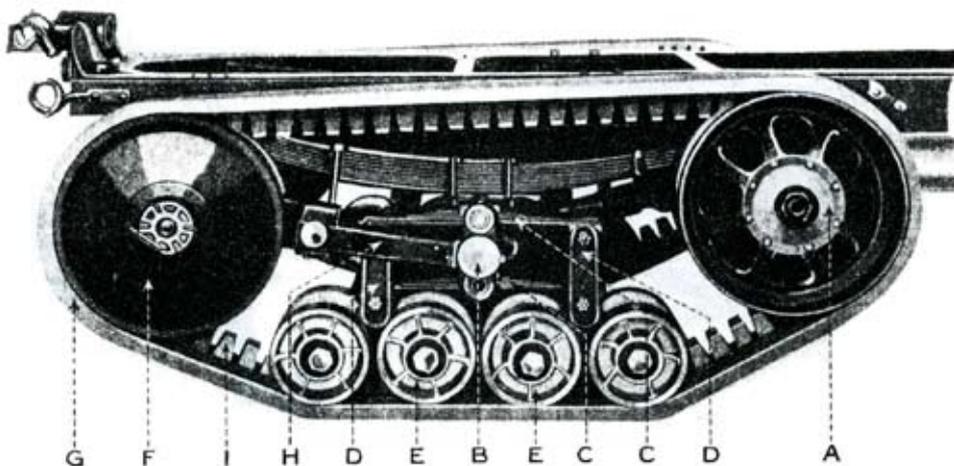


Evolution: rear axle



The Danish army wasn't among the greatest customers. The K1 pictured on page 5 was the first to be delivered. Another K1 or P4T followed and in 1925 these two P7T were purchased - here seen during at test in July 1925. The 5th and last Danish army Citroën Kegresse was a P17 Torpédo (page 15).

In addition, four Danish "Triangel" trucks were sent to Courbevoie to be supplied with caterpillars at the Citroën Kegresse plant.



The P7T is the last Kegresse equipped with the early type of one-piece moulded rubber belt and the system of springs for the four "galets", which carries the weight of the car.

This illustration also shows how the pulleys are lifted from the ground when there's no load on the car.

Type »P7bis«

1927–1928

This model brings a new era: A completely redesigned Kegresse system including a new type of belts. These are supplied with metal brackets and rubber pads on the outside, and three rows of rubber blocks on the inside. The row in the centre keeps the band centered on the wheels and rollers. The rows along the edges engages in the traction pulley. All parts are bolted onto the simple rubber belts.

Apart from this, no differences from the P7T. (The P7bis is not an official name).



The All-purpose Tractor for Farm and Estate

The latest type of KÉGRESSE HINSTIN ENDLESS BAND ATTACHMENT which now comprises a positive drive.

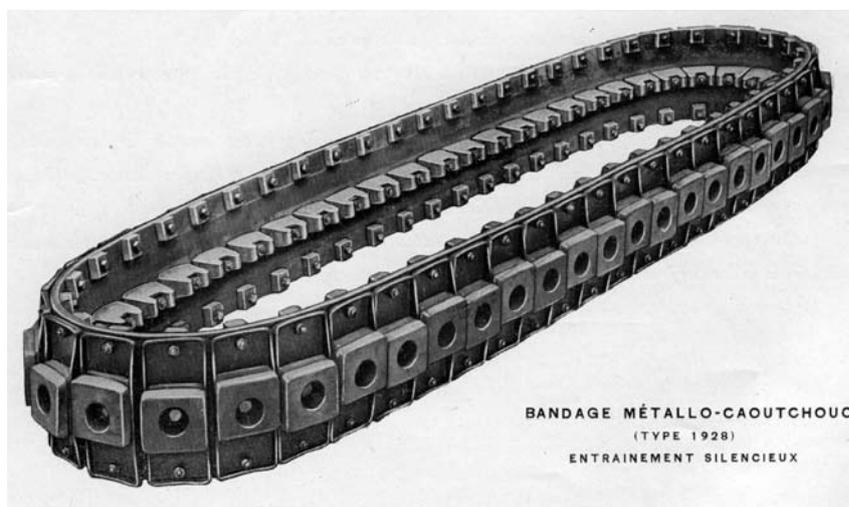
THE Citroën Kégresse is the all-purpose Tractor, invaluable on Farm and Estate. With its endless rubber bands and pneumatic front tyres it can travel over any surface, whether plough-land or moors, lanes or tracks, yet on good roads it has the performance of a normal wheeled vehicle. It can be used for hauling agricultural machinery, such as reaping and binding machines, for ploughing, hay-making and removal of crops. As a shooting brake, it is ideal for transporting the "guns," beaters or game. In a word, the Citroën Kégresse combines in one vehicle an agricultural tractor and a general utility car or lorry for use under any conditions. The Citroën Kégresse is of equal service for industrial haulage, and for the maintenance of Golf and Race Courses.

Write for Illustrated Booklet.

CITROËN KÉGRESSE

CITROËN KÉGRESSE LTD., Citroën Building, Brook Green, Hammersmith, LONDON, W.6

Advertisement showing a P4T – and the new Kegresse design for the P7bis. But the pictured car is a P4T which must have been a few years old. The real evolution came in two stages. In the Kegresse marketing material it is not uncommon to see a discontinued model...



The new belts with metal brackets and rows of rubber blocks.

This is the early design (as seen on P7bis and early P10). Later the big rubber pads are hexagonal and the metal brackets are simplified.

Type P10

1928–1929

This model is considered to be the first representative of the "second generation" of half-track Citroëns, mainly based on the C4 and later represented by the P17. (6-cylinder models also appeared for the first time in 1928, based on the C6).

A few early P10s seem to have the body style of the B14, but soon they adapted the C4 components, such as radiator grille, bonnet, torpedo etc.

Engine: Type B14G, 1539 cm³, (70x100). Many other mechanical parts came from the B14 and B15 truck.

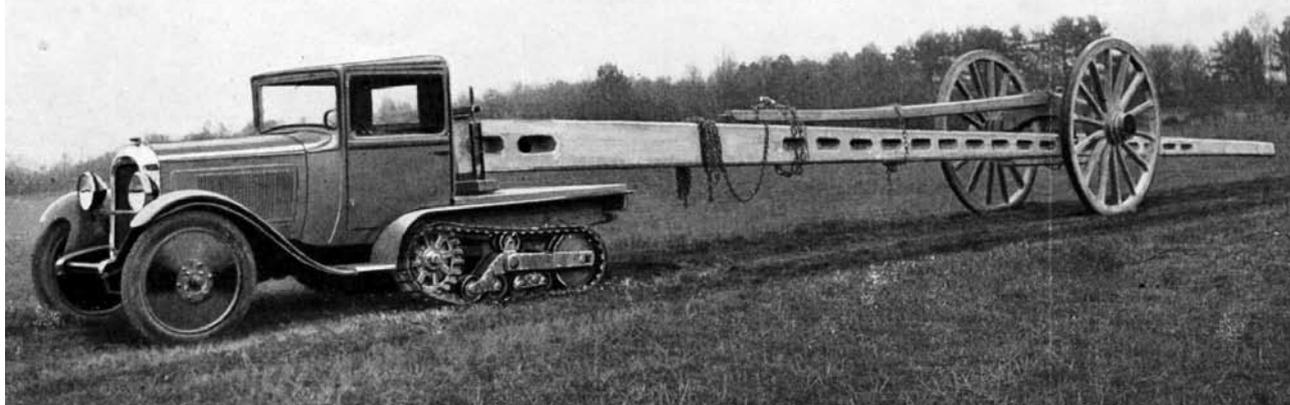
Kegresse system identical to P7bis, but before the P10 derived into the P17, a fifth roller was added on top of the "balance" to help the guiding of the belts (tracking).



Early P10 (or late P7bis?). This car is in the British National Car Museum. The radiator looks like the B14, but with its 8 separate elements, it is a special design for the half-track car.



At some time during the production of the P10, this new design of the belts was introduced.



Obviously the same photo but scanned from two different editions of a commercial brochure. Note the retouche on the lower: The addition of the top roller and slightly changed design of the balance supporting it. Now there's no visual difference from the P17.

Type P17

1929–1934

No visual difference from the last P10s. The P17 is the first model to integrate all important aspects of the C4, including the engine. 1628 cm³ (72x100).

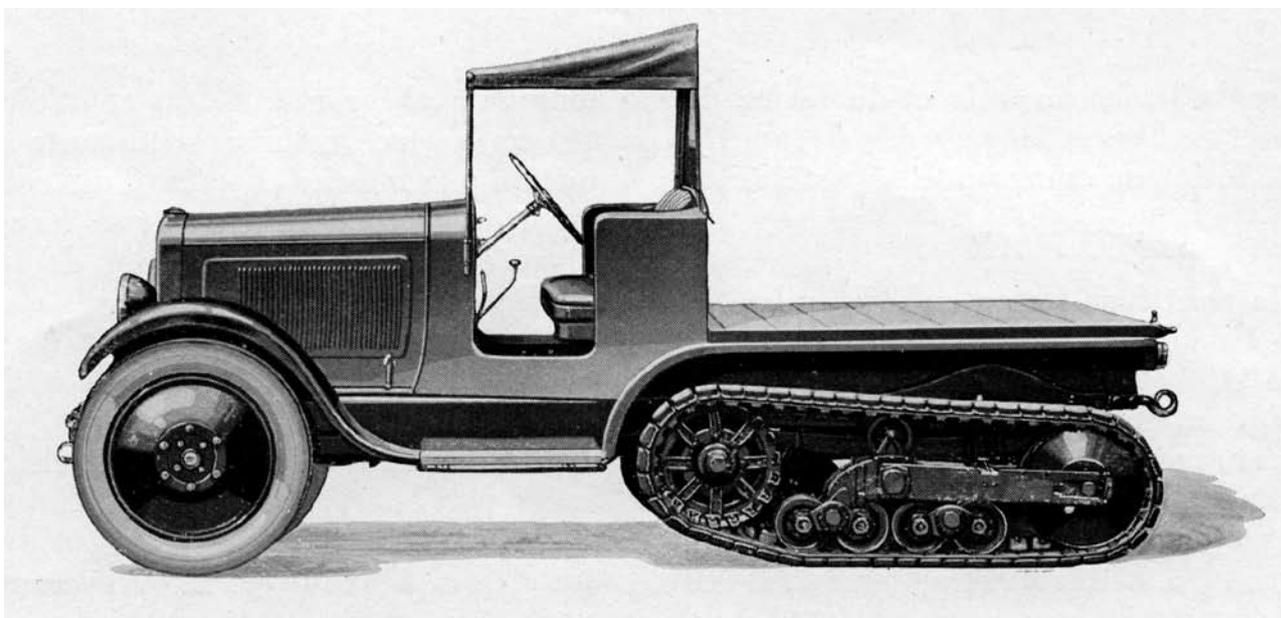
The rear axle (including the front pulleys) was fixed on the P10 – but now mounted in a flexible way allowing a vertical movement.

Being manufactured during more than 5 years, the P17 goes through an evolution, starting with the **P17A** (hardly an official name) and **P17B**. Though based on C4, these models are built on the chassis of the B15, a truck derivate of the B14. Weight of chassis (no body, empty car): 1200 kgs.

The **P17C** appears in 1932, now with the engine of the C4G: 1767 cm³ (75x100). This is probably also the stage when the P17s gets the new chassis, designed for the purpose: It's flat (without the slung shape at the rear) and the empty car weight is increased to 1470 kgs without body.

The P17C is followed by **P17D** and **P17E**, with minor modifications.

The P17 is a light Kegresse and by far the model with the highest production numbers. Somewhere it is said that for the French army alone, more than 1700 cars were delivered and surely Citroën supplied the armies in other countries as well. But the P17 model was also applied in other areas such as agriculture and forestry and public service.



*Early P17 in profile showing the B15-chassis, with its slung shape at the rear - where there's no rear axle!
As for bodywork, there were many versions available for various uses.*



Six P17s took part in the Croisière Jaune, Pamir group. Some sources mention that they were special-built, with chassis from P19, the 6-cylinder sister of P17, of which one was used by the expedition.



Reconstruction of a Croisière Jaune car owned by Citroën.



One of several hundreds French army cars. The wheel system for the cannon is another Kegresse patent.



Radiator design of later P17 with 8 separate elements.



Danish army P17 Torpédo.



Far left: Beautifully restored original car from "Croisière Blanche" in Alaska 1934.

An unrestored P17 with a closed cabin. Only a few of this type have survived.

Nice picture of a French army radio-car.

The "fifth wheel" (drum in front) seems to be standard equipment on later P17s.



Type P15 N

1928–1934

This model is the only Kegresse specially designed to drive in snow. N=neige. The P15 N is very easy to recognize by the extremely long and 40cm wide tracks, with two rollers on top of the balance to ensure the tracking of the belts. These gigantic tracks reduces the pressure on the snow and provides a good grip. They also ensure a very comfortable drive as their length reduces the need for suspension.

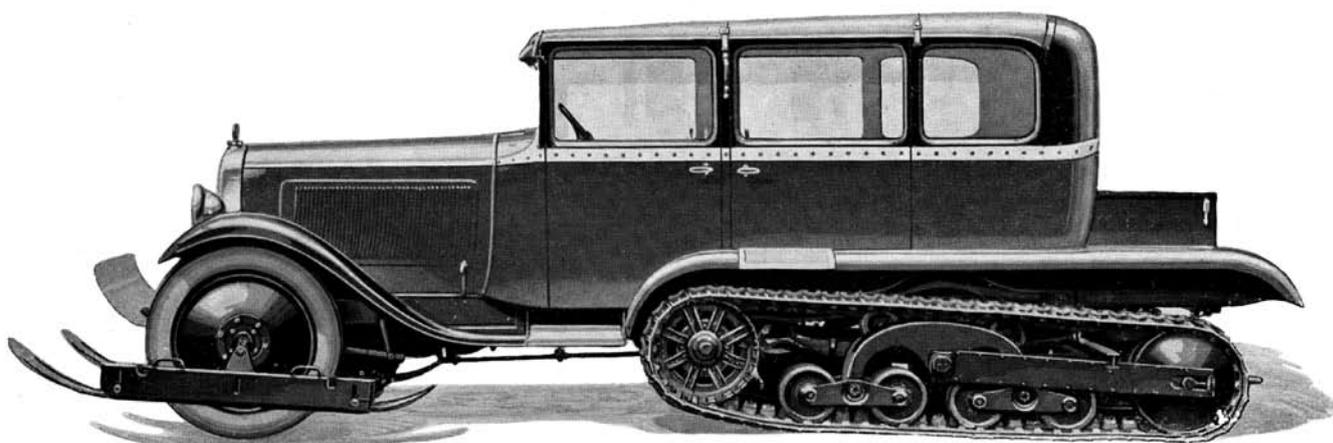
Standard equipment includes detachable skis and a large "board" at the front to prevent the car from sinking in deep snow.

The P15 N is the first 6-cylinder Kegresse. The engine (2442 cm³) and most body elements are adopted from the C6.

The P15 N was made for many uses: As passenger cars, with both open and closed bodywork and utility vehicles. The P15 N track system was also used for some armoured cars. Three P15 N (NK?) were used by Admiral Byrd for his Antarctica expedition in 1934.

Evolution: **P15 NK** appears in 1932. Larger and heavier (Chassis 1900 kgs), with 4-speed gearbox and an engine of 3015 cm³.

The **P15 N B**, also known as **P15 N 75**, arrives in 1933 replacing the original P15 N. Chassis weight is 1575 kgs and the engine is the modern OHV of the Rosalie 15 (2650 cm³).



P15 N



P15N military ambulance.

Left: André Citroën in Saint Moritz, 1933.

Below: Mail delivery car from Switzerland.





Copenhagen 1930: Three chassis' were prepared at Citroën Denmark before being exported to Norway. The car in the picture to the right must be one of them. With Norwegian coachwork, these cars were used offering safe transport routes in the cold mountains of Norway.



We only know of three surviving P15 N. Two of them are on Iceland, one as a wreck, but the other is well preserved and original, exhibited in a museum. The coachwork resembles that of the Norwegian cars.

*This beautiful car started from Athens in the 1934 Rallye Monte-Carlo, but unfortunately didn't make it. It's obviously a **P15 N B**.*

P15 NK

*Manufactured in parallel with the standard P15N, the larger and much heavier **P15 NK** was destined for military uses and came with a number of different bodies. Shown here is a staff car and a truck, both dating from 1933.*



The front pulley has a larger diameter than the rear one on the P15 NK.



Type P19

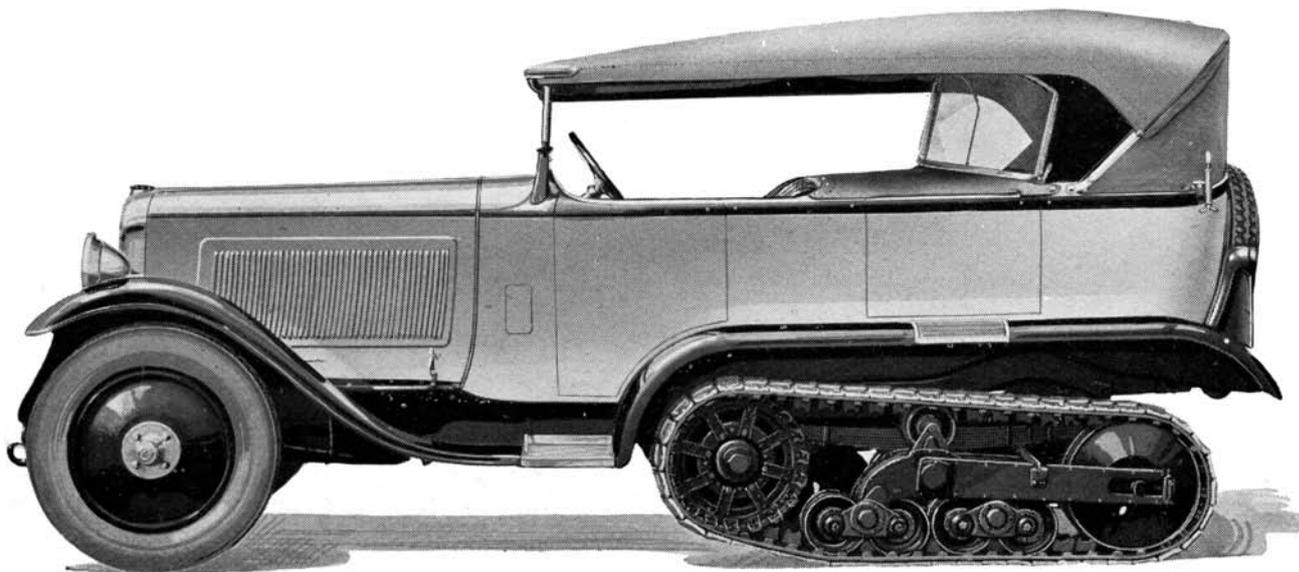
1929–1935

The P19 is the 6-cylinder sister of the P17. The engine (as well as many other components) came from the C6. It is considered a light and relatively fast Kegresse with a cruising speed of more than 40 km/h. Weight (chassis) 1200 kg.

P19 B from 1931 is 11cm wider and heavier: 1620 kg.

Compared to the P17, the tracks are the same length and type, but the diameter of the front pulley is larger and the rear pulley smaller. The P19 can also be recognized by the bonnet from the C6.

Different body versions were offered - most P19s were used by the army. France, Belgium, Poland.



Profile of P19 B.



French army P19 specially equipped as a small firefighter car.

Right: It's extremely rare to see a Kegresse in completely original and authentic condition like this P19! It was for sale in France in 2007.

Now the car is in a museum in USA.

Whether the "restoration" has been for the benefit of the car is surely a matter of taste... or is it?



P19



18



As good as it gets! Incredibly beautiful P19 Torpédo. French military "état major" car.

Type P20 R

1936

In all technical aspects it seems that there are no differences from the P19 except the engine which is now taken from the 6-cylinder Rosalie 15 (2650 cm³). Yet it is mentioned (one source), that the track system is modified as well.

Very little is known about the P20 R and its commercialization - surely it must be considered the successor of the P19, probably also used by the army.



The only P20 R existing today (as far as we know) is this nice blue "minibus" residing in France.



Type P14

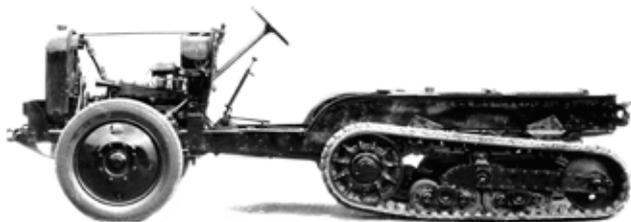
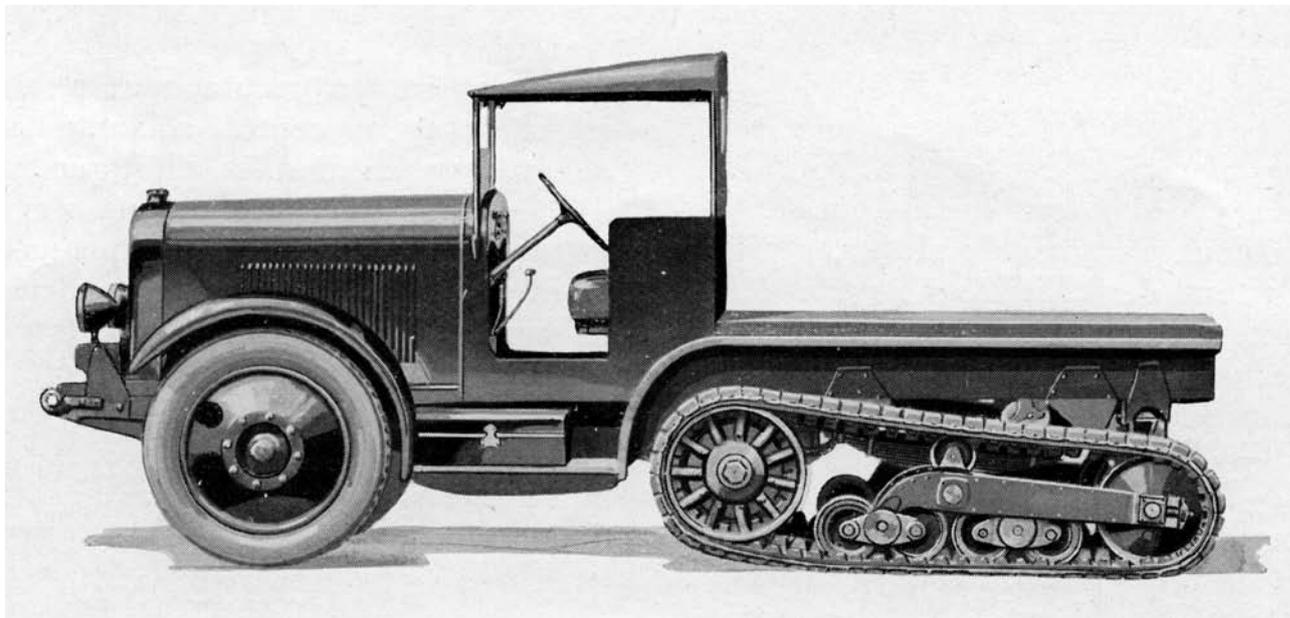
1930-1940

Another C6-engined Kegresse, but very different from the light and fast P19. The P14 is a heavy duty tractor, build on a very solid chassis and with a weight of allmost 3 tons.

The traction pulleys have 11 spokes (8 on the P19) and holes instead of dents, a design which can also be found on the P107. Also the long belts are very strong.

The P14 was used both in public service and as artillery tractor by the armys in France, Belgium and Poland.

A P14 served as radio-car for the Pamir group of the Croisière Jaune.



Undressed: note the heavy frame. It's made from 6mm steel plate.

French military experimental vehicle (for pulling a 75mm cannon).



The only existing P14 we know - and a close-up on the special design of the traction pulleys.

Type P26

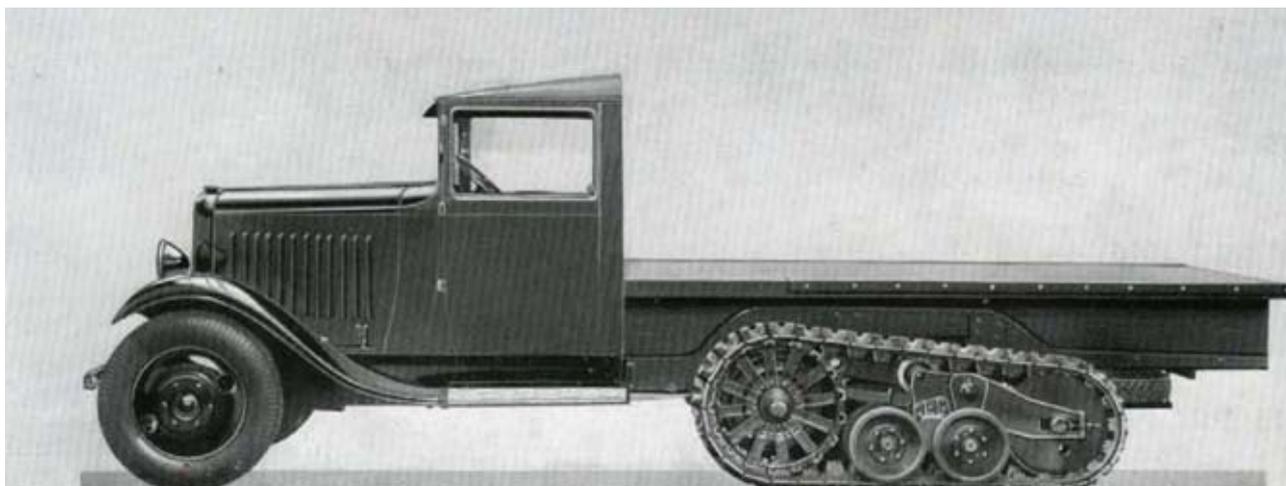
1932-1936

This model is based on the popular C6 2-tons truck, the engine is the 6-cylinder 2650 cm³. 4-speed gearbox. The P26 was offered as a transformable car - with the possibility to replace the tracks with ordinary wheels within a few hours (which would include replacing the complete rear axle and différentiel to one without reduction gear).

The track system is unique with only two rollers, running on the edge of the belt.

In 1934, the **P26 B** appears. Apparently a bit heavier: 2900 kg (and with a modified trailing arm in the track system?).

Although the commercial brochures suggest several body versions for different purposes including an armoured car, it is believed that only very few P26 were made.



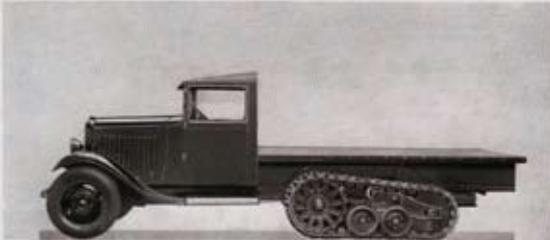
LE VÉHICULE IDÉAL POUR LES TRANSPORTS DE GROS TONNAGES EN TOUS TERRAINS

LE CAMION TOUS TERRAINS

CITROËN

Type P. 26

MUNI DU PROPULSEUR KÉGRESSE-HINSTIN
BREVETÉ S.B.D.G. FRANCE ET ÉTRANGER
(TRANSFORMABLE EN VOITURE À ROUES)



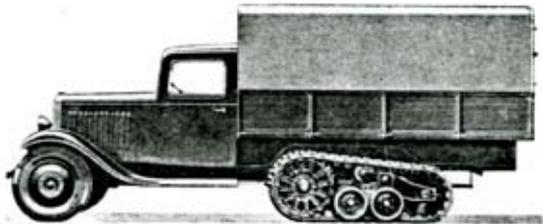
Le P. 26 possède toutes les qualités et tous les avantages des véhicules tous terrains. Il peut être transformé en véhicule à roues dans l'espace de quelques heures.

CARACTÉRISTIQUES PRINCIPALES DU CHASSIS CITROËN - KÉGRESSE TYPE P. 26

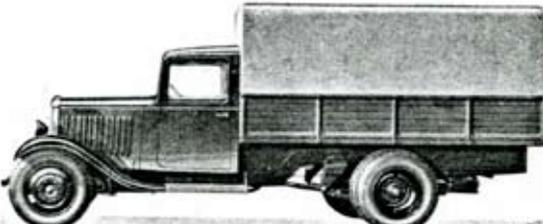
MOTEUR. - 6 cylindres 75x100 type C6 G. Puissance fiscale 13,15 CV. Puissance effective 48 CV à 2700 tours. - Allumage par batterie ou mixte. - Refroidissement par pompe centrifuge. - Graissage sous pression. - Régulateur centrifuge. - Carburateur Solex vertical à Starter.	BOÎTE DE VITESSES. - 4 vitesses AV et une marche AR. Rapports de réduction en 1 ^{re} vitesse: 0,152, en 2 ^e — 0,284, en 3 ^e — 0,537, en 4 ^e — 1. - en M AR 0,127.
EMBRAYAGE. - À disque unique fonctionnant à sec.	TRANSMISSION. - À cardans métalliques.

PONT ARRIÈRE
Du type Sanja à différentiel commandé par un couple conique. Couples possibles 7x44, 8x41.

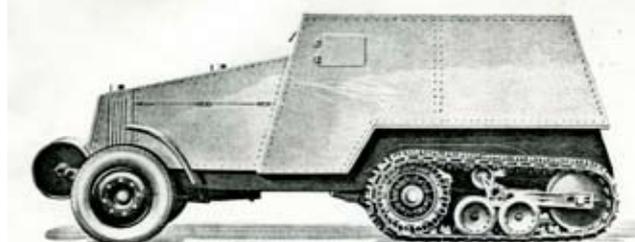
CAMION BÂCHÉ



Camion bâché P. 26 B, équipement chenilles



Camion bâché P. 26 B, équipement à roues



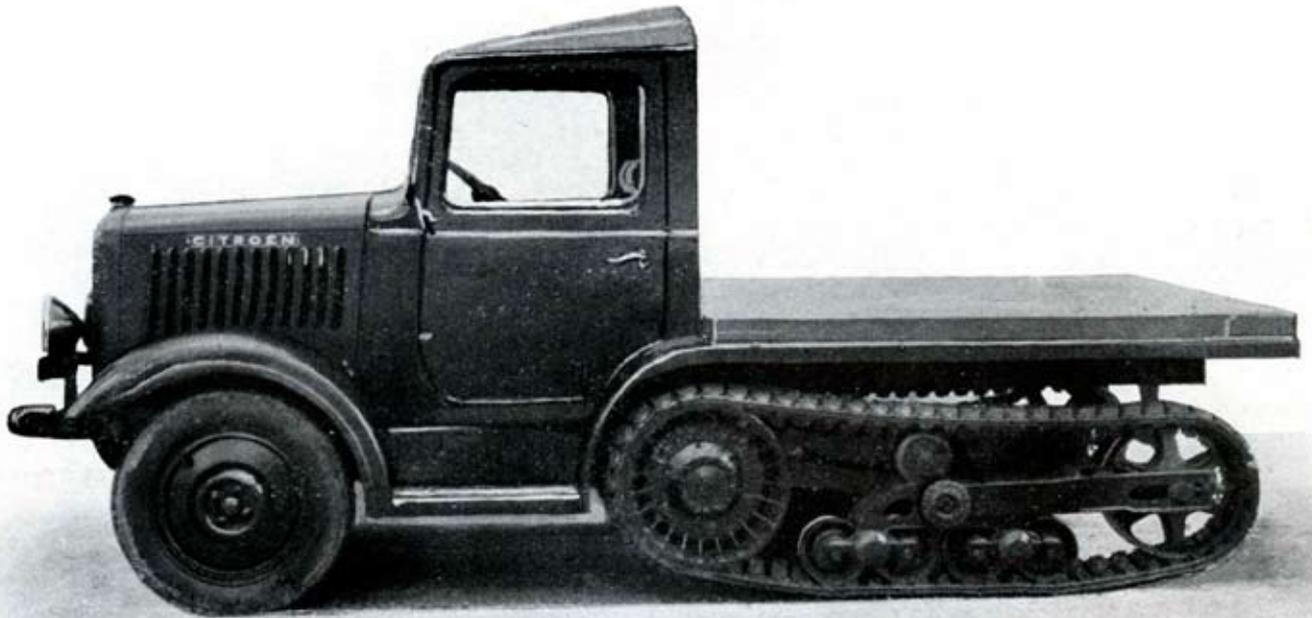
All illustrations here are scans of brochures. But even if production figures were low, some cars were actually sold. In his book "Citroën 1919-1949 - La Belle Époque", Wouter Jansen presents a beautiful picture of an oil-tanker on delivering fuel in snowy mountains...

Type P107

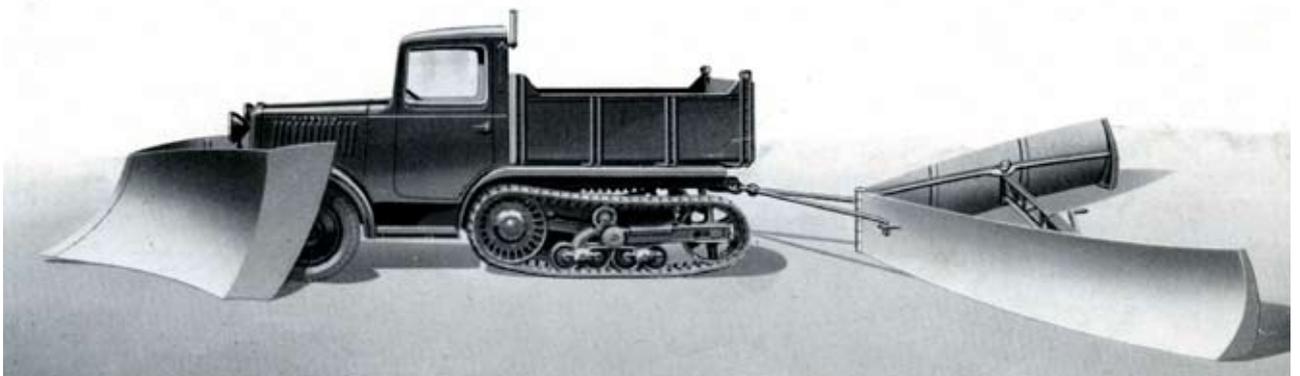
1935-1940

The P107 is a heavy tractor for towing and pulling. It has the most powerful engine of all Kegresseses, 4-cylinders, 3454 cm³, 60 hp. Top speed 46 km/h.

Like most Kegresseses, most of the P107s were used by the army. It is also the model with the absolutely highest production number: 3.276 units were made through 1937-40 by the Unic factory in addition to the Citroën production (of how many?).



This P107 owned by the Conservatoire Citroën has a known history of being in use at Citroën's test grounds at Le Ferte Vidame. It is said to be a 1939 prototype, developed by Citroën's design department - but at least the technical aspects seem to be standard. (Yet a one-off, if Citroën production stopped in 1937 as claimed by some sources...)



Type P21

1931 (-1936?)

This is the famous 6-cylinder (2650 cm³, C6 G) model from the Croisière Jaune, used by the China group 1931-32.

It's a heavy car, almost 3 tons. The track system is very special and much like the P26 which appeared some time later. Only here the two rollers are running on the centerline of the belts.

In 1936 Citroën obtained an approval from the Service des Mines, which suggests that a production of the P21 (P21B?) might have been planned, but there's no proof of any cars sold.



At least three of the cars from the Croisière Jaune returned to France after the expedition to be displayed at the big "Citroën Centre Asie" exhibition in Paris. Unfortunately none of them exist today.

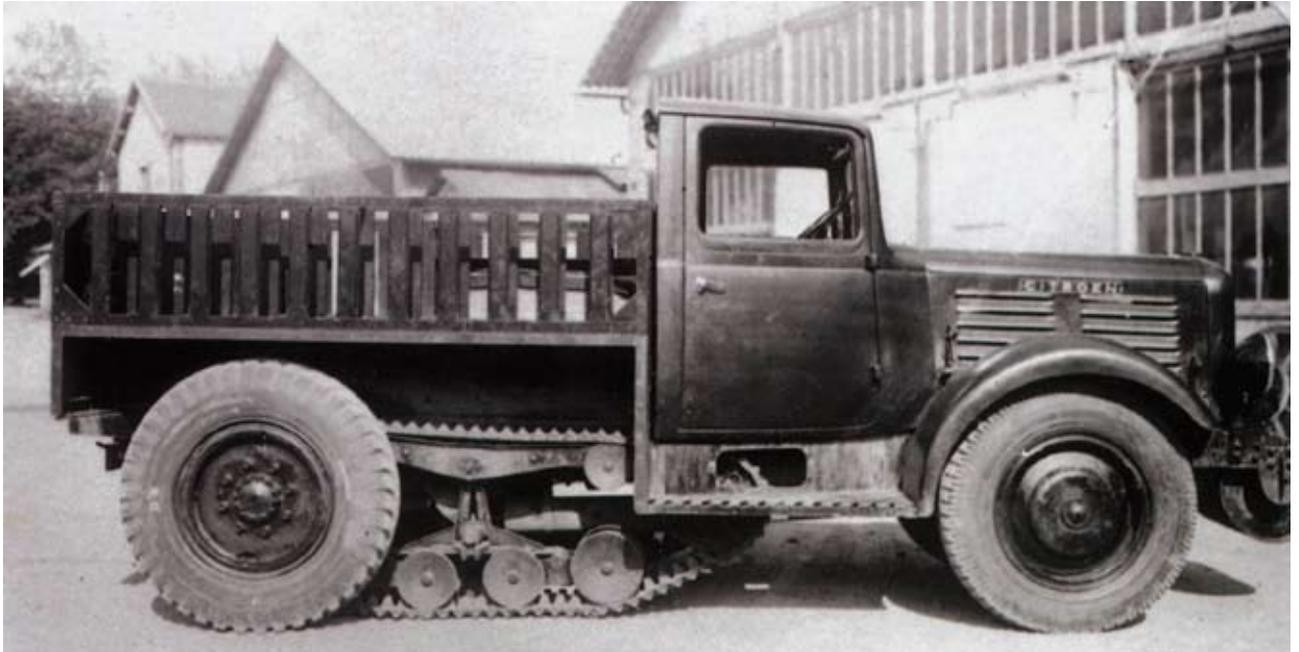


Type P112

1936

A hybrid, obviously based on the T45 truck, featuring both caterpillars and rear wheels. The caterpillars can be lowered when necessary, but spared on good roads.

Very little is known about this car and it's probably a one-of experimental (possibly done by the French army).



This picture is found in the book "Citroën 1919-1949 - La Belle Epoque", by the Dutch Citroën expert Wouter Jansen, published in 2009. Used here with permission.

Type P16

1928 - 1929

A Panhard-engined armoured car, with tracks almost identical to the P17. Manufactured by the French company Schneider & Cie, the model is known as the "Automitrailleuse Panhard-Schneider".



Type P20 C

1930

This car has been seen in a catalogue of military equipment.

The body is known as Type K, but the tracks resembles the P19.



Type P28

1931 – 1932

An armoured car with the 6-cylinder engine of the C6 (2442 cm³), later with a 3015 cm³ engine.

The tracks are near identical to the P26 if not the same.

50 cars is known to have been used by the French army and in 1933, 3 cars were sold in Uruguay.



The P28 has a very short wheelbase. The track system resembles the P26. Note the slight differences on the trailing arms and rubber pads on the three cars here.

P28 prototype K



Type P104

1934

Another armoured car with the 3015 cm³ 6-cylinder engine and the P28 track system.



Type P103

1935

A prototype armoured vehicle with caterpillars only (no wheels).



A special army K1...

Several pictures of these cars are circulating in books and articles. The design of the tracks differs from all other K1s seen – they are shorter and modified with only three rollers. Does anyone have an explanation...?

A step in the track development...

Like the car seen on page 13 bottom, this P7bis appears in a brochure, which was re-issued a few times around 1929-30.

It's a rather special car, with massive tires on the front wheels, built for the purpose of pulling barges. But take a look at the tracks on the top picture. It is not the final system!

In a later issue of the same brochure it has been (well) retouched to look like the P17 type.



