AstonMartin

AMHT: 2007/398

0

This Document is part of the Archives of the Aston Martin Owners Club

33/1



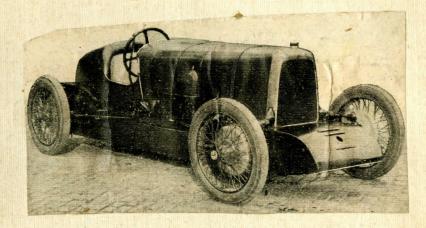
MANUFACTURED BY

BAMFORD & MARTIN,

53, ABINGDON ROAD, KENSINGTON .. LONDON, W.8. Telephone
WESTERN 4003.

Telegrams:
ASTOMARTIA, KENS, LONDON.

1924



1925 200 Wides Races

All previous Catalogues and Announcements cancelled.

THE ASTON-MARTIN CAR

FOREWORD

N submitting this description and specification of Aston-Martin Sporting and Touring Cars to the Public, the manufacturers feel that, owing to the very special qualities and performance of the car, their clients are likely to be drawn from a very discriminating and experienced class of Owner-drivers who may have well-founded personal preferences on the performance and equipment of motor-cars.

Therefore, while it is manifestly commercially impossible to alter the broad principles of design, though we particularly recommend the "S.U." Carburetter we fit also "Solex" and "Zenith" Carburetters at slight extra cost. Likewise, while recommending the "Scintilla" Magneto, we are prepared to fit Battery and Coil Ignition if desired, at slight extra cost.

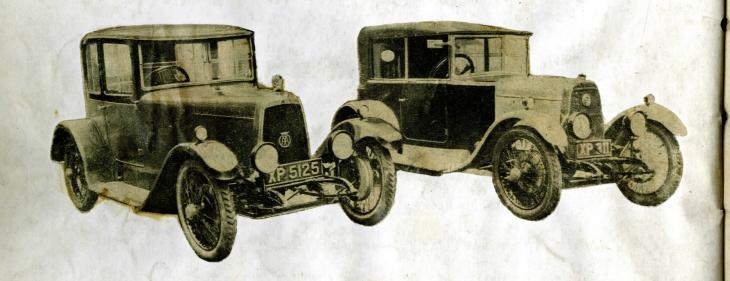
We realise that we must supply to the Public a car as suitable as we can make it to the requirements of each individual client, and we therefore invite them to specify, within the alternatives set out, the equipment particularly preferred.





Eyston at Bolovska





HE Aston-Martin Car has been on the road since 1914, and has been tested over more than 150,000 miles in England, Scotland, Wales and the Continent, comprising roads of all varying degrees of quality, from the great trunk roads, on which speed may safely be enjoyed, to the tortucus country lanes and Alpine Passes, in which the flexibility of the engine, the easy steering, and the smooth acting reliable brakes have been amply proved out.

All the known test hills in the country have been climbed with loads in excess of the normal seating capacity of the car, and we can state as the result of experience that the car is able to "go anywhere and do anything" that can be expected of a motor vehicle.

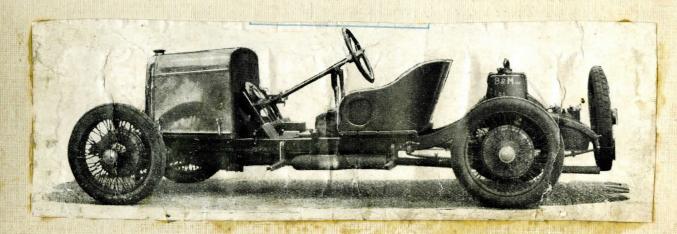
Throughout our tests the cars have been looked after entirely by their drivers, and as the following detailed description will show, infinite care has been taken to provide a car capable of being looked after by a Private Owner with a minimum of trouble and expense.

Those who have been associated with the designing and testing of the Aston-Martin have been practical users of motor-cars since 1903, and having had a very large number of different makes through their hands on the road, and in the shops, know well what is good and what is bad in Automobile Design.

The importance of this point should not be overlooked, as it is, alas, only too common to find cases where the draughtsman—clever enough on the drawing-board—has, through lack of practical experience, failed signally in such matters as accessibility and general maintenance.

With regard to performance, we are prepared to guarantee that each of our cars, fully equipped with open two or three-seater body, electric lighting and starting, hood, screen, and spare wheel, and carrying driver and one passenger, will complete a lap of the Brooklands Track at a minimum average speed of 65 m.p.h.





Standard Chasen

It is well understood that this average speed entails a maximum speed in excess of 70 m.p.h., but we guarantee the lap speed instead of the maximum speed as being, in our opinion, more capable of being checked by those interested.

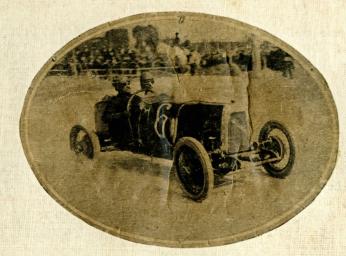
We have found that petrol consumption on the road averages from 35 to 45 miles per gallon in the hands of our clients, according to conditions, while a gallon of oil will suffice for well over one thousand miles.

The Engine has four cylinders, cast "monobloc," bore 66½ mm., stroke 107 mm.—cubic capacity 1,486 cubic centimetres. The crankshaft, which is balanced to reduce the rocking couples as well as the inertia load, is carried in three large diameter bearings.

The Valves are actuated by adjustable tappets which work in an oil-tight chamber with quickly detachable cover. Valve caps have large castellations to take spanner. Camshaft has cams cut solid with it and is driven by skew gears. The Carburetter is controlled by accelerator pedal and lever on steering wheel, is entirely automatic, giving maximum power and acceleration with very good consumption. The Magneto has variable control by lever on steering wheel; it is driven by skew gears. For those who prefer it, high tension battery ignition can be fitted as an alternative at a small extra charge.

Lubrication is by positively driven spur wheel pump delivering oil under pressure to main bearings, thence via hollow crankshaft to big ends and camshaft. There is a pressure gauge on the instrument board, an adjustable pressure valve outside the engine, and a readily accessible oil filler, the operation of which also operates the maximum level tap. There is also a graduated rod to show exact oil level and a tap





Zhorowsky in Spain.

controlled from the platform of the engine by which the sump—which holds enough oil for over 1,000 miles—may be drained. The oil filter is readily accessible for cleaning, and is of patented design; it may be removed without emptying the sump.

The connecting rods are machined all over. Zephyr pistons with large gudgeon pins and narrow rings are fitted.

Cooling is by honeycomb radiator of ample surface and exclusive design assisted by large centrifugal pump with automatically adjusting gland. Provision is also made for the fitting of a fan when required.

A starting handle is provided for testing compression, etc., but starting is effected by an electric motor mounted on engine and driving by positive gearing to flywheel. A dynamo is also mounted on the engine and is driven by skew gears, if incorporated with battery ignition, or by belt if fitted as a separate unit.

Batteries in box mounted in frame.

The clutch is the Hele-Shaw, running in oil, and drives through two laminated spring joints to a four-speed gearbox of special design.

All shafts in gearbox run on roller bearings with ball thrusts where necessary. The striking mechanism is so mounted as to be independent of any possible flexion of the frame, and the movement at the end of the change speed lever has been kept very small. A special patented interlocking device prevents the engagement of more than one gear at a time. The operation of the gear lever at any road or engine speed will be found to be very rapid and easy.



FRONT, 34 FRONT & CHASSIS Views of this car are at end of Catalogue.

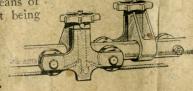
A VERY interesting car has just been completed by Bamford and Martin, Ltd., for a Swiss client who specified that the machine must be of the sports type similar to the Aston-Martins which ran in the Grand Prix race at Strasbourg in 1922.

Accordingly, this latest chassis has the overhead-valve engine with two overhead camshafts and a special system of four wheel brake control, the rest of the design being exactly similar to that of the ordinary touring cars, save that, of course, a straight external exhaust pipe replaces

The arrangement of the brake control is interesting.

All eight shoes are applied by the lever, but the front brakes are also controlled by the pedal, and when the lever is hard on, additional pressure can be imposed on

the front shoes by means of the pedal, the result being



The adjustment for the brake cables and the pulleys over which they run.

An Aston-Martin Sports model with a sixteen which has been delivered to a Swiss enthustast, and details, particularly the straight exhaust processes and specified by the owner.

that all four brakes come into operation with the lever if the lever only is used, and very much greater force can be applied if the lever and pedal are used in conjunction. Further, a system of cable adjustment has been adopted of the type where a hand wheel alters the position of a pulley over which the cable passes, and thereby takes up any slack that may exist in the whole brake systems, the two hand wheels (one for the rear, one

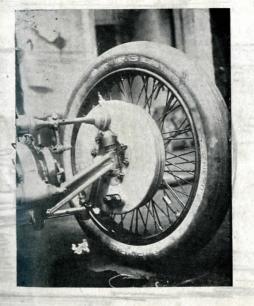
for the front, shoes) projecting through the floor boards so that they can be operated by the mechanic during a race while the car is in motion.

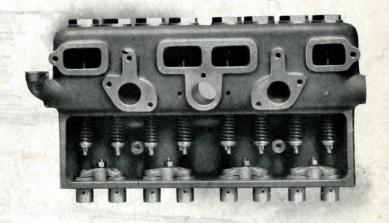
Diagram of the layout of the brake controls.

Compared with the standard tour-



ing Aston-Martin, the radiator is smaller and slimmer, which adds to the delightfully sporting and speedy appearance of the whole car, while the type of two-seater body with a very short tail, similar to that which was used for the Grand Prix, has been adopted.





From the gearbox the drive is taken through a universal joint running in oil and a propeller shaft to a bevel geared back axle with bevel differential. The torque and drive are borne by a torque tube which has a large ball joint mounted on a cross member of the frame which relieves the gearbox of all strains.

The gearbox and back axle are lubricated with thin oil.

Large diameter brakes, made under "Perrot" patents, are fitted to all four wheels. Though extremely powerful, they are very progressive in action.

The drums are of aluminium, ribbed, and lined with cast iron. The shoes are of aluminium faced with "Ferodo."

All brake adjustments may be made without the use of tools and are out of reach of mud and dust.

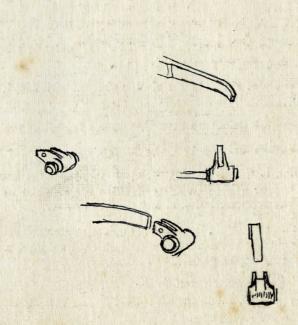
The hand brake and change speed levers are fitted on the right hand, and are adjustable for rake.

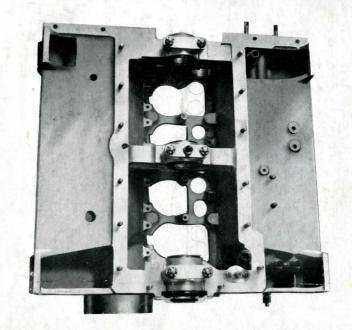
The steering is the Marles patent, operated by a large hand wheel of special design. The rake of the column is adjustable and different lengths are supplied to suit clients' requirements. Full provision is made for the accommodation of any height of driver.

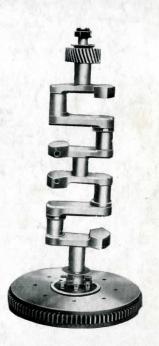
The front axle is of "H" section, giving ample strength and a wide lock. The stub axles are so designed that the car tends to return to the straight after rounding a curve—this tendency being facilitated by the lightness of the steering gear.

Great pains have been taken to make all controls of clutch, accelerator, brakes and gears as easy to operate as possible, and in the case of the pedals, to make them operable when the feet are in a comfortable position.



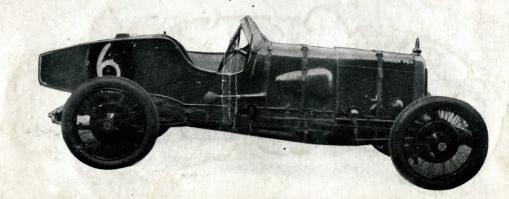


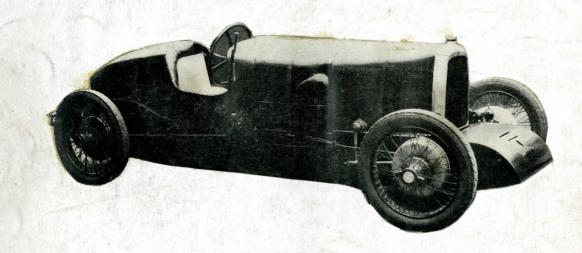




The British Aston- Martin cars ran ex- tremely well and second place was gained by a private owner, R. Morgan.	2. Segrave (14Bot) 3. Morgan (Aston-Martin) 4. Eyston (Aston-Martin) 5. Dely (Bugatti) 6. Marshall (Bugatti) 7. Bucciali (Buc) 1,100 c.c. CARS. 1. Bueno (Salmson) 1. 8 1 2. Carse (Salmson) 1. 9 31 3. Benoist (Salmson) 1 9 35 4. Ringwood (Frazer Nash) 1 10 8 5. F. Nash (Frazer Nash) 1 10 8 6. Cusiman (Frazer Nash) 1 17 7 1. Senechal (Senechal) 2. King (Austin) 3. Cutler (Austin) 1 16 53 2. Cutler (Austin) 1 16 53

1. Divo (Talbot)





Throughout the car oilers and greasers have been eliminated, the "Enots" Grease Gun System being standardised.

The chassis is of very strong section and supported by four semi-elliptic springs of generous proportions, the front being 31½ ins., and the rear 48 ins.—Sports Model, 30 ins. front., 40 ins. rear—mounted below rear axle to allow of a low frame; the axles are off-set on the springs to damp out periodicity. Shock absorbers are fitted to each spring.

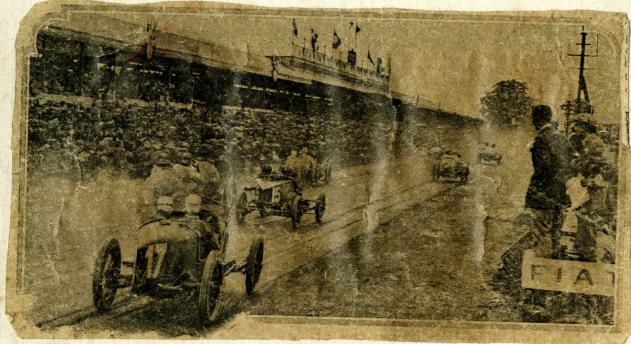
All hubs are mounted on Timken thrust and load roller bearings, and carry detachable wire wheels fitted with 710 by 90 millimetre tyres.

Petrol is fed from a nine-gallon tank mounted at rear of frame by the Autovac System, I gallon being kept in reserve and released by a special device. This, of course, renders the carrying of a spare can unnecessary.

The rear axle shafts take the drive only, all weight being taken by the axle sleeves.

A Sporting Model has been prepared, which has been thoroughly tried out during the past season, scoring second place in the Grand Prix de Boulogne, and sixth in the Two Hundred Miles Race at an average speed of 86.5 m.p.h., making on each occasion a non-stop run.

Though capable of speeds in excess of 90 m.p.h. in racing trim, it is a docile touring car when required, and gained a Gold Medal in the London to Land's End Trial.



Slart of Grand Price 1922 Zhorowaki No 15, Aston,

The price of the chassis has been fixed at £625, and will include spare wheel with tyre, full electrical equipment including five lamps and horn, speedometer, clock, revolution counter and oil pressure gauge, bulb horn and aluminium registration plates, and tools.

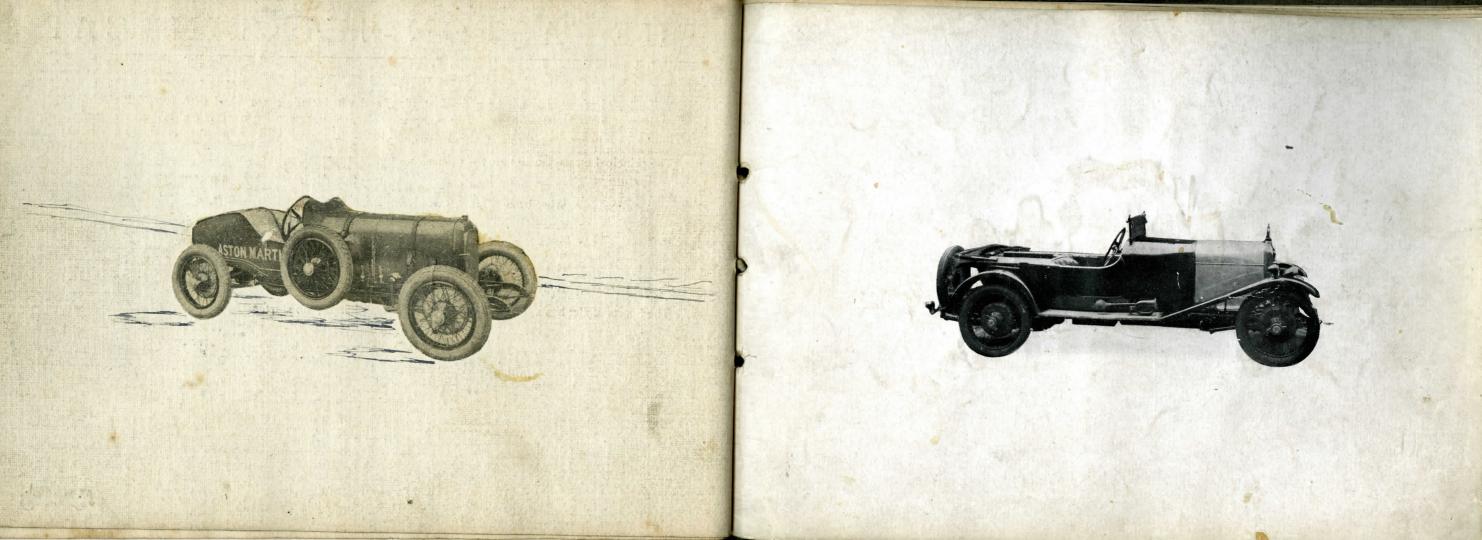
The principal measurements are :-

		Standard.		Sports.	
Wheelbase			8 ft. 9 ins.	8 ft. o ins.	
Track	4507		4 ft. 3 ins.	4 ft. 3 ins.	
Over-all Length			12 ft. o ins.	II ft. I in.	
Road Clearance	1		6 ins.	6 ins.	
Body Space			7 ft. 1 in.	6 ft. o ins.	

The Sports Model has a six-volt lighting set and three lamps; no starter.









As engineers, we sell only chassis, fitted with instruments and electrical equipments as specified, but we are always glad to assist our clients by supplying coachwork to their requirements at the minimum prices set out elsewhere in this booklet.

We require with each order a deposit of £50, the purchase price of chassis to be completed within seven days of the client being advised that his chassis is ready for delivery. In the event of coachwork being ordered through us, we reserve the right to retain the deposit until the order is completed and delivery accepted.

Prices.

The Chassis (Touring)				
	TO STATE OF THE ST			£625
The Chassis (Sports)		 •••	Section in	£625
Two Seater Sports		 	From	£695
Three Seater, Cloverleaf			,,	£695
Four Seater (Two door)			,,	£720
Four Seater (Allweather)				£825

Other Prices and Information gladly on Application.



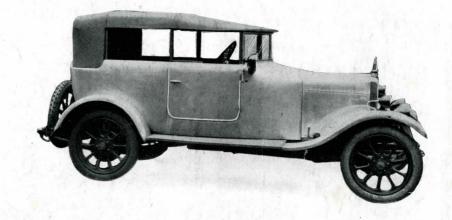
IN deference to several requests from Clients we have decided to standardize a Super-Sports Model identical with the Sporting Model, but fitted with an overhead valve engine of 65 mm. bore and 112 mm. stroke in place of the side valve engine. No electrical equipment is offered with this model, though a lighting dynamo can be fitted to order.

The price of the chassis (which is suitable for 2-seated bodies only) is £725.





entroit Junicator non section of the low aread failt or come



RECORDS HELD, 23rd October, 1923.

TEN WORLD'S RECORDS.

Including :-

15 to 19 hours.

ours. 1,100 miles and 1,200 miles. 1,000 to 2,000 kilometres.

TWENTY-SIX BROOKLANDS RECORDS, 1500 c.c. Class.

Including:

1,000 miles. 2,000 kilometres. 12 to 16 hours inclusive.

Half-mile. Kilometre. Standing start

SUCCESSES, 1923.

Six Firsts ... Brooklands Automobile Racing Club. Three Firsts ... Caerphilly Hill Climb.
Three Firsts ... Skegness Motor Trials.
Two Firsts ... Holme Moss Hill Climb.
Three Firsts ... Blackpool Motor Carnival.
One First ... Boulogne Speed Trials.

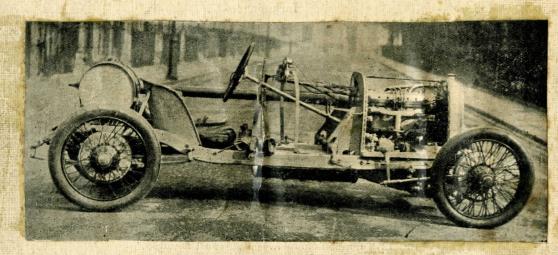
Grand Prix de Boulogne 2nd and 3rd.
Two Hundred Miles Race Only Team to finish.
Gran Premio Penya Rhin ... 2nd.

In all:

35 Firsts. 15 Seconds. 20 Thirds.

5 Gold Medals for Reliability.





From Motor Sport 1925.

Chan Princ Type Chann.

Walve Dry Comp.

THE ASTON-MARTIN CAR

WE DESIRE TO DRAW THE ATTENTION OF PURCHASERS TO THE FOLLOWING CONDITIONS OF SALE, AND ALSO TO THE GUARANTEE ON THE FOLLOWING PAGES-

- "The Company reserve the right to alter their catalogues and lists, and the standard specifications stated therein, without any previous notice.
- "The Company shall not be responsible for delay in delivery due to strikes, lock-outs, fire, accidents, combinations of workmen, delays in obtaining material, or other causes outside the control of the Company, and they may cancel any order which they are unable to execute within two months of the due date owing to causes falling within this clause.
- "The Company shall not by naming or accepting a date or time for delivery be deemed to have undertaken to give delivery on such date or within such time, but only to have undertaken to use their best endeavours to complete the order by such date or within such time. In case delivery shall not be made within six weeks of the due date as aforesaid, the Purchaser may thereupon, if he thinks fit, give the Company 14 days notice to deliver, and failing delivery, may cancel the order for the same, but shall have no claim against the Company for damages or compensation.
- "In no case will the Company be responsible to the Purchaser or anyone else for expenses incurred on repairs and adjustments executed to the Company's productions without express written permission from the Makers,
- "The sale is made at the Company's catalogue or list price current at the time the order is accepted, but the Company reserve the right to alter their catalogue or list prices at any time, and will invoice at the prices current at the date of delivery, but the Purchaser may within 14 days after being notified of an increase in price cancel this order, in which case any deposit paid thereon will be returned.
- "AGENTS. The term 'Agent' applied to a Dealer in the Company's Cars is used in a complimentary sense only, and the relationship of principal and agent does not in fact exist between the Company and the Dealer. No Dealer is authorised to act on behalf of the Company or to give any warranty or make any representation to a Purchaser on the Company's behalf.
- "If the Purchaser fails to carry out his obligations hereunder, the Company may thereupon or at any time thereafter cancel this agreement, and retain any deposit paid thereon."



Guarantee.

THE FOLLOWING GUARANTEE IS GIVEN IN LIEU OF ANY GUARANTEE OR WARRANTY IMPLIED BY STATUTE OR OTHER-WISE, AND NO OTHER GUARANTEE OR WARRANTY WHATSOEVER IS GIVEN OR IS TO BE IMPLIED.

The Company guarantees that all precautions that are reasonable and usual have been taken to secure excellence of material and workmanship. In case any chassis or car, or any part thereof should appear to be defective, the Company does not accept responsibility for consequential damage, but undertakes to repair and make good, free of charge, any chassis or car sold by them or any part thereof which may be found to be defective in material or workmanship, subject to the following conditions:—

This guarantee is limited to defects of which notice in writing is given to the Company within a period of twelve months from the date when the chassis or car was completed and delivered new from the Company's works.

The defective chassis, car or part thereof, is to be returned by the Purchaser, carriage paid, with an advice under separate cover stating the number of the chassis, as shown by the Company's number plate, the date and place of purchase, and the nature of the alleged defect or want of repair. Parts returned to the Works without such advice cannot be identified and lie there entirely at the Purchaser's risk.

The Company must be satisfied that the alleged defect is within the terms of this guarantee and in no case does the Company undertake to make good, free of charge, defects caused by wear and tear, misuse or neglect.

The Company is not responsible for any expense the Purchaser may be put to in removing any part to be sent for inspection or in replacing the same or any new part supplied in lieu thereof.

Where cars are purchased from a dealer, the complaint should be addressed to him, as the Company's Agents are only so called in a complimentary sense, but to save time the Company usually deal with matters arising under their guarantee if sent to them direct, provided the name of the agent or dealer be given in the advice in addition to the other particulars. This guarantee only applies to cars sold through authorised channels.

ACCESSORIES.—The Company do not warrant or guarantee or accept any responsibility for accessories not made by them or for the method of fixing. Many of these accessories are novelties with which the Company's workmen are not familiar, and should be fixed (if at all) by persons who are acquainted with them.

The Chassis supplied by the Company are intended to be fitted with bodies similar in weight and general character to those shown in the Company's Catalogue, and if the Purchaser should fit a body materially differing therefrom, he does so at his own risk.



