1969 UAZ-452 800kg 4×4 van, OMM

1975 UAZ-469 4×4 utility vehicle, MSH

UAZ SU 1957 to date

Ulyanovsk Automobile Plant, Ulyanovsk

As the large Molotov Works at Gorky began to show signs of age, the UAZ plant was constructed to take over some of its production.

The GAZ/UAZ-69 4 × 4 field car ultimately gave way to the more modern UAZ-469 in the new factory. It, too, has been improved since introduction and is currently powered by a 4-cylinder, in-line engine of 79 hp providing over 100 km/h. It will seat up to seven, or two plus cargo.

Cab-over-engine light trucks were added including the 0.8-ton UAZ-450D, a 4 × 4 with a 65 hp 4-cylinder engine. Ambulance, van and bus models were also built on this chassis. These were joined by a 4 × 2 series 451 of similar styling.

The current 4 × 4 series is now built as the 452 with power increased to 80 hp. *BE*

U.D. see Minsei

U D P X see Prunel

UERDINGEN (D) 1930-1958

Waggonfabrik Uerdingen A.G., Krefeld-Uerdingen; Dusseldorf

This specialist firm in railroad coachbuilding was engaged in construction of the first modern trolley-bus in Germany, which was put into operation in 1930 in Mettmann (Rhineland). Krupp components were used. In 1932 the first chassis-less trolley-bus was produced for Idar-Tiefenstein. The firm carried on development of chassis-less trolley-buses and in 1949 a new range was presented using Henschel components and a VW auxiliary engine driving a generator to permit driving without wire for short distances. Also chassis-less buses and articulated buses were built during the fifties, mainly with Bussing engines and components. When the demand for trolley-buses diminished production was given up. *HON*

ULTIMATE (US) 1919-1925

Vreeland Motor Co., Inc., Hillside. N.J.

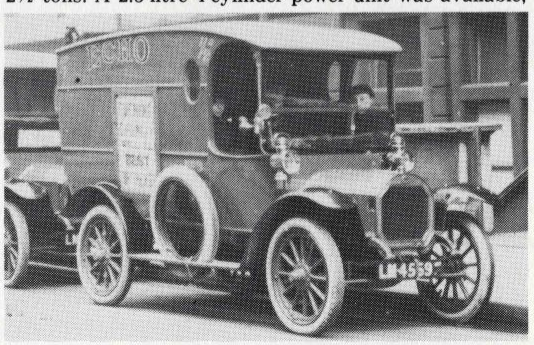
The Ultimate was a conventional assembled truck powered by two sizes of Buda 4-cylinder engine, a 25.8 hp in the 2-ton Model A and a 28.9 hp in the 3-ton Model B. There were also two models of bus chassis, the 25-seater AJL and the 30-seater BU. Both had Westinghouse electric lighting and starting sets, unlike the trucks which relied on hand starting. The larger bus chassis was the only Ultimate made for the last two years of production. *GNG*

UNIC (F) 1905 to date

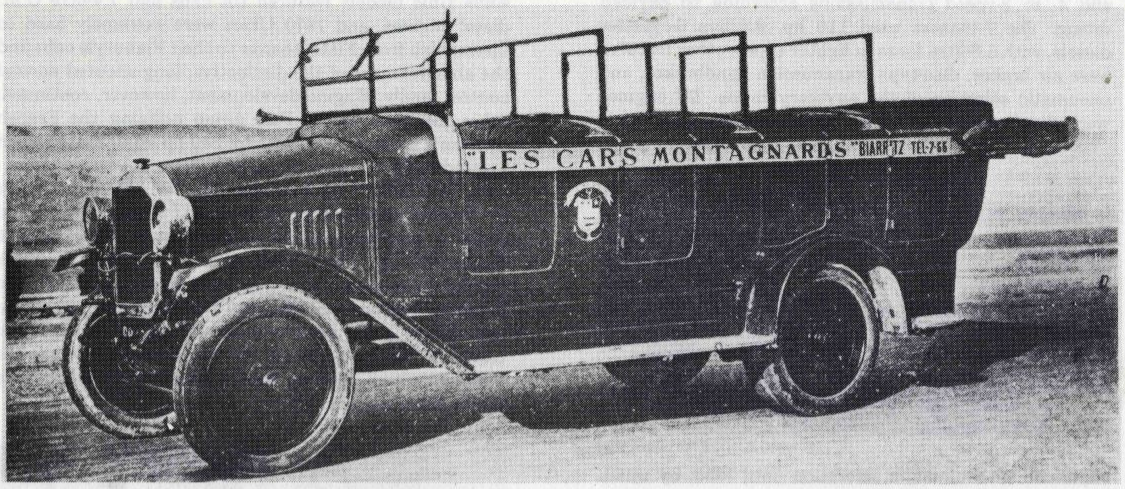
(1) Societe des Anciens Etablissements Georges Richard, Puteaux, Seine 1905-1914
(2) SA des Automobiles Unic, Puteaux, Seine 1914-1958
(3) SA Unic (Simca Industries), Puteaux, Seine 1958-1966
(4) Fiat France SA, Division Vehicules Industriels, Suresnes and Trappes 1966-1974
(5) Unic-Fiat SA, Trappes 1975 to date

After the divorce from Brasier, Georges Richard continued the manufacture of cars under the Unic name, adopted in view of his initial one-model policy. This first Unic was a 10/12 hp T-head twin with lt magneto ignition, cone clutch, 3-speed gearbox and shaft drive, which became very popular as a taxi in many European countries; 2,500 were in service in London alone by 1911. By 1908 the 10/12 had acquired a ht magneto; it had also been joined by an even more popular 1.9-litre L-head monobloc four, though a heavier cab with 3-litre 23 hp engine never caught on, any more than did the curious 2-cylinder G1 of 1911, which had a dashboard radiator and masqueraded as a Renault. Unic taxis had a long career, reappearing in the 1920s with smaller, 1.8-litre 4-cylinder power units, four forward speeds, and spiral bevel drive. As late as 1934 the company offered the L11F2, a more car-like 2-litre affair with fwb, disc wheels, and the magneto ignition to which the company remained loyal until 1936. Unlike its 1920s counterparts, it had a flat radiator, and some of these Unics were still working in London in the early 1950s.

By 1907 the 10/12 was also offered as a 10/15-cwt van, in which guise it won a Gold Medal in the British Commercial Vehicle Trials. The introduction of a 24/30 hp 4-cylinder private car added a line of ambulances to the range, and by 1909 the 2- and 4-cylinder lightweights had been joined by bigger Unics for payloads from 25 cwt to 2½ tons. A 2.3-litre 4-cylinder power unit was available,



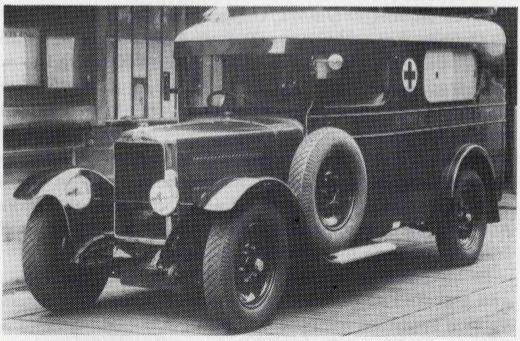
1912 UNIC ¾-ton newspaper vans, OMM



1922 UNIC M1AZ charabanc, NMM

with the option of chain drive in the over-2-ton class. 4-speed gearboxes were first listed in 1910, and a year later came the O-type, a forward-control machine available as a 2-tonner or a 15-seater coach. By 1913 it had a 3.3-litre L-head monobloc engine, the twins had gone, and the smallest van used a new 1½-litre 4-cylinder unit.

The continuation of the taxi line in 1919 furnished the company with a light van chassis, but the trucks (the 30-cwt M1A2 and the 2-ton M2-O) were modernized with rounded-vee radiators, electric lighting, 4-speed gearboxes and pneumatic tires with twin rear wheels. Bigger ones had double reduction drive, also applied to Unic's first 3-tonner, the 3-litre M5C of 1925. Also new that year were fwb of uncoupled type, with or without servo assistance, and coach chassis for up to 24 passengers were available, with a 3.2-litre drop-frame version in the 1929 catalog. Unic's first true heavies came in 1931, in the shape of the



1932 UNIC 11CV ambulance, Unic

normal control CD2 and CD3, continued up to the outbreak of war. These were powered by 8.6-litre diesel sixes made under Mercedes-Benz license, other features being vacuum servo brakes on all wheels and double reduction drive. The CD3 was a 6-wheeler for 11-ton payloads, and a year later a smaller 4.6-litre engine enabled the company to offer a diesel in the ¾-ton bracket. The 1934 range covered payloads from 18 cwt up to 11 tons, a 6-tonner using a 5-litre 4-cylinder oil engine and 5-speed gearbox. The lighter Unics were restyled to bring them into line with contemporary private car types, with silent 3rd gearboxes from 1935, and (at long last) ohv and coil ignition on the 1937 models. In the intermediate bracket

1933 UNIC CD2 7-ton truck, Unic

were 4- and 5-tonners with 4-cylinder gasoline, diesel or gazogene engines, servo brakes, and the choice of four or five forward speeds; a long wheelbase coach edition was offered. The CD used a bigger 10.3-litre engine, and the Unic commercial range was completed by a halftrack of Kegresse type for the Army, using the 2.2-litre gasoline engine common to the 1-ton S25/27 trucks and the U4 car.

During the war Unic joined the G.F.A. consortium along with Bernard, Delahaye, Laffly and Simca, but this association was short-lived, and from 1951 Unic threw in their lot with the last-mentioned company, becoming the heavy-vehicle division of Simca Industries in 1958, and ultimately taking over production of Simca's 5-ton forward control truck with Ford V-8 gasoline engine. A 30-cwt military 4 × 4 development of this theme was still being produced for the NATO powers in 1964. The private cars were, however, discontinued, leaving Unic free to concentrate exclusively on heavy goods vehicles for payloads of over four tons. The new ZUs of 1946 were normal control trucks (only a few bus chassis were made) with American-style grilles and cabs, dry-plate clutches

1948 UNIC ZU51 12-ton articulated van, Unic

and 4- or 8-speed transmissions according to payload rating. The 7-tonners used 110 hp, 9.8-litre 6-cylinder diesels, with 6.8-litre fours in lighter types; other features were air brakes, disc-type transmission handbrakes, and pneumatic selection of the auxiliary ratios. ZU engines were also fitted to Labourier trucks, and the Unic range

1955 UNIC ZU100 8-ton tipper, Unic

continued without major alteration until 1955, by which time 4 × 4 versions had made their appearance, and the marque dominated the 10/15-ton class in France. The heaviest Unics had 180 hp turbocharged engines, power steering, and an air-assisted gearchange. The company kept a foothold in the smallest category by acquiring an O.M. license; in 1956 they acquired Saurer-France, subsequent French Saurers having Unic-type cabs. 1957 saw an extensive restyling, and comprehensive coverage of the 4/13-ton bracket, with 6.6-litre fours on the smaller Unics, and the big six in the heavy Lautarets and Izoards. Forward control, already available, arrived in earnest in 1960, an unusual departure being the adaptation of Fiat front-end sheet metal (from the unsuccessful C40/C50 series) for normal control editions of the 5-ton Vosges. This had a 5-litre 4-cylinder engine rated at 90/100 hp, a 5-speed synchromesh gear box, and air-hydraulic brakes, by contrast with the 8-speed rangechange boxes, full air brakes, and power steering at the top of the range. By 1964 the largest six developed 210 hp with the aid of a turbocharger, and more power still would soon be available in the shape of a 10.8-litre 255/270 hp V-8 fitted to the top-line Izoard. Along with the conventional trucks, there were tractors for GCWs of up to 65 tons, normal control 6 × 4s, and forward control 6 × 2s; all-synchromesh boxes were standard by 1966. The smallest power units were fours of 4.5 and 5.4-litres with ratings of up to 135 hp; 5- and 6-cylinder derivatives were used in intermediate Unic types.

In the meantime there had been a managerial reshuffle, with Simca changing hands. The car side went to Chrysler, but Fiat bought into Simca Industries, the truck division, emerging in full control of Unic by 1966, when the firm was renamed to indicate its latest status. In 1968

1962 UNIC Belfort MZ37 6-ton truck, OMM

some Unic models featured tilt cabs and 7.4-litre O.M. diesel engines, and 1970 Unics were extremely hard to distinguish from Fiats, thanks to their Fiat-style cabs and the abandonment of the distinctive, long-snouted normal control family. Engine development, however, continued, other members of the Fiat group utilizing the French concern's latest V-8, a 14.9-litre 340 hp affair mated to an 8-speed splitter box with synchromesh.

By 1973 production had been transferred to a new plant at Trappes capable of turning out 30,000 units a year, and under a new program of rationalization Unic became responsible for Fiat products in the 10/16-ton GVW bracket. The Unic name was used only at home and in Belgium. During 1976 and 1977 Unic badges appeared on some heavy 4 × 4 and 6 × 4 normal control construction trucks of Magirus type for the French market, while the company's own product was supplied to Germany with Deutz diesel engines. *MCS*

c. 1955 UNIMOG 4×4 tractor/truck, GNG

UNIMOG (D) 1948 to date

(1) Gebr. Bohringer GmbH., Goppingen 1948-1951
(2) Daimler-Benz Aktiengesellschaft, Gagenau 1951 to date

In 1948 the UNIMOG (UNIversal-MOtorGerat = Universal Motor Unit) appeared following a totally new concept. It was mainly developed for agricultural use as a tractor for a wide variety of accessories but also as a light truck for about 1½ tons payload. A 4-cylnder 1.7 litre Mercedes-Benz diesel engine was used, the vehicle had 4 × 4 drive, maximum road speed was about 35 mph. It was not only used in agriculture but became a popular road tractor and basis for municipal purposes.

In 1951 production was taken over by Mercedes-Benz and transferred to the Gaggenau works. In 1954 a new version appeared with the UNIMOG S, a cross-country 4 × 4 truck with 6-cylinder 2.2 litre gasoline engine and 1½ ton payload capacity. During its production the UNIMOG has become a really universal vehicle and today is used with a wide scale of applications for agricultural purposes, as a road tractor, articulated tractor or just as a truck, as road-rail vehicle, for underground mining work, and with fire fighting equipment, while the front axle plus cab allows a wide variety of lift trucks. It is available with diesel engines ranging from 34 to 150 bhp and the S version retains the 2.2 litre gasoline engine.

A tracked version is available as the Unitrac, produced by Tractortechnic of Gevelsberg and a 6 × 6 chassis for a wide variety of bodies is offered by LESA of Stolberg. *HON*