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DE L'AUTOMOBILE MARIUS BERLIET
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THE HISTORY OF THE TRUCK: CHRONOLOGY

1769: Nicolas Joseph CUGNOT, a military engineer, builds a steam chariot, a load carrier with a robust chassis, capable of carrying several tonnes of equipment. The project was abandoned during the Revolution due to indifference on the part of the military planning staff.

1834: Charles DIETZ publicly runs a steam road tug, capable of pulling a large number of trailers, on the route between Paris and Saint Germain.

1862: Etienne LENOIR, develops an oil combustion engine.
In the same year, BEAU DE ROCHAS, patents the principal of the 4-stroke engine design. This invention opens up greater possibilities for the combustion engine.

1894: Rudolf DIESEL invents the first auto-ignition engine.

1899: the Bordeaux-based manufacturer Valentin PURREY, manufactures a steam truck which attracts the attentions of the Say sugar refineries. The company orders a fleet of 34 long-haul trucks, a first for the period.

1900: Georges LATIL, develops front-end with a combustion engine enabling any horse-drawn chariot to be converted into a truck: it is the first front-wheel-drive system.

1906 to 1910: the car manufacturer Marius BERLIET develops a proper range of industrial vehicles with special strengthened chassis, slow-speed, high-capacity engines and robust engine parts. For the most part, they are made with forward cabs of the M type (1910).

1905 to 1913: the French army, aware of the potential of motorised trucks, organises a competition for producing heavy trucks between the different truck manufacturers. The winning trucks are blessed with a reputation for sturdiness and reliability. Their purchasers could get back 30% of the purchase price from the Ministry of War, but in exchange, the vehicle was requisitioned in case of mobilisation, with driver.

1913: wooden wheels circled with iron, used for these trucks at the time, are progressively replaced by steel wheels with solid bands of rubber around them. As a result, speeds are doubled from 10 to 20 km per hour.

1913: BERLIET manufactures its famous-CBA type truck which is particularly sturdy and reputed to be "indestructible". Almost 40,000 units had been produced by the BERLIET factories by 1932.

1914: at the outbreak of war, the French army requisitioned 6,000 heavy goods vehicles. At the same time, the main automobile manufacturers, BERLIET and RENAULT, were requisitioned for the war effort.

1915: the LATIL factories developed the first 4 x 4, all-wheel-drive and all-wheel-steering truck: the TAR. It was designed to pull 155-mm canons.

1916: the BERLIET factories manufacture up to 40 CBAs per day.

1916: the famous "*Voie Sacree*", a 67-km stretch from Bar-le-Duc to Verdun, absorbs an unbroken convoy of 3,500 trucks transporting 90,000 men and 50,000 tons of equipment per week to the front.

1917: the American army enters the war and lands in France with a fleet of over 35,000 vehicles.

1919 to 1920: at the end of the First World War, military surplus was flooded with over 70,000 trucks which were sold on to individuals at very low prices. This surge of competition resulted in a collapse in the sale of new vehicles. The manufacturers faced difficult times and turned their attentions to manufacturing smaller vans.

1920 to 1925: RENAULT increased its range and proposed multi-purpose vans and light commercial vehicles with universal-joint transmissions built on rubber tyres, seen as a great boon in the rural environment.

1922: the stock of French commercial vehicles on the roads totals 92,730 vehicles, or 1 commercial vehicle for every 2 private cars.

1923: the German manufacturer MAN develops the first trucks equipped with "heavy oil" (diesel) engines.

1926: CITROEN, which had been mass-producing automobiles since 1919, applies the "all steel" cab technique to their B15 vans, allowing them to dispense with wood in the construction of the van body.

1926 to 1930: the reconstruction of the country and of the road infrastructure requires ever more powerful and sturdy trucks: progress in the tyre industry sees tyres being mounted on the front of high-tonnage vehicles, making them more comfortable and quicker. Windscreens and closed cabs become more common.

1930: BERLIET purchases the "Acro" licence from the German BOSCH, and brings out its first diesel truck.

1931 to 1934: the first high-volume tyres come out: blow-up type tyres broadens the use of tyres at the front and back of trucks. From a safety point of view, the mechanical servo-brake mounted at the rear of the gearbox becomes more common.

1931 to 1934: the average speed of trucks increases from 25 to 50 km per hour. Manufacturers propose high-tonnage models with longer chassis and 2 rear axles: the famous "six wheel" truck, up to 12m in length.

1934 to 1939: vehicles equipped with diesel engines become more common and more sophisticated: recession hits Europe and the low cost of diesel fuel wins over many users.

1934 to 1935: Raoul DAUTRY, a high civil servant responsible for transport co-ordination, introduces a series of decrees targeting "the co-ordination of rail and road travel". The public

authorities encourage rail transport by imposing new standards: limiting total cargo on trucks to 15 tonnes and reducing lengths to 10m. At the same time, several control measures and new taxes are introduced to slow the growth of the road transport sector.

1935: truck production decreases, and France falls from 2nd to 5th position in the world manufacturers ranking.

1936: for several years, BERLIET had been selling the alternative "gas generator" engine developed in 1923. "Gazobois" (gas generator and wood combination) trucks attract the attention of more and more customers as a means of getting around the heavy taxes being charged on fuel at that time.

1936 to 1939: the leading manufacturers adapt their processes to the new standards and propose forward cab vehicles with engines under the driver's seat. This reduction in the length of the cab means increased payload, reduced wheelbase and improved turning circles.

1939: French truck production falls by 30% compared to 1930. In contrast, English and German production almost quadruples over the period 1930 to 1939.

1940 to 1945: during the Second World War, and during the years of occupation, the lack of fuel sees the popularisation of gas generator engines, compared to a time in 1938, when they accounted for only 1% of trucks.

1945 to 1949: truck factories partly destroyed by bombardment recover slowly from the trials and tribulations of the war: certain makes disappear and RENAULT is nationalised.

1949: the BERLIET factories bring out a new, all-steel cab truck with a 5-cylinder diesel engine: the famous GLR.

1950 to 1955: diesel engine manufacturers see rapid development thanks to the compulsory conversion of gas generator engines and the thousands of American surplus petrol engine trucks. Progress in diesel engines sees them getting quicker and quicker.

1955: the consolidation of RENAULT's heavy-duty truck activities of with those of the manufacturers LATIL and SOMUA result in the creation of SAVIEM LRS, and the first concentration in the French industrial vehicle industry.

1956: SAVIEM sees its first French forward-cab truck, the "Tancarville", come off the production line, with a mass-produced pressed-steel cab.

1956 to 1958: progress with engines results in the first fast diesel engines. In 1957, BERLIET equips the engine of its GLM truck with a turbo-compressor. The poor state of the road network after the war and practically no motorways means the manufacturers have to improve their technologies even further – and gearboxes in particular –, to increase the number of gear ratios. At the same time, the introduction of metallic-structure radial tyres increases safety and average vehicle speeds.

1958: BERLIET brings out its GAK truck equipped with the "Relax" pressed-steel forward cab, and a single-piece panoramic windscreen, offering maximum comfort and a level of visibility never previously seen.

1959: with RENAULT becoming the major shareholder, SAVIEM was now the heavy goods vehicle division of RENAULT.

1960: 1,250,000 trucks are now on the roads of France, owned primarily by small companies: 75% of them have fleets of under 6 vehicles.

1960 to 1970: a number of manufacturers fall by the wayside: UNIC absorbs SAURER France, BERNARD signs an agreement with the American manufacturer MACK, and CITROEN absorbs PANHARD.

1965: BERLIET launches the "Stradair", a revolutionary "Airlam" suspension truck. The advertising campaign is also highly innovative, targeting society as a whole, beyond the heavy goods market.

1967: BERLIET joins the MICHELIN group and collaborates with CITROEN to set up a complete, more powerful automobile group, offering products ranging from cars to the biggest heavy duty trucks.

1970: the tippable forward cabin becomes more widely available: BERLIET brings out its GR300 truck with this style of cab. Now the driver is able to tip back the cab himself and access the engine and most of the equipment very easily.

1970 to 1973: progressively, rigid trucks are replaced by road tractors with increasingly sophisticated specialised semitrailers: loading and unloading becomes quicker and simpler.

1972: BERLIET brings out its TR280 tractor with the turbo-compressor supercharged "Maxi-Couple" engine. The engine's torque rating is between 30 and 50% more than what is available on the market at the time. The vehicle climbs better, requires less gear-changes and offers enhanced driver comfort and reduced fuel consumption.

1974: CITROEN encounters serious financial problems. In exchange for state help, the MICHELIN Group sells BERLIET to the RENAULT corporation and CITROEN is merged with PEUGOT.

1978: merger of BERLIET and SAVIEN to create RENAULT VEHICULES INDUSTRIELS.

1980: all the products of the RENAULT VEHICULES INDUSTRIELS range now carry the brand RENAULT and its characteristic diamond-shaped logo. There is now only one heavy goods vehicle manufacturer in France.

1980 to 1990: the commercial vehicle is further improved, with better cab ergonomics (sound and thermal insulation) and more sophisticated suspension. ABS braking becomes more complex.

1990: the arrival of the RENAULT AE truck and its "*A vivre*" cab provides sound evidence of all the progress made. Electronic wizardry and new composite materials are now an integral part of the end-of-20th-century truck.