# GENERAL INFORMATION

#### **CONTROLS**

#### Hand brake

The hand brake lever is located alongside the driver's seat and operates the rear wheel brakes only.

To operate, pull up the lever and press the knob in the end with the thumb to lock the lever in position. To release the brakes, pull upwards on the lever to automatically release the lock and then push downwards.

Always apply the hand brake when parking.

#### Brake pedal

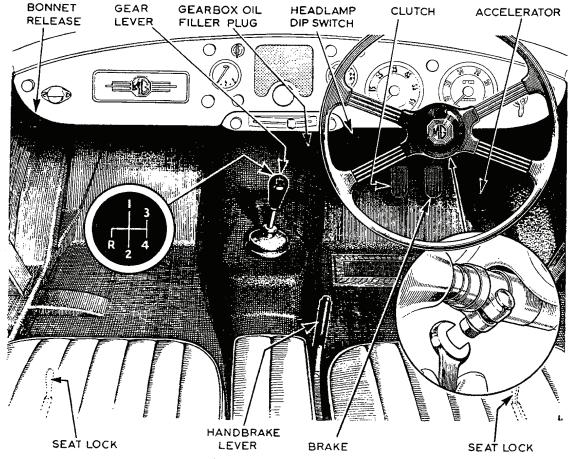
The pedal operates the hydraulic brakes on all four wheels and will also operate the twin stop warning lamps when the ignition is switched on.

#### Gear lever

The four forward gears and the reverse gear are engaged by moving the lever to the positions indicated in the illustration.

To engage the reverse gear move the lever to the left of the neutral position until resistance is felt, apply side pressure to the lever to overcome the resistance and then pull it backwards to engage the gear.

Synchromesh engagement is provided on second, third and fourth gears.



The location of the driving controls

#### Seat adjustment

A lever is provided at the front of each seat and this must be pressed outwards to release the catches and allow the seat to slide.

#### Steering column adjustment

This enables the steering wheel to be placed in the most comfortable driving position after slackening a clamp bolt below the wheel hub.

M.G. 'MGA'. Issue 1. 22142

Headlamp beam dip switch

This is situated on the left of the clutch pedal and is foot operated. The switch will dip the headlamp beams on one depression and raise them on the next.

#### **Bonnet lock release**

The bonnet is hinged at the rear and the lock is released by pulling on the ring below the instrument panel on the extreme left-hand side of the car.

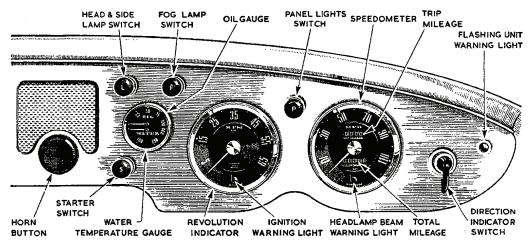
The bonnet is still held by the safety catch, which must be released before the bonnet can be raised.

To re-lock the bonnet in the fully closed position after opening, press downwards on the front of the bonnet until the lock is heard to engage.

#### INSTRUMENT PANEL

#### Speedometer

The speedometer also records the trip and total distances. The trip recorder is reset to zero by pushing upwards the knob below the instrument and turning it anti-clockwise.



The right-hand side of the instrument panel (R.H.D.)

#### Main beam warning light

The warning light at the bottom of the speedometer dial glows red when the headlamp main beams are in use, as a reminder to dip the beams when approaching other traffic.

#### Engine revolution indicator

This dial is calibrated in hundreds of revolutions per minute. Normal use of the engine will not require speeds over 5,000 r.p.m. and great care must be taken if the needle does approach the amber sector of the dial, which commences at 5,500 r.p.m. Under favourable conditions the needle may be allowed to enter the amber sector but under no circumstances must it enter the red sector.

#### Ignition warning light

The warning light at the bottom of the revolution indicator dial glows red when the ignition is switched on and will go out again when the engine is started and its speed is increased sufficiently for the dynamo to charge the battery. Should the light glow at all engine speeds, the dynamo is not charging the battery.

#### Oil pressure gauge

The pressure of the oil should be between 30 lb./sq. in. and 80 lb./sq. in. (2·1 kg./cm.² and 5·6 kg./cm.²) under normal running conditions. Approximately 10 lb./sq. in. (·7 kg./cm.²) should be shown when the engine is idling.

#### Water temperature gauge

The temperature of the cooling water leaving the cylinder head is indicated by this gauge and should be approximately 160° F. when the engine is running normally.

#### Starter switch

Pull out the knob marked 'S' to operate the starter motor. The switch must be pushed in immediately the engine starts.

#### Lamp switch

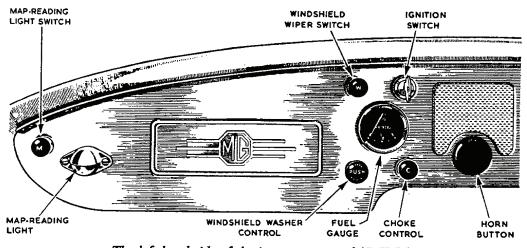
To switch on the sidelamps, tail-lamps, and number-plate illumination lamp pull out the knob marked 'L'. Turn the knob clockwise and pull out again to switch on the headlamps.

See 'Headlamp beam dip switch' and 'Main beam warning light'.

#### Fog lamp switch

A fog lamp is not fitted as standard equipment, but the switch marked 'F' on the instrument panel is connected to the battery and is ready for use when a fog lamp is connected to it.

Pull out the knob to switch on the fog lamp.



The left-hand side of the instrument panel (R.H.D.)

#### Panel lamp switch

To illuminate the instruments turn the control knob 'P' clockwise. The first movement of the knob will switch on the lamps and further turning to the right will dim the lamps.

The panel lamps will only operate when the sidelamps are also switched on.

#### Direction indicator switch

The lever-type switch on the outer edge of the panel controls the flashing indicator unit. The unit will operate only while the ignition is switched on and flashes the sidelamp and tail lamp, on the side of the car to which the switch lever is moved, until it is automatically switched off.

While the flashing unit is switched on, the warning light next to the switch will show green.

#### Fuel gauge

This operates only when the ignition is switched on.

#### Choke or mixture control

To enrich the mixture and assist starting when the engine is cold, pull out the knob marked 'C' and lock it in position by turning it anti-clockwise. Turn the knob clockwise and push it inwards to the normal running position as soon as the engine is warm enough to run without the rich mixture.

Never allow the engine to run for any length of time with the knob pulled out.

#### **Ignition** switch

The fuel pump and gauge are brought into action by this switch, which is also the master switch for the windshield wipers and direction indicators.

#### Windshield wiper switch

The windshield wipers are self-parking and operate only when the ignition is switched on.

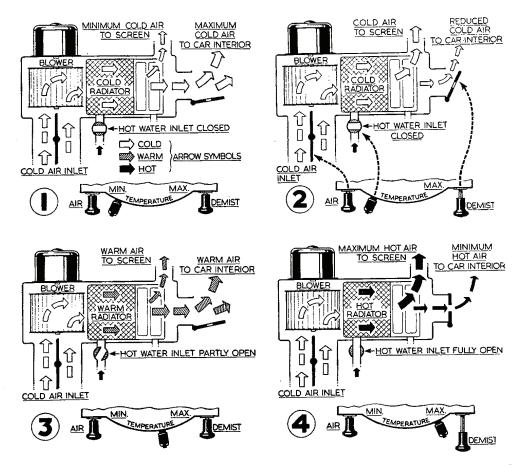
Pull out the control 'W' to set the wiper blades in motion. Push in the knob to switch off the motor and park the blades.

#### Map-reading lamp

The map-reading lamp is controlled by the adjacent knob, which must be pulled out to switch on the light. The lamp will only operate while the sidelamps are switched on.

#### Windshield washer

When windshield-washing equipment is fitted it is operated by the knob marked 'Push' below the fuel gauge.



The circulation of the air through the heater unit with the controls positioned as recommended on page General Information 5

## HEATING AND DEMISTING EQUIPMENT

The 2.75-kw. heating and demisting unit is fitted as an extra to standard equipment (see Section S.9).

Fresh air is ducted from the radiator grille to the heating element and blower motor mounted below the bonnet. Water from the engine cooling system is used to heat the element.

Warmed air issues from the toeboard or the windshield demisting vents according to the position of the controls mounted below the instrument panel

Air

The left-hand knob controls the air supply. When the knob is pushed in the air duct is open and air at atmospheric temperature will enter the car when it is in motion and will issue from the toeboard or demisting vents.

While the control is pushed in it may be turned clockwise to switch on the blower motor, if the ignition is switched on also, and this will increase the flow of air into the car unit and may be used to give a supply of air when the car is stationary.

If the blower motor is switched off by the air control, the knob can be pulled outwards to close the air duct and prevent fresh air entering the car from the toeboard or windshield vents. The blower cannot be switched on while the knob is pulled out.

NOTE.—The heating and demisting equipment control panel fitted to some cars has the blower motor operating switch incorporated in the temperature control lever. These control panels may be identified by the temperature lever knob, which is round and marked 'B'. Pull out the knob to switch on the blower motor.

The left-hand control on these panels will regulate the air supply only.

#### **Demist**

The right-hand knob on the heater unit control panel operates a shutter in the panel above the gearbox cover When the control is pushed into the normal position the shutter is open and most of the air from the unit will enter the car at the toeboard while some will issue from the vents below the windshield. As the knob is pulled out the shutter closes and more air is delivered to the car from the demisting vents, giving the maximum supply of air to the windshield. This is the demist position of the control if the blower is switched on and also the defrost position if the heater is operating.

#### Temperature

The temperature lever operates the water valve on the engine. When the lever is in the left-hand position the hot water supply is cut off and air entering the car through the unit will not be heated. As the lever is moved to the right the water supply is increased and the maximum temperature is obtained.

As a general guide, here are some of the more frequently required positions:

- (1) No additional ventilation or heating. Pull out the air control, push the temperature control to the left.
- (2) Hot weather. Push in the air and demist controls. Move the temperature control to the left. To increase the supply of air switch on the blower motor.
- (3) Warm weather. Set the controls as for hot weather. To increase the supply of air switch on the blower motor. To prevent mist forming on the windshield pull out the demist control partially.
- (4) Cold weather. Place the air control in its normal position. Place the temperature lever according to the degree of heating required. Switch on the blower to increase the air supply. (If demisting is required pull out the demist control).
- (5) Severe cold. Move the temperature control to the right for maximum heating and pull out the demist control

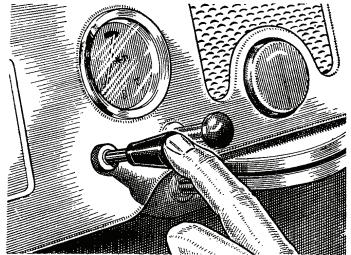
fully to give a maximum supply of hot air to the screen. Switch on the blower motor to increase the air flow.

#### WINDSHIELD WASHER

The washing equipment supplied as an optional fitting is operated by pumping the knob on the instrument panel. As the knob moves towards the panel a jet of cleaning fluid is ejected onto the windshield from nozzles on the scuttle.

Set the windshield wipers in motion before operating the cleaning jets.

Fluid for the windshield is stored in an unbreakable bottle clipped to the engine bulkhead. When refilling with fluid, lift the bottle from its clip and unscrew the cap.



Operating the windshield washer

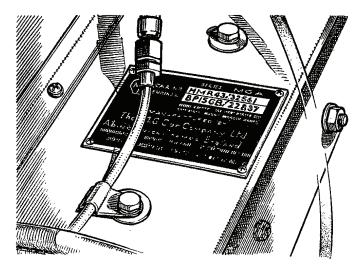
#### FOLDING THE HOOD

Never fold the hood if it is wet or damp; wait until it is dry.

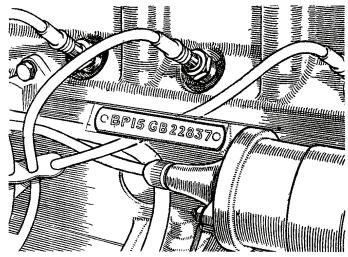
- (1) Release the hood from the pillars at the top of the windshield by unscrewing the wing bolts.
- (2) Release the rear bottom edge of the hood from the three buttons and the turnbuckle at each side. Pull on the centre knob of each button to release them from their attachment pins.
- (3) Raise the front of the hood slightly to release the tension in the canvas and pull to the rear the bottom of the hood where it is attached to the tonneau panel to release it from the two anchor brackets on the panel.
- (4) Tip the seats forward, unfasten the sidescreen container, and turn it over onto the tonneau panel to expose the hood stowage compartment.
- (5) Leave the rear window panel suspended over the tonneau panel and collapse the hood into the stowage compartment, pulling the canvas clear of the hood irons and folding it forward over the front hood rail.
- (6) Fold the rear window forward over the hood, pulling out the spare canvas at each side and folding it neatly over the front of the window.
- (7) Push the hood into the stowage compartment and turn the sidescreen container forward to cover the hood
- (8) Remove the sidescreens and stow them in the container pockets with the cranked bracket of each screen at opposite ends and facing towards the rear.
- (9) Secure the sidescreen container over the folded hood with the six buttons (three on each side).
- (10) Tighten the sidescreen clamping nut on each door to prevent its possible loss.

#### SERIAL NUMBERS

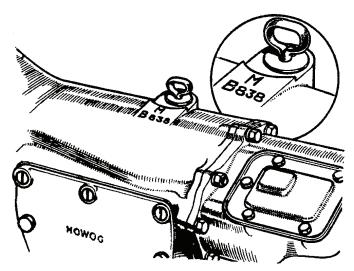
The major components of the vehicle have serial numbers and these will be found in the positions illustrated on pages General Information 6 and 7. When in communication with the Company or your Dealer always quote the engine number and car number complete with prefixes. The registration number is of no assistance and is not required. Write your name and address clearly.



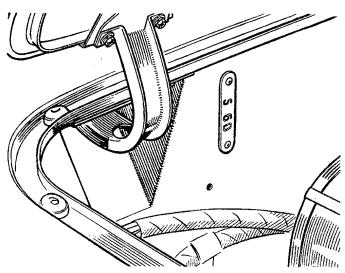
Chassis Number. This is stamped on the identification plate and should be quoted with its prefix. The plate is secured to the top left-hand side of the dash panel



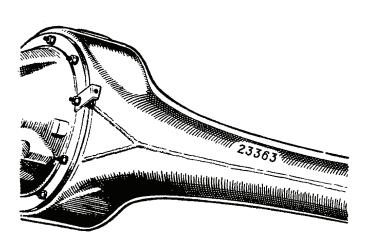
Engine Number (earlier models). This is stamped on the identification plate and also on a plate on the right-hand side of the cylinder block



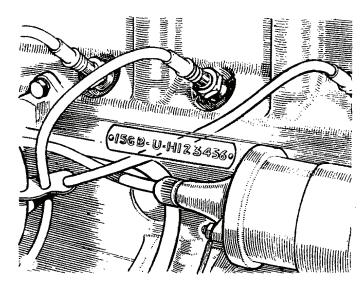
Gearbox Number. Stamped on top of the gearbox casing adjacent to the dipstick



Body Number. Stamped on a plate secured to the right-hand side of the dash panel



Rear Axle Number. Stamped on the front of the lefthand rear axle tube



Engine Number (later models). This is stamped on a plate on the right-hand side of the cylinder block

#### **POWER UNIT SERIAL NUMBER CODING**

The engine number on later engines comprises a series of letters and numbers, presenting in code the capacity, make, and type of unit, gearbox and ancillaries fitted, and the type of compression together with the serial number of the unit.

#### 1st PREFIX GROUP-Cubic capacity, make, and type

1st Prefix number 8-803 c.c.

9-950 c.c.

12-1200 c.c.

15-1500 c.c.

16-1600 c.c.

22-2200 c.c.

25-2500 c.c.

26-2600 c.c.

1st Prefix letter A-Austin

B-B.M.C. Industrials

G-M.G.

H-Miscellaneous special

J-Commercial

M---Morris

R-Riley

W-Wolseley

2nd Prefix letter

A-Z used for the variations of engine type

#### 2nd PREFIX GROUP—Gearbox and ancillaries

A—Automatic gearbox

M—Manumatic clutch

N-Steering-column gear change gearbox

O-Overdrive (Borg-Warner)

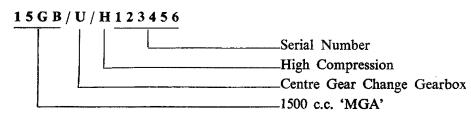
P—Police specification

U—Centre gear change gearbox

### 3rd GROUP-Compression and serial number

H—High compression and serial number of unit L—Low compression

#### **CODE EXAMPLE**



## CAR NUMBER IDENTIFICATION CODE

In order to provide comprehensive information concerning the vehicle the identification plate is stamped with symbols.

The symbols consist of three letters and two figures followed by the usual serial number of the vehicle for cars of one colour, and four letters and two figures followed by the vehicle serial number for vehicles with a duotone finish.

The first letter when related to the code provides indication of the make and model of the vehicle—Morris Minor, M.G. 'MGA', etc.

The second letter provides an indication of the type of vehicle—Saloon, Tourer, Van, etc.

The third letter indicates the colour in which the vehicle is finished or the top colour on duotone vehicles.

The fourth letter indicates the bottom colour in which the duotone vehicle is finished. For duotone vehicles the third and fourth letters are read in the same (colour) column.

The first figure indicates the class to which the vehicle belongs—R.H.D. Home, L.H.D., etc.

The second figure indicates the type of paint used to finish the car-Cellulose, Synthetic, etc.

From this it will be clear that when an owner quotes the code number of his vehicle it is a relatively simple matter to obtain a comprehensive picture of the vehicle concerned by reference to the following tabulated code of symbols.

Model	Code	Туре	Code	Colour	Code	Class	Code	Paint	Code
Wolseley 6/80 Wolseley 4/50 Morris Six Morris Oxford Morris Cowley Morris Minor	A B C D E F	Saloon 4-door Saloon 2-door Tourer 2-Seater Van Truck	A B C D E F	Black Light Grey Dark Red Dark Blue Mid Green Beige	A B C D E F	R.H.D. Home R.H.D. Export L.H.D. North America C.K.D.—R.H.D. C.K.D.—L.H.D.	1 2 3 4 5 6	Synthetic Synobel Cellulose Metallic Primed Cellulosed body and	1 2 3 4 5
Morris 5-cwt. M.G. 'MGA' M.G. 1\{\frac{1}{2}\}-litre M.G. Magnette Riley 1\{\frac{1}{2}\}-litre Riley 2\{\frac{1}{2}\}-litre Wolseley 4/44	G H J K L M	Cab Mail Engineers Chassis Traveller	G H J K L	Brown C.K.D. Finish Dark Grey Light Red Light Blue	G H J K L			synthetic wings	6
Quarter-ton Half-ton Wolseley 6/90 Isis Wolseley 15/50	O P R S T			Ivory White Mid Grey Light Green Dark Green	P R S T U				

As an example:

The symbols HDA 43/10101 when decoded give—M.G. 'MGA', 2-seater, Black, North America, Cellulose, Car No. 10101.

Owing to the fact that the technique required to effect repairs to the different paint finishes varies considerably and that the correct paint must be used for such purpose, it is to be noted that the last number(s) of the symbols is of particular importance as it defines the nature of the paint used in the Factory to finish the car.

#### **IDENTIFICATION OF UNIFIED SCREW THREADS**

The general standardization of Unified screw threads makes it necessary to identify all nuts, bolts, and set screws with these threads in order to ensure their being matched with correspondingly threaded components and the fitting of correct replacements.

Identification has been standardized and is effected in the following manner:

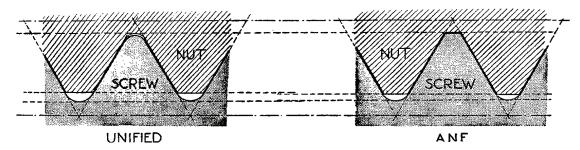
Nuts. By a circular groove turned on the end face of the nut or by connected circles stamped on one flat of the hexagon.

Bolts and set screws. By a circular depression turned on the head or by connected circles stamped on one flat of the hexagon.

Wheel stud nuts. By a notch cut in all the corners of the hexagon.

It is of the utmost importance that any nuts, bolts, or set screws marked with the above identifications are used only in conjunction with associated components having Unified threads and that only replacement parts with Unified threads are used, as these are *not* interchangeable with Whitworth, B.S.F., or Metric threads.

The Unified thread is, however, interchangeable with the American National Fine (A.N.F.) thread for all practical purposes.



This illustration of the Unified thread and the A.N.F. thread to the same scale indicates their close relationship

Spanners. It is to be noted that all A.N.F.- and Unified-threaded nuts and hexagon-headed bolts are made to the standard American hexagon sizes and that spanners of the appropriate size must be used when tightening or loosening them.

KE	Y TO SF	PANNER	SIZES	(Nomina	ıl widths	between <sub>.</sub>	jaws)			
Diameter of screw thread (inches)	10	5 "	3"	7 7	1/2"	9 "	<u>5</u> "	3"	7."	1"
For B.S.F. screws and nuts	·448	·529	·604	-705	·825	·925	1.016	1.207	1.309	1.489
For A.N.F. screws and nuts	-440	·504	·566	-629	-755	-880	·944	1.132	1.320	1-508
For Unified screws	•440	·504	·566	·630	-755	·817	·943	1.132	1.321	1.509
For Unified nuts (normal)	·440	·504	·566	·692	·755	·880	·943	1.132	1.321	1.509
For Unified nuts (heavy)		•	_				1.069	1.258	1.446	

NOTE.—In the case of some Unified-threaded components the size of the hexagon for the nut is different from that of the bolt. Where this occurs the spanner size is shown in heavy type in the above table

#### PART NAME ALTERNATIVES

M.G. part name

Alternatives

**ENGINE** 

Gudgeon pin

Piston pin. Small-end pin. Wrist pin.

Scraper ring

Oil control ring.

Core plug

Expansion plug. Welch plug. Sealing disc.

Oil sump

Oil pan. Oil reservoir.

CONTROLS

Mixture control

Choke. Strangler.

GEARBOX

Gear lever

Shift lever.

Change speed fork

Shift fork, Selector fork.

First motion shaft

Clutch shaft. First reduction pinion. Main drive pinion. Drive gear.

Layshaft

Countershaft.

**AXLE** 

Crown wheel

Ring gear. Spiral drive gear.

Bevel pinion

Small pinion. Spiral drive pinion.

'U' bolts

Spring clips.

Axle shaft

Half-shaft. Hub driving shaft. Jack driving shaft.

Differential gear Differential pinion Sun wheel. Planet wheel.

STEERING

Swivel pin

Pivot pin. Steering pin. King pin.

Stub axle Track-rod Swivel axle. Cross-tube.

Draglink

Side-tube. Steering connecting rod.

ELECTRICAL Dynamo

Generator.

Control box

Voltage regulator. Cut-out. Voltage control.

**EXHAUST** 

Silencer

Muffler.

BODY

**Bonnet** 

Hood.

Wing

Mudguard. Fender.

#### CLAIMS UNDER WARRANTY

Claims for the replacement of material or parts under Warranty must always be submitted to the supplying Distributor or Dealer, or, when this is not possible, to the nearest Distributor or Dealer, informing them of the Vendor's name and address.

#### 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. As a precautionary measure when frost is anticipated an anti-freezing solution must be used in the cooling system. The heater unit fitted to the M.G. (Series MGA) cannot be drained completely by the cooling system drain taps and the use of anti-freeze is essential on this model in freezing weather.

The cooling system is of the sealed type and relatively high temperatures are developed in the radiator upper tank. For this reason anti-freeze solutions having an alcohol base are unsuitable owing to their high evaporation rate producing a rapid loss of coolant and consequent interruption of circulation.

Only anti-freeze of the ethylene glycol type incorporating the correct type of corrosion inhibitor is suitable and owners are recommended to use Bluecol, Shell, Esso Anti-freeze, or any other anti-freeze conforming to Specification B.S.3151 or B.S.3152.

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

15° frost (17° F. or −8° C.)		 	 	 1 pint (.57 litre, 1.2 U.S. pints)
25° frost (7° F. or -14° C.)		 	 	 $1\frac{1}{2}$ pints (.85 litre, 1.8 U.S. pints)
35° frost $(-3^{\circ} \text{ F. or } -19^{\circ} \text{ C.})$		 	 	 $2\frac{1}{2}$ pints (1.42 litres, 3 U.S. pints)

Where temperatures below  $0^{\circ}$  F. or  $-18^{\circ}$  C. are likely to be encountered a solution of at least 25 per cent. of antifreeze 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 the radiator.

Make sure that the cooling system is watertight 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 taps 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 the 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.

Radiator anti-freeze should not be used in windshield-washing equipment.

#### **RUNNING-IN SPEEDS**

The treatment given to a new car will have an important bearing on its subsequent life, and engine speeds during this early period must be limited. The following instructions should be strictly adhered to.

#### During the first 500 miles (800 km.)

DO NOT exceed 45 m.p.h. (72 km.p.h.).

DO NOT operate at full throttle in any gear.

DO NOT allow the engine to labour in any gear.

#### FILLING UP WITH FUEL

Considerable loss of fuel can occur as a result of filling the fuel tank until the fuel is visible in the filler tube. If this is done and the vehicle is left in the sun, expansion due to heat will cause leakage, with consequent loss of and danger from exposed fuel.

- (1) Avoid overfilling the tank until the fuel is visible in the filler tube.
- (2) If the tank is inadvertently overfilled, take care to park the vehicle in the shade with the filler as high as possible.

### CAR NUMBER IDENTIFICATION CODE (MGA 1600 MODELS)

The car number symbol consists of three letters and one figure followed by a fifth prefix letter (L) if the vehicle is left-hand drive, and then by the serial number of the vehicle.

The first letter when related to the code provides an indication of the make of the vehicle—M.G., etc.

The second letter provides an indication of the model's cubic capacity.

The third letter indicates the type of body—2-seat Tourer, etc.

The first figure indicates the series of model—1, 2, etc.

1st Prefix Letter	r—Name	2nd Prefix Letter—Model (cubic capacity)					
AAustin	M-Morris	A800-999 c.c.	G-1000-1399 c.c.				
C—Austin Cooper	R—Riley	В—2000–2999 с.с.	H-1400-1999 c.c.				
G-M.G.	V-Vanden Plas	D-3000 c.c. upwards	L—Up to 799 c.c.				
H—Healey	W-Wolseley						
K-Morris Cooper							

#### 3rd Prefix Letter-Body type

A—Ambulance	H—Hearse	P—Hard Top	T-4-seat Tourer
B—Buckboard	J—Convertible	O—Chassis and Cab	U—Pick-up
C—Chassis	K-Truck	R—Chassis and Scuttle	V—Van
D—Coupé	L—Hire-car	S-4-door Saloon	W—Dual-purpose
E-G.P.O. Engineers	M—Limousine	2S—2-door Saloon	X—Taxi
G-G.P.O. Mail	N—2-seat Tourer	23 2 4001 Baloon	A—Taxi

4th Prefix—Series of model (2, 3, etc., used to record a major change).

5th Prefix (used when vehicles differ from standard R.H.D.) D—De-luxe.

L—Left-hand drive.

S—Super De-luxe.

Code Example GHN 68851

#### B.M.C. SEAT BELTS

The body of the car incorporates anchorage points to facilitate the fitting of B.M.C. seat belts.

To use the seat belt, position the buckle tongue on the long belt approximately in the centre of the belt and ensure that the upper part of the belt passes over the shoulder; pass the tongue across the body. Adjust the short belt until the buckle is located just in front of the hip and push the tongue into the buckle until it clicks in the locked position. Finally, adjust the long belt until the user is held firmly but comfortably in the seat.

To release the seat belt lift up the buckle lever. After releasing the seat belt the long belt must be stowed in such a way as to give clear access to the doors.