LANCIA HF

DELTA

INSTRUCTION BOOK

CONTENTS

LANCIA

Dear Sir,

All the instructions tor the use, specification, details and diagrams considered necessary for the normal maintenance and good performance of the car will be found in this manual.

Except for some Countries where special service agreements are in force, you have been handed over a booklet containing the certificate of guarantee, a free service coupon and nine coupons for the diagnosis and maintenance schedules.

Such operations are also stated in the « Summary of the service coupon, diagnosis and maintenance schedules » in this book. We warmly recommend you to make use of this Service in order to ensure your car trouble-free running and best performance. However, failing to have the free Service Coupon carried out at 2,000 to 3,000 kms (1,250 to 1,850 miles), all terms covered by the Guarantee Certificate will be voided.

Should the Service fail to meet your requirements, kindly inform our Service Dpt. about your trouble.

PRECAUTIONS DURING THE RUNNING-IN OF THE CAR

The correct use of the car during the first thousand kms. greatly helps a good bedding of the running parts and their subsequent life.

For a gradual running-in, therefore, it is necessary to proceed as follow.

— **when starting the engine**, gradually warm it up without reaching the max. r.pm.

— **on long runs**, from time to time release the accelerator pedal even for a few seconds only.

— **when climbing**, never depress the accelerator pedal fully, but shift to the lower gear, if necessary.

Gradually exploit the performance of the car and of the engine in particular; to this end, please do not exceed the following engine speeds:

up to 1,000 km (620 miles): 5,500 r.p.m.

from 1,000 to 3,000 km (620 to 1,860 miles): 6,500 r.p.m.

from 3,000 to 5,000 km (1,860 to 3,100 miles): gradually increase the engine speed up to 7,800 r.p.m.

At 1,000 km (620 miles) change engine oil and filter.

At 3,000 km (1,860 miles) change engine oil and filter again.

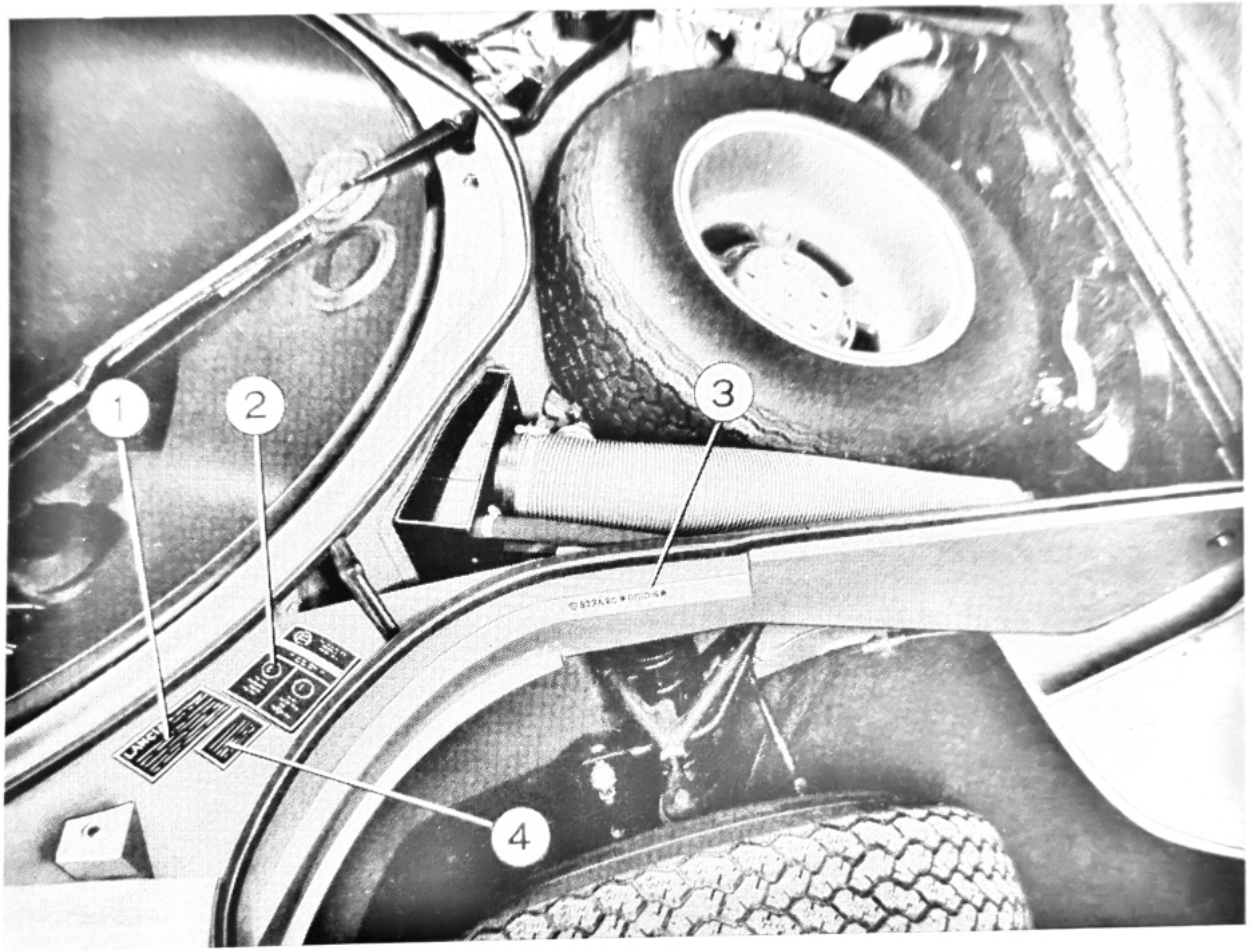
After 3,000 km mileage (1,860 miles) change the oil every 5,000 km (3,100 miles) and the filter every 10,000 km (6,200 miles).

For any topping-up use:

AGIP SINT 2000 10 W-50;

ESSO UNIFLO 10 W-50;

MOBILOIL SUPER 10 W-50.



829 AR.0 L.H.D. Stratos

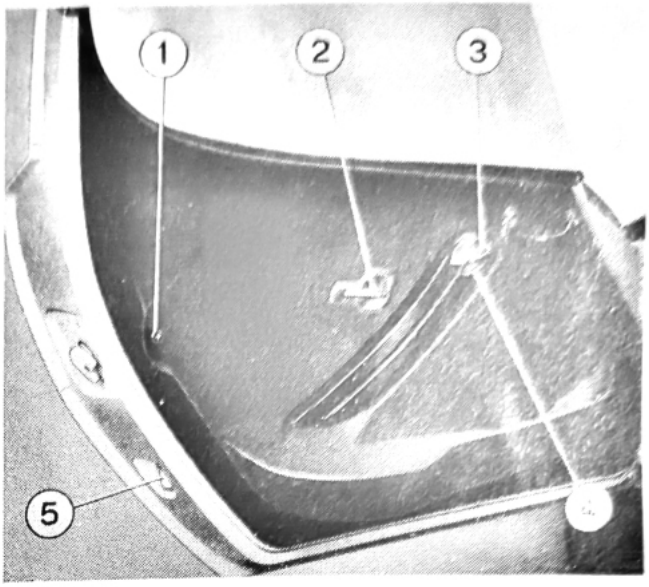
1. Car data plate (West-Germany)
2. Car data plate (Italy)
3. Identification data
4. Car data plate (Belgium)

KEYS

The car is supplied with two keys in duplicate. One key is used for the doors and luggage compartment; the other key is used for the anti-theft device and the ignition switch.

NOTE - Take note of the code number stamped on both keys to order them from our organization when required.

DOOR OPENING AND LOCKING



Outside recessed flick handle.

The doors are fitted with locks to be engaged from the outside by turning the key.

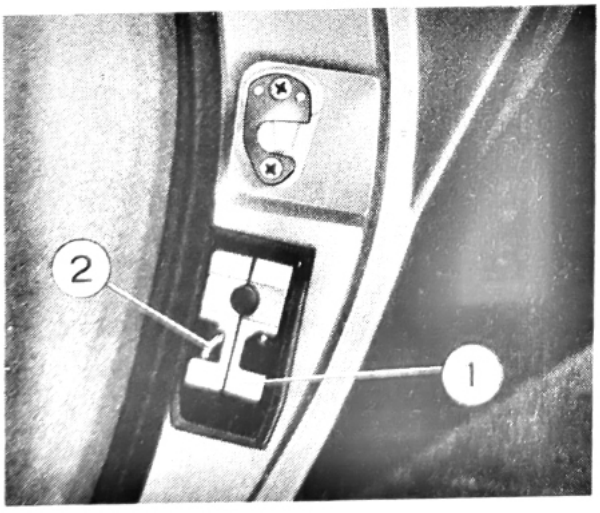
To lock the doors from the inside, depress the push-knob (1), with door closed only.

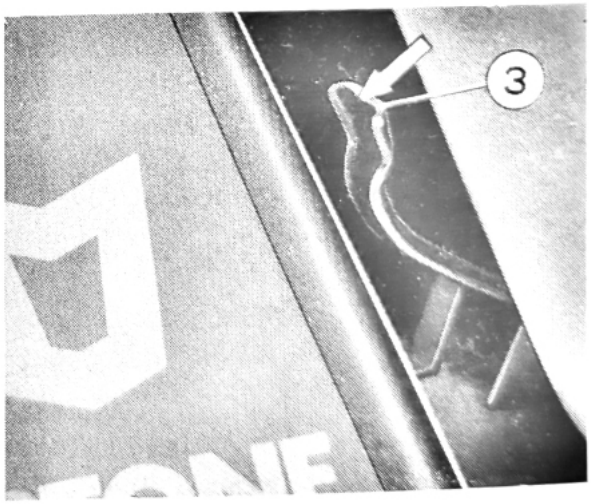
To open from the inside, operate the handle (2) also with lock knob on.

To slide down the door window release grip (3) and together with ring (4) lower it in its guides, when required position obtained lock grip (3).

The open dor safety lamp (5) lights up on opening the relevant door.

BONNET RELEASE

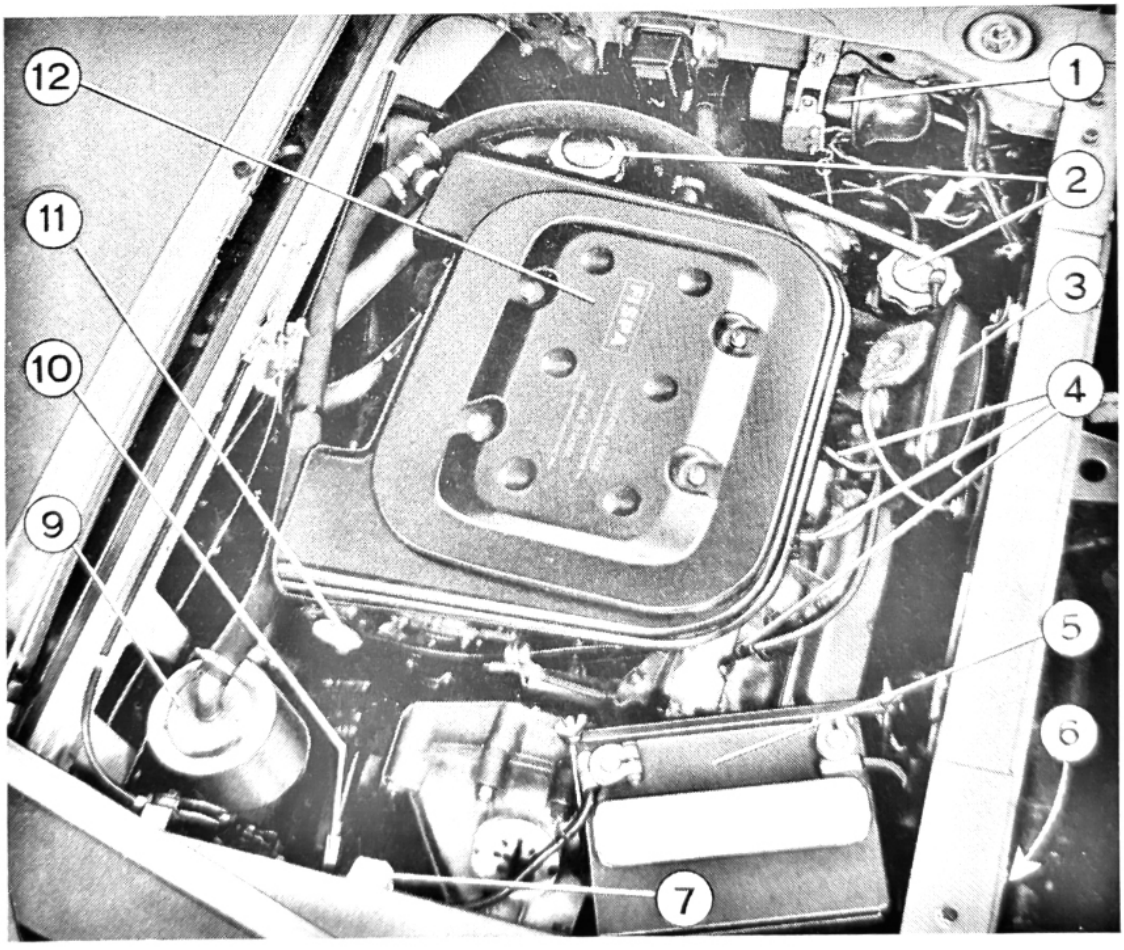




To release the engine bonnet, free the bottom end side fasteners fitted on each side of the car body panels and lift the lever (1) located on driver's side door pillar.

Should the lever (1) fail in releasing the bonnet, please pull the emergency control (2).

When bonnet slightly open, raise it up to the fully open position.

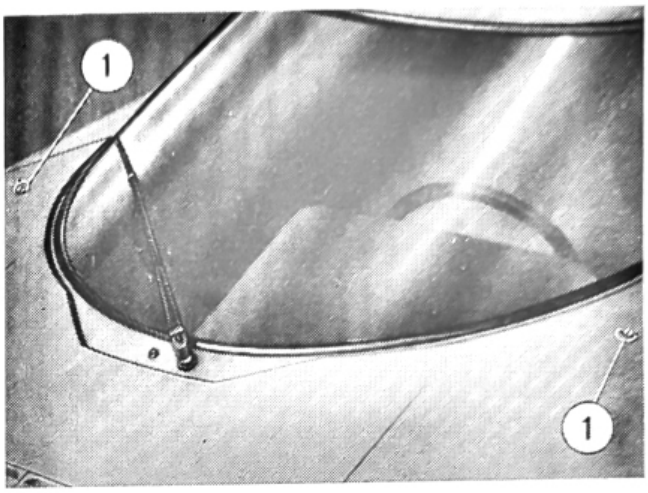


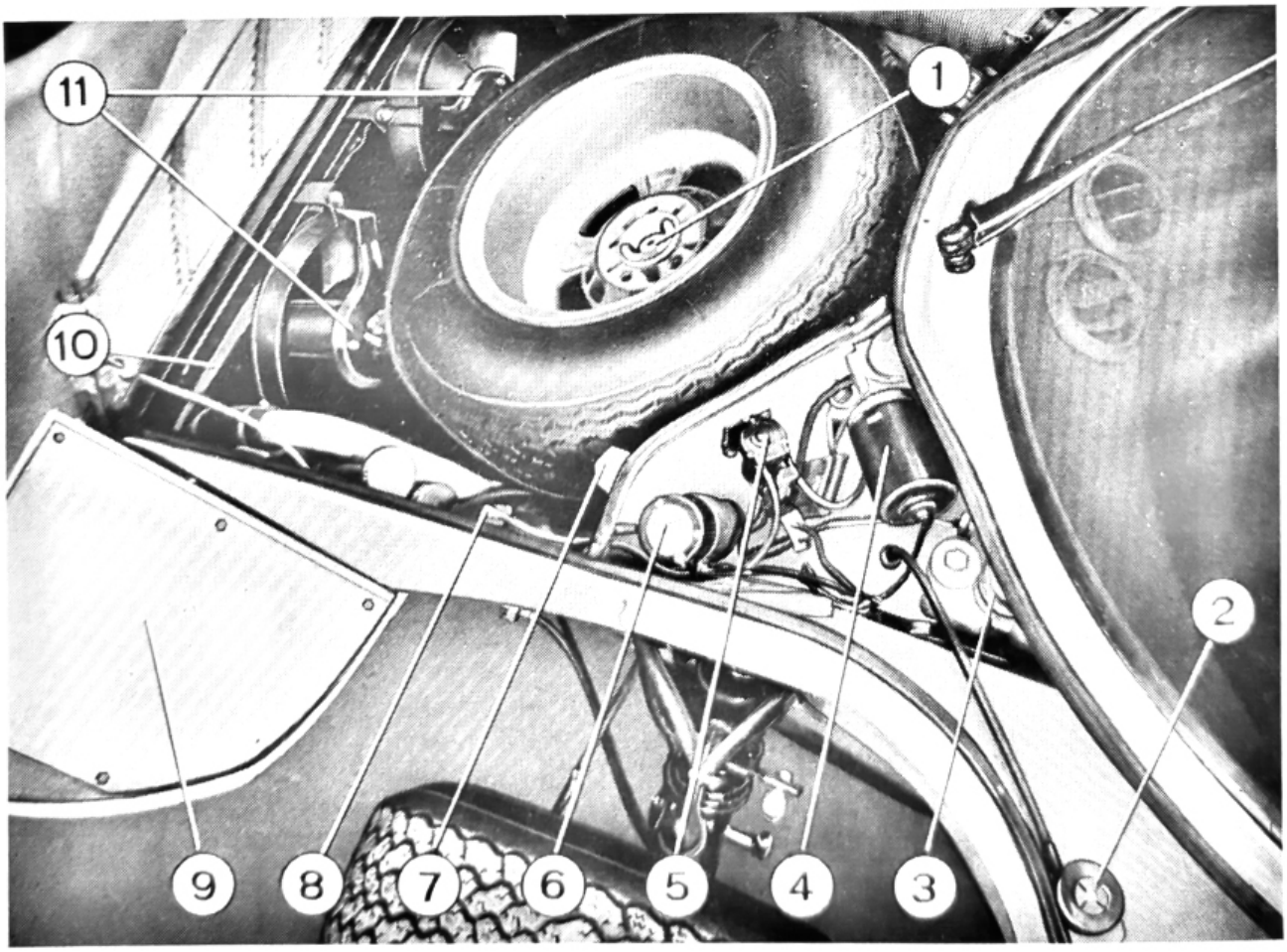
Engine compartment.

1. Coil - 2. Engine oil filler caps - 3. Coolant filling and overflow tank - 4. Spark plugs - 5. Battery - 6. Electronic ignition set - 7. Engine compartment light - 9. Engine oil vapour condenser - 10. Clutch free travel adjuster - 11. Engine oil dipstick - 12. Air cleaner.

OPENING THE FRONT LID

To release the front lid from the bodywork, please act on the fasteners located down on both sides, and turn the two hand levers (1) counterclockwise. Then lift up the lid fully open. With side lights on, an inner lamp lights up the compartment.





Front compartment.

1. Spare wheel fastening wing bolt - 2. Clutch fluid reservoir - 3. Hydraulic brake reservoir - 4. Windscreen wiper motor - 5. Windscreen washer motor - 6. Air horn compressor - 7. Light - 8. Windscreen washer fluid bag - 9. Pop-up headlight cover - 10. Coolant radiator - 11. Temperature controlled electric cooling fans.

LUGGAGE COMPARTMENT

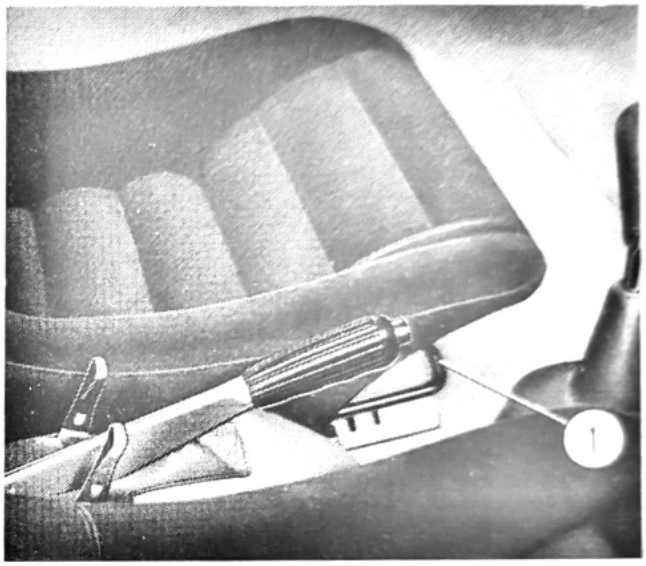
To open, unlock with the key, and turn the knob counterclockwise.
When side lights on, the compartment is illuminated by a light.

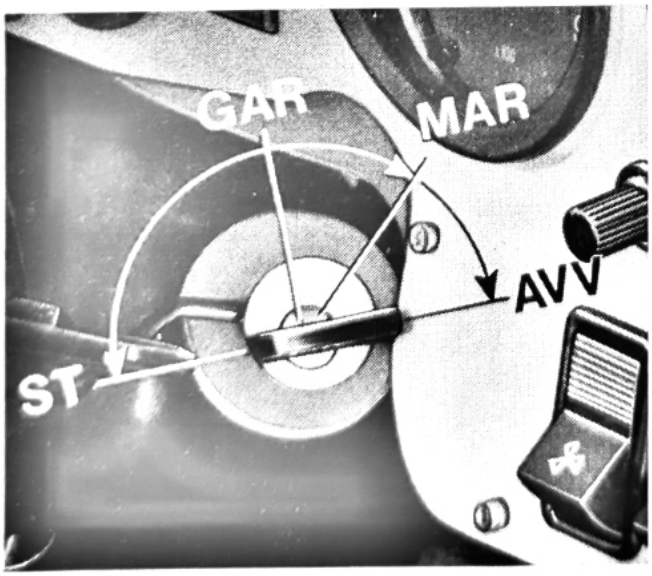
FUEL FILLERS

Fillers with screw-in caps fitted to the right and left-hand tanks on the car rear quarter sides.

SEATS ADJUSTMENT

To adjust the fore-and-aft position of the seats, please pull the handle (1) upwards and release it once the right position obtained.





KEY SWITCH

ST = Parking with anti-theft steering lock device on

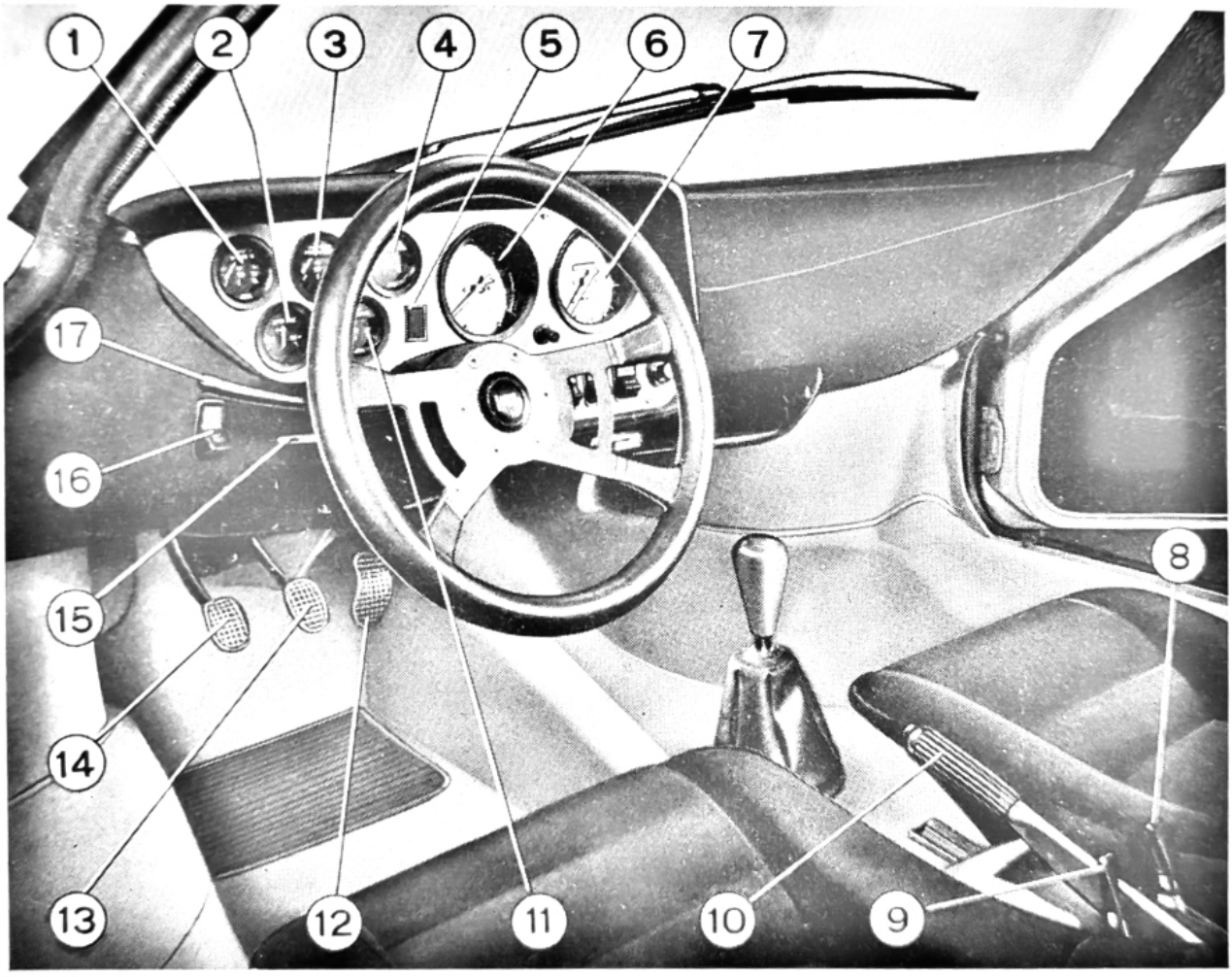
GAR = Garage with anti-theft steering lock device off

MAR = Drive

AVV = Engine starting

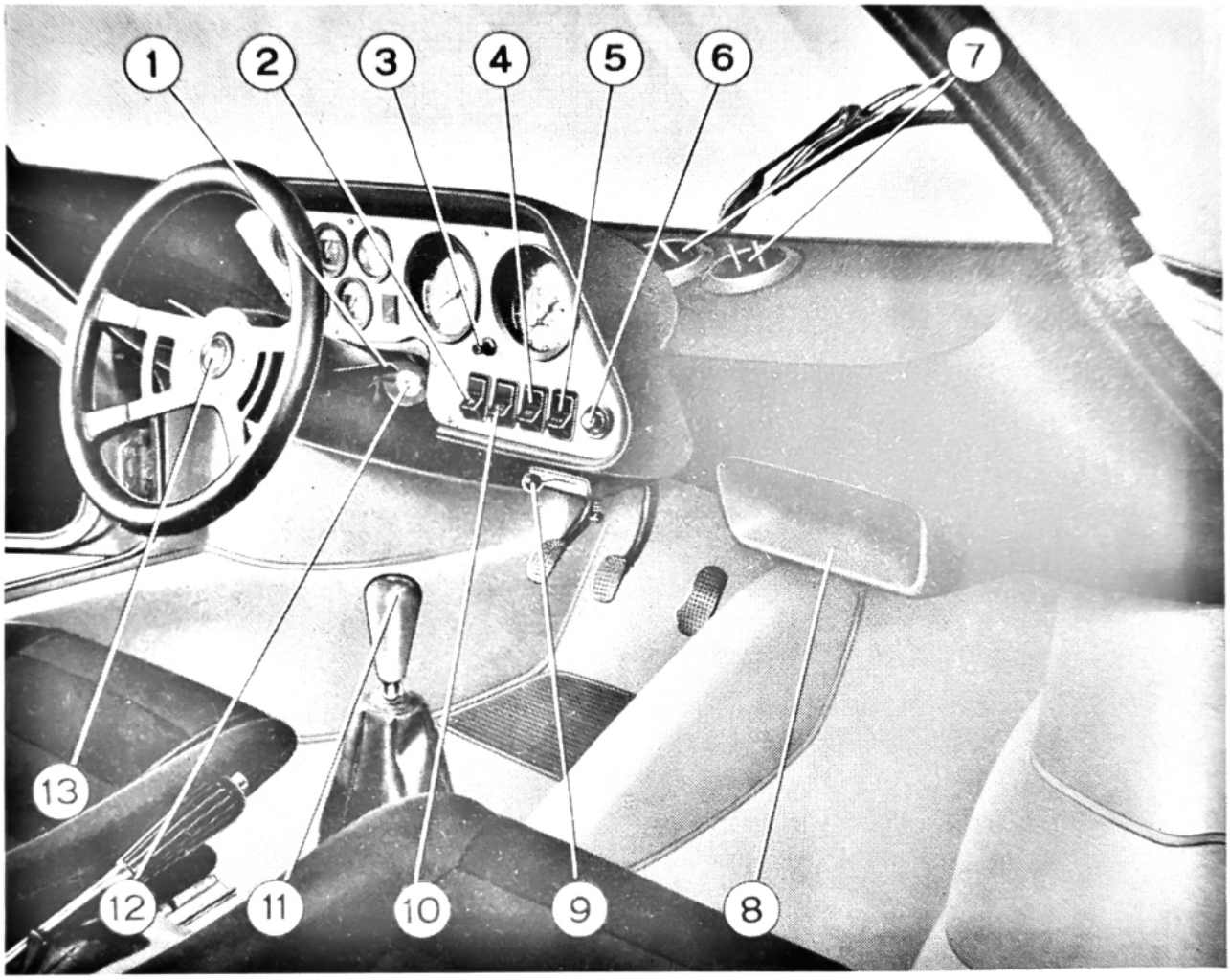
PLUG-IN SOCKET

Fitted underneath the dashboard for the use, whenever necessary, of portable lamp, shaver, etc.



Instruments and controls.

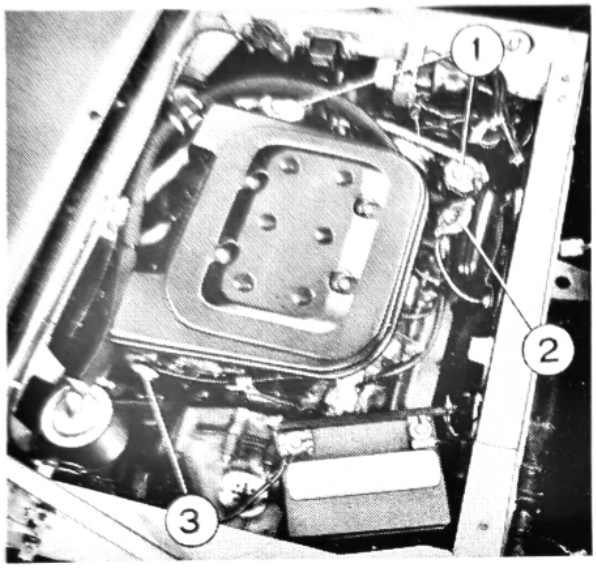
1. Coolant temperature gauge - 2. Ammeter - 3. Oil pressure gauge with low pressure warning light - 4. Oil temperature gauge - 5. Handbrake and foot brake fluid low level warning light - 6. Electronic Rev. counter with alternator and choke warning ligths - 7. Speedometer with total and trip distance recorders and side lights, turn indicators and main beams tell-tales - 8. Hand accelerator control - 9. Choke control - 10. Handbrake lever - 11. Fuel gauge with reserve warning light - 12. Accelerator pedal - 13. Brake pedal - 14. Clutch pedal - 15. Turn indicators control - 16. Side lights control - 17. Main and low beams control stalk.

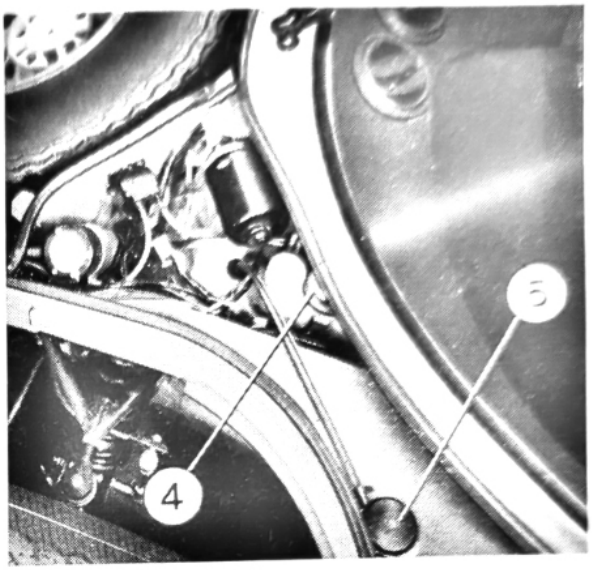


Instruments and controls.

1. Windscreen washer and wiper control - 2. Heating and ventilation booster control - 3. Trip distance recorder zero reset - 4. Interior light switch - 5. Extra switch - 6. Instruments light with intensity adjuster - 7. Heating and ventilation adjustable outlets - 8. Cubby-hole - 9. Heating and ventilation control - 10. Fog lamps switch - 11. Gear control lever - 12. Key switch with anti-theft steering locking device - 13. Horn control.

CHECKS TO BE CARRIED OUT BEFORE USING THE CAR





— fuel level;

— the level of coolant in the filling tank (2), with heater cock open should be 30 mm high from tank bottom when engine cold;

— the fluid in the brake reservoir (4) and clutch reservoir (5) should be at the max. level. To top-up remove the cap;

— the oil in the engine sump with car level shouldn't be much below the max. level marked on the dipstick (3), in order to avoid dropping below the min. level while running. Top-up when necessary through fillers (1) fitted with caps.

Sump oil level must be checked every 1,000 km (620 miles) and not over this limit.

— tyres inflation pressure, when cool, front: 1.8 bar (25.5 p.s.i.); rear: 2.2 bar (31 p.s.i.).

As frequently as possible check tyres of each wheel set and make sure they are inflated at the same pressure.

STARTING THE ENGINE

Pull the carburettor choke control knob (choke warning light lights up on rev counter dial) when starting undertaken at low temperature or if engine is cold.

Depress clutch pedal to disengage the engine from the gearbox. Switch on the ignition key to position AVV without depressing the accelerator pedal. As soon as the engine starts the key will automatically return to the MAR position on release.

If the carburettor choke control has been used, push the choke control in progressively as the engine warms up, and right in (choke warning light off) when the engine runs smoothly.

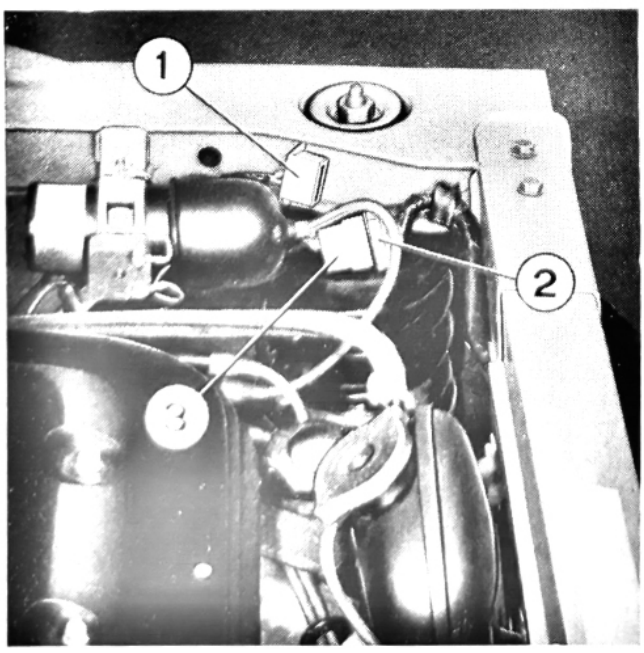
Do not race the engine when cold and during the first minutes of running of the car so stimulating and ensuring a good lubrication to all engine parts.

Make sure that pointers of both coolant and engine oil temperature gauges dwell in the centre sector to signify that the engine has attained a proper working temperature.

WARNING - Exhaust gases are poisonous, never run therefore the engine in a closed place.

ELECTRONIC IGNITION

Should this system fail, or work impropery it is possible to switch from the electronic to the conventional ignition by operating as follows:



— take off the ignition key;

— remove the junction block (2) from the socket (3);

— plug the junction block (1) to the socket (3).

Under these conditions, the Rev. counter does not work.

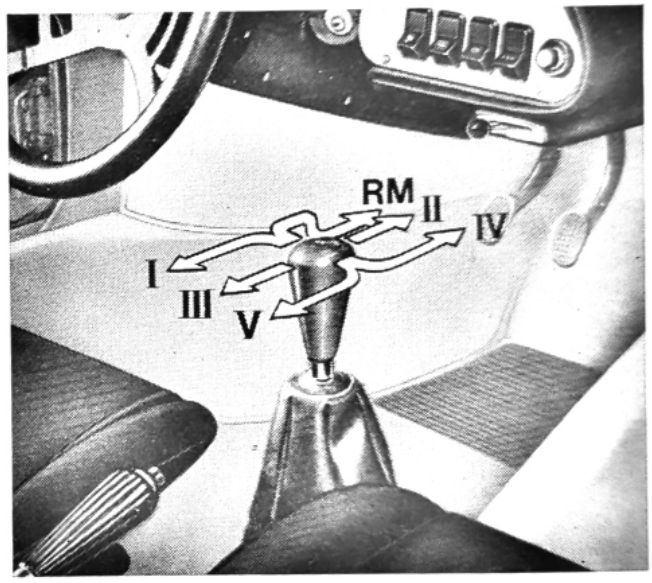
NOTE. - The figure shows the electronic ignition on.

For any checking or maintenance to the ignition system, we advise to apply to one of our Authorized Workshops.

WARNING

Do not disconnet, or loosen, the battery terminals when alternator working, so as not to damage the system.

CAR MOVING OFF

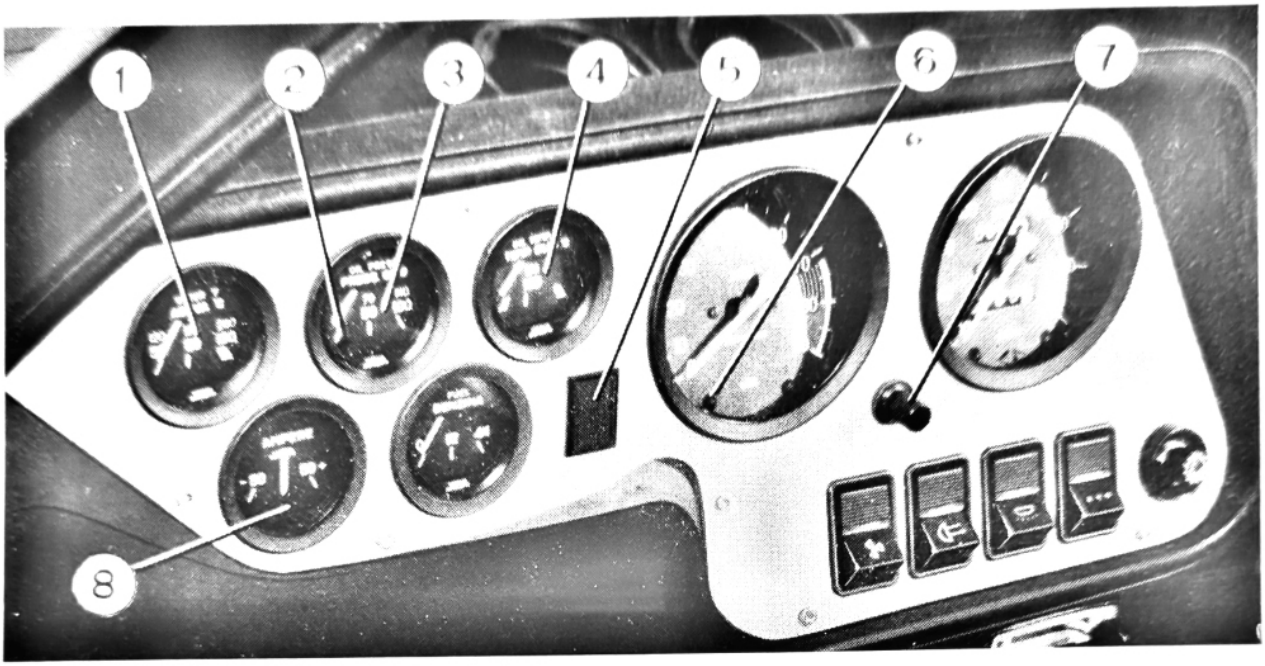


Once the engine has been started and warmed up, fully depress the clutch pedal and shift che gear control lever into 1st speed position. To engage reverse, depress gear lever and shift it into RM position. Release handbrake by depressing handle push-button and pulling the lever at the same time then, move the lever downwards to horizontal position (warning light on instrument panel with handbrake on). Slowly release clutch pedal and gradually accelerate.

WHILE RUNNING

Check now and then:

— **the coolant temperature gauge (1)**; the centre sector shows the right temperature for the normal operation of the engine. Should the pointer dwell in the red sector, locate the cause at once by checking the level in the filling tank and working of the fans motor thermoswitch and then, if necessary, have the other cooling system components inspected.



— **the engine oil pressure gauge (3)**; with engine working, the pointer should normally overstep the centre mark otherwise and if the oil low pressure warning light turns on (2), switch off the ignition and effect the checkings required.

— **the engine oil temperature gauge (4)**; when engine operating, the hand shows the temperature of the engine oil and should dwell on the center of the dial. Should the pointer attain the red sector, locate the causes at once, as serious damage to the engine could ensue.

— **The ammeter (8)**; when engine working, the pointer should normally dwell offset from the centre towards the positive side. Should the hand stay on the negative side have the electric system checked.

— **the handbrake on and foot brake fluid low level warning light (5)**; shall be off. If it is on, first check the handbrake lever is fully released and the if required, verify the fluid level in the reservoir.

— **the alternator warning light (6)**; must go off when the engine is running. Should the warning light stay on, have the alternator and the voltage regulator checked. The possible lighting of the warning light however, **with engine idling** is not dangerous.

— **the emergency fuel electric pump**; should the fuel electric pump fail to operate, turn on the emergency pump control switch located on the cockpit rear wall between the seats.

SPEED LIMITS

The speed limits in each gear may be determined by the driver by checking through the revolution counter that the engine r.p.m. do not exceed the max. figure recommended.

WARNING - When zerosetting the speedometer trip recorder, bear in mind that this operation must be effected with **car stationary only**, by turning the relevant knob (7) in figure on page 13 anticlockwise.

BRAKES

Brake gradually and timely and avoid as far as possible, sudden braking hastening brake and tyre wear. On slippery ground, operate the brakes softly in order to avoid locking the wheels.

Adherence and road holding are greater when wheels do not lock.

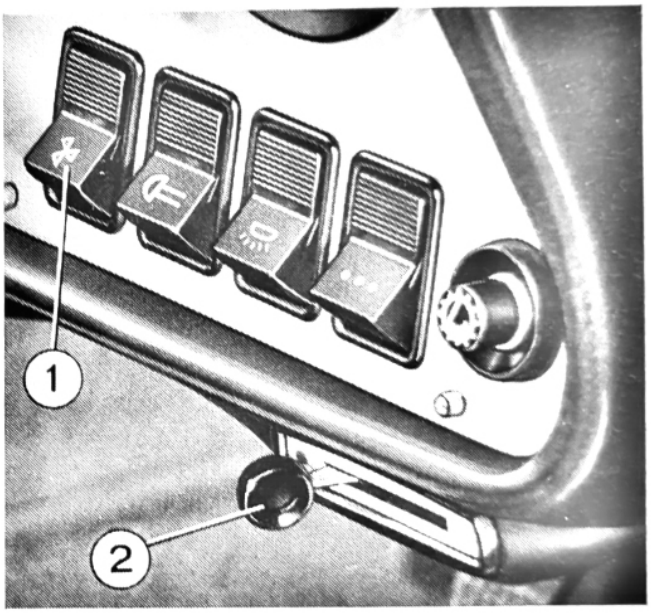
RUNNING DOWNHILL

On long downhill runs, it is advisable to use the engine brake power by engaging the most suitable gear in order to prevent rapid wear to brake pads. Do not swith off ignition by turning the key to position GAR, or ST, as in the first instance the litle amount of fuel flowing from the carburettors to the engine would remain unignited and could damage the parts, **in the second case by withdrawing the key, the anti-theft device is automatically applied and does not allow turning the steering wheel.**

AIR VENTILATION AND HEATING

The car air ventilation and heating system may be regulated at will and is obtained as follows:

Fresh air

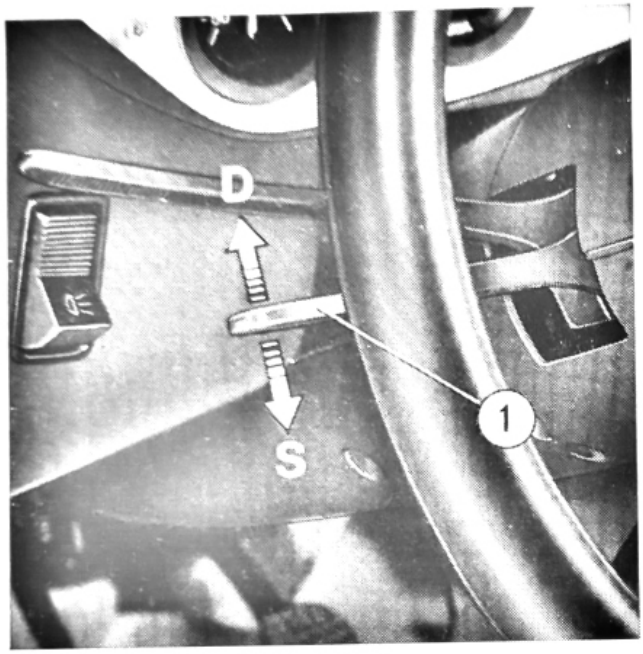


Shift lever (2) fully to the left. The air flow is directed to the car interior through the two outlets on the dashhoard upper padding. The air flow can be adjusted and directed accordingly through the finned vents.

To increase the air flow when car stationary, ot running at low speed, shift the booster control switch (1) downwards to the first click to select the normal speed, or to the second click to obtain the faster speed.

Warm air

Shift lever (2) fully to the right. Move it as required to obtain any temperature wanted. To warm the car interior, keep the engine running and shift the booster control switch (1) to the first, or second position.



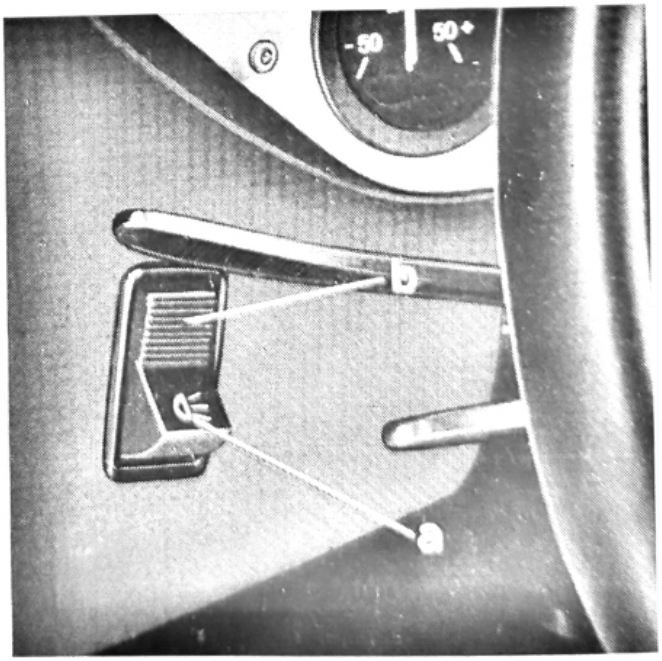
DIRECTION INDICATORS

Operate with ignition key in position MAR.

Move the lever (1) in the direction of the intended turning (D = right-hand indicator; S = left-hand indicator), the relevant warning light on instrument panel goes on.

Cancellation takes place automatically when the steering wheel is centralized after turning a corner and by hand in case of non-turning.

OUTSIDE LIGHTS



By pressing the relevant switch in (a) with ignition key in MAR position, the following lights and controls will go on:

— side light and relevant warning light; number plate lights; control switches light; raised pop-up headlights; reversing lights switch and headlight change-over switch under current.

With ignition key in MAR, or ST position, or completely withdrawn and switch pressed in (b) the following will be energized:

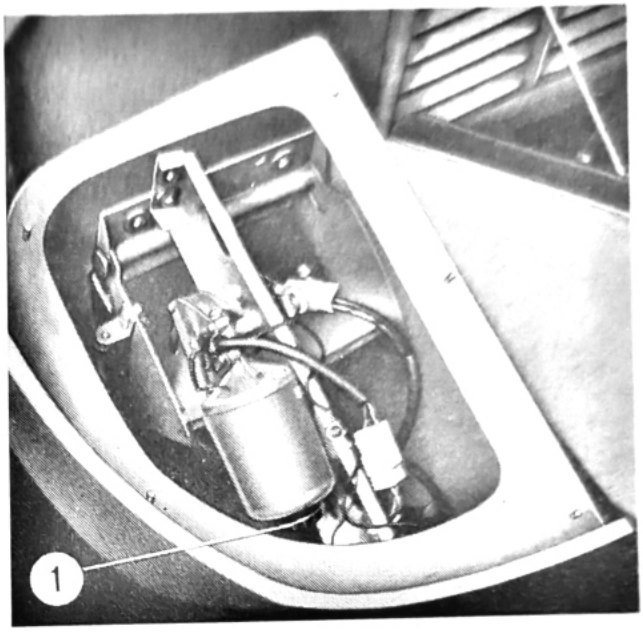
— Side lights and relevant warning light; number plate lights; raised pop-up headlights; reversing lights switch under current.

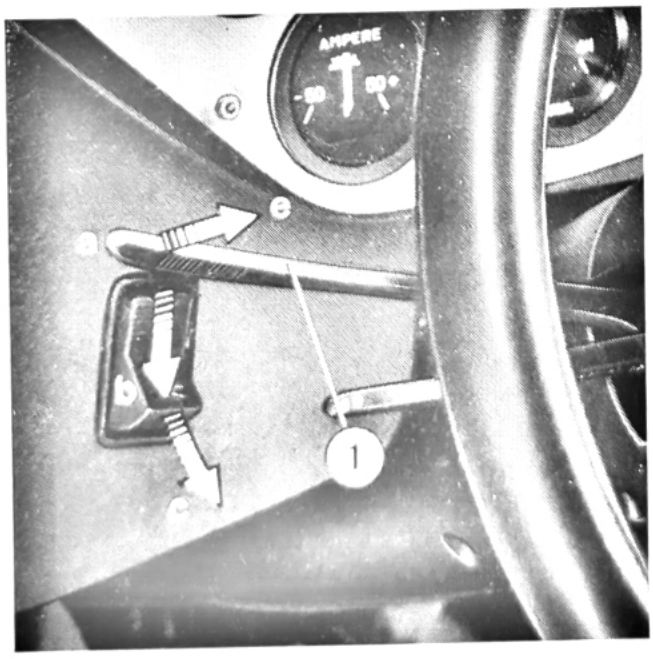
With switch in centre position:

— lights system off.

Pop-up headlights

Raise automatically on switching the side lights on. If required the pop-up headlights may be raised manually by removing the cover from the wheelarch and acting on the knob (1) until they are fully up.

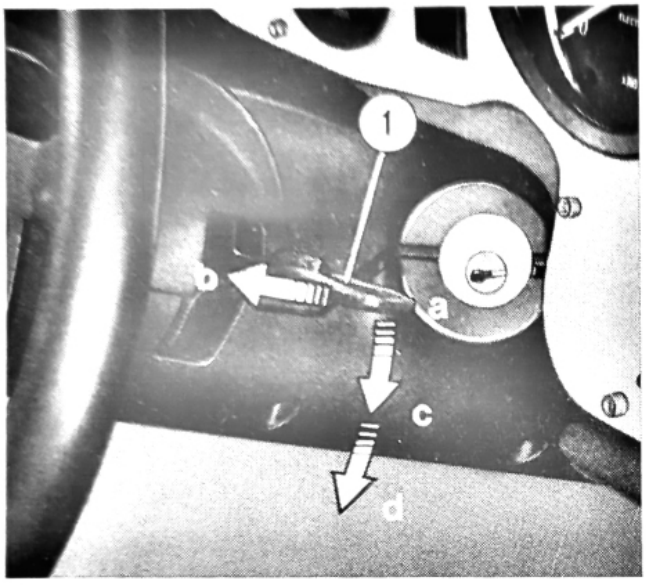




Headlight beams

Turn on with side lights on, by shifting the control stalk (1) from the off position (a) to the position (b) low beams and to the position (c) main beams.

With headligths raised, move the stalk (1) towards the steering wheel (e) to light signal by the low beams.



WINDSCREEN WASHER - WIPERS

Windscreen washer works when ignition key in position MAR, by shifting the wiper control lever (1) upwards towards the steering wheel to position (b).

Windscreen wipers. Two speeds: move the control lever (1) from position (a) to position (c) for the low speed and to position (d) for the high speed.

Do not operate the wipers with glass dry, so as not to damage the glass and the blades.

STOPPING THE CAR

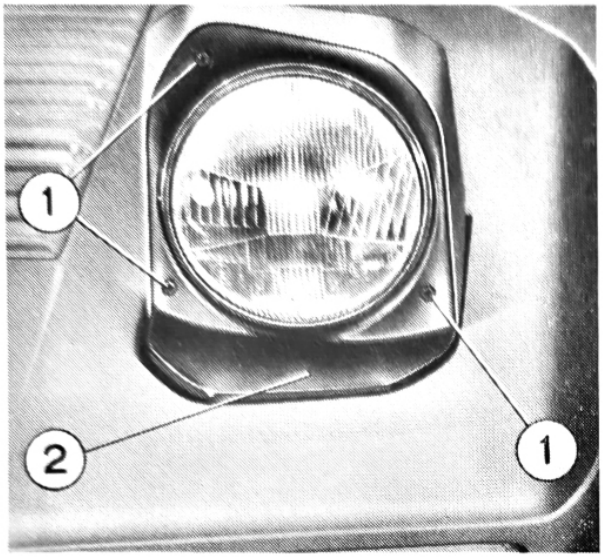
When parking the car, switch off the ignition by turning the ignition key to GAR position, apply the handbrake and engage the first gear.

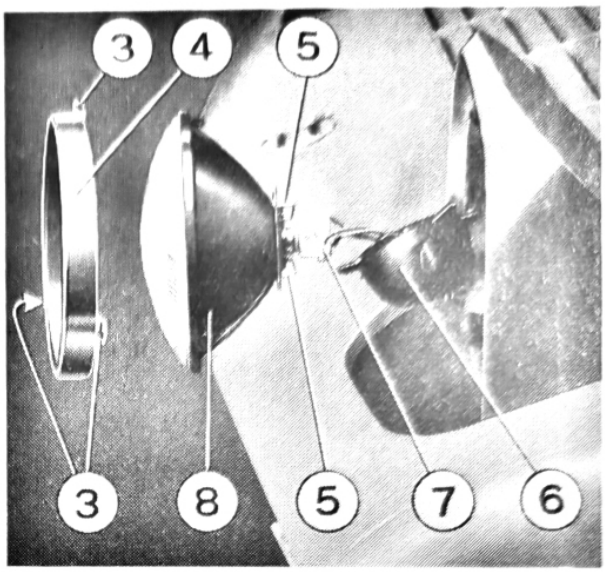
ANTI-THEFT DEVICE

Automatically applied on removing the ignition key from position ST. To facilitate engaging and disengaging the anti-theft device, it is advisable to turn the steering wheel lightly in either direction.

REPLACING THE BULBS

Headlights (figure page 19): remove the screws (1) and lift off the door (2). Loosen the screws which secure the retaining ring (4), turn it up to the screw head disengaging bores (3) and remove. Take off the beam unit (8), remove the cap (6) and the connector (7). Free the retainer tabs (5) and extract the bulb. Fit the new bulb by holding it at the base only.





Front side lights and turn indicators: remove the screws and take the lens off.

Turn indicator repeaters: remove the mounting screws fitted inside the wheelhousing and pop-up headlight housing.

Fog lamps: remove the cover from the wheelhousing, remove the lamp securing nut and renew the bulb.

Front compartment, engine compartment and luggage compartment: slide the bulb carrying lens off the guides and extract the bulb.

Tail and reversing lights: remove the fixing screws and take off the lens.

Number plate lights: remove the screws and lift off the bezel.

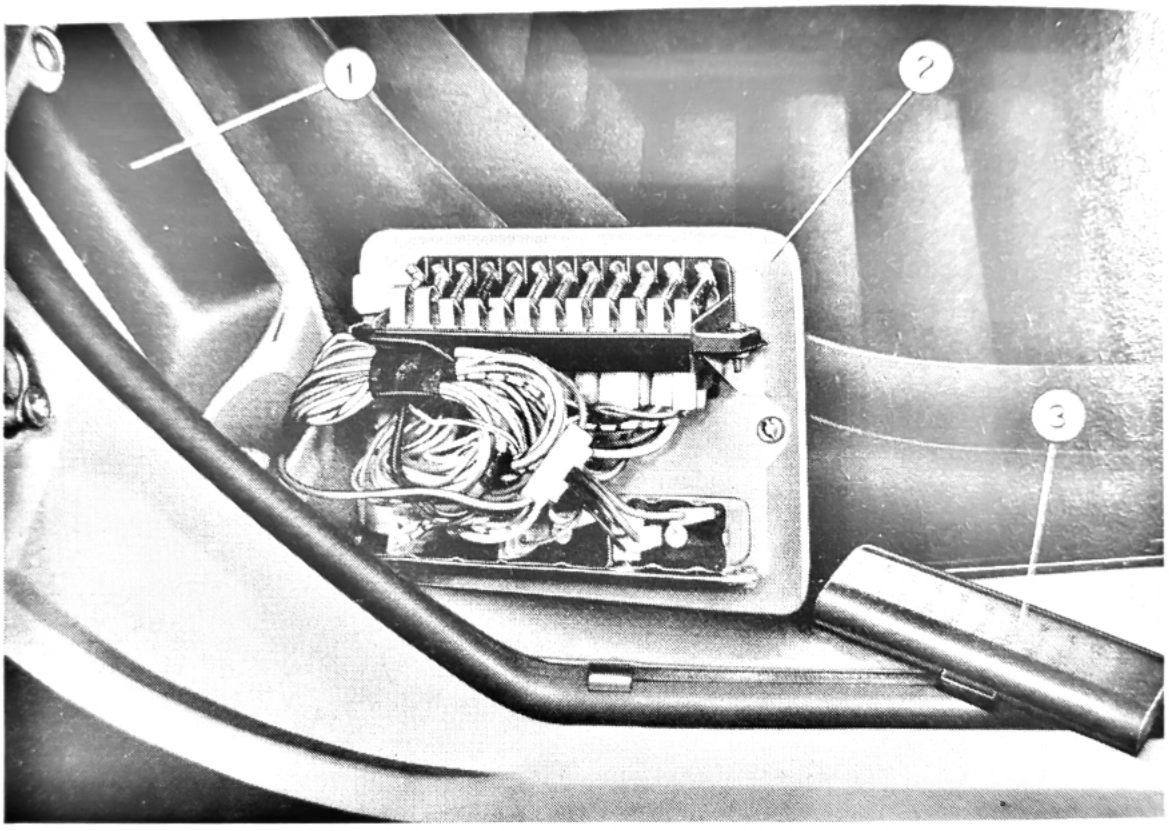
Door safety lights: remove the door trim panel and extract the pressure fitted bulb socket.

Cockpit light: extract the pressure fitted lens.

NOTE - The bulbs must be replaced with new ones having the same characteristics (see page 27).

FUSE BOX

Located in a housing (1) beside the right-hand seat backrest. Turn the upp[illegible] mounting screw by about half a turn and remove the cover (2). The press[illegible] fitting cover (3) bears the fuses numbering and circuits.

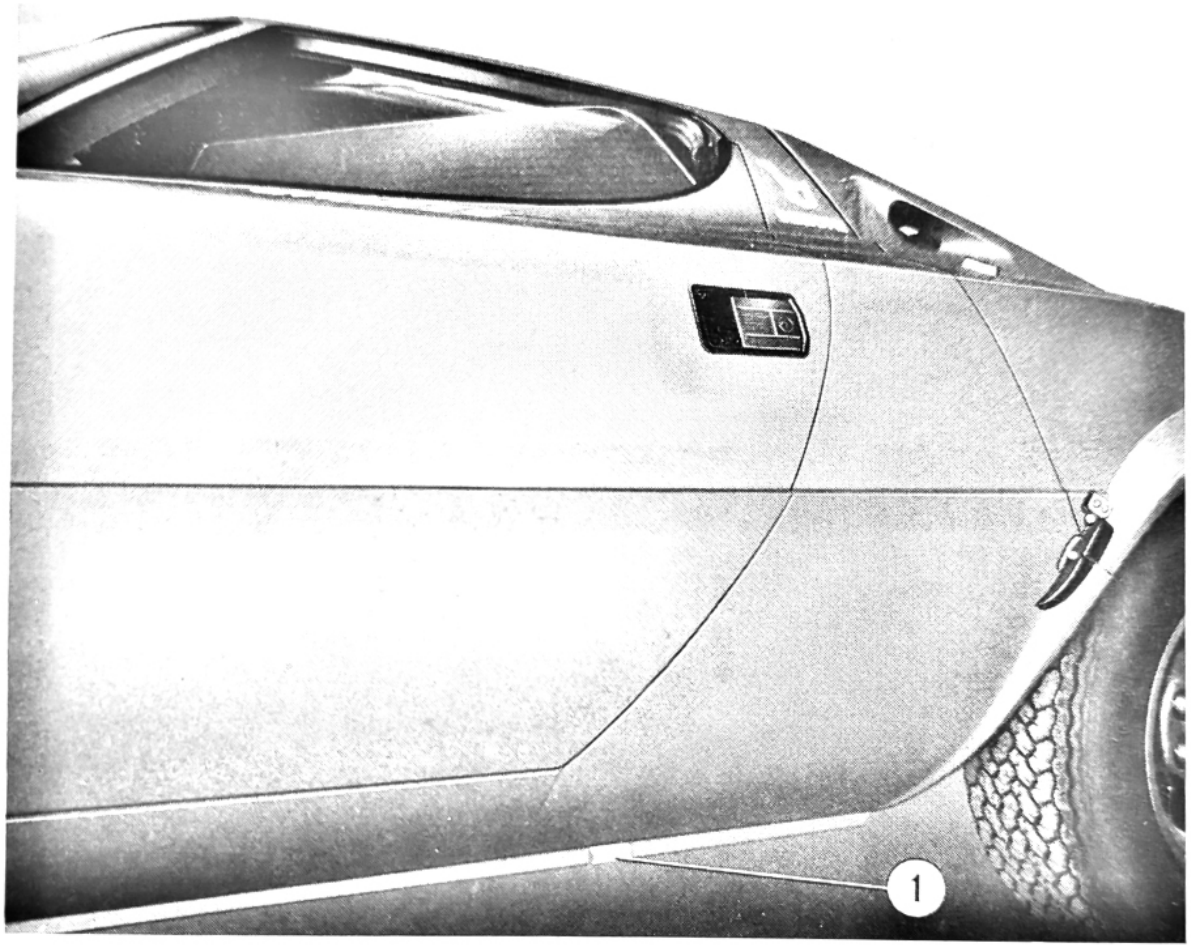


Fuses numbering and circuits.

1.A. Extra.
2.B. Pop-up headlight motor with step-down gear.
3.C. Left-hand main beam and main beam warning light.
4.D. Right-hand main beam.
5.E. Left-hand low beam.
6.F. Right-hand low beam.
7.G. Front right-hand side light, rear left-hand side light, right-hand number plate light. instruments and pictorial markings light and side lights tell-tale.
8.H. Front left-hand side light, rear right-hand side light, left-hand number plate light, reversing light and front, engine and luggage compartment lights.
9.I. Cockpit light and door safety lights.
10.L. Engine cooling fans and air horns.
11.M. Pop-up headlight motor closing solenoid switch.
12.N. Pop-up headlight motor opening solenoid switch.

NOTE - The fuses must be replaced with new ones having the same features. Black fuses, Nos. 1-2-3-4-5-6-7-8: 8 Amp; green fuses, Nos. 9-10: 16 Amp; white fuses, Nos. 11-12: 3 Amp.

CHANGING A WHEEL



Before jacking the car up, it is necessary to apply the handbrake, so that the car, lifted on the side of the wheel to be changed, does not move. Loosen the wheel mounting nuts.

Apply the jack to the proper seating located beneath the side member (1), jack the car up and remove the wheel mounting nuts previously loosened.

Once the wheel has been changed, reverse the procedure detailed above and tighten evenly and in criss-cross fashion, the wheel mounting nuts with wheel resting on the ground.

IMPORTANT WARNING

Disconnect the battery prior to recharging, or carrying out any repair. Do not run the engine if the battery, alternator and voltage regulator are not firmly connected.

ENGINE

	Six cylinders, 65° Vee arrangement, cross mid fitting.
Type	829 A.000
Bore	92.5 mm (3.641 in.)
Stroke	60 mm (2.362 in.)
Displacement	2418 c.c. (147.55 cu. in.)
Compression ratio	9 to 1
Max. power KW (CV) (DIN)	140 (190) at 7000 r.p.m.
Max. r.p.m.	7800
Max. torque Nm (Kg.M.) (DIN)	225.6 (23) at 4000 r.p.m.

Timing System

Camshafts	Four, overhead, driven by the crankshaft through two double row chains provided with stretchers.
Valves	Overhead directly controlled by the camshafts through tappets.
Timing	With 0.50 mm (0.0196 in.) valve clearance for checking purpose.
	Intake { opens 40° before T.D.C. / closes 52° after B.D.C.
	Exhaust { opens 53° before B.D.C. / closes 31° after T.D.C.
Standard valve clearance (with engine cold)	Intake 0.15÷0.20 mm (0.0059÷0.0078 in.) Exhaust 0.25÷0.30 mm (0.0098÷0.0118 in.)

Fuel System

Fuel supply	Two electric pumps fitted beside the left-hand tank.
Carburettors	Two Weber 40 IDF 28 type (left and centre) One Weber 40 IDF 29 type (right) Venturi tubes 32 Main jets 125 Slow running jet 50 Air correction jet 220
Fuel filter	On the line from the tanks to the pumps.
Air cleaner	On the carburettors, dry element type.

Ignition System

Type	Electronic, Marelli AEC 103 A electronic ignition set; Marelli BAE 203 A coil and Marelli S 125 C two breakers distributor.
Spark plugs	CHAMPION N 60 Y

Firing oder	1 - 4 - 2 - 5 - 3 - 6
Fixed advance (on engine):	$7^{o} \pm 1^{o}$
Automatic advance (on engine)	$30^{o} \pm 2^{o}$
Distributor points gap	0.32 to 0.38 mm (0.0125 to 0.0149 in.)
Spark plugs electrode gap	0.5 to 0.6 mm (0.0196 to 0.0236 in.)

Lubrication

System	Pressure type, with gear pump and pressure relief valve.

Oil filters	Quick-change, full-flow type and gauze type in the pump strainer.
Heat exchanger	To cool the engine oil by coolant circulation from the cooling radiator.

Cooling System

Type	Forced coolant circulation, with pump, radiator at front, filling tank and thermo-electrically controlled fans.

Starting

Type	With Marelli MT 42 E motor.

Engine Mounting	Together with clutch and gearbox-differential unit by four rubber buffers on the frame.

TRANSMISSION

Clutch

Type	Dry, single disc, hydraulic pedal controlled.
Release lever free travel	3 to 5 mm (0.118 to 0.196 in.).

Gearbox

Type	Five forward synchromeshed speeds and reverse. Mechanical control by lever on floor.

Ratios

1st	2nd	3rd	4th	Top	Rev.
3.554	2.459	1.781	1.320	0.986	3.3

Differential Unit	Limited-slip differential. Final drive: spur gear set.
Ratio	17/75
Drive shafts	Two, equipped with constant velocity joints at the ends (sealed for life); they connect the wheel hubs to the differential unit. The joints also slide axially by means of balls.

BRAKES

Service	Ventilated disc all round, hydraulic, foot operated. Two indipendent hydraulic systems branch off the Duplex master cylinder; one of them is connected to the front wheel calipers, the other one is connected to the rear wheel calipers.
Handbrake	Disc on rear wheels, with hand lever and mechanical control.

STEERING - SUSPENSIONS - WHEELS

Steering gear

Type	Rack and pinion, sealed for life, ball joint articulations. Energy absorbing safety steering column.

Front Suspension

Type	Independent; upper wishbones and lower arms arrangement, double-acting hydraulic shock absorbers coaxial with coil springs and rubber bumpers. Front mounted anchorage rods. Stabilizer bar adjustable in three different positions for rolling stiffness. 35 mm car trim adjustment height.

Rear Suspension

Type	Independent; lower wishbones arrangement, telescopic struts with hydraulic shock absorbers incorporated; coil springs. Forward mounted anchorage rods. Stabilizer bar adjustable in three different positions for rolling stiffness. 35 mm car trim adjustment height.

Wheels

Rim	7 ½ K × 14″ light alloy
Tyres	205/70 VR 14 tubeless
Inflation pressure when cool	Front: 1.8 bar (25.5 p.s.i.). Rear: 2.2 bar (31 p.s.i.).

ELECTRICAL EQUIPMENT

Type	12 Volt 45 Ah battery with earthed negative.
Alternator	Marelli A 12 M 124/12/57
Fuses	Eight 8 Amp fuses (black); two 16 Amp fuses (green) and two 3 Amp fuses (white) protect the various circuits as shown on page 20.

Moreover four loose fuses protect the following circuits: fog lamps (16 Amp); fuel pump (8 Amp); alternator (8 Amp); turn indicators, windscreen wipers and washer, plug-in socket, stop lights, ventilation and heating fan, engine cooling fan remote control switch excitation, warning lights for handbrake and foot brake fluid low level, fuel reserve and choke and oil pressure and temperature gauges, coolant temperature gauge and electronic Rev. counter (16 Amp) and are fitted below the dashboard.

Bulbs

Main and low beams	12 V - 60/55 W iodine halogen
Fog lights	H 3 - 12 V - 55 W
Front side lights and turn indicators Rear side and stop lights	12 V - 5/ 21 W
Rear turn indicators and reversing lights	12 V - 21 W
Number plate and cockpit lights	12 V - 5 W
Turn indicator repeaters, engine compartment, front compartment, luggage compartment and door safety lights	12 V - 4 W
Instruments and warning lights	12 V - 3 W

TOOL KIT

In the front compartment	Tool bag containing: four double head spanners (8 × 10 - 9 × 11 - 13 × 14 - 17 × 19 mm), spark plug socket spanner, cutting pliers, normal point and crosspoint screwdriver. Jack with ratchet spanner and spanner.

DIMENSIONS - WEIGHTS

Wheelbase	2180 mm (85.82 in.)
Front track	1430 mm (56.29 in.)
Rear track	1460 mm (57.48 in.)
Overall length	3710 mm (146.06 in.)
Overall width	1750 mm (68.89 in.)
Overall height (unladen)	1114 mm (43.85 in.)
Ground clearance (laden)	130 mm (5.11 in.)
Min. turning circle	10190 mm (33.43 ft.)
Kerb weight	980 kg (2160 lb.)
Payload	160 kg (350 lb.)

PERFORMANCE

Max speeds		1st	2nd	3rd	4th	5th	Rev
	m.p.h.	42.2	61.5	84.5	113.7	more than 143	45.3
	k.p.h.	68	99	136	183	230	73

The various maintenance operations to be carried out periodically according to mileage covered, have been divided in two different groups.

Ordinary maintenance refers to lubrication points and to simple cleaning operations, whilst specific maintenance refers to more complex operations of cleaning, checking and setting.

Use only the products listed hereunder, which may be mixed in any proportion.

	Quantity				
	l.	Imp. gall.	US gall.	kg	
Fuel tanks (including 10÷12 l. reserve) left and right	80	17.6	21.1	—	Premium fuel (96 octane rating min.)
Cooling system *	15	3.3	4	—	Coolant (35% LANCIA 430 S antifreeze, 65% water)
Engine: to change oil	7	1.53	1.84	6.30	AGIP SINT 2000 10 W-50 ESSO UNIFLO 10 W-50
to change oil and filter	8.10	1.78	2.13	7.30	MOBILOIL SUPER 10 W-50
Gearbox-differential unit	3.45	0.75	0.91	3.10	AGIP F1 ROTRA MP SAE 85 W/90
Steering gear	0.17	pint 0.30	pint 0.35	0.15	ESSO GEAR OIL GX 90 MOBILUBE HD 90
Hydraulic brakes**	0.40	pint 0.70	pint 0.84	0.36	AGIP F1 BRAKE FLUID SUPER HD
Clutch control**	0.28	0.49	0.59	0.25	CASTROL GREEN Fiat etichetta azzurra DOT 3
Rear drive shaft constant velocity joints	—	—	—	—	FIAT MRM 2 MOLYKOTE BR 2
Rear suspension grease nipples	—	—	—	—	AGIP F1 GREASE 30 ESSO MULTIPURPOSE GREASE H MOBILGREASE SPECIAL
Washer reservoir	1.70	pint 3.0	pint 3.58	—	Water plus 50% FIAT DP 1 liquid detergent

* Including car heater system.

** Including bleeding quantity.

SUMMARY OF THE SERVICE COUPON DIAGNOSIS AND MAINTENANCE SCHEDULES

Progressive mileage in thousands of kms and miles

	Service coupon	Diagnosis	5 3.1	10 6.2	15 9.3	20 12.4	25 15.5	30 18.6	35 21.7	40 24.8	45 27.9	50 31	55 34.1	60 37.2	65 40.3	70 43.5	75 46.6	80 49.7	85 52.8	90 55.9	95 59	
Road test (on reception)	•																					
Fuel filter				+		+		+		+		+	+	+		+		+				31
Cleaning air cleaner element			+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+			31
Changing air cleaner element				+		+		+		+		+		+		+		+				31
Checking engine oil level		□																				10
Changing engine oil	•		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	31
Changing engine oil filter				+		+		+		+		+		+		+		+		+	+	32
Checking gearbox and differential oil level		□	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	32
Changing gearbox and differential oil								+											+			32
Checking for oil, petrol and coolant leaks	•	□																				
Checking pressure of tyres																						10-26
Lubrication of rear suspension	•		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	33
Repositioning tyres [not imperative]			+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	33
Checking condition of tyres and road wheel mounts		□																				
Lubrication, checking fastening and operation of devices and accessories			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	33
Windscreen washer and checking reservoir level	•	□	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	33
Checking brake line and master cylinder; windscreen washer line and joints; fuel system for tightness	•																					
Checking the cylinder head for tightening	•																					
Checking engine compression		□																				
Checking clearance between valves and camshafts	•			+		+		+		+		+		+		+		+			+	34
Inspecting checking and tightening exhaust manifold and pipes	•	□																				
Slow-running adjustment	•	□																				34
Cleaning spark plugs and checking breaker points gap	•	□	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	34
Replacing the spark plugs				+		+		+		+		+		+		+		+			+	34
Checking breaker points voltage drop, fixed advance		□																				
Checking and setting ignition distributor		□		+		+		+		+		+		+		+		+			+	34
Checking and adjusting clutch release lever	•	□	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	34
Checking gear shift for operation		□																				
Checking condition of C.V. Joint guards	•	□																				
Checking foot brake operation		□	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	35
Checking condition of braking surfaces		□	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	35
Checking and adjusting the handbrake	•	□		+		+		+		+		+		+		+		+			+	35
Checking steering rods and links		□																				
Checking the front and rear suspension anchorages	•																					
Checking anchorage rods, torsion bars and buffers; shock absorbers (for fluid leaks)	•	□																				
Checking front road wheels toe-out		□																				
Cleaning starter motor commutator and brushes inspection						+				+				+				+			+	35
Checking condition and tension of coolant pump and alternator drive belt	•	□	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	35
Checking alternator output		□										+										35
Checking alternator brushes for wear																						
Checking headlamps for correct aiming		□																				
Checking level of engine coolant	•	□																				10
Checking density of coolant		□																				
Renewing the coolant																						32
Checking level of brake and clutch fluid		□																				10
Checking density of battery electrolyte		□																				
Checking battery electrolyte level	•	□																				33
Lubrication of horn compressor																						33
Checking carburettor choke for operation		□																				
Checking operation of all electrical gauges, warning lights, windscreen wiper, washer, cooling system fan, heating and ventilation		□																				
Checking operation of lights, direction indicator and stop light, horn		□																				
Checking coolant fan cut-in and cut-out	•	□																				
Road test (prior to approval for release)	•																					

before winter time
weekly

monthly
periodically

ENGINE

Fuel System

Fuel filter

Every 10,000 km (6,200 miles) renew the filter fitted between tanks and electric pumps, after disconnecting the inlet and outlet tubings.

Air cleaner

Every 5,000 km (3,100 miles) remove the cover, take out the element and blow carefully at low pressure.

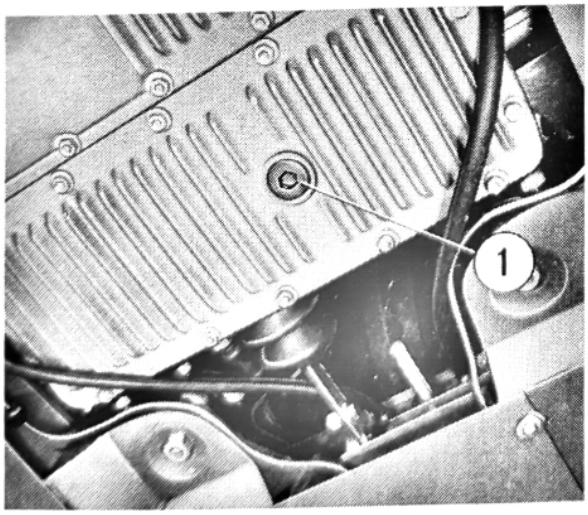
Every 10,000 (6,200 miles) renew the element.

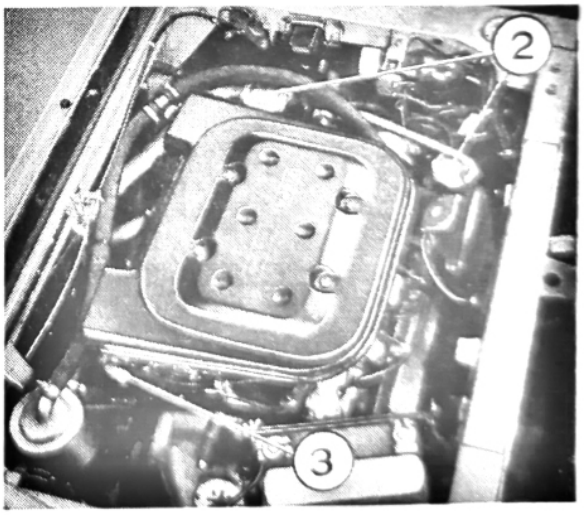
NOTE - Replace element more frequently if car is run under dusty conditions.

Lubrication

Oil change

Every 5,000 km (3,100 miles) change the oil with engine warmed up.





Oil drain

Drain plug (1) fitted underneath the sump.

Oil refill

Through fillers with caps (2), pour in the right quantity of oil, start-up and let the engine run for a few seconds, switch off then, after 5 to 10 minutes, check the level on the dipstick (3).

Oil filter

Every 10,000 km (6,200 miles) replace the oil filter. Screw on new filter until gasket contacts the support, then screw on a further half-turn by hand.

Start the engine and check for oil leaks. To remove the filter, make use of the special clamping tool.

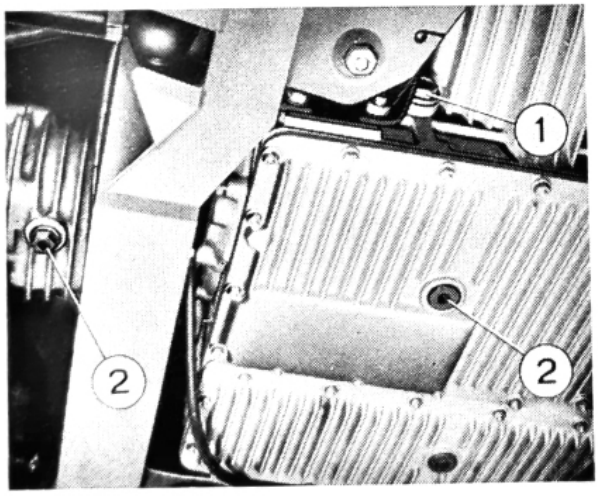
Cooling System

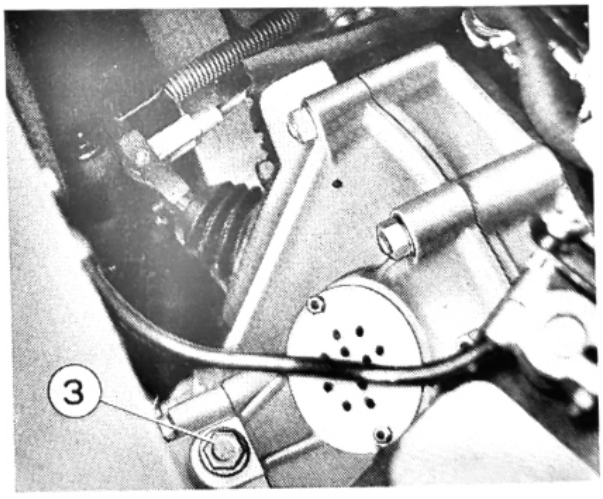
Changing the coolant

Periodically change the coolant, at least every 12 months and before winter-time, if possible.

TRANSMISSION

Gearbox and Differential Unit





Oil level

Every 5,000 km (3,100 miles) check the oil level. The level is correct when the oil skims the bore after removing the plug (1).

Every 30,000 km (18,600 miles) change the oil. Drain off when oil warm if possible, by removing the plugs (2) and letting drip thoroughly before pouring fresh oil in.

Remove the cap (3) to pour in fresh oil.

SUSPENSION - WHEELS

Rear suspension

Every 5,000 km (3,100 miles) lubricate the suspension arm shafts through the grease nipple on either side.

WHEELS

Wheel interchange (not imperative)

Every 5,000 km (3,000 miles) for a good life and even wear of tyres, wheels should be changed round.

On such an occasion, fit the spare wheel and inspect tyres and rims.

ELECTRICAL EQUIPMENT

Battery

Every month, check level of electrolyte and, if necessary, top up with distilled water (with cold battery) until level is 5 mm (0.196 in.) above the plates. Keep battery terminals clean and firmly tightened, furthermore, in order to avoid oxidation, grease then with pure petroleum jelly.

NOTE. - In summer the electrolyte level has to be inspected more frequently.

BODY

Devices and accessories

From time to time (anyhow **every 5,000 km [3,100 miles]**), lubricate all car parts subject to wear (hinges, articulations, carburettor levers, sheathes etc.), check front lid, engine bonnet and luggage compartment lid lock working condition and tightness of screws fixing various body devices and accessories (locks, door hinges ect.)

Winscreen washer

Every 5,000 km (3,100 miles) check the mesh filter located at the end of the tube inside the fluid bag and the level of the fluid consisting of 50 % detergent liquid and 50 % soft water, which does not freeze down to — 10° C (+ 14° F) temperature.

Electocompressor

Lubricate the air horn compressor by injecting, periodically (once about six months), a few drops of very fluid oil (ex. SAE 10) inside the small hole fitted with plug, then it is advisable to operate the horns for some seconds.

ENGINE

Valve gear timing

Clearance between valves and camshafts

Every 10,000 km (6,200 miles) have the clearance between valves and camshafts and the tension of the camshaft drive chains checked c/o one of our Authorized Workshops.

Fuel System

Slow-running adjustment

Blow carburettor jets and carry out necessary adjustments periodically.

Ignition

Spark plugs

Every 5,000 km (3,100 miles) clean spark plugs and check electrode gap.

Every 10,000 km (6,200 miles) renew the spark plugs.

Ignition distributor.

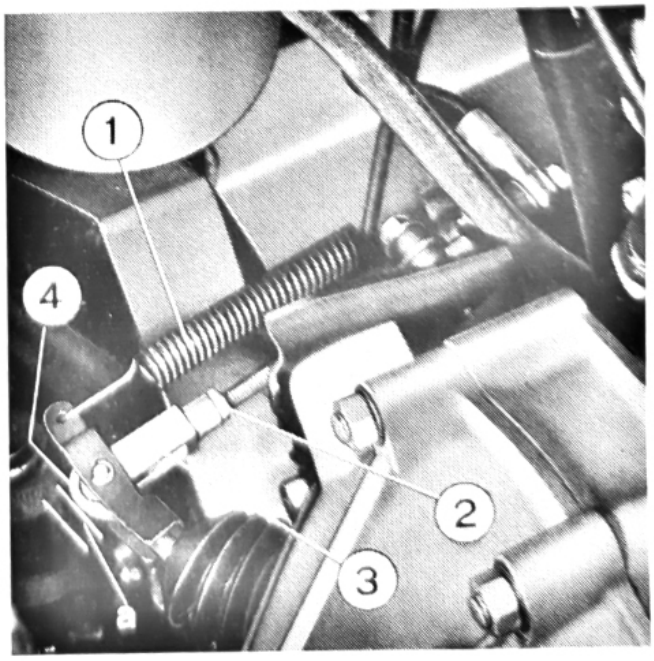
Every 10,000 km (6,200 miles) have the breaker points checked for condition and gap c/o one of our Authorized Workshops.

TRANSMISSION

Clutch

Free Travel Adjustment

Every 5,000 km (3,100 miles) check the release lever (4) for free travel. The adjustment is carried out by unhooking the spring (1), loosening the lock nut (2) and turning the clevis (3) until the free travel (a) of the release lever (4) is restored to 3 ÷ 5 mm (0.118 ÷ 0.196 in.).



In particular conditions of use, have the release lever free travel checked more frequently.

BRAKES

Brake system

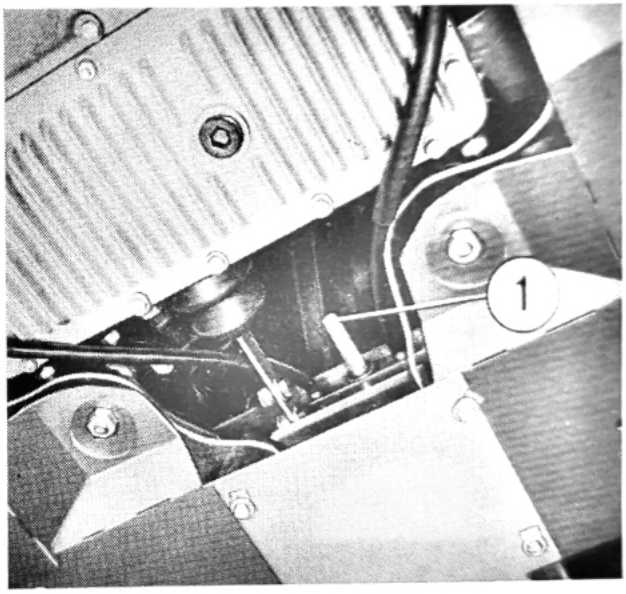
Every 5,000 km (3,100 miles) check the foot brake for working and thickness of the friction pads as per use of the brake.

The front and rear brake pads have to be replaced c/o one of our Authorized Workshops when worn down to 2 mm thickness.

Every 10,000 km (6,200 miles) check **the handbrake** for working.

To adjust, operate beneath the car as follows: loosen the lock nut and turn the pull-rod (1) till the car is braked through a 3 to 4 notch travel of the hand lever.

Once the adjustment is over, tighten the lock nut.



ELECTRICAL EQUIPMENT

Starter motor

Every 20,000 km (12,400 miles) carefully clean the commutator and blow off any copper and carbon dust between segments.

Check brushes for wear and proper contact and renew them, if necessary.

Alternator and coolant pump drive belt

Every 5,000 km (3,100 miles) check the belt tension; tension is correct when the belt, subjected to 10 kg load midway the run from alternator-to-coolant pump, sags by 10 to 15 mm.

Alternator

Every 50,000 km (31,00 miles) check the brushes for wear and contact; if required, renew them.

SERVICE

Necessary instructions for routine adjustments and inspections are clearly stated in the technical data, details and diagrams. For the above operations however, the Customer may wish to employ specific tools and skilled personnel. We wish, therefore, to remind him of the Repair Workshops of our Branches and Dealers available even for ordinary maintenance, and of the necessity to use genuine spare parts only. For complete overhauls, we recommend you to apply to our above Authorized Workshops only. Indeed, being continuously informed on the technical data relevant to your car, they are in a position to grant you the best assistance.

SPARE PARTS

Request for spares must be forwarded to our Italian agents and to the Foreign Importers, or local Dealers, who will supply them (also if not in their stock) by specifying as follows:

— order number of part needed, or at least relevant description
— quantity required
— car identification number (prefix number, chassis number)
— engine number
— shipping means
— refer to previous correspondence, if any.

If the Importer, or Dealer, do not process your order as expected, please address your claim to:

— SERVIZIO PARTI RICAMBIO —
C.so Peschiera 193 - 10141 TORINO - Phone 33.31.1 - Telex 21465

Orders for spares may be forwarded to the address above, following foregoing directions, when Foreign Countries are not provided with Lancia Agents (refer to « Commercial and Assistance Organization » booklet, print No. 8798900).

LANCIA & C.

FABBRICA AUTOMOBILI - TORINO - S.p.A.

Fully paid-up capital: 30,000,000,000 lire

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VERRONE (13030) Strada Comunale - Tel. 54.25.41/2/3/4/5
Telegrams: LANCIAUTO - VERRONE - Telex 20332

BRANCHES - INSPECTORATES * - REGIONAL OFFICES **

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PALERMO	(90145)	Viale Reg. Siciliana 4452 - Tel. 51.87.54/5-52.89.44	Telex 91130
ROMA	(00199)	Via Salaria 665 - Tel. 81.08.341	Telex 60137
TORINO**	(10121)	Corso Matteotti 30 Tel. 54.55.97 - 54.58.34 - 54.38.15 - 54.61.107	
VERONA	(37100)	Viale delle Nazioni 10 - Tel. 50.50.88	Telex 48257

SPARE PARTS DEPARTMENT

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Telegrams: LANCIAUTO - TORINO

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