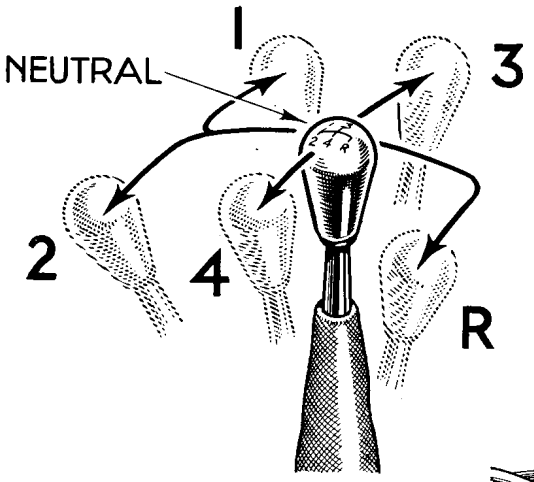
GENERAL INFORMATION
(SERIES "TD")

GEAR POSITIONS

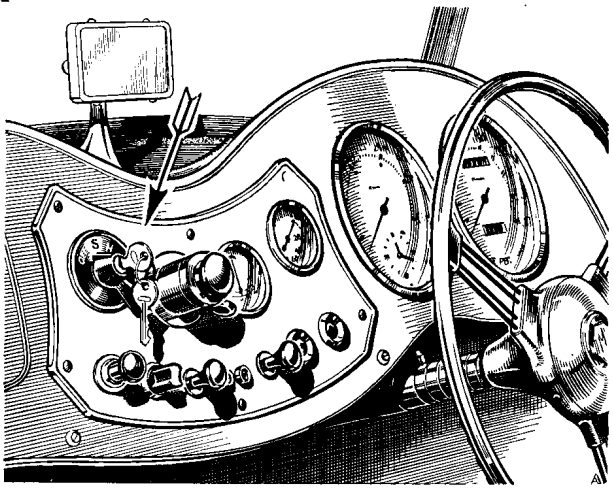
The gearbox has four forward speeds, with synchromesh on second, third and top. The gear lever positions are shown in the illustration below.

To engage reverse gear, move the gear lever to the extreme right of its neutral position; exert sufficient pressure to overcome the resistance of the spring-loaded stop, and move the lever rearwards.



The positions of the gear lever for selecting the various gears are here indicated.

The location of the gears is also indicated diagrammatically on the top of the gear lever knob.



The instrument panel with the ignition switch key indicated by the arrow. The ignition switch is in the centre of the lighting switch and the remainder of the instruments in the top row are the horn push and dipper switch, the ammeter, and the oil gauge, respectively. Later models have a foot-operated dipping switch, a combined water temperature and oil pressure gauge, and modified speedometer with headlamp beam indicator light and revolution indicator dials

THE INSTRUMENT PANEL

All switches and instruments except the speedometer and revolution indicator are carried in the central instrument panel, with the exception of the dipping switch fitted to later models.

At the top left is the lighting switch controlling the lamps, in the centre of which is the key-operated ignition switch. Turning the switch clockwise switches on the ignition and the ignition warning light at the bottom right-hand corner of the panel.

To the immediate right of the lighting switch is the combined horn push and headlamp dimming switch. It is clearly marked "D" for the dip position and "H" for the full beams.

Later models are fitted with a foot-operated headlamp beam dipping switch and this switch lever is omitted on such models.

Next to the dipping switch is the ammeter. This is of the usual central zero type indicating both charge and discharge.

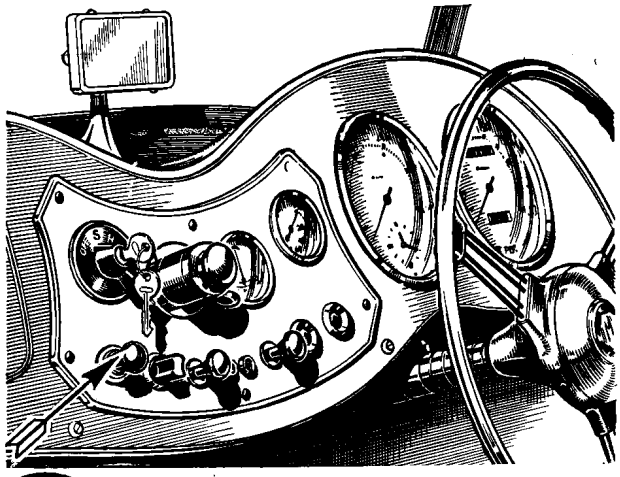
The right-hand instrument is the oil gauge. This should normally indicate a pressure in the region of 40 to 45 lb. per sq. in. (2·8 to 3·2 kg./cm.^{2}) at normal running speeds. It will of course show a higher figure when the engine is cold and a lower figure when the engine is running slowly. On later models this is combined with a water temperature gauge.

So long as it is showing a reasonable pressure it may be taken that the circulating system is working satisfactorily.

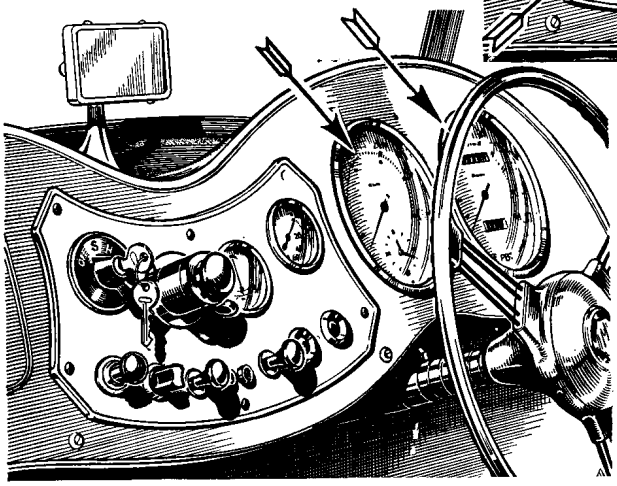
The bottom left-hand switch in the instrument panel is the switch for the panel light. It is of the rotary type.

The next switch, reading from left to right, is the switch operating the fog-lamp. It is of the semi-rotary type. Fog-lamps are not fitted as standard, but the switch is ready-wired so that one may be fitted if desired.

Next is the mixture control knob which pulls out to provide an enriched mixture. It can be locked in several set open positions by turning it anti-clockwise through 90°. It should be returned to the "Off" position as soon as possible once the engine is running. The mixture control is interconnected with the throttle so as to co-ordinate the setting of the two automatically when starting from cold.



The instrument panel with the panel light switch indicated by arrow. The remaining items at the bottom of the panel are the fog-lamp switch, the mixture control, the inspection lamp plugs, the starter switch, the fuel warning light, and the ignition warning light.



On the facia in front of the driver are the large-diameter revolution indicator and the speedometer.

In the centre of the panel are the two plug sockets for feeding an inspection light when required. They are always live and have no separate switch. The rims of the sockets are coloured red and black, indicating positive and negative in the accepted manner.

To the right of the sockets is the starter switch which is of the pull type. It must always be operated smartly and decisively over its full range of movement.

At the bottom right-hand corner of the instrument panel are two warning lights. The one on the extreme right is the ignition warning lamp which glows when the ignition is switched on, until the engine runs at sufficient speed to cause the dynamo to charge the battery.

The left-hand warning light comes into operation when the fuel in the tank falls to approximately $2\frac{1}{2}$ to 3 gallons (11·3 to 13·5 litres), thus giving warning that the fuel supply is getting low and in need of replenishment at the first opportunity.

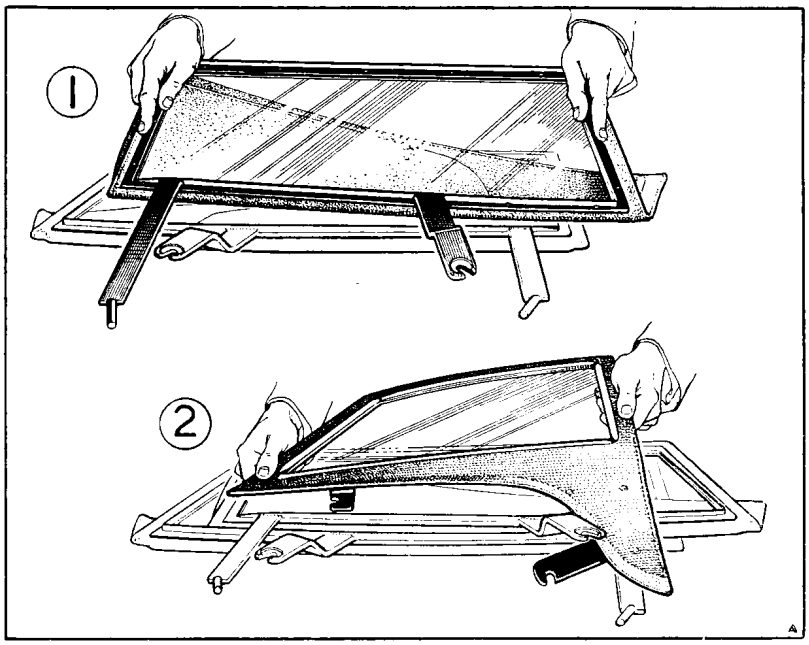
Two large instruments are located right in front of the driver on the facia board. These are the revolution indicator and clock, and the speedometer, respectively.

A knob below the speedometer enables the trip recorder scale to be returned to zero when it is pulled downwards and turned, and on later models a headlamp beam warning light is fitted in the speedometer dial which glows when the headlamp beams are in the raised position to give the driver warning to dip his lamps when approaching other traffic.

The clock in the revolution indicator is set by inserting the hand in the hole in the underpanel to reach the knob on the back-plate of the clock.

SIDESCREEN STOWAGE (FIRST TYPE) (For details of second type see pages 17 and 18)

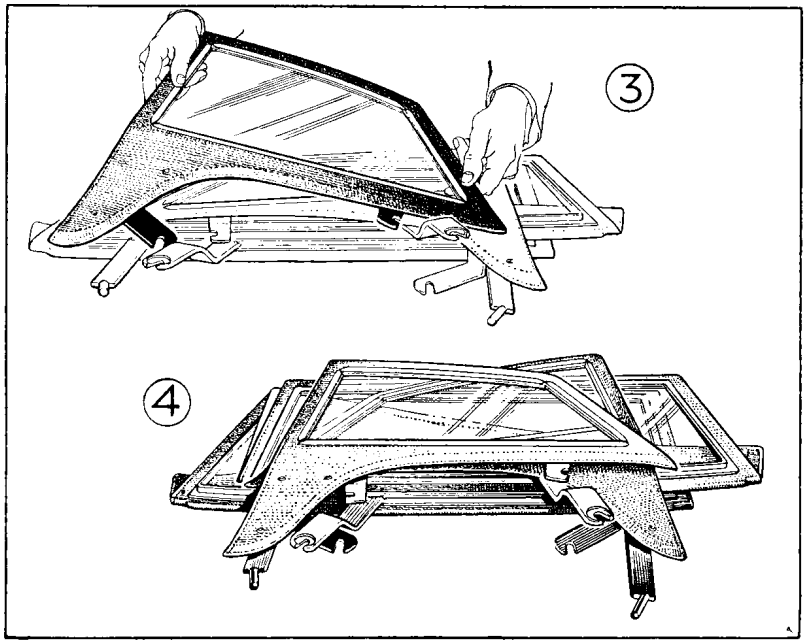
It is of the utmost importance that the sidescreens be packed together exactly as indicated, otherwise it will not be found possible to insert them into the compartment in the boot provided to house them. The necessary sequence is shown below.



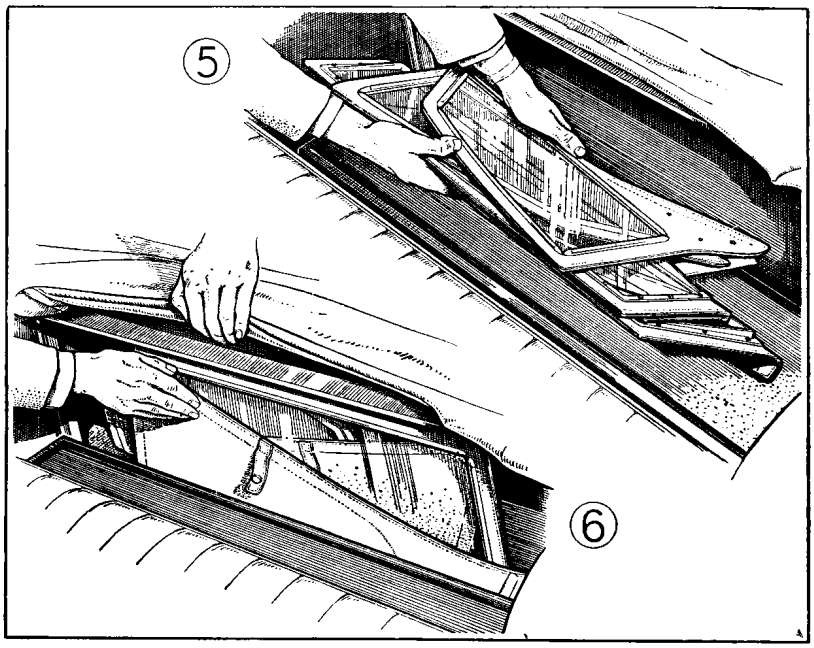
Start with the right-hand front sidescreen and lay it down on something flat as indicated in (1), taking care that the stays are the right way up. Then place the left-hand front sidescreen on top of it as shown, with its flap folded under and the stays at opposite ends as illustrated.

The right-hand rear sidescreen is then placed on top of the other two as shown in (2), tucking its front bracket underneath that of the left-hand front sidescreen, so that it lies flat upon the other, taking up the minimum amount of room.

This is followed by the left-hand rear sidescreen, which is laid upon the others in the opposite direction with its bracket slipped under the cranked stay of the right-hand front sidescreen with which the pack was first started (3). This produces a pack of minimum dimensions, as shown in (4).



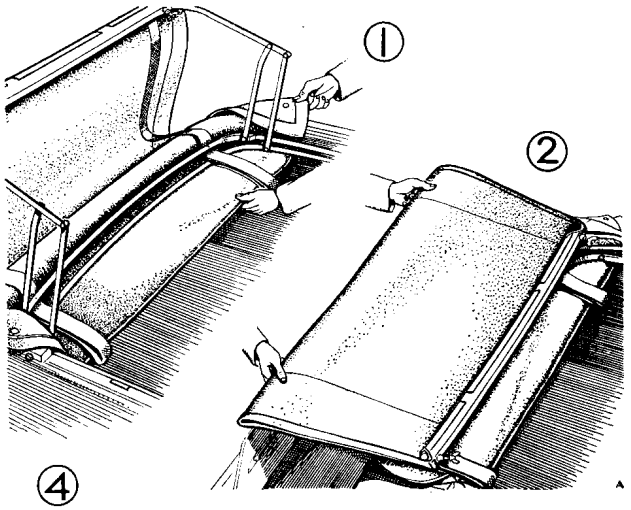
Finally the complete pack of screens (4) is transferred to the space in the body behind the seat provided to house them. They should be inserted into the compartment, brackets first (5), taking care that they are not forced into position or damaged, and holding back the edge of hood to facilitate their insertion as shown at (6).

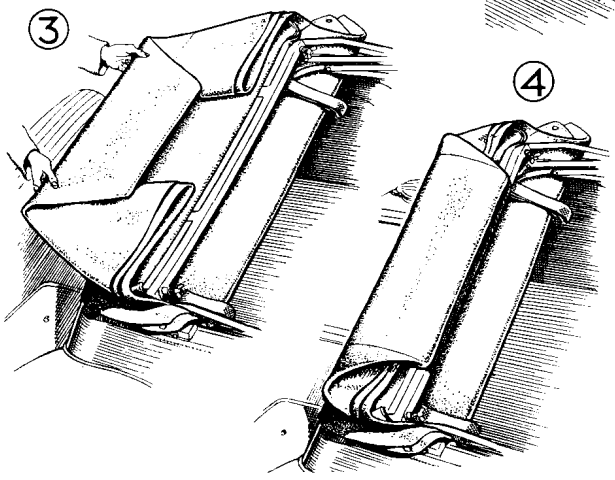


FOLDING THE HOOD

To ensure that the hood does not receive unnecessary damage it is important that it should be folded correctly when stowed. The four steps for correctly folding the hood are here shown. Never fold the hood when it is damp or wet. Always wait till it dries.

Before folding the hood back, release the press buttons at each side. Make sure that no hood material is trapped between the hood-sticks, and that the rear panel of the hood is pulled well forward, as at (1). Then fold the hood-sticks right down and gently pull the hood material out as at (2).





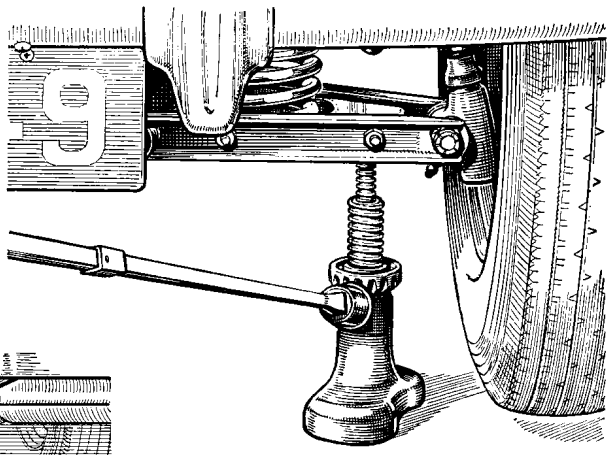
Now fold the two corners in at right angles, and fold the hood as illustrated in (3). The hood material is then folded over again as shown at (4), and it is then ready for the tonneau cover to be fitted over it.

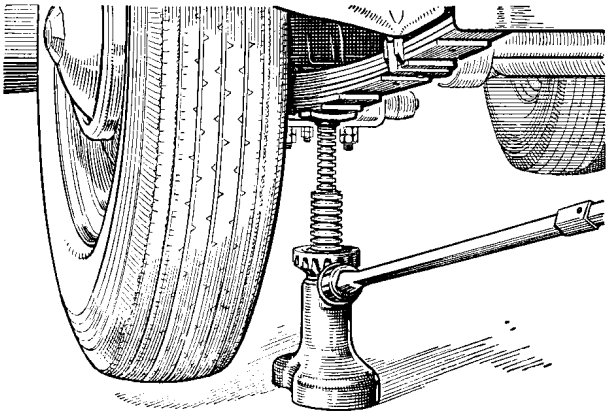
JACKING THE CAR

When jacking the front wheels the jack pad should be located in the hollow on the under side of the outer end of the lower wishbone to avoid the possibility of the jack slipping.

In the case of the rear wheels the most convenient place is under the springs close to the axle as shown in the accompanying illustration.

When jacking the front wheels the jack should be engaged with the hollow of the lower wishbone pan as shown.





When used at the rear the jack is best engaged with the rear spring as close to the axle as possible.

WARMING UP THE ENGINE

As soon as the engine has started, return the mixture control to its half-way position. Do not race the engine while it is cold, but let it run at a fast tick-over—approximately 1,000 r.p.m., corresponding to 15 m.p.h. (24 km.p.h.) in top gear—until it has warmed to allow the oil to circulate properly. Return the mixture control to the completely "Off" position as soon as possible without causing the engine to splutter.

Blanking off the radiator will assist in warming the engine in cold weather, but never run the car with the radiator completely masked.

CHASSIS AND ENGINE NUMBERS

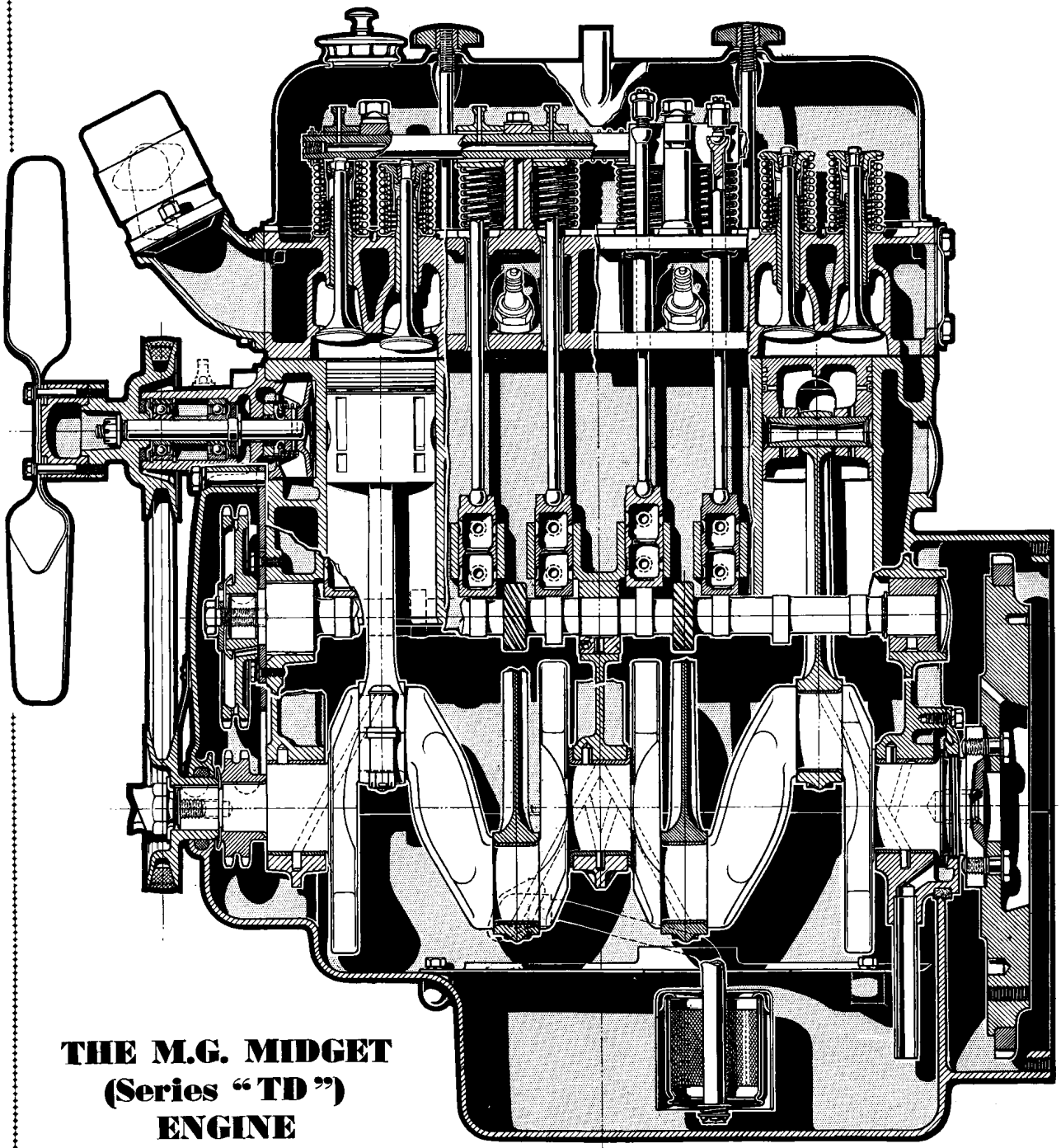
When in communication with the Company or your Dealer, always quote the type of model and the chassis and engine numbers. The registration number is of no assistance and is not required. Write your name and address legibly.

Model. This is stamped on the identification plate which is secured to the left-hand side of the dash panel beneath the bonnet.

Chassis Number. For convenience this is also stamped on the identification plate as well as on the chassis and should be quoted with its prefix.

Engine Number. Every engine carries a number stamped on a disc which is secured to the flywheel housing. This number is also duplicated on the identification plate.

Note.—*On later models the model symbols and chassis number are incorporated in a single panel on the identification plate.*



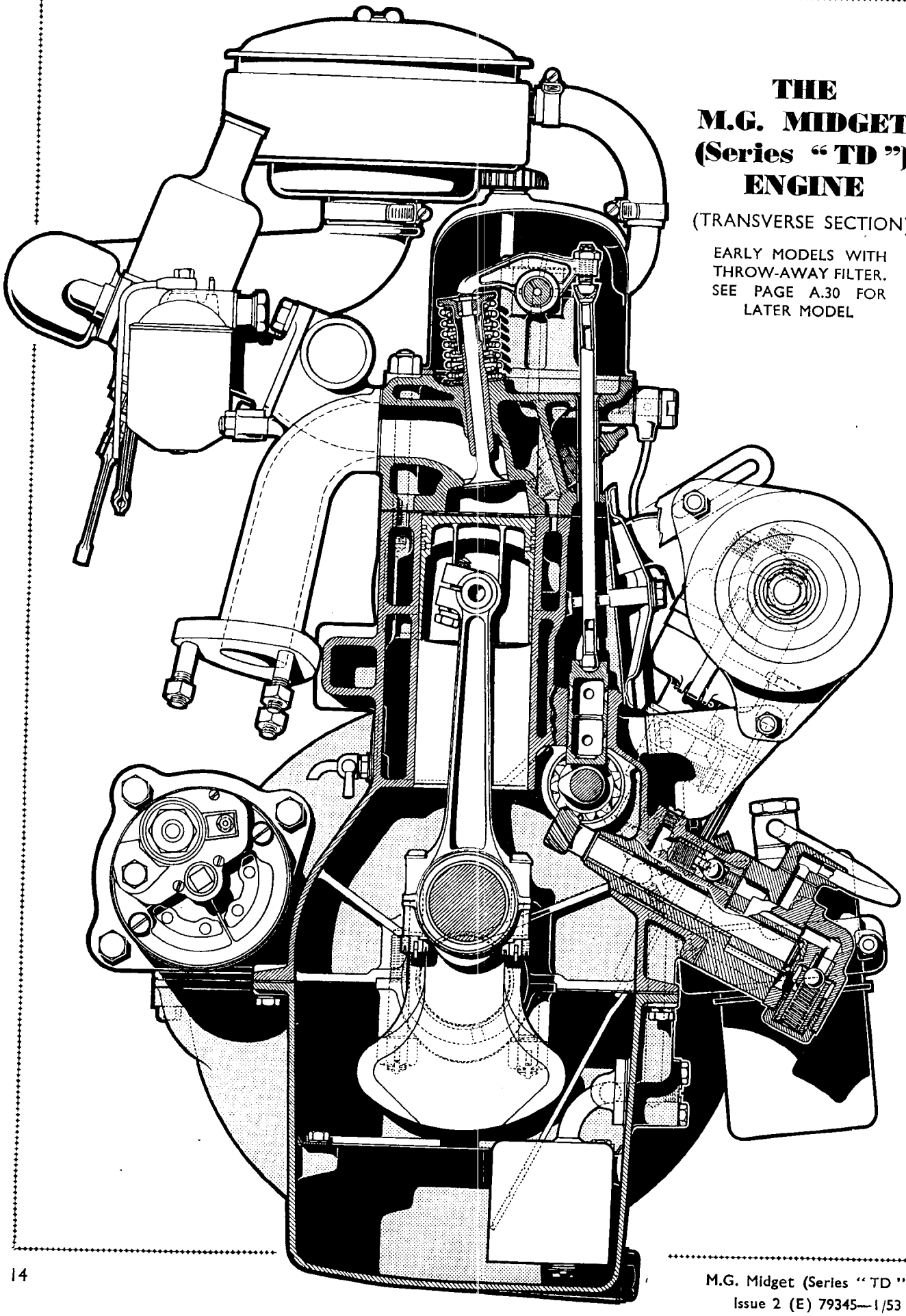
THE M.G. MIDGET (Series "TD") ENGINE

(LONGITUDINAL SECTION)

THE M.G. MIDGET (Series "TD") ENGINE

(TRANSVERSE SECTION)

EARLY MODELS WITH THROW-AWAY FILTER. SEE PAGE A.30 FOR LATER MODEL



MAINTENANCE ATTENTION

FIRST 500 MILES (800 KM.) FREE SERVICE ATTENTION

(*a*) Drain sump, gearbox and back axle, and refill with appropriate lubricant.

(*b*) Oil and grease vehicle throughout with appropriate lubricant.

Note.—New lubricants chargeable to customers.

(*c*) Check and, if necessary, adjust :—

(1) Ignition timing.
(2) Tappet clearances.
(3) Carburetter control gear, mixture setting and slow-running.
(4) Dynamo drive belt.
(5) Correct clearance for clutch pedal.
(6) Alignment of front wheels.
(7) All steering controls.
(8) Tyre pressures.

(*d*) Adjust brakes and check level of Lockheed fluid in supply tank.

(*e*) Look over and tighten all nuts, particularly cylinder head, wheels, spring clips and body bolts.

(*f*) Top up battery and check working of all electrical equipment.

All this first service is free, only material used being charged for.

PERIODICAL

Every 250 miles (400 km.) : Inspect oil level in engine. Replenish if necessary.

Every 500 miles (800 km.) : See that wheel nuts are tight.

Apply grease gun, filled with grease to Ref. D, page P.2, to the following grease nipple fittings, and give pump three or four strokes :—

4 on steering swivel pins. 2 on steering tie-rod arms.

Models with left-hand steering have an extra grease nipple on the clutch and brake pedal shaft.

Apply grease gun filled with grease to Ref. C (page P.2) to grease nipple on water pump spindle and give two or three strokes.

See that radiator is full of water. The water level should never be allowed to sink so low that the opening for the cylinder outlet pipe is not fully covered.

Test tyre pressures. (See Section O.1.)

Every 1,000 miles (1600 km.) : Inspect oil level in gearbox and rear axle. Replenish if necessary to Ref. B, page P.2.

Apply grease gun filled with grease to Ref. D (page P.2) to nipple on propeller shaft sliding joint and give three or four strokes.

Apply grease gun filled with grease to Ref. D (page P.2) to the nipples on the front and rear propeller shaft universal joints.

Examine level in Lockheed brake supply tank and replenish with Lockheed Orange Brake Fluid if necessary (Lockheed No. 5 overseas). The tank should never be allowed to be less than half-full of fluid nor closer than $\frac{1}{2}$ in. (12 mm.) to the bottom of the filler opening.

Top up battery with distilled water.

Add a thin engine oil to carburetter piston dashpots to Ref. F, page P.2.

Use the oilcan, filled with oil to Ref. F, page P.2, sparingly on the door hinges, bonnet locks, carburetter controls, hand brake lever and seat runners.

Every 3,000 miles (5000 km.) : Drain engine and refill with fresh oil to Ref. A, page P.2.

Withdraw rotating arm from distributor and add a few drops of oil to the aperture. Lubricate the automatic advance mechanism with engine oil. Smear contact breaker rocker-arm pivot with grease to Ref. D, page P.2, or trace of engine oil.

Remove dynamo lubricator cap and refill with the recommended grease to Ref. C, page P.2.

Clean and re-oil the air cleaner (overseas).

Check dynamo belt tension and adjust if necessary.

Clean petrol pump points. Check contact breaker gap.

Apply grease gun (hand type), filled with oil to Ref. B, page P.2, to nipple of steering gearbox and give not more than ten strokes.

Examine the gaps of the sparking plug points and make sure that they are not too wide; they should be ·020 in. to ·022 in. (·50 mm. to ·56 mm.).

Every 6,000 miles (10000 km.) : Remove filters from carburetters and petrol pump, clean and replace. (See Section B.)

Grease the revolution indicator drive gearbox by applying the grease gun, filled with grease to Ref. D, page P.2, to nipple provided.

Replace external oil filter on early models with a new one. On later models (from Engine No. 14224) fit new filter element.

Clean and re-oil air cleaner (Home).

Drain gearbox and rear axle. Refill with fresh oil.

Remove front wheel covers and give one stroke of grease gun, filled with grease to Ref. C, page P.2, to hub nipple (early models). Remove grease-retaining cap and replenish with grease to Ref. C (later models).

Check valve tappet clearance.

Tighten door hinge fixing screws and spring seat bolts.

Every 12,000 miles (20000 km.): Remove sump. Clean sump and internal oil filter, replace and refill with fresh oil.

Examine fluid level in front dampers and replenish with Girling or Armstrong piston-type fluid if necessary.

Remove rear dampers, clean and replenish with Girling or Armstrong piston-type fluid.

Replace sparking plugs with new ones.

Adjust clutch pedal clearance. (See Section E.1.)

Check dynamo and starter brushes.

FROST PRECAUTIONS

If the car is not stored in a warmed building, steps must be taken to prevent the cooling water from freezing during frosty weather. Water upon freezing expands, with the result that there is a very considerable risk of bursting either the radiator or the cylinder block by the pressure generated. As a precautionary measure when frost is anticipated, the water should be drawn from the radiator before the car is stored for the night, or, better still, an anti-freezing solution may be used.

We recommend the use of Smiths " Bluecol," Shell " Snowflake " or Filtrate " Nevafreze " non-corrosive anti-freeze in order to protect the cooling system during frosty weather and reduce corrosion to a minimum.

The recommended quantities of anti-freeze for different degrees of frost resistance are :—

	Down to 7° F. (—14° C.)	Down to 0° F. (—18° C.)
Series **"TD"**	Quantity 2½ pints (1·4 litres)	Quantity 3½ pints (2 litres)
Series **"TF"**	Quantity 1½ pints (·85 litre)	Quantity 2 pints (1·14 litres)

Where temperatures below 0° F. or —18° C. are likely to be encountered, a solution of at least 25 per cent. of anti-freeze must be used to ensure immunity from trouble. Consult your local Dealer on this matter.

First decide what degree of frost protection is required before adding anti-freeze to radiator.

Make sure that the cooling system is water-tight and examine all joints, replacing any defective rubber hose with a new one.

Before introducing anti-freeze mixture to the radiator it is advisable to clean out the cooling system thoroughly by draining out the water and swilling out the water passages with a hose inserted in the radiator filler, keeping the drain tap open.

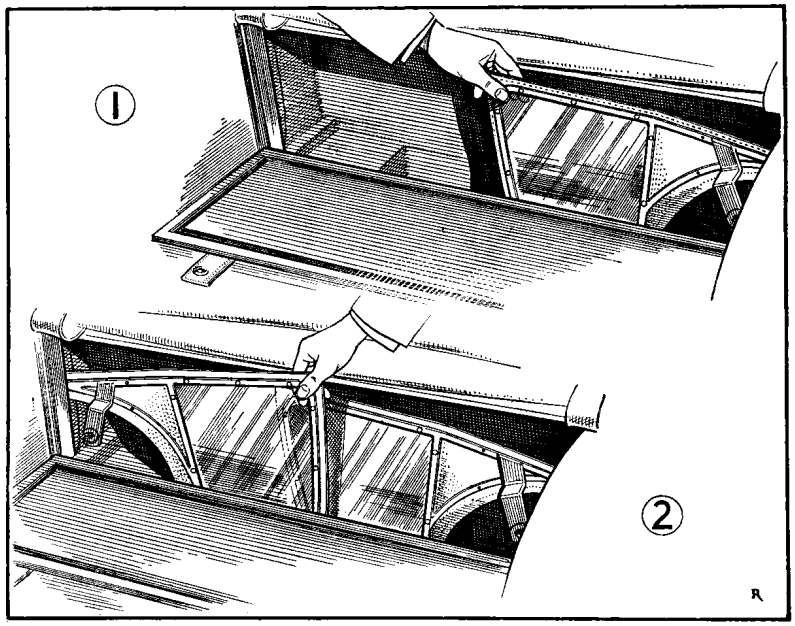
Avoid excessive topping up, otherwise there is a risk of losing valuable anti-freeze due to expansion of the solution. Only top up when cooling system is at its normal running temperature.

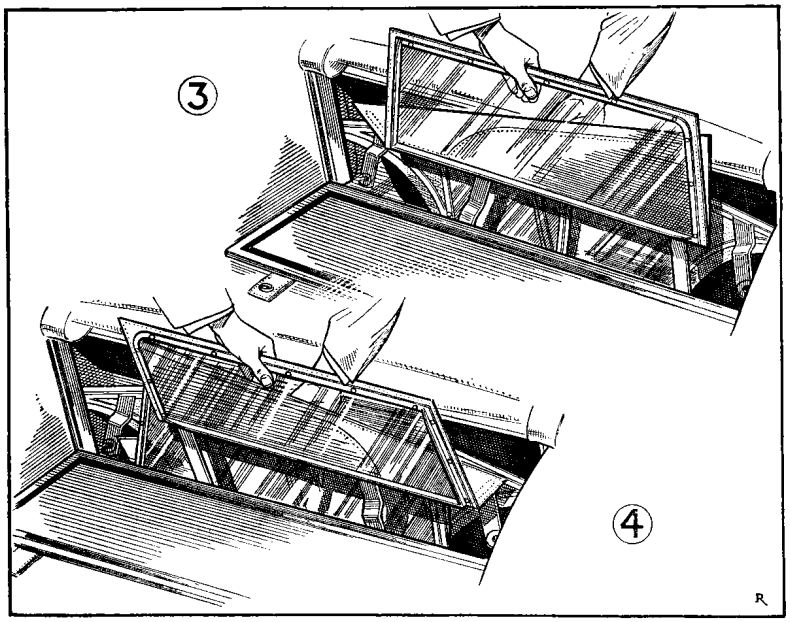
Generally speaking, anti-freeze is not injurious to cellulose paint, provided it is wiped off in reasonable time. It must not, however, be allowed to remain on the paintwork.

SIDESCREEN STOWAGE (SECOND TYPE)

Later models are fitted with a modified hood and deeper sidescreens. The following directions must be followed when carrying out the stowage of the sidescreens on such models, and no attempt must be made to stow them as described on pages 10 and 11.

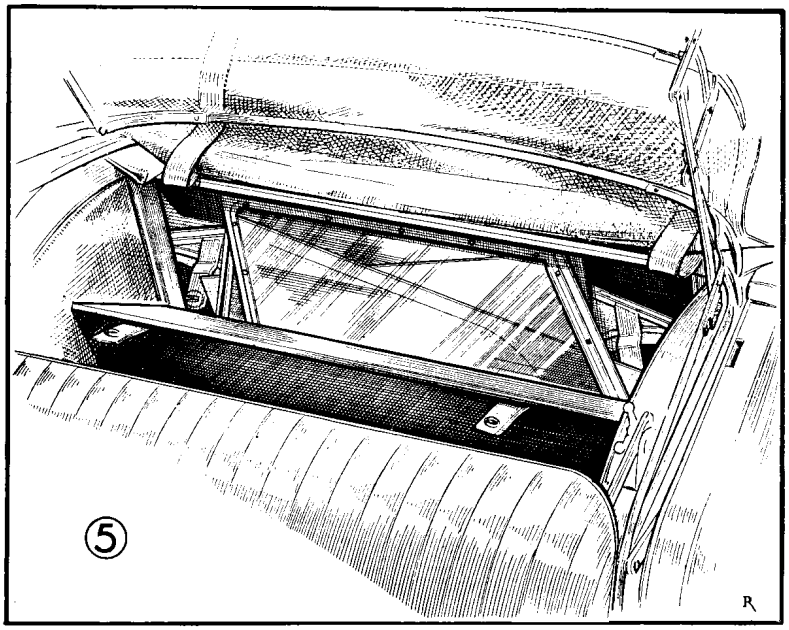
Start with the left-hand rear sidescreen and place it in the space provided for housing the sidescreens, as in Fig. 1, with the attachment lugs facing towards the front of the car and with the canvas part up against the left-hand body panel. The right-hand rear sidescreen should now be placed in front of the first one, again with the attachment lugs facing towards the front of the car, but with the canvas part up against the right-hand panel, as in Fig. 2.





Insert the right-hand front sidescreen as in Fig. 3 with its lugs pointing downwards and its flap folded under towards the rear of the car. Make sure that it is inserted as far downwards as it will go. This is followed by the left-hand front sidescreen, which is also inserted with its attachment lugs to the bottom and its flap folded under to the rear, as in Fig. 4. Be careful not to scratch the transparent material of which the screens are made. If stowage is carried out correctly the use of force is unnecessary.

Finally, ensure that the screens are inserted fully, as in Fig. 5, when the stowage compartment lid may be closed and secured by means of the two press studs.



FOLDING THE HOOD

The hood on later models is fitted with an extra hood stick in the frame at the front end. This, however, does not affect the folding procedure, and the instructions given on page 11 may be followed when performing this operation.