Twenty-One Six Special Coupé

Price . . . **£350**
(ex Works)

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Obtainable in : All Black cellulose with brown leather upholstery, Grey duotone cellulose with light blue leather upholstery, Sports Blue cellulose with light blue leather upholstery.

SPECIFICATION

FRAME. The chassis frame is of robust design and incorporates box sectioned side members spreading into generous cross braci forming an exceptionally rigid structure which is further strengthened by sturdy cross members. The track of .... Sixteen and Eighteen is 4 ft. 8 in. and the wheelbase 9 ft. 9 in. The track of the Twenty-one and Twenty-five is 4 ft. 8 in. and the wheelbase 10 ft. 1½ in.

ENGINE. The six-cylinder engine of the Sixteen has a bore of 65.5 mm. (2.58 in.), a stroke of 102 mm. (4.01 in.) and a cubic capacity of 2062 c.c. (125.84 cu. in.). Treasury rating 15.94. Tax £12. The engine of the Eighteen has a bore of 69 mm. (2.72 in.), a stroke of 102 mm. (4.01 in.) and a cubic capacity of 2288 c.c. (148.7 cu. in.). Treasury rating 17.71. Tax £13 10s. The engine of the Twenty-one has a bore of 75 mm. (2.95 in.), a stroke of 110 mm. (4.33 in.) and a cubic capacity of 2916 c.c. (179.67 cu. in.). Treasury rating 20.92. Tax £15 15s. The engine of the Twenty-five has a bore of 82 mm. (3.32 in.), a stroke of 110 mm. (4.33 in.) and a cubic capacity of 3485 c.c. (209.5 cu. in.). Treasury rating 25.01. Tax £18 15s. The cylinders are cast in one with the skirt of the crankcase, which is extended well below the crankshaft centre and liberally reinforced with internal webs to provide a structure of great strength and rigidity. The crankshaft is of the four-bearing type, with bearings of large diameter and generous length. Every crankshaft is carefully balanced to very close limits. The main bearings are die-cast white metal. The steel connecting rods are equipped with white metal big-end bearings of the full-ring type, and are individually balanced to a very high degree of accuracy. The aluminium pistons are fitted with four rings, and the complete assemblies of rods and pistons are equalised in weight to within .2 oz. (best aero engine practice). The side-by-side valves are operated by a large diameter four-bearing camshaft through adjustable tappets carried in removable guides. The cylinder head is detachable. The camshaft is driven by duplex roller chain from the crankshaft. An important feature of the induction system is the A.C. air cleaner and silencer, which also collects and consumes all fumes discharged from the crankcase breather, so that they are prevented from finding their way into the car interior.

SYNCHROMESH GEARBOX. The three-speed gearbox is provided with synchromesh mechanism for top and second gears. The gearbox is provided with an accessible filling orifice and dipstick oil level indicator and protected by a thick dustproof rubber cover.

LUBRICATION. A spur gear pump, driven from the camshaft by inclined shaft, supplies oil under pressure to all main and big-end bearings, camshaft bearings and clutch. The oil is filtered before recirculation by a generous tray type filter covering the full area of the sump and a large capacity external filter. Chassis lubrication is by Enots high-pressure oilgun in conjunction with accessible nipples.

COOLING SYSTEM. The cooling water is circulated by centrifugal pump and is controlled by thermostat. The cylinder head has carefully positioned ports which ensure an even temperature distribution. The radiator is fan assisted.

ELECTRICAL EQUIPMENT. The distributor for the 12-volt coil and battery ignition is driven from the upper end of the inclined oil pump drive shaft, and has fully automatic advance and retard with micrometer adjustment. The large dynamo is belt driven and of the ventilated type with three charge rates. The starter motor is of the sliding pinion type and located on the side of the gearbox. Full five-lamp equipment is provided, including headlamps with dip and switch mechanism with single acting foot-operated switch which dips the lights with one depression and raises them on the next depression, and fog lamp. All switches are accessibly mounted on the instrument panel with the exception of the horn push and Trafficator switch, which are conveniently mounted in the centre of the steering wheel. An easily controlled electric windscreen wiper is mounted on the lower screen rail, with additional arm on passenger side ensuring clear vision in bad weather. The battery is mounted below the front seats and is readily accessible.

CARBURATION. An S.U. automatic piston-type downdraught carburetter with adequate control over mixture strength supplies the mixture. The controls are conveniently situated on the facia board. The petrol feed is by a large S.U. automatic electric pressure pump.

ETROL TANK. The petrol tank is mounted at the rear of the chassis and has a capacity of 10 gallons on the Sixteen and Eighteen, and 13 gallons on the Twenty-one and Twenty-five. Its contents are clearly indicated to the driver by an electrically operated scale on the instrument panel.

TRANSMISSION. A clutch of the cushioned hub single-plate type with cork inserts in the driven plate, automatically fed with oil from the crankcase, provides smooth engagement with the minimum of attention. A Spicer tubular propeller shaft, with Spicer needle type universal joints at each end, transmits the drive to the silent spiral bevel final reduction gears and differential in the rear axle. The axle shafts are of the three-quarter floating type.

THE FOUR-WHEEL BRAKES. Fully compensated four-wheel brakes of the internal expanding type, operating in alloy cast iron drums and actuated by the Lockheed hydraulic system, ensure the maximum braking efficiency. Their certainty of action is maintained under all conditions as there are no bearings to wear or need lubrication. The centrally disposed horizontal hand brake lever operates independently on the rear wheels, and possesses instantaneous adjustment from the driver's seat.

STEERING. The steering gear is of the Bishop cam type, providing extremely light and safe operation with accurate controllability. The rubber mounted spring steering wheel reduces shocks on the driver to a minimum. The track rod bearings are self adjusting.

CONTROLS. The accelerator pedal is located on the extreme right, and the brake pedal and clutch pedal are positioned to provide ample foot clearance. They are both mounted on the frame and isolated from engine vibrations.

SUSPENSION. Long, semi-elliptic springs are fitted fore and aft and are controlled by Luvax hydraulic shock absorbers. The spring eyes are provided with flanged non-squeak bushes to reduce side play. Stabilising humpers are fitted at the front to counter periodic vibrations.

WHEELS. Five detachable wire wheels fitted with 6.00—17 Dunlop low pressure tyres are provided on all models. They are held in position by five studs with nuts of the reversible type. The spare wheel is carried at the rear of the car, protected by a metal cover, and is sunk into the panelling in the case of the Saloon.

VENTILATION. Particular care has been taken to ensure adequate and draughtless ventilation. The windscreen has top hinges, is infinitely adjustable up to a wide angle, and is carefully sloped to give maximum visibility with the minimum air resistance. The front door-windows are of the extractor type providing a vertical opening behind the door pillar and are fitted with louvres. Additional ventilation is provided by the hinged quarter-light windows and the scuttle air scoop.

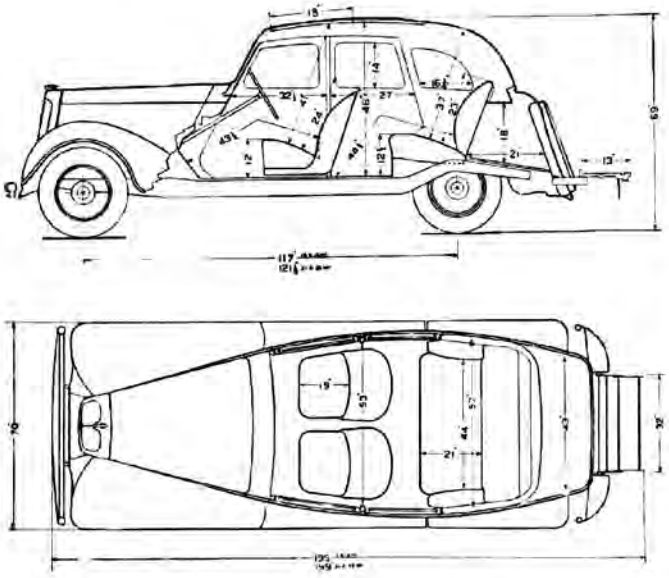
SEATING ACCOMMODATION. Generous seating accommodation is provided for five people within the wheelbase, ensuring the highest possible comfort. The front seats are equipped with adjustable pneumatic back cushions to give comfortable support to the lower part of the back.

BUILT-IN JACKING SYSTEM. The new Morris Sixes are permanently fitted with Jackall hydraulic jacks, which enable all four wheels to be lifted from the ground simultaneously, or alternatively the front wheels or back wheels only when desired. They can be actuated without difficulty from inside the car and without effort or difficulty.

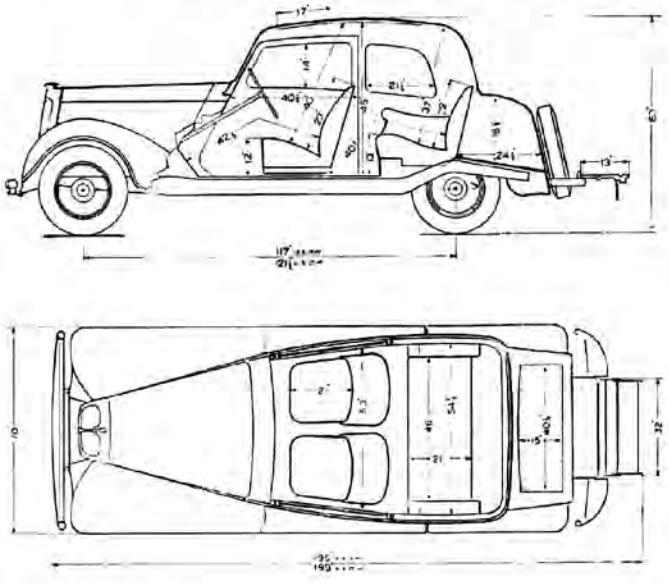
LUGGAGE ACCOMMODATION. The Saloon models are provided with generous luggage accommodation behind the rear seat, access to which is achieved by raising the hinged seat back, and on the Sliding Head Saloon a folding luggage grid is standard, but is available at a small extra charge when required on the Fixed Head Saloon. The Coupé body has an exceptionally large inbuilt luggage container at the rear which can be loaded through a large weather-tight hinged cover, and has a folding luggage grid as standard.

SEATING DIMENSIONS

SIXTEEN, EIGHTEEN, TWENTY-ONE AND TWENTY-FIVE SALOONS



SIXTEEN, EIGHTEEN, TWENTY-ONE AND TWENTY-FIVE SPECIAL COUPÉS



The front seats are provided with a range of adjustment of 8 inches and are shown midway in this range in the illustrations. The legroom is therefore capable of considerable adjustment on either side of the dimensions indicated.

CHASSIS

For the convenience of those who wish to have their cars fitted with special coachwork to suit their individual requirements, Morris Sixteen, Eighteen, Twenty-one and Twenty-five chassis are obtainable separately. These chassis are exceptionally well equipped and include such items as wings, running-boards, headlamps, instruments, spare wheel and complete tool kit; in short, they are all ready for the coachwork.

Morris Sixteen and Eighteen Chassis

General specification as on page 10. The chassis equipment includes: Steel dash, instrument panel, clock, speedometer, electric petrol gauge, splashers, pedal rubbers, front wings, stays and rear wings (enamelled), headlamps with dipping mechanism, sidelamps, rear lamp with stop light, fog lamp, battery, front and rear bumpers, front and rear number-plates, oil gauge, ammeter, electric horn, kit of tools, spare wheel and tyre, hydraulic shock absorbers front and rear, hydraulic four-wheel jacks, bonnet complete with fasteners, running-boards.

Price (*ex Works*) **£195**

Morris Twenty-one and Twenty-five Chassis

General chassis specification as on page 10. The chassis equipment includes:—Steel dash, instrument panel, clock, speedometer, electric petrol gauge, splashers, pedal rubbers, front wings, stays and rear wings (enamelled), headlamps with dipping mechanism, sidelamps, rear lamp with stop lamp, fog lamp, battery, front and rear bumpers, front and rear number-plates, oil gauge, ammeter, electric horn, kit of tools, spare wheel and tyre, hydraulic shock absorbers front and rear, hydraulic four-wheel jacks, bonnet complete with fasteners, running-boards.

Price (*ex Works*) **£210**

Purchasers of Morris chassis are requested carefully to note paragraph 3(b) of Guarantee. No variation in the above chassis specifications can be made.

GENERAL DATA

	Sixteen-Six	Eighteen-Six	Twenty-one Six	Twenty-five Six
Bore	2.58 in. 65.5 mm.	2.72 in. 69 mm.	2.95 in. 75 mm.	3.23 in. 82 mm.
Stroke	4.01 in. 102 mm.	4.01 in. 102 mm.	4.33 in. 110 mm.	4.33 in. 110 mm.
Cubic capacity ...	125.84 cu. in. 2062 c.c.	139.63 cu. in. 2288 c.c.	177.05 cu. in. 2916 c.c.	209.5 cu. in. 3485 c.c.
Treasury rating ...	13.04	17.71	20.92	25.01
Wheelbase	9 ft. 9 in. 2.96 m.	9 ft. 9 in. 2.96 m.	10 ft. 1½ in. 3.086 m.	10 ft. 1½ in. 3.086 m.
Track	4 ft. 8 in. 1.422 m.	4 ft. 8 in. 1.422 m.	4 ft. 8 in. 1.422 m.	4 ft. 8 in. 1.422 m.
Tyre size	6.00—17	6.00—17	6.00—17	6.00—17
Wheel size	3.62 - 17	3.62 - 17	3.62 - 17	3.62 - 17
Gear ratios 1st ...	17.875	16.1	15.09	15.09
2nd	8.832	7.95	7.46	7.46
3rd ...	5.273	4.73	4.454	4.454
Reverse	22.663	20.425	19.15	19.15
Sparking plugs ...	Champion L.10 ¼ in. reach	Champion L.10 ¼ in. reach	Champion L.10 ¼ in. reach	Champion L.10 ¼ in. reach
Petrol tank capacity	10 galls. 40 litres	10 galls. 40 litres	13 galls. 59 litres	13 galls. 59 litres
Engine oil capacity ...	2 galls. 1 pt. 9.65 litres	2 galls. 1 pt. 9.65 litres	2 galls. 1 qt. 10.22 litres	2 galls. 1 qt. 10.22 litres
Gearbox oil capacity	2 pints 1.14 litres	2 pints 1.14 litres	2 pints 1.14 litres	2 pints 1.14 litres
Rear axle oil capacity	2 pints 1.14 litres	2 pints 1.14 litres	2 pints 1.14 litres	2 pints 1.14 litres