

Automobile-Year

1960-1961



with the old rounded bodywork. The wrapround windscreen, one of the most inconvenient and useless ideas ever inflicted on Europe by American stylists, has been abandoned and a flatter roof line brings height down by $\frac{3}{4}$ in. The new instrument panel makes plentiful use of changing colours to facilitate quick reading and the steering wheel has a recessed centre, while European-style parallel wipers eliminate unswept areas in the middle. The new body is slightly wider and gives more legroom. Road holding is improved by wider wheel rims and a wider track. Front springs are softer and helper leaves are now used on the rear semi-elliptics.

The comparison between this car, from General Motors and the new German Ford is extremely interesting, for the Opel can be regarded as one of the last examples of a style which has already had a long run, whilst the Ford is the first example of a new school already established a year ago in the U.S.A.

The new Taunus 17 M has slim lines and hard edges but the corners are rounded. The headlamps are moved into the front panel (there is room for four, although only two are used at present) and the wing edges sweep down to merge into the up-swept ends of the bumpers. Its affinity with the current Detroit models is very close; in fact the front is simply a scaled down edition of the current Thunderbird, and it has the typical big circular Ford tail lamps set in a false grille at the rear.

It is 2 in. lower, 3 in. longer and weighs 220 lb. less than the previous model. The double-curvature windscreen flows into the roof, giving a very high angle of vision, which will increase the importance of sun visors in sunny weather and the wide windows are also curved. The buyer has a choice of two engines, the 1.5-litre giving 55 b.h.p. and the 1.7-litre giving 60 nett, with three or four-speed gearboxes. There is a small reduction in brake lining area, but it is said to be offset by more rigid brake shoes.

In contrast, the latest VW is identified only by the flashing indicators on the wings which replace the semaphore type, but the mechanical changes are far reaching. The new engine, similar to that used in Transporter and Station Wagon for a year past, has a stiffer crankcase and cylinders spaced farther apart to allow room for better cooling and a stronger crankshaft. The cylinder heads have different combustion chambers with higher compression of 7 to 1, and larger valves operated by a new camshaft. Maximum power is raised by 4 b.h.p. to 40 S.A.E. at slightly higher revs. and torque rises by 9%. The carburetter has an automatic choke and a counterweighted flap valve directs warm air to it at low speeds to prevent ice formation. The new gearbox has synchromesh for all four speeds. Overall gear ratios are slightly lower than before, increasing the engine revs. to secure better acceleration and hill climbing. Redesign of the fuel tank has nearly doubled front luggage space and there are many detail improvements to trim and equipment.

The prototypes of the new Russian baby car, originally called the Communard, had a flat four engine very similar to that of the VW but accessibility was not ideal and on very bad roads it became clogged with mud, so the production version, now called the Zaporozhets has a new fan-cooled V4 engine-of 748 c.c. giving 20 b.h.p. at 4,000 r.p.m. To overcome the balance problems inherent in a V4, the balance weights on the crankshaft are supplemented by weights on the ends of a contra-rotating shaft running at engine speed inside a hollow camshaft, which runs as usual at half engine speed.

The lubrication system includes an oil cooler and a centrifugal filter inside the fan pulley. Engine weight is given as 155 lb. Transmission is through a four-speed gearbox with the top three speeds synchronised. Front suspension is by trailing arms and transverse laminated torsion bars, semi-trailing single wishbones being used with coil springs at the rear. Construction necessary

to stand up to bad roads is reflected in a car weight of 1,320 lb. and ground clearance is nearly 8 in.

In Poland a sports coupe was produced for the two-stroke Syrena and in East Germany, the two stroke Trabant appeared with station wagon body. In China, motoring remains largely the prerogative of the country's rulers and such production as there is is concentrated on large V8 limousines. The latest, called Peace, is even more ornate than the 5.6-litre 220 b.h.p. Red Flag already in production and in side view resembles the Chevrolet of a few years ago. Efforts to start a motor industry in Egypt were renewed with small production of the Ramsès, which has a simple open doorless body on an NSU Prinz chassis.

PARIS SALON

Having designed a five-bearing lower end for their 1,290 c.c. four-cylinder engine, Simca tried it out in the big Ariane saloon on an 80-day endurance run at the deserted Miramas track in south west France and set up 150 new international class records for distances up to 120,000 miles at speeds of 65 m.p.h. Bearing area is increased by 30% and bearings are copper lead indium. Like Fiat, Simca also adopted a centrifugal oil filter in the fan pulley. With 7.5 compression the engine is known as the Rush and gives 52 b.h.p. With 8.5 compression it is called the Rush Super and develops 62 b.h.p. These two now power the Arondes and Arianes except for the 1,100 c.c. Etoile economy model.

Citroen adopted the Chapron DS 19 convertible as a catalogue model and introduced a simplified automatic clutch control. Previously there was a complicated apparatus governed by throttle pedal and gear lever with a modulator using a low pressure oil pump driven off the water pump. Instead there is now a centrifugal regulator, belt driven, which operates a control valve in the high-pressure circuit, adjusting clutch action to engine speed.

Panhard also introduced a convertible for the PL 17 and hung the front doors on the forward edge in anticipation of new French safety regulations.

Renault made only slight changes to the Dauphine; a pressure-limiting valve for the rear brakes, a treadle-type accelerator and carburetter with bigger float chamber to ensure easier warm starts. The Fregate, which had never achieved the success hoped for, went out of production.


Fiat gave the 600 a considerable increase in performance by increasing bore and stroke to give 767 c.c., producing 32 b.h.p. (S.A.E.). The axle ratio has been changed accordingly, dropping engine speed by about 11%. Like the other Fiats, this engine, called the 600 D, has a centrifugal oil filter and the gearbox is strengthened. The only external evidence is the use of pivoted ventilating panes in the doors.

Improvements were also announced to two German small cars.

The BMW 700 is now available with a twin carburetter engine of 9 to 1 compression giving 40 b.h.p. which confers a really sporting performance and it should be homologated as a standard touring car in time for the 1961 competition season.

At NSU a rise in compression and new camshaft brought the output of their standard Prinz engine up to 23 b.h.p. Road holding and comfort are improved by an anti-roll bar and longer travel for the front springs. A 30 b.h.p. engine is already available.

The Alpine sports coupe, built in France, with Dauphine parts, now has a new and much more elegant body only 44 in. high. An engine enlarged to 998 c.c. is available, giving 70 b.h.p. and is



said to give a maximum speed of 115 m.p.h. The car weight is quoted as a mere 1,145 lb.

Transalpine competition for it comes from Carlo Abarth who has taken the Fiat 600 D engine as starting point for a new Bialbero twin cam engine of 982 c.c. producing 90 b.h.p. at 7,100 r.p.m., said to propel the tiny 1,260 lb. Zagato coupe at over 125 m.p.h. Adequate braking is now ensured by discs at the front with reinforced suspension and Amadori supplies the cast light alloy wheels.

The Facellia, coming slowly into production, was shown with a new four-seater coupe body and the spider was given plastic fairings over the headlamps to improve airflow at maximum speed. Paris was also the first public presentation of the new Ferrari 250 GT. 2+2, a four-seater saloon by Ferrari on the same wheelbase as before. The nose is lower and the grille is smaller than on the two-seaters.

LONDON MOTOR SHOW

As at Paris, the trend in London was mainly improvement of existing models, but there were a few novelties.

Berkeley produced a good-looking little plastic-bodied sports car, the Bandit, using Ford Anglia engine, gearbox and front suspension, with rear drive, swing axle rear suspension and disc front brakes. The body is bonded to a metal chassis and an output of 39 b.h.p., in a car weighing 1,360 lb. promises a lively performance. The Morgan 4/4 and the plastic-bodied Fairthorpe sports car were also offered with the ubiquitous Ford engine.

Lea Francis, now under new management, staged their effort to come back into the sports car market with a roadster of highly individual appearance powered by a three-carburettor Ford Zephyr engine in a tubular chassis with front suspension by torsion bars and semi-elliptic rear springs. All wheels have disc brakes.

Daimler, recently bought by Jaguar, announced no changes but their SP 250 sports model has been given extra structural rigidity by Jaguar engineers, with benefit to its road holding. Rootes announced a larger engine of 1,592 c.c. for the Sunbeam Alpine, giving an extra 3 b.h.p. and an extension of useful torque. Stiffer crankshaft, new clutch and wider rear springs were included in the transformation and the disc front brakes were given sheet metal shrouds to counter rapid pad wear.

With a re-styled front, the Humber Super Snipe became the first British car to have four headlamps. Less visible but important changes: improved engine lubrication, better synchromesh, redesigned seating to increase rear space, stiffer front springs and wider rear springs. The Humber Hawk, like the Snipe now has disc front brakes.

A new lightweight six-cylinder engine was introduced in a more luxurious version of the Standard Vanguard. Unlike the four-cylinder, it has no cylinder liners, and by use of siamesed bores, cast in pairs, length has been restricted to only 1½ in. more than that of the four. More surprising, although it is of conventional cast iron construction, it weighs 57 lb. less. It gives 85 b.h.p. (S.A.E.) from 1,998 c.c. and has two Solex carburettors of a very compact new design.

The Vauxhall Velox and Cresta, already given a larger engine of 2,651 c.c. producing 113 b.h.p. (S.A.E.) accompanied by bigger radiator grille and bigger brakes, is now offered with the new small Hydra-matic transmission developed for the American

compact cars. It has only three speeds, but a small torque converter make first a variable-ratio gear. The same transmission was later offered on the Opel Kapitän in Germany.

The latest Jensen follows the main lines of the previous model but has a new bonnet and rear window. It is wider inside and has more headroom. The big Hydra-matic transmission made by Rolls-Royce is now available and one of the frame tubes is used as a vacuum reservoir for the disc brake servo.

TURIN

For the ordinary Italian motorist the most exciting thing at the Turin Show was the price war which developed as Fiat and Alfa Romeo reacted to the challenge of the Austin A40 (assembled in Italy by Innocenti, makers of the Lambretta Scooter) by slashing the prices of the Fiat 1100 and the Italian-assembled Renault Dauphine.

The most important new model was the Lancia Flavia, the first design for which Prof. Fessia, the company's present chief engineer has been entirely responsible, and Italy's first front wheel drive production model. Its layout recalls that of the Cemsca Caproni prototype for which Fessia was responsible in the immediate post-war period, with flat four engine ahead of the front wheel centres and it is intended as the main weapon in the expansionist policy initiated by Sig. Pesenti, the cement magnate who now has a controlling interest in Lancia. Bodies will eventually be pressed, painted and trimmed at the big new plant at Chivasso outside Turin.

Engine and gearbox are composed largely of high-precision pressure die castings in light alloy with wet iron liners. An 8.3 to 1 compression, permits use of normal grade fuel and the engine gives 78 b.h.p. at 5,200 r.p.m. from 1,498 c.c. To shorten the pushrods and lighten the valve gear there are two chain driven camshafts. Transmission is four-speed all-synchromesh with direct-drive top obtained by passing the input shaft through the differential pinion and through a hollow mainshaft to the far end of the box. Drive shafts have Rzeppa joints, the inner pair being mounted on balls in grooves to permit low-friction length adjustment as the suspension moved up and down. Suspension is by leaf springs; one transverse at the front; two semi-elliptics at the rear, with anti-roll bars. Brakes are servo assisted discs.

To isolate the steel body structure from road noise and engine vibrations, power unit, transmission, front suspension and steering are carried on a rubber-mounted sub frame of steel and aluminium. Extensive use of rubber and sealed bearings reduces chassis greasing points to five, all on the steering linkage. The body is exceptionally roomy; practically a six-seater, width being gained by curved side windows dropping in curved guides. But solid construction, sound proofing and elaborate equipment mean weight and at 2,690 lb. ready to run, the Flavia is no lightweight. On the other hand its fine road qualities, exceptional quietness and honest quality appeal to many faithful Lancia fans. Initial production is scheduled at 50 a day.

Besides assembling the A40, Innocenti announced an Italian version of the Austin Healey Sprite with a most attractive body by Ghia, called the Innocenti 950 and propose to export it outside Italy in competition with the less elegant British-built model. Their plans envisage production of the two models totalling 50,000 units a year which would make them Italy's third largest car manufacturer after Fiat and Alfa Romeo and accounted for the sharp reaction in price cuts by their chief competitors.



The return to curvaceous forms, emphasised by retractable head-lamps and a tiny cooling air intake on Pininfarina's Ferrari Superamerica two-seater coupe.



Photos A. Guichard

FERRARIS BY PININFARINA

To meet the demand for a Ferrari capable of carrying more than two people, the GT. 250 2+2 was evolved through collaboration between Ferrari and Pininfarina. Conserving the same wheelbase and overall dimensions, engine and gearbox were moved forward to leave space for two occasional seats. The radiator grille is smaller than on two-seater models and the smoothness of the descending bonnet line is not broken by any carburetter air intake. The tail is higher to give more luggage space. A Laycock de Normanville overdrive is available and the car weighs 2,820 lb. ready to run.

