CONTROLS

Gear lever

The gear change lever positions are clearly shown in the diagram.

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

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

Pedals

The left-hand pedal operates the clutch, the centre pedal the brakes, and the right-hand pedal the accelerator.

Do not allow the foot to rest on the clutch pedal while driving or excessive wear of the operating mechanism will result.

Hand brake

The hand brake is applied by pulling upwards on the lever situated between the driver's and passenger's seats. The ratchet mechanism will hold the brake in the 'on' position and will be heard engaging as the lever is pulled. To release the hand brake pull upwards on the lever, depress the button on the end, and push the lever downwards to the 'off' position.

Headlamp dip switch

The foot operated dip switch is mounted on the floor to the left of the clutch pedal. It is of the repeating type, lowering the beams on one application and raising them on the next. The headlamp beam warning light glows when the beams are in the raised position.

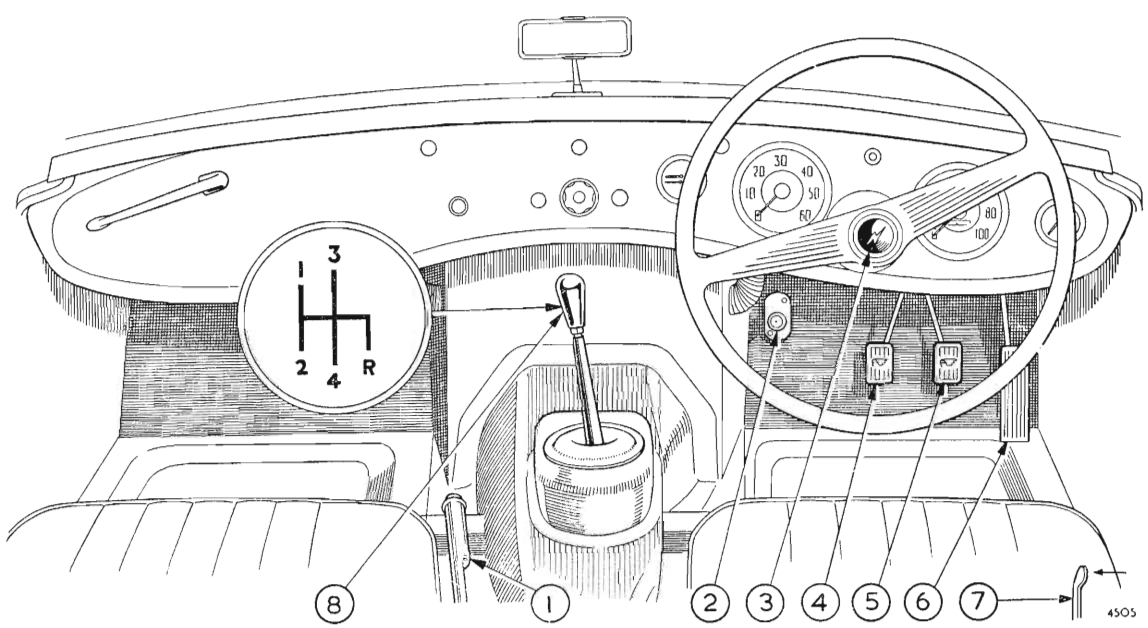
Direction indicators and horn

The direction indicator switch is mounted on the fascia above the ignition switch. To operate, move the switch to the left or right according to whichever indicator is required; a warning light flashes green when the indicators are in use.

The horn is operated by pressing the button in the centre of the steering wheel.

Windtone horns (optional extra)

These horns give a soft and loud note.



The location of the driving controls.

1. *Handbrake.*
2. *Headlamp dip switch.*
3. *Horn.*
4. *Clutch pedal.*
5. *Brake pedal.*
6. *Accelerator pedal.*
7. *Seat adjuster.*
8. *Gear change lever.*

Ignition switch

The switch is situated in the centre of the fascia and is operated by a removable key, which is turned clockwise to switch on the ignition.

Starter switch (marked 'S')

Pull the knob smartly and firmly to operate the starter motor. Release it immediately the engine starts. If the engine fails to start first time wait until the starter motor has come to rest before operating the control again.

Choke or mixture control (marked 'C')

Pull out the control to its limit when starting the engine from cold. Return the control to its normal running position (pushed right in) as soon as possible after starting the engine.

Do not use the control when the engine is warm.

Windshield wiper switch (marked 'W')

Pull the control outwards to set the wipers in motion. The blades are automatically parked when the control is pushed in to the 'off' position.

The windshield wipers will operate only if the ignition is on.

Lamps switch

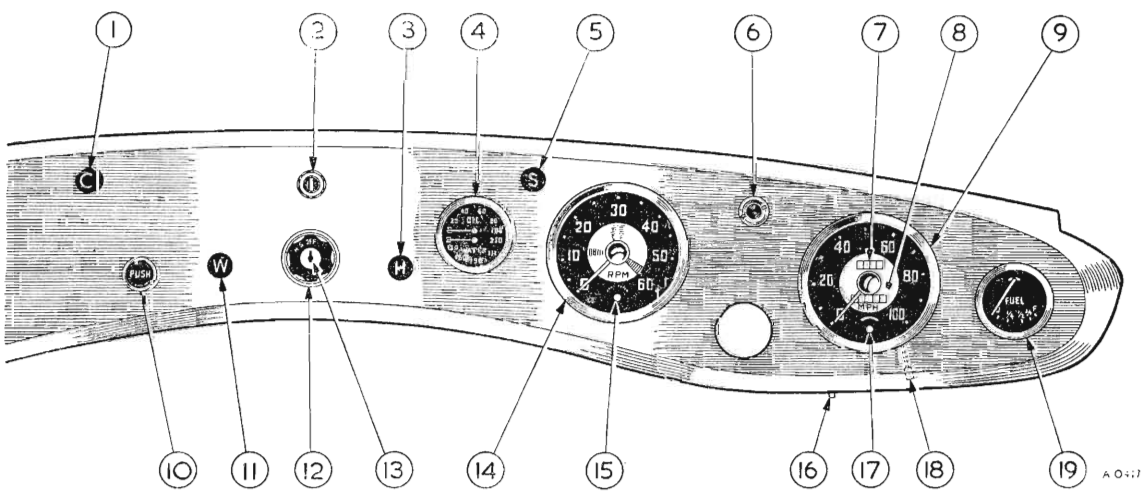
Turn the central moulding which surrounds the ignition switch clockwise to the first notch for the side and tail lamps, and to the second notch for the head, side and tail lamps.

Panel lamp switch

This is situated on the lower edge of the fascia below the speedometer. No light will be obtained unless the side lamps are in operation.

Windshield washer (optional extra)

To operate the washer press the control knob at the far left-hand side of the fascia. In cold weather it is important to fill the reservoir with a mixture of water and Trico to prevent freezing of the water in the container and on the windshield.



The instruments and switches.

1. *Mixture control.*
2. *Direction indicator switch.*
3. *Heater switch.*
4. *Oil pressure and water temperature gauge.*
5. *Starter.*
6. *Direction indicator warning lamp.*
7. *Trip mileage indicator.*
8. *Total mileage indicator.*
9. *Speedometer.*
10. *Windscreen washer knob.*
11. *Windscreen wiper switch.*
12. *Lamp switch.*
13. *Ignition switch.*
14. *Engine revolution indicator.*
15. *Main beam warning lamp.*
16. *Panel lamp switch.*
17. *Ignition warning lamp.*
18. *Trip mileage resetting knob.*
19. *Fuel gauge.*

Do not use radiator anti-freeze solution in the windshield washing equipment.

Heating and demisting system (optional extra)

The heating and demisting system is provided for two purposes: (a) heating the interior of the car (b) demisting and defrosting the windshield.

Air for the heater is drawn from a forward-facing intake via an auxiliary blower which should only be needed at speeds below 25 m.p.h. (40 km.p.h.). A shut-off valve is incorporated in the heater intake to prevent fumes from entering the car in traffic. The valve must always be open when heating is required. A water tap is fitted at the rear of the engine. In the summer conditions, this tap may be shut off and the heating system may then be used for cool air ventilation.

The heating and ventilating system is operated by a single control located on the fascia and marked 'H'. For heating and demisting, pull out the knob, and to bring the blower into operation push in the knob and turn in a clockwise direction. Two doors located forward at either side of the gearbox tunnel control distribution of air between screen and car interior. For heating, open the doors; for defrosting and demisting close the doors.

INSTRUMENTS

Speedometer

In addition to showing the car speed this has total distance and trip recorders. The trip recorder can be set to zero by pushing the resetting knob upwards and turning it anti-clockwise.

Engine revolution indicator (optional extra)

The speed of the engine is indicated by this dial which is calibrated in hundreds of revolutions per minute. Normal use of the engine will not require speeds over 5,000 r.p.m.: with care and under favourable conditions between 5,500 and 6,000 r.p.m. may be attained, but this speed must not be exceeded.

Water temperature gauge

The needle registers the coolant temperature only when the ignition is switched on. The normal running temperature is 164°F (73°C). Should there be a sudden change from the usual running temperature, immediate attention should be given to the cooling system and the cause of the trouble rectified.

Oil pressure gauge

The normal working pressure when the engine is warm is 60 lb./sq. in. (4.2 kg./cm^2) with a proportionately lower idling pressure. Should the gauge fail to register, stop the engine immediately, investigate and rectify the trouble before starting the engine again.

Fuel gauge

This shows the amount of fuel in the tank and operates only when the ignition is switched on.

Warning lamps

The ignition warning lamp is in the lower half of the speedometer indicator dial. The bright red light will go out as the engine speed is increased; should it glow at all engine speeds the dynamo is not charging the battery, and after ascertaining that the dynamo belt is not broken the circuit should be examined.

In the lower half of the engine revolution indicator is the headlamp main beam warning light. Coloured dark red to avoid dazzle, the warning lamp glows when the headlamps are in the raised position and is extinguished when the beams are dipped for approaching traffic.

The warning lamp immediately above the steering wheel flashes green when the direction indicators are operated.

BODY AND EQUIPMENT

Bonnet

The bonnet lock is situated behind the front number plate. Turn the handle in a clockwise direction to release the bonnet, after which the bonnet will rise about two inches until held by a spring loaded safety catch. Insert the

fingers and lift the catch, and then the bonnet may be lifted right up; it is held open by two telescopic prop rods which automatically lock in the fully extended position.

As a safety measure an extra prop is provided and should always be used to prevent any possibility of an accident. Release the prop from the clip at the side of the radiator and insert the end into the hole provided in the bracket below the heater intake on the underside of the bonnet.

To close the bonnet, release the prop and return it to the securing clip. Raise the bonnet to release the telescopic prop rod locking devices and lower gently. Push downwards on the radiator grille to engage the safety catch and turn the locking handle in an anti-clockwise direction to secure.

Spare wheel and jack

The spare wheel is retained in position horizontally on the floor of the luggage compartment by webbing straps. Access to the spare wheel is gained by tilting forward the seat squabs.

The spare wheel should always be maintained in good repair and inflated to the correct pressure, otherwise its value in an emergency is reduced and tiresome roadside pumping may be involved. It should also be exchanged with the road wheels periodically to ensure even wear on all tyres—every 3,000 miles (4800 km.) is recommended.

The jack is also housed in the luggage compartment. When using the jack, always ensure that the jack lug is properly engaged in the socket below the front doors (normally closed by a rubber plug). Turning the ratchet handle clockwise will raise the car and turning anti-clockwise will lower the car (**see Section N.6**).

Fuel filler

The fuel filler is located towards the rear on the right-hand side of the body. The tank is sealed by a locking cap which, after unlocking with the key provided, can be turned anti-clockwise for removal.

Hood (first type)

To erect the hood place the hood frame in the body sockets with the hinged rail facing forwards.

Lay the hood over the hood frame and secure the press studs on the two flaps which will hold the hood to the hood frame. Attach the rear hood rail to the two slotted fasteners on the tonneau panel and the hood sides to the body with the turn button and fasteners.

Secure the hood to the windscreen frame with the press stud fasteners.

Removing the hood is a reversal of the above order.

To stow the hood lay it on a flat surface with the lining upwards and roll up from the rear edge carefully avoiding kinking. Withdraw the hood frame and turn it through 180° so that the hinged rail faces rearwards and stow in the sockets provided. Secure the frame in the centre with the strap attached to the underside of the boot. If correctly positioned the frame will follow the contour of the rear edge of the cockpit. Strap the rolled hood to the top of the hood frame with the extreme ends bent round at the seams into the boot. The straps for this purpose will be found in the tool kit.

Hood (second type)—fitted to Car Nos. AN5 5137, 5287, 5288 and 5477 onwards.

To erect the hood place the hood frame in the body sockets with the hinged rail facing forwards, press the main hood frame downwards and rotate the lugs to lock the telescopic ends in the compressed position.

Lay the hood over the hood frame and fit the front rail firmly into the lip of the windshield frame; secure with the two fasteners one at each top corner of the windshield.

Attach the rear hood rail to the two slotted fasteners on the tonneau panel and the hood sides to the body with the turn buttons and fasteners.

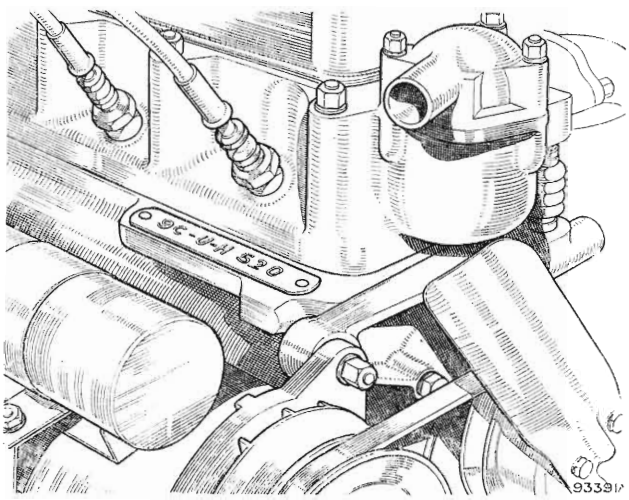
Before releasing the two tension springs on the main hood frame make certain that the front hood rail is still firmly secured in the lip of the windshield.

Removing the hood must be a reversal of the above order. Never commence hood removal from the windshield.

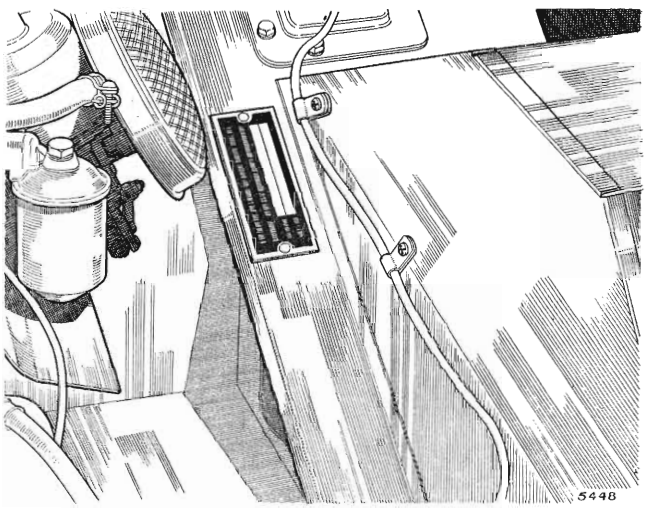
To stow the hood proceed as with the first type.

LOCATION OF MAJOR COMPONENT SERIAL NUMBERS

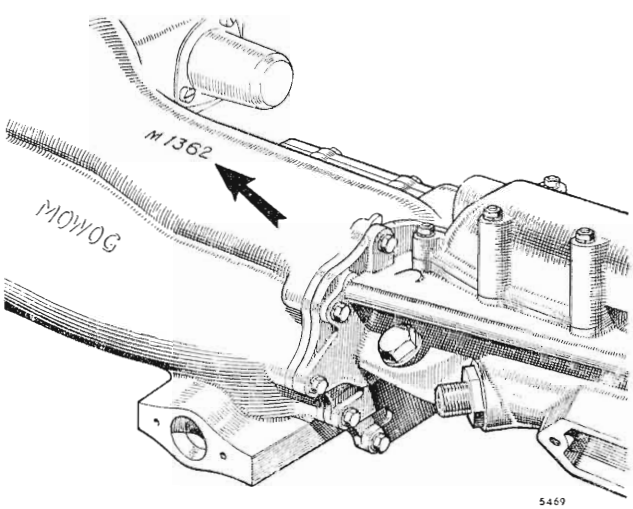
The major components of the vehicle have serial numbers. When in communication with the Company or your Dealer, always quote the car and engine numbers. The registration number is of no assistance and is not required. The car number will be found stamped on the identification plate located on the left-hand inner wheel arch valance under the bonnet. The engine number is stamped on a plate fixed to the right-hand side of the cylinder block. Other major components have their serial numbers stamped upon them and their locations are illustrated below.



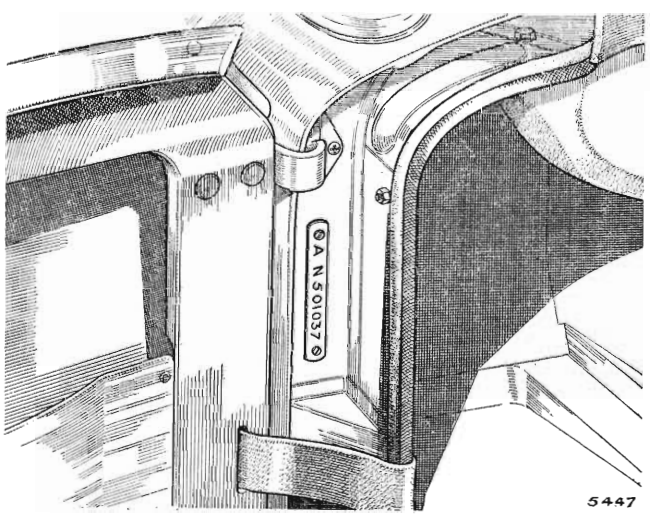
Engine Number. This is stamped on a plate secured to the right-hand side of the cylinder block above the dynamo.



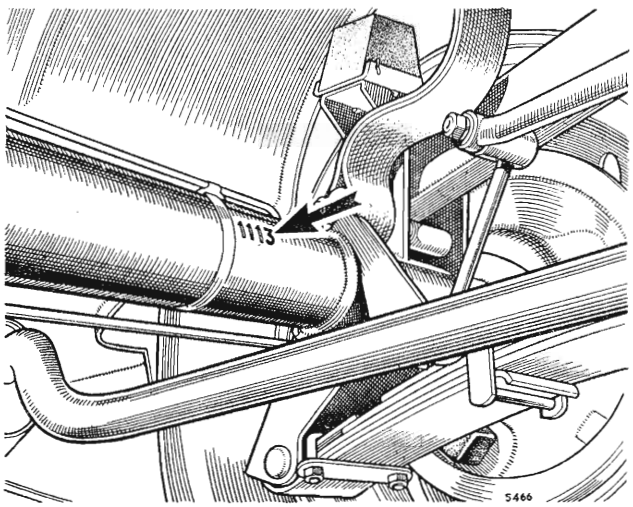
Car (Chassis) Number. This is stamped on a plate mounted on the left-hand inner wheel arch valance under the bonnet.



Gearbox Number. This is stamped on the top of the gearbox casting.



Body Number. This is stamped on a plate secured to the left-hand front door pillar.



Rear Axle Number. This is stamped on the front of the left-hand ***rear*** *axle tube adjacent to the spring anchorage.*

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.

COMMUNICATING WITH THE COMPANY

For all inquiries the address is:

THE AUSTIN MOTOR COMPANY,

SERVICE DEPARTMENT,

LONGBRIDGE,

BIRMINGHAM, 31,

ENGLAND.

The telegraphic address is:

SPEEDILY, TELEX, NORTHFIELD.

The telephone number is: PRIORY 2101.

The cable address is: SPEEDILY, BIRMINGHAM.

PRESERVATIVE ON EXPORT CARS

To remove the hard film preservative from the external plated parts, a cloth dipped in a solution of equal parts of white spirit and petrol (gasoline) should be used. Take care to keep this solvent from anything other than the plated components.

POWER UNIT SERIAL NUMBER CODING

The engine number comprises a series of letters and numbers, presenting in code the capacity, make, and type of unit, 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.
22—2200 c.c.
25—2500 c.c.
26—2600 c.c.

1st Prefix letter

B—B.M.C. Industrials
C—Austin-Healey
G—M.G.
H—Miscellaneous
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

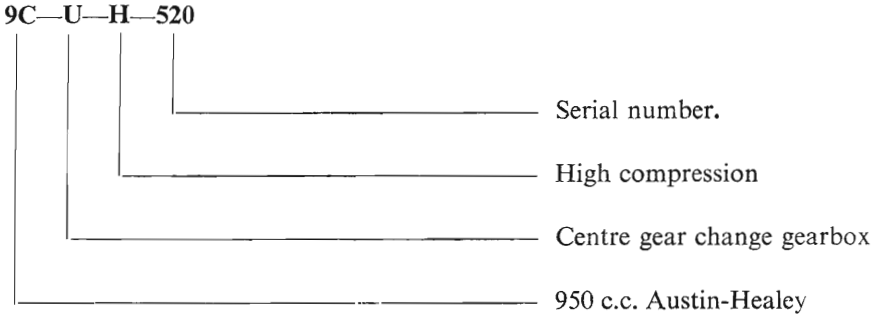
A—Automatic gearbox
M—Manumatic clutch
N—Steering column or side gear change gearbox
O—Overdrive (Borg-Warner)
P—Police specification
U—Centre gear change gearbox

3rd GROUP—Compression and serial number

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

CODE EXAMPLE

9C—U—H—520



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:

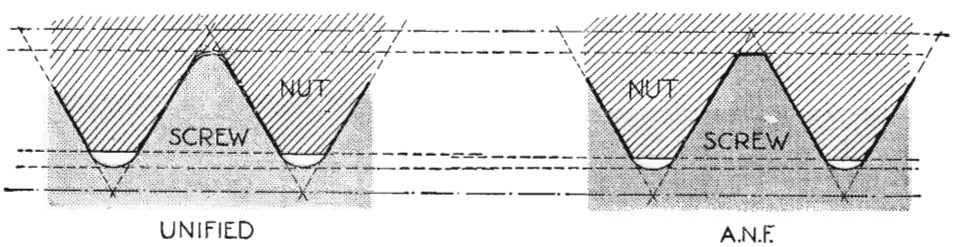
Nuts. By a circular groove turned on the end face of the nut or by connected circles stamped on one flat of the hexagon.

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, BSF, or Metric threads.

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



This illustration of the Unified thread and the ANF thread to the same scale indicates their close relationship.

Spanners. It is to be noted that all ANF- 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.

KEY TO SPANNER SIZES (Nominal widths between jaws)

Diameter of screw thread (inches)	$\frac{1}{4}$″	$\frac{5}{16}$″	$\frac{3}{8}$″	$\frac{7}{16}$″	$\frac{1}{2}$″	$\frac{9}{16}$″	$\frac{5}{8}$″	$\frac{3}{4}$″	$\frac{7}{8}$″	1″
For BSF screws and nuts	·448	·529	·604	·705	·825	·925	1·016	1·207	1·309	1·489
For ANF 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

	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	Sun wheel.
	Differential pinion	Planet wheel.
STEERING	Swivel pin	Pivot pin. Steering pin. King pin.
	Stub axle	Swivel axle.
	Track-rod	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.

FROST PRECAUTIONS

Steps must be taken to prevent the water in the cooling system from freezing during frosty weather. Water, when it freezes, expands, with the result that there is a very considerable risk of bursting either the radiator, heater element, or the cylinder block by the pressure generated. Since no provision is made for draining the heater unit, draining the radiator and cylinder block is not a sufficient safeguard.

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 a 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 Snowflake, or Esso Anti-freeze.

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

Down to	*Down to*
7° *F.* (—14° *C.*)	0° *F.* (—18° *C.*)
15% solution	20% solution
Quantity 1½ pints (·85 litre)	Quantity 2 pints (1·1 litres)

Where temperatures below 0° F. (—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 the anti-freeze.

Make sure that the cooling system is watertight and examine all joints, renewing any defective rubber hose.

Before adding anti-freeze to the cooling system it is advisable to clean the cooling system thoroughly by swilling out the water passages with a hose inserted in the filler, and with the drain taps open.

Avoid excessive topping up, otherwise there is a risk of losing valuable anti-freeze due to expansion of the solution. Top up only when the 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.

Radiator anti-freeze must not be used in the 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 k.p.h.).

DO NOT operate at full throttle in any gear.

DO NOT allow the engine to labour in any gear.