



P R E F A C E

In this booklet we have briefly gathered the main principles covering this car, together with informations for the knowledge and for the normal operations of use and maintenance of the car. In order to obtain the best results from the car as far as minimum cost, long life and best performance are concerned, one should bear in mind the suggestions given in this book. For those operations and repairs not easily done with normal tools at one's disposal (supplied with ordinary tool kit), as well for complete or partial ~~overhauling~~ overhauling, we suggest those Owners, in their own interest, to avail themselves of the services of our Agents who will look to the prompt, accurate and rational execution of any job of repair or overhauling. All spare parts must be original for the best functioning results. Engine and chassis numbers must be given when ordering spares.

DATA FOR IDENTIFICATION OF A VEHICLE

Each car is identified by special numbers, i. e. :

A M 101	☆ . . . . .	☆
A M 101 S	☆ . . . . .	☆
A M 101 C	☆ . . . . .	☆

The chassis serial number is stamped on the right hand side of the cross member and on both sides of this number appear the Maserati trade mark.

The engine number is stamped on the clutch housing near the starting motor.

These numbers, for easy reading, are repeated on two plaques mounted on the radiator shroud, and are the only ones suitable both for identification and sale of the car, they also appear on the certificate of origin and on the registration certificate.

S P E C I F I C A T I O N S

Number of cylinders . . . . .	6 in line
Bore and stroke . . . . . (3,38 x 3,93 inch)	86 x 100 mm.
Individual Cyl.capacity (35,4 cu. inch)	580,88 cc.
Total capacity . . . . . (212 cu. inch)	3485,29 cc.
Max.power at 5800 revs/min.                      Injection	235 CV.
" " " " " "                      Carburettors	220 CV.
Taxable power . . . . .	33 CV.

Cylinder block is of light alloy with liners of special cast iron. Cylinder head is made of a light alloy with overhead valves, in which the valve seats have been inserted. -

Combustion chambers are hemispherical.

The crankshaft is dynamically balanced and is supported by seven lead-indium alloy bearings.

The conrods are made of forged steel in H section with the bigend bearing made of lead-indium alloy.

The little end bearing is a bronze bush.

Pistons are made of light alloy with two compression rings and two oil rings.

Crankshaft has a torsional damper.

D I S T R I B U T I O N

The inclined valves in the head are actuated by 2 overhead camshafts driven by a 3 - cog chain.

Valves are operated directly by the camshaft with the interposition of a small steel tappets operating in cast-iron seats.

Valve clearance is by means of casehardened steel inserts, which may be easily replaced.

The proper clearances (cold) between tappets and the base radius of the lobe of cam are 0,1 mm inlet and 0,20 mm exhaust.

This will give the following data:

lift of the inlet valve at top dead centre: 1 mm (0,004)  
lift of the ex. valve at top dead centre : 0,9 mm (0,039)

I N T A K E   C O L L E C T O R

The intake collector is a light alloy made, with water chamber for the warming up of the mixture.

In the hot seasons or in normally hot areas, the water should not circulate inside the collector.

This is to improve the engine performance and make starting easier.

F U E L F E E D I N G - I N J E C T I O N

The Feed is obtained by fuel being injected inside the intake collector, (Indirect injection).

This is achieved by a Lucas fuel pump, distributor, and a control unit.

The pump is electrically driven and it is capable of compressing the petrol to a pressure of 7 atmospheres.

The pump performance is very satisfactory, absorbing 60 watts only, with a fuel flowing capacity of 130 liters/h. to a pressure of 7 kgs. per cm.<sup>2</sup> (Squared centimeter).

The pressure brings the fuel to a unit which is called "the distributor".

This distributor distributes the pressure to the appropriate injector, causing it to open, permitting a very precise fuel metering into the cylinders, in exactly the amount required by the engine, according to the setting of the control instrument.

The distributor has the advantage of not employing heavy components with alternate motion, nor elastic or return adjustments, the little cylinders being operated by pressure.

Figure no. 1 shows the distributor scheme.

One can note how the motion of one rotor, bearing certain holes, connects the little cylinders alleys with the pressure and how the rotor itself, with a further rotation, connects the same amount of pressured petrol with the tubing which conveys the fuel to the injector.

This system is particularly simple.

Also the control system, which determines the amount of fuel conveyed inside the intake ports according to the amount of air inspired by the cylinders, is very simple, as well as its adjustment.

The adjustment is effectuated by means of rollers or springs, the flexibility of which has a considerable importance.

Figure 2 shows the control scheme and particularly, at point A, B, C, the coupled rollers determining the variation of motion of the distributor cylinders.

Points D, E, show the springs which vary the rollers operating place, on the plane.

The position and influence of springs D, E, are particularly important, since they determine the depressure capacity curve. Rollers A, B, C, are only the elements providing the flowing capacity amount.

The control element is also equipped with a fuel flowing variator, the performance of which is given by the Barometric depressure. Oil lubrication of the injection system is provided by a slightly higher pressure than fuel's.



The distributor element is equipped with a constant level pump, with a pressure adjusting valve, which prevent fuel escape throughout the rotating components.

### S T A R T E R

In the winter season an easier starting of the cold engine is obtained by an additional amount of injected petrol and air which helps winning the cold engine friction, and permits the engine normal idling in the cold season as well.

This additional amount of air and petrol is obtained by operating a dashboard switch (choke) which can increase the mixture to three times the normal amount.

It is up to the driver to gradually reduce this feed enrichment, setting the switch back to zero position, as soon as the engine is perfectly hot.

### S A F E T Y     S W I T C H

If the engine does not come into life when setting the starting key on, a safety system causes the automatic disconnection of the fuel feeding pump and, contemporaneously, a red warning light lights up on the dashboard.

The safety system is operated also when the engine oil pressure cut down beneath the 0,5 kgs. per cm.<sup>2</sup> (squared centimeter). To reset the pump into action, push the warning light button. An additional switch, situated under the dashboard, eliminates the safety system efficiency, should this become defectable, and connects the pump directly with the ignition switch.

---

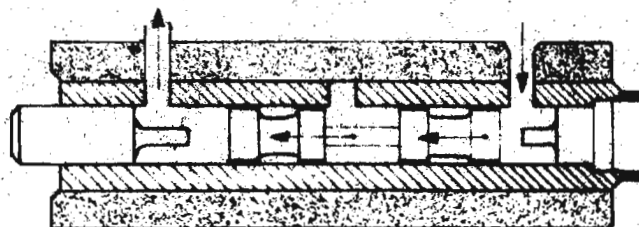
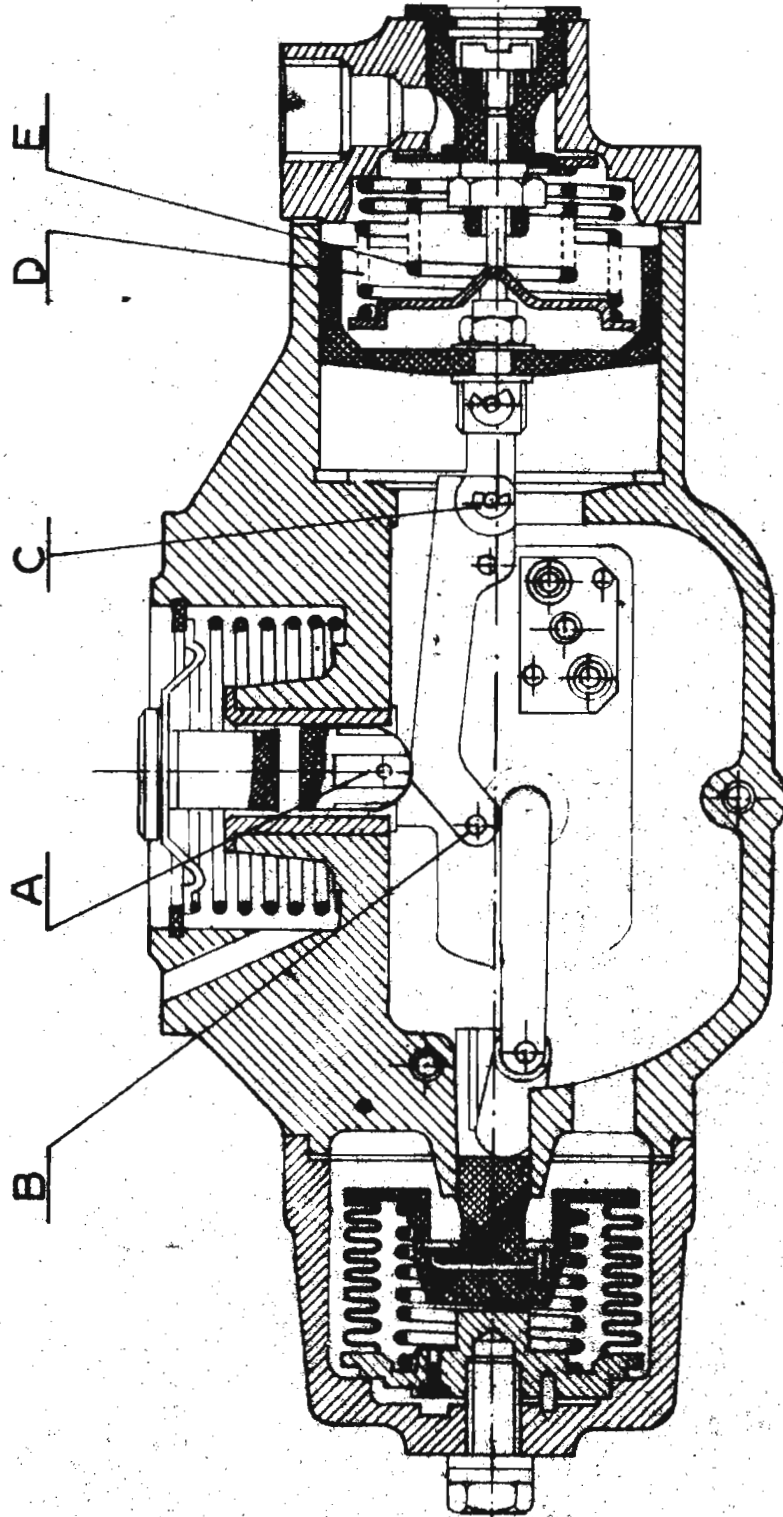
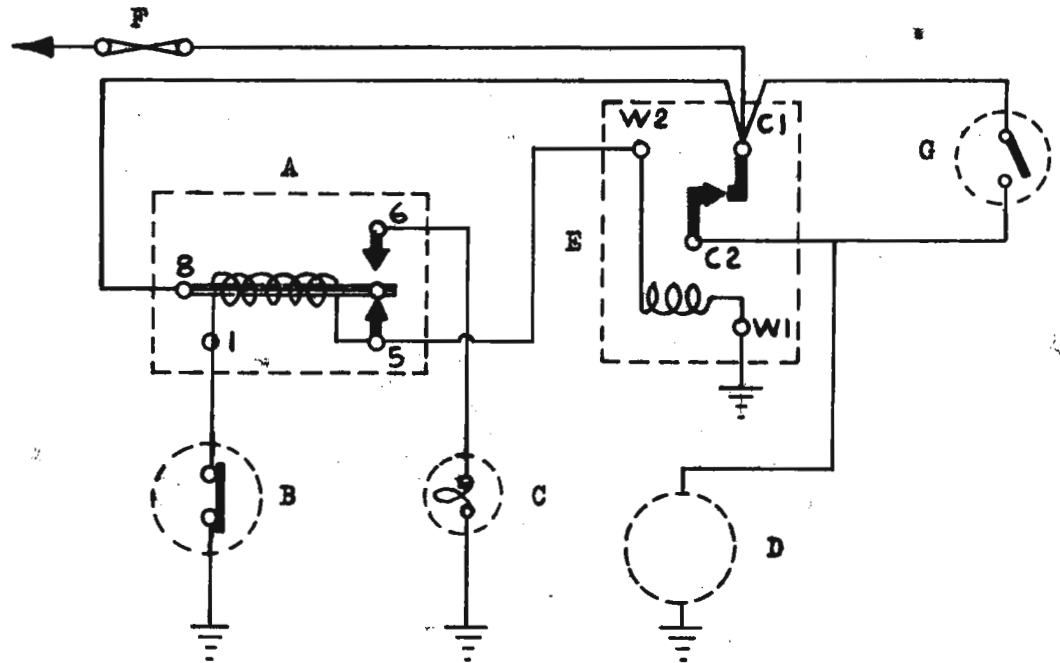
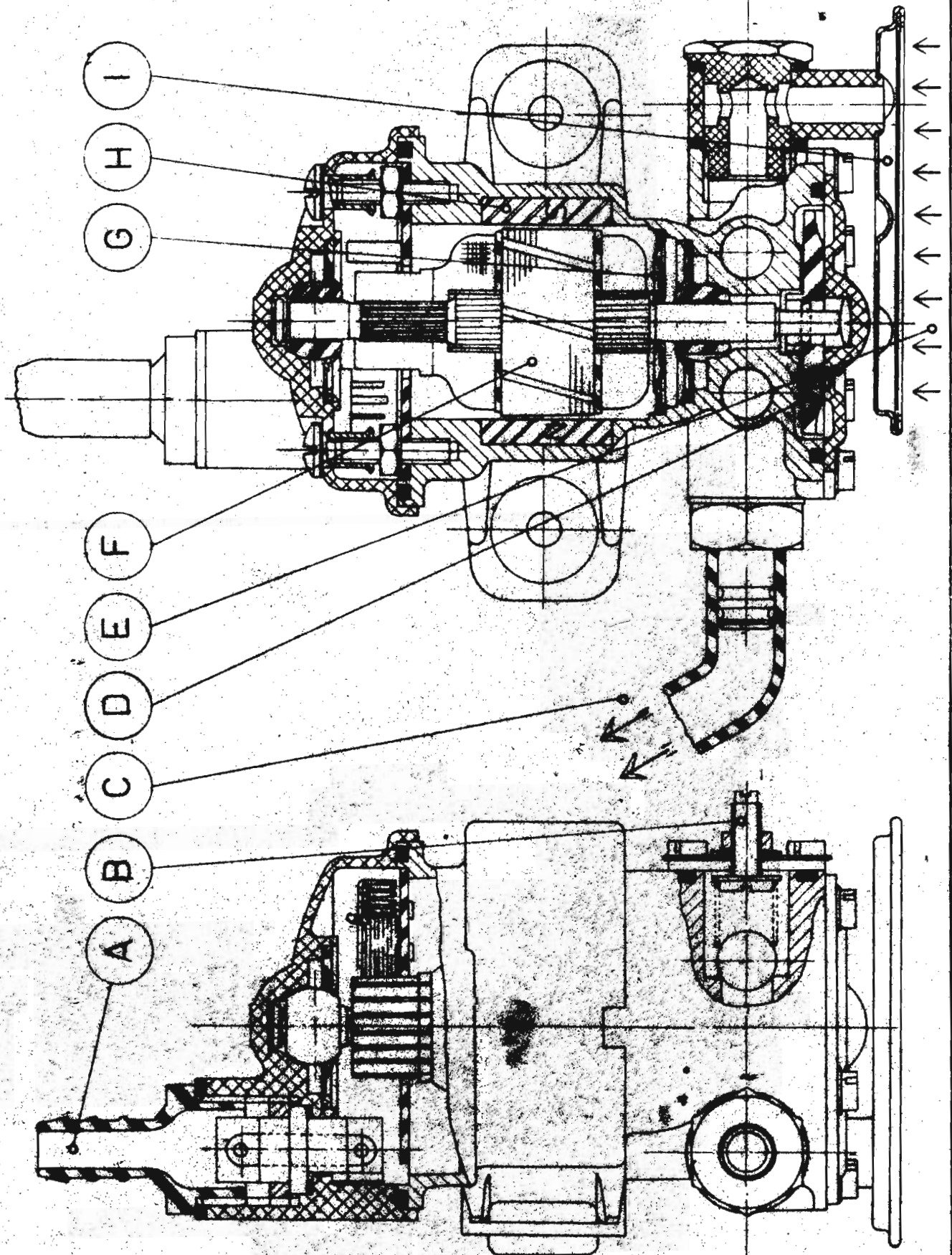


Fig. 2



- A - Thermal switch
- B - Pressure switch (switch off pressure 0,5 atm.)
- C - Push button warning light
- D - Injection pump with filter (maximum consumption 5 Amp.)
- E - Relais
- F - 11 fuses (inside the fuses box beneath the dashboard)
- G - Safety switch (on the left section of the panel, beneath the dashboard)



FUEL FEEDING - CARBURETTORS

The fuel feeding is provided by a 2 FP Type LUCAS pump (fig.4) which is sunk in the tank.

The 2 FP pump sucks fuel through one filter (I) situated on the bottom of the tank (E) and conveys it with pressure to the carburetors (C) eliminating in such a way the inconveniences caused by stagnant gas in the tubes.

The fuel is conveyed to carburetors through a centrifugal pump (D) in line with an electric motor (F) running at 2900 RPM. The quantity of fuel conveyed varies from 130 to 230 Lt. per hour, in accordance with pressure.

Pressure is maintained constant by an exhaust valve (B) but can be varied by a screw with nut from 0 to 0,4 Atm.

The pressure is regulated at 0,25 Atm.

The pump is isolated and gets electric current from two wires which go through the higher part of the pump and are protected against fuel infiltration by a flexible tube fixed to the pump and to the tank.

The fuel filter is situated on the rear right side of the car, and its element (cartridge) is easily replaceable.

Carburators are Weber 42 DCOE 8 tips, with double body, mechanical pump and starter.

The three double carburetors suck air through a single wide-capacity air filter, with catalytic action.

---





## LUBRICATION

Lubrication is by forced circulation through all the main components of the engine, and is obtained by means of a rotor pump situated inside the sump.

The pump sucks oil from the sump, passes it through a filter and then sends it to the components to be lubricated.

To ensure a low oil temperature a small helical pump, immersed in oil, and driven by a V belt circulates the oil through an oil radiator which is situated next to the water radiator.

The oil filter is located on the right side of the engine block and is desmontable from underneath the car.

The normal oil pressure from low to high revelations is of 3 - 5 kilos per sq. cm. (80 - 100 lbs. per sq. inch.).

This pressure is controlled by means of a pressure relief valve installed in the oil filter casting.

Oil is refilled through the pipe union situated on the front of the oil cylinder head.

The level is ascertained by means of a dipstick inserted into the pipe which is situated on the left hand of the sump under the exhaust manifold.

## COOLING SYSTEM

Engine cooling is obtained by circulating water through an centrifugal pump and a electromagnetic ventilator, the action of which is regulated by a thermometric switch situated on the radiator.

The ventilator comes into action when the water temperature is 75° / 86° degrees.

The water flowing through the radiator is also automatically regulated by means of a thermostat, fitted on the engine head, This system permits an easy heating of the engine, specially at starting.

The water temperature is checked by means of an indicator on the dashboard which is connected with a tube inserted inside the upper section of the radiator.

The water temperature should not exceed 90° degrees.

The draining water tap is placed in the lower section of the radiator.

Radiator capacity is approx. 14 liters. To the water is added 1 % of emulsifiable oil.

I G N I T I O N      S Y S T E M

The distributor is situated on the front right hand side of the engine, driven by a pair of helicoidal gears and by a battery. The distributor is a Marelli S - 87 A 12 V 15° (Destro) with automatic advance.

The spark is set at 12° advance. (on crankshaft)

Range of automatic advance is 30° (on crankshaft)

Max. total advance of the coil ignition is 42°.

Firing order is 1 - 5 - 3 - 6 - 2 - 4.

The gap between the breaker points is 0,4 mm. (0,016 in) .016

Cap between spark plug point is 0,5 mm. (0,02 in) .020

Diameter and gauge of the plugs are 14 x 11,25 mm.

Marelli type B Z R 201 A coils.

Spark plugs for light duty :	Marelli	CW 240 L
	Besch	W 215 P 21
	Lodge	2 HL or 3 HLN
	Champion	NA 10
	K L G	FE 80
	Marshal	34 HF

for heavy duty :	Marelli	CW 230 LPS
	Besch	W 215 P 21
	Champion	NA 12
	Lodge	47 RL
	K L G	FE 250
	Marshal	33 HFS

S T A R T I N G

The starter motor is a Marelli type MT 23 A CV 1,2  
Starter is operated by means of a key switch on the dashboard.

E N G I N E      M O U N T S

Engine has an inclination of 4° to the vertical-longitudinal plane, and is offset 38 mm. to the right-hand side.  
Engine is mounted on 4 silentbloccs.

**TRANSMISSION**

**Clutch** - The dry spring-loaded single-plate clutch is hydraulically operated by two little pumps: one is a 3/4" pump on the pedal and the other is a 7/8" pump on the clutch. The pedal travel is regulated by means of a screw nut situated on the strut of the inlet side of the pump.

**GEAR-BOX** - There are 4 or 5 forward speed and a reverse ones. There is synchromesh in all forward gears. The gear lever is situated directly on the top centre of the gear box.

Gear ratios :		Normal	
1	ratio	0,331	= 3,02
2	"	0,540	= 1,85
3	"	0,776	= 1,29
4	"	1	= 1
5	"	1,18	= 0,85
	Reverse	0,315	= 3,17

**A X L E**

Rear axle is a rigid hypoid - bevels.

The normal reduction ratio is :	13 / 49	= 3,77
It can be substituted by :	13 / 43	= 3,31
	13 / 41	= 3,54
	11 / 45	= 4,09

**C H A S S I S**

Principal dimension :

Front tread . . . . .	1390	mm	(54,3 in.)
Rear tread . . . . .	1360	mm	(53,5 in.)
Wheel base	Coupé . . . . .	2600	mm (102,3 in.)
	Coupé S. . . . .	2500	mm (98,4 in.)
	Convertible . . . . .	2500	mm (98,4 in.)
Ground clearance . . . . .	130	mm	(5,1 in.)
Weight of the empty car . . . . .	1300	kilos	(2750 lbs.)
Weight laden . . . . .	1400	kilos	(3100 lbs.)

The frame is exceptionally rigid and is made of longitudinal and transverse members, which are tubular and elliptical in shape. The size and strength of these members is proportional to the stress which they will undergo.



## FRONT SUSPENSION

Front suspension is a quadrilateral transverse type with coil springs and with pivots acting on rubber suspensions. Telescopic shock absorber type Girling F 4.5 or Koni 82.1019. There is a transverse stabilizer bar to limit roll angle.

## REAR SUSPENSION

Rear suspension is by Cantilever leaf springs, with 2 Girling F 7.5 shock absorbers. There is a transverse stabilizer bar which steadies the car when cornering.

## STEERING

The steering box is mounted on the left hand side and is of the type with variable play.

It is operated through a column with a flexible joint to dampen vibrations, and acts directly on the steering bars through a double lever.

The toe-in of the front wheels is between 5 and 6 mm.

The min. turning radius is 6 meters (20 feet).

## BRAKES

The brakes are hydraulic acting on all four wheels with 306 mm. diameter disc brakes at the front and 291 mm. diameter disc brakes at the rear.

The braking surface in the front wheels is 294,5 squared inches and 186 squared inches in the rear.

The adjustment of the brake pads is automatic.

A second mechanical braking system, operates on the rear disc brakes.

This braking system is used as an additional safety braking, when parking, by pulling a hand-lever.

The braking system is equipped with a vacuum control situated on the right hand side of the engine which reduces the foot pressure required on the brake pedal to a minimum.

A vacuum of approx; 280 mm of mercury is obtained in the servo brake chamber by connecting this unit to the inlet manifold of the engine.

## WHEELS

The wheels discs are 550 X 16, perforated and attached to the hub by means of 4 stud bolts.

TYRES

Front and rear : Pirelli 185 x 16"

Cold inflation pressure for max speed of 100 ml/h : front 1,7 Kg/cm<sup>2</sup> = 24 lb/sq. in.  
rear 1,9 Kg/cm<sup>2</sup> = 27 lb/sq. in..

Inflation pressure for speed more than 100 ml/h not longway on normal roads : front 2,1 Kg/cm<sup>2</sup> = 30 lb/sq. in.  
rear 2,3 Kg/cm<sup>2</sup> = 33 lb/sq. in.

Inflation pressure for speed more than 100 ml/h longway on motor roads : front 2,4 Kg/cm<sup>2</sup> = 34 lb/sq. in.  
rear 2,6 Kg/cm<sup>2</sup> = 37 lb/sq. in.

ELECTRICAL SYSTEM

**Battery :** The battery is located in the boot and is easily accessible.

Capacity : 64 amp/h - 12 volts

Type : Marelli - 6 VL 7

**Generator:** Marelli DN 63 A type, with a voltage regulator.

It is situated on the left hand side of the engine and it is operated from the crankshaft through an adjustable V Belt. Normal output 400 W. Rotation is right from the front.

**Starting :** Marelli type MT 23 A 1,2 12 D9.  
motor

HORN

2 Electric - MIXO TR - 100 Horns operated by means of a button in the centre of the steering wheel.

FUSES

The 12 electric fuses of the electrical system are located together on a small fuse board which, for sake of convenience, is situated under the dash - board on the right - hand side, easily accessible.



### HEATING AND VENTILATION SYSTEM

As it is shown in the annexed print, table V, this system consists of :

One side conductor with electric fan (1), one centrifugal ventilator (2), one conductor for air distribution (4), one radiator (3) and one dynamical air inlet tube.

This system is very simple and can be used in several ways.

When used as ventilation system while the car is running, the dynamic air goes with pressure through the main throttle and the secondary throttle, and blows inside the car through three outlets, operated beneath the dash-board.

In these conditions additional air is blown inside the car also through the ventilator and radiator.

Should the dynamic pressure be insufficient it is advisable to close the secondary throttle and to operate the ventilator.

Heating system : open the water tap (11) operating the lever on the dash-board. Open the air main throttle (6) and close the secondary throttle (7).

The air going through the radiator can be increased by operating the ventilators.

For heating the car without taking outside air, close the main throttle (6) and open the secondary throttle (7) and operate the ventilator.

With the ventilator in action the air inside the car will be sucked from outlet (9) and circulated through the radiator until it has heated up to the desired temperature.

With outlet 8 open air circulation is easier.

Defrost : The air conductors to rear glass (12); are always open, and to obtain a quick demist it is necessary to close n. 8 - 9 - 10 outlets and operate the heating system.

#### Hot water circulation and throttle operating levers :

- (13) Operating lever for main throttle (6) - (When the lever is all the way up the throttle is closed).
- (14) Operating lever for secondary shaft (7)-(When the lever is all the way up the throttle is closed).
- (15) Hot water circulation tap operating lever (11) - (When the lever is all the way up the tap is open).
- (16) Ventilators switch.



## H E A T I N G   A N D   D E F R O S T E R

The car is equipped with complete ventilation and heating system which, besides improving the condition of the temperature into passenger's compartment, prevents at the same time the formation of frost on the windscreen.

The heater, which is illustrated in the annexed scheme, consists of the following parts :

- 1 - Hot water inlet in the radiator
- 4 - Radiator group
- 5 - Regulator's control for water circulation
- 6 - Throttle's control and ventilator introducing air in the radiator.
- 8 - Throttle's control and ventilator on driver's side.
- 10 - Radiator's door
- 11 - Water outlet from the radiator
- 12 - Throttle directing air flow to the radiator
- 14 - Air inlet on driver's side
- 15 - Water switch
- 16 - Throttle controlling air inlet on driver's side
- 17 - Air inlet to radiator with ventilator
- 18 - Air inlet on driver's side with ventilator
- 19 - Water return on motor pump intake
- 20 - Hot water inlet on the head of the engine
- 21 - Hot air output ventilator
- 22 - Regulator for warm water flow.
- 23 - Air on the front windscreen
- 24 - Air switch on the rear window



## O P E R A T I N G

Working of the heater is based on introducing hot or cool air in the inside of driving compartment by means of conductors with frontal inlets ( 17 - 18 ) which are equipped with ventilator with an electrical motor, and output of hot air under the bennet with ventilator ( 21 ).

The radiator ( 4 ) through which air increase is thermic content, consists of a pipe installation where the hot water of the engine is circulated and is drawn out at warmest point ( 20 ) of the outlet nozzle from the head and is circulated again on the intake conductor of the motor's pump ( 19 ).

Circulation of hot water is obtained by means of the lever ( 5 ) on the control panel, which operates on a plug-governor ( 22 ). The auxiliary tap is near the water pump and must be closed in warm weather ( 15 ).

After a few minutes running of the engine, the water will be hot enough to be able to heat up the air which may then be introduced by opening the induction throttle ( 12 ) by means of the lever ( 6 ).

On this inductor the ventilator is engaged by the same lever ( 6 ) at which time it actuates the automatic cutout.

The other air inlet is ( 18 ) equipped with electric ventilator, which are operated by the lever ( 8 ).

Direct stream driver's feet by conductor ( 14 ).

The left hand ventilator is actuated by 50 W electric motor which extracts warm air from the engine compartment to the exterior via the left hand grille.

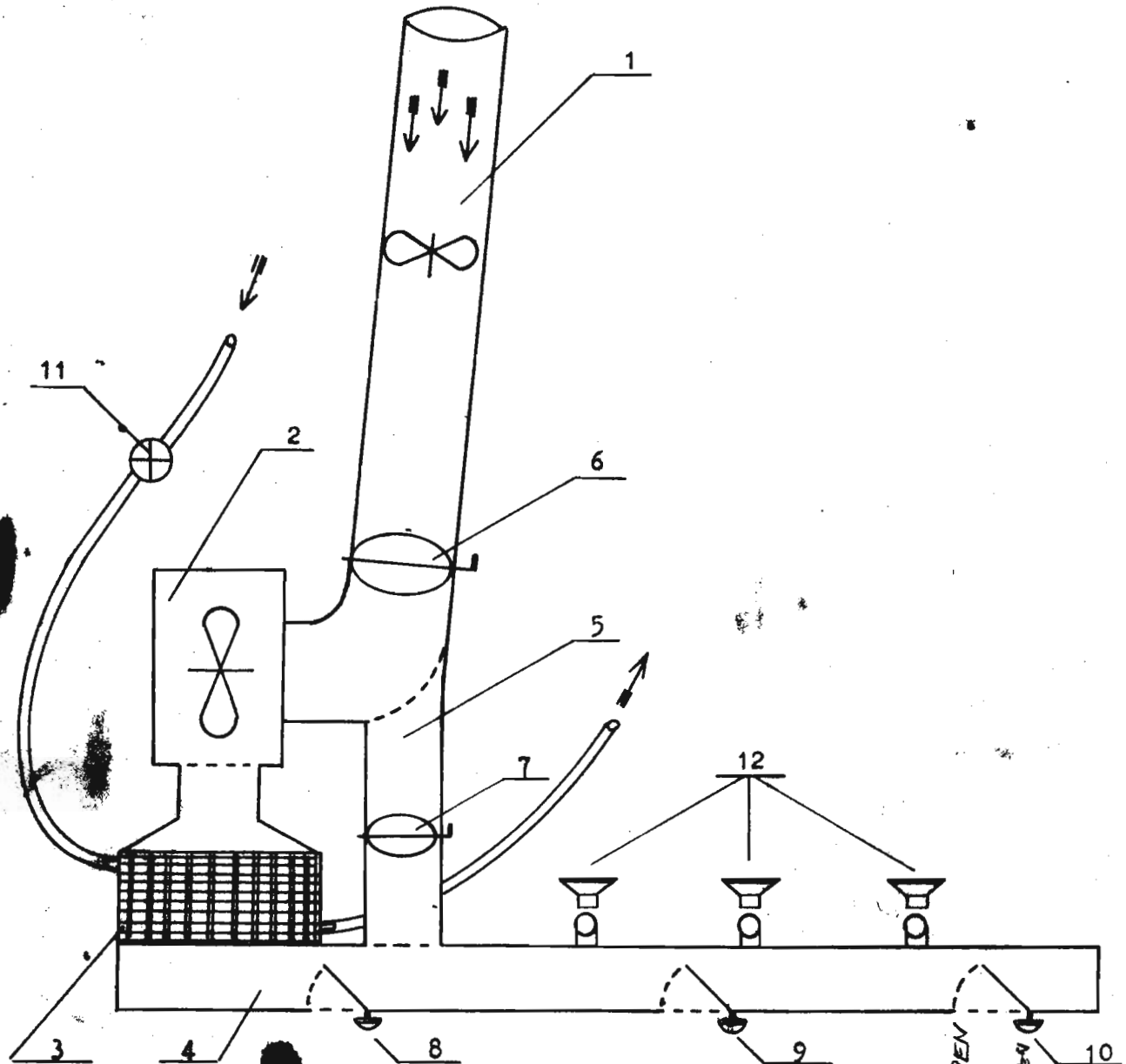
This blower is started when lever ( 8 ) is depressed all the way down.

In other words the electrical ventilators ( 18 - 19 - 21 ) are respectively operated by the levers ( 8 - 6 ) when depressed to their lowermost position.

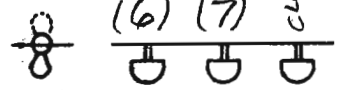
Their running is indicated by three pilot-lamps, placed on the dashboard in relation to each lever.

For greater security the three fans can only be operated when the cars' ignition switch is on.

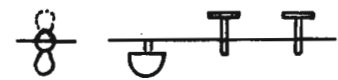




Levers position for completely cool (with or without ventilator in action)



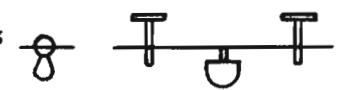
Levers position for completely hot (with or without ventilator in action)



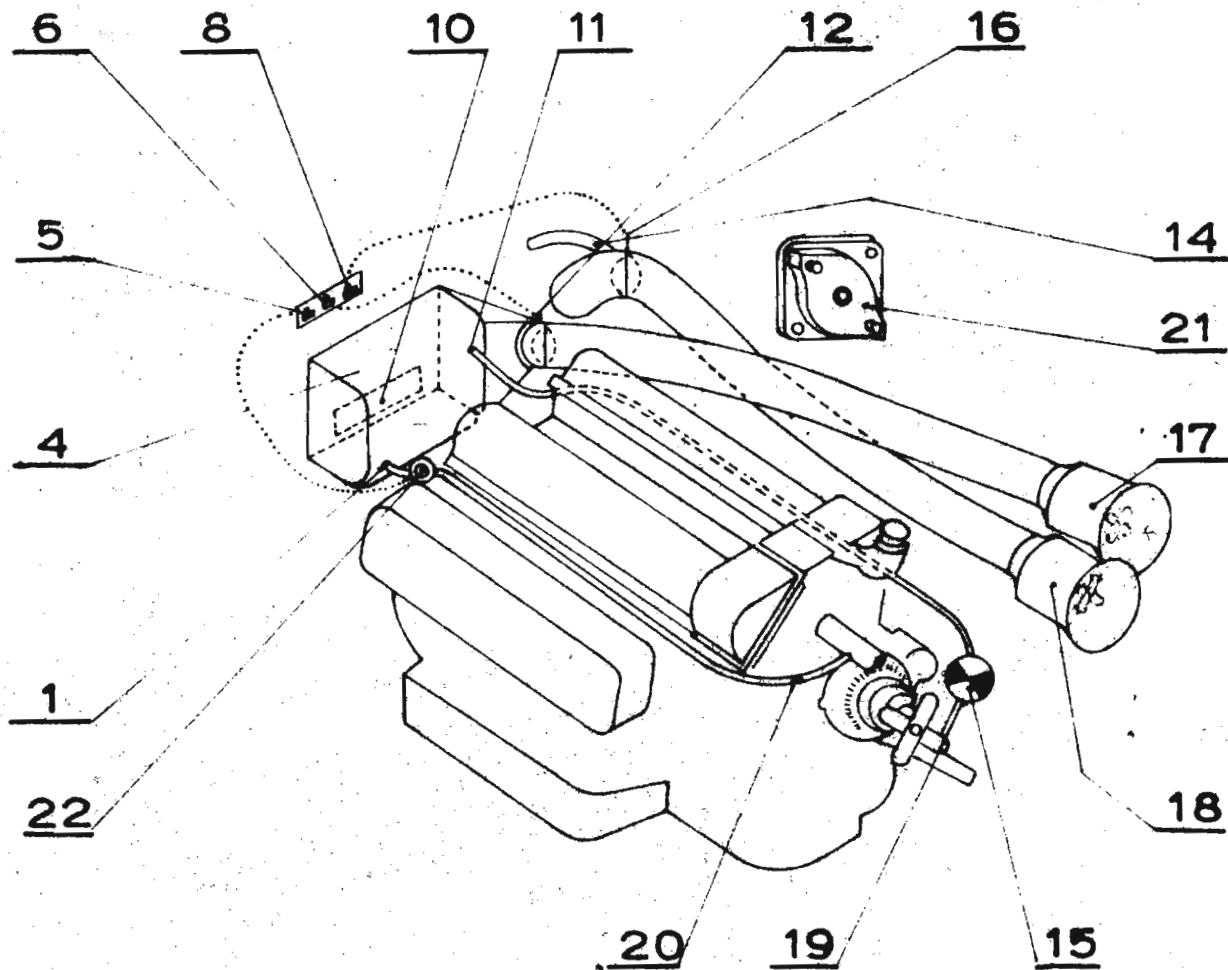
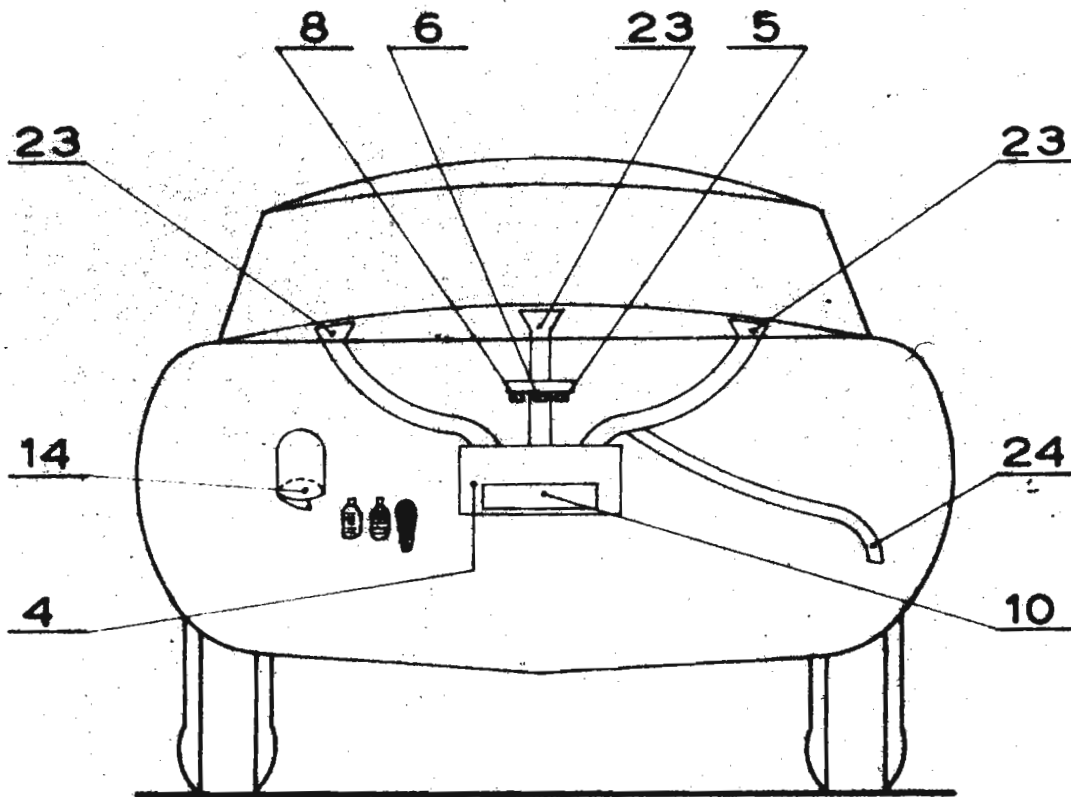
All closed position . . . . .



Levers position for air circulation in the compartment with ventilator in action, hot radiator and outlet n. 8 open



14



IMPIANTO DI VENTILAZIONE E RISCALDAMENTO



PERFORMANCES OF THE VEHICLE  
WITH 4 AND 5 FORWARD SPEEDS

15  
Axle ratio .....  $\frac{13}{46}$  ..... = 0,2825 - 3,54  
Tires - 600 x 16" average circumference 2,24 - 88 Inches.

S P E E D - M I L E S / h - (With 4 forward speeds)

Engine revs.	1 st Gear	2 nd Gear	3 rd Gear	4 th Gear
	0,333	0,544	0,770	1
1000	7,74	12,77	18,06	23,5
1500	11,73	19,16	27	35,2
2000	15,48	25,54	36,12	47,0
2500	19,47	31,93	45,06	58,0
3000	23,46	38,32	54	70,4
3500	27,21	44,60	63,12	82,2
4000	30,96	51,08	72,24	94,0
4500	34,95	57,47	81,18	105,7
5000	38,94	63,86	90,12	117,4
5500	42,69	70,24	99,06	129,1

Axle ratio .....  $\frac{13}{49}$  ..... = 0,265 - 3,77  
Tires - 185 x 400 average circumference 2,10 - 82,5 Inches  
Tires - 185 x 16" average circumference 2,10 - 82,5 "

S P E E D - M I L E S / h (With 5 forward speeds)

Engine revs.	1 st Gear	2 nd Gear	3 rd Gear	4 th Gear	5 th Gear
	3,02	1,85	1,29	1	0,84
1000	6,85	11,2	16	20,7	24,7
1500	10,37	16,8	24	31,05	37
2000	13,7	22,4	32	41,4	49,4
2500	17,22	28	40	51,75	61,7
3000	20,74	33,6	48	62,1	74
3500	24,7	39,2	56	72,45	86,4
4000	27,4	44,8	64	82,8	98,4
4500	30,9	50,4	72	93,1	111,1
5000	34,44	56	80	103,5	123,4
5500	37,9	61,6	88	113,8	135,7
6000	41,18	77,2	96	124,2	148

At high speed the above specifications are to be multiplied by the tire expansion coefficient which is caused by the centrifugal force.

The above performances are given by the following models : Coupé, Coupé S., Convertible.

**MAINTENANCE**

The normal maintenance operations have been listed hereunder as follows: - (after the first 500 km. or 300 miles the differential oil must be changed)

**EVERY 1000 kms. (600 MILES)**

- 1 - Engine : Check oil level and refill if necessary.
- 2 - Radiator : Check water level and refill if necessary, preferably with distilled water and 1° emulsifiable oil.
- 3 - Tyres : Check pressure.

**EVERY 4000 kms. (2400 MILES)**

- 4 - Engine ; Change oil and change oil filter cartridge.
- 5 - Water pump : Lubricate with grease nipple.  
Don't exceed a pressure of 0,2 - 0,3 atmospheres.
- 6 - Front suspension pivots - Lubricate by means of the special grease nipple.
- 7 - Transmission junctions: These are to be lubricated by means of the grease nipples.
- 8 - Steering and articulated joints: lubricate by means of the grease nipples and check oil level in the steering box.
- 9 - Rear wheel hub : Lubricate by means of the grease nipples.
- 10 - Clutch : Check oil level in the tank of the pump and if necessary top up.
- 11 - Battery : Check level of distilled water and top up.
- 12 - Brake master cylinder : Check the level and if necessary add brake fluid.
- 13 - Spark plugs : Clean and set the points to a gap of 0,5 mm (0,02).
- 14 - Distribution points : Clean and set the gap to 0,4 mm(0,015)
- 15 - Generator belt : Adjust the tension.
- 16 - Timing chain : Check and adjust tension.
- 17 - Water pump packing gland : Make sure that it is water tight and if necessary replace it.
- 18 - Clutch pedal free play : Make sure there is 10 mm. (0,4 in) travel in the pedal before the clutch starts to disengage.  
Free play clutch pedal should be 10 mm (0,4 in )
- 19 - Brakes : Automatically adjusted.
- 20 - Steering box : Regulate the play by means of the screw bolt.  
The max. torque stress not to exceed 7  
(kilogrameters) (48 lb/fr).

**EVERY 10.000 KILOMETERS ( 6000 MILES**

- 21 - Ignition distributors : Dismantle and lubricate bearing and bushes.
- 22 - Gear box : Check level and if necessary top up with oil
- 23 - Rear axle : Check the level and if necessary top up with oil.
- 24 - Commutator : Inspect, clean and lubricate with special oil can grease, from side of driving belt.
- 25 - Valves : Adjust valves clearance.
- 26 - Brakes : Check the diameter of the braking pads. Minimum diameter shall be 7 mm. (iron guide included)
- 27 - Hand Brakes : Lubricate the cable through the 3 grease nipples.
- 28 - Petrol filter : Check and if necessary replace cartridge.

**EVERY 20.000 KILOMETERS (12.000 MILES)**

- 29 - Gear box : Drain oil and refill.
- 30 - Differential : Drain oil and refill.
- 31 - Steering box : Drain oil and refill.
- 32 - Front wheel bearings : repack with grease.
- 33 - Brakes : check pads and if necessary replace them.

**34 - For Carburettors cars : 2 F P Lucas Pump -**

Check carbons and electric connector. Injection pressure must be 0,25 Atm. and fuel capacity no less than 28 gallons per hour.

**FURTHER DETAILS REGARDING THE OPERATIONS N.**

8 - 15 - 16 - 18 - 19 REFERRED ABOVE :

- 8 - Steering : During the course of normal overhauling it is necessary to examine all steering parts in order to clean and lubricate the tiered joints as well as the steering box unit.
- 15 - Generator belt - Should the tension require adjustment, it is necessary to loosen the belt on the stirrup which is joined to the bottom of the generator, after which the required tension is obtained by moving the generator itself. The adjustment of the belt for the oil cooler pump is effected by removing one or more of the spacers on the driven (pump) pulley.



- 16 - Timing chain : If after a certain period it is found necessary to adjust the timing chain tension unscrew the central nut holding the plate which is left of the engine block.  
Remove the washer and locking dowel underneath using the proper extractor tool.  
Turn the eccentric, using a torque stress of approx. 0,1 Hgm. (0,75 lb. ft.) and lock it in the desired position by placing locking dowel in the adjustment holes which are now aligned.
- 18 - Clutch adjustment : The play between the clutch and the thrust disc which must be approx. 2,5 mm (0,1 in) will be eliminated by the wear of the antifriction material, which results in the slipping of the clutch itself.  
The inconvenience is eliminated by adjusting the play back to the original specifications by means of the adjustable tracer point situated on the second pump.  
The play of 0,1 in. on the thrust disc corresponds to 0,15 in. displacement of the pedal.
- 19 - Brakes - When mounting disc brakes it is important to ensure that the disc braking surface and the pads are parallel.  
Only a few millimeters play is admitted.  
The replacement of the brake pads, which with a moderate use of the car is normally effected after around 12.000, miles, is necessary when the antifriction material is worn out to a few millimeters diameter.
-

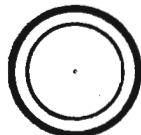


CAPACITY AND CONSUPTIONS

The normal petrol consumption (according to CUNA standard) is 13 liters x 100 Km. (5,5 U S gallons x 100 miles)  
Average consumption varies according to speed, road surface and amount of acceleration and deceleration.  
It is advisable never to let the engine exceed 6000 rvs/min.  
The car can travel approx. 450 Km without refuelling (280 miles)

ITEM	CAPACITIES	REMARKS
Petrol tank	Gallons 20	SUPERCORTEMAGGIORE N.O. 98/100 R.M.
Radiator engine	Gallons 3,7	Distilled water if possible
Engine sump	22 lbs	Winter: AGIP F 1 RACING SAE 30 Summer AGIP F 1 RACING SAE 50
Gear box	3,3 lbs	AGIP F 1 ROTRA HYPOID SAE 90
Differential	4,2 lbs	AGIP F 1 ROTRA HYPOID SAE 140
Differential	4,2 lbs	AGIP F 1 ROTRA HYPOID SAE 90 for temperature less than 8° C under zero
Steering box	0,44 lbs	AGIP F 1 ROTRA SAE 250
Master cyl. (brakes)	0,88 lbs	CASTROL WAKEFIEL GIRLING BRAKE FLUID AMBER (EXTRA HIGHT DUTY H 204/57)
Master cyl. (clutch)	0,44 lbs	OIL LOKEED HYDRAULIC HEAVY DUTY
Bushes & bearings		AGIP GRASSO 951 or AGIP F 1 GREASE 30
Steering joints		AGIP F 1 GREASE 15

LUBRICATION SCHEME SYMBOLS FOR TABLE X



AGIP F 1 RACING SAE 30 : Winter  
AGIP F 1 RACING SAE 50 : Summer



AGIP F 1 ROTRA HYPOID SAE 90



AGIP FF 1 ROTRA SAE 250



AGIP GRASSO 951 or AGIP F 1 GREASE 30



AGIP F 1 GREASE 15



AGIP F 1 ROTRA HYPOID SAE 140

In countries where AGIP F 1 RACING SAE 30 and SAE 50 are not available use AGIP F 1 MOTOR HD SAE 40 and SAE 50, taking care to change this oil and filter element for the first time after not more than 600 miles.

**TAV. X - LUBRICATION SCHEME**

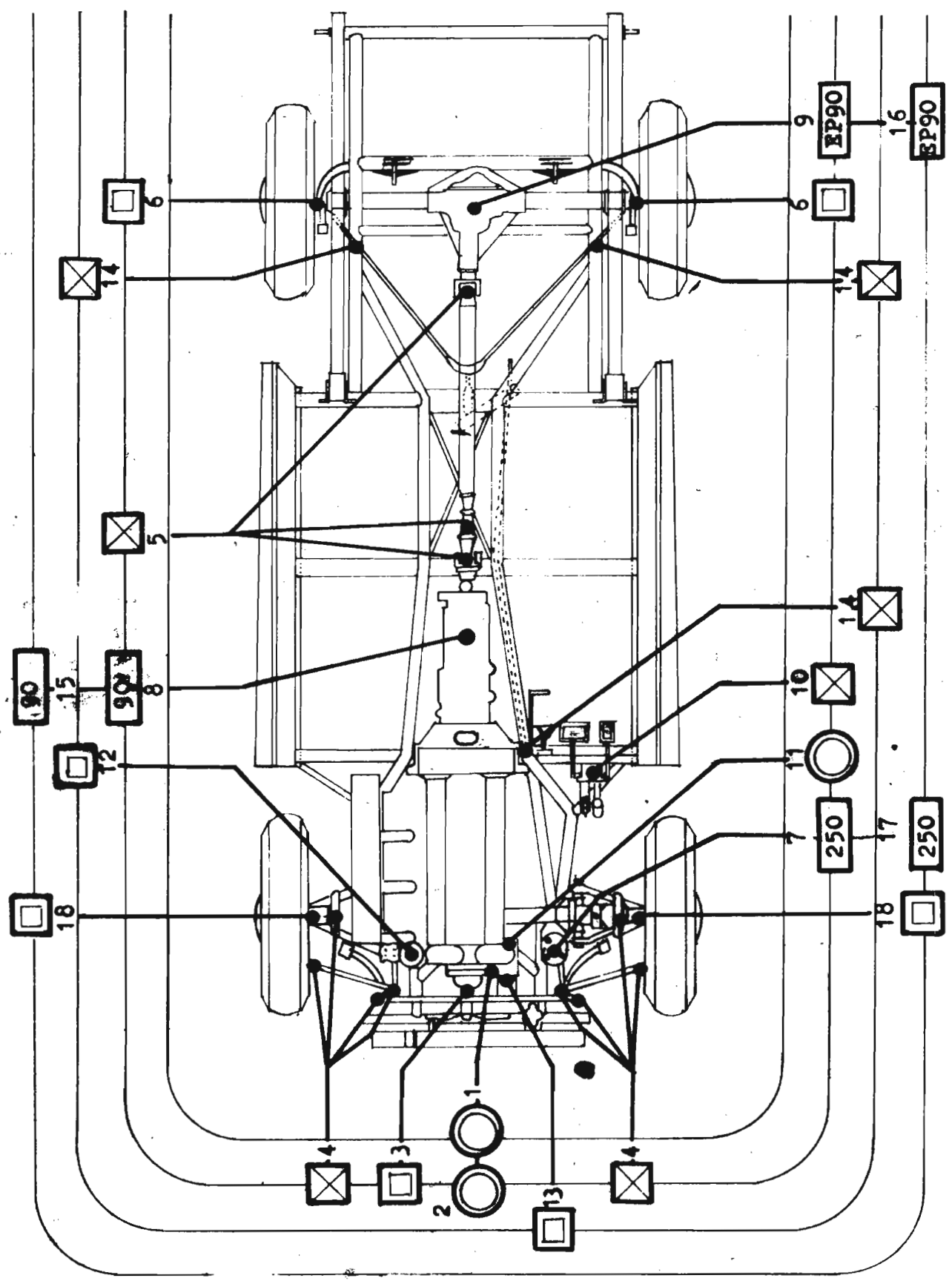
---

- N° 1 - Engine
- N° 2 - Engine
- N° 3 - Water pump
- N° 4 - Steering unit and suspension
- N° 5 - Drive shaft points
- N° 6 - Rear end
- N° 7 - Steering box
- N° 8 - Gear box
- N° 9 - Differential Case
- N° 10 - Pedals
- N° 11 - Generator
- N° 12 - Distributer
- N° 13 - Generator
- N° 14 - Hand Brake
- N° 15 - Gear box
- N° 16 - Differential case
- N° 17 - Steering box
- N° 18 - Front hubs



20.000 Km  
 10.000 Km  
 4.000 Km  
 1.000 Km

1.000 Km  
 4.000 Km  
 10.000 Km  
 20.000 Km



SCHEMA DI LUBRIFICAZIONE - TAV. 8



## U S E   O F   T H E   C A R

The car is delivered to customers after it has undergone a very strict test and a prolonged running-in of engine and transmission unit, and therefore it can be run to full speed without endangering its ultimate efficiency.

In this way it is not necessary to change the oil filter after the first 1000 kilometers, as is usually done with ordinary vehicles.

---

On carburettors models it is not necessary to fit locks to the carburettors.

- 1 - Before driving off, it is advisable to check and see if the petrol is of the advised octane contents, if the radiator and the engine sump are full, and if the tyres have the right pressure.
- 2 - While going through the normal starting operations, remember to check if gear lever is in neutral, in such a position this lever can freely move from left to right. To facilitate starting of the engine when cold pull out the hand throttle and twist the key to engage the starter motor. Until engine is slightly warm, especially during the cold season, avoid sudden acceleration but give the oil time to warm up, so that it may freely circulate.
- 3 - When driving occasionally check the oil pressure gauge. In order to avoid clutch do not rest your feet on the clutch pedal when not shifting gears.
- 4 - To switch off the engine, turn the ignition key.
- 5 - Winter precautions. If during winter months the vehicle has to remain standing outside in a temperature below freezing point, add antifreeze to the water.

**IRREGULARITIES AND REMEDIES**

Engine will not start; if the battery is flat, it should be recharged or replaced.

Engine too tight : oil is too dense or some part is too tightly fitted. (The latter case is possible when the car has been improperly overhauled by a non-specialist workshop).

Low voltage at spark plugs : damaged earth terminal, oxidised contacts of the coil ignition ( a very rare case).

Damaged pumps filters dirty or clogged.

Low compression : excessive scoring of the cylinders, or excessive wear, or valves not having a gas-tight fit, or valve adjustment too tight.

Oily spark plugs : heat range too cold or fouled by excessive attempts to start.

**LACK OF POWER IN ENGINE**

Low compression : the engine emits fumes from the crank case breather pipe; the piston rings are worn or broken: replace same.

Spark plugs with white insulating china: plugs too hot : replace them with recommended type.

Incorrect type of petrol: unless suitable antiknock petrol is used, self ignition takes place: the petrol is too cold and therefore does not ignite at the proper time.

Incorrect engine timing: this can happen after an incompetent overhaul. Check and time.

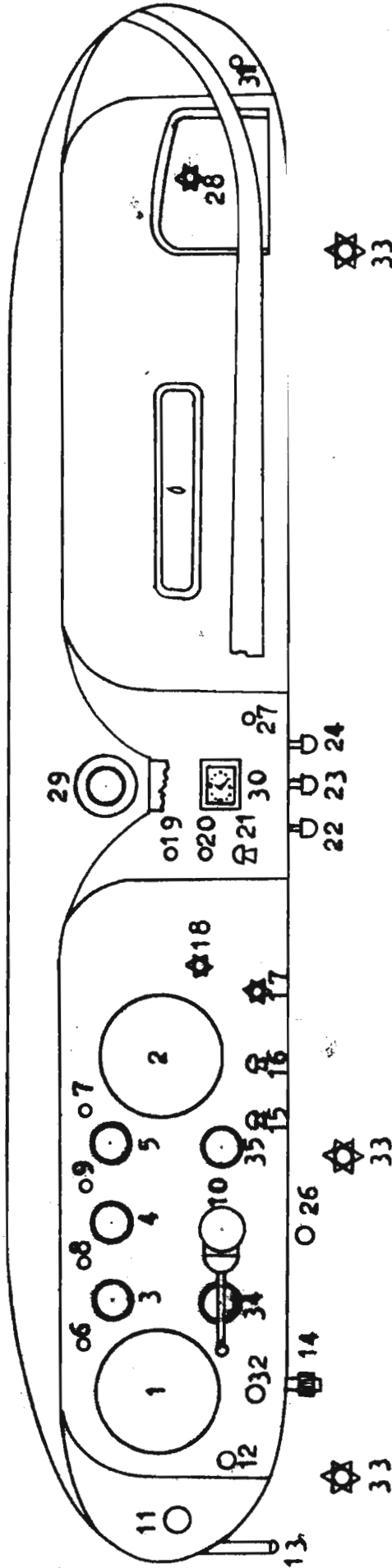
Broken valve springs : the engine misfires.

Incorrect spark advance: check and reset according to the above data.

**TOOL KIT**

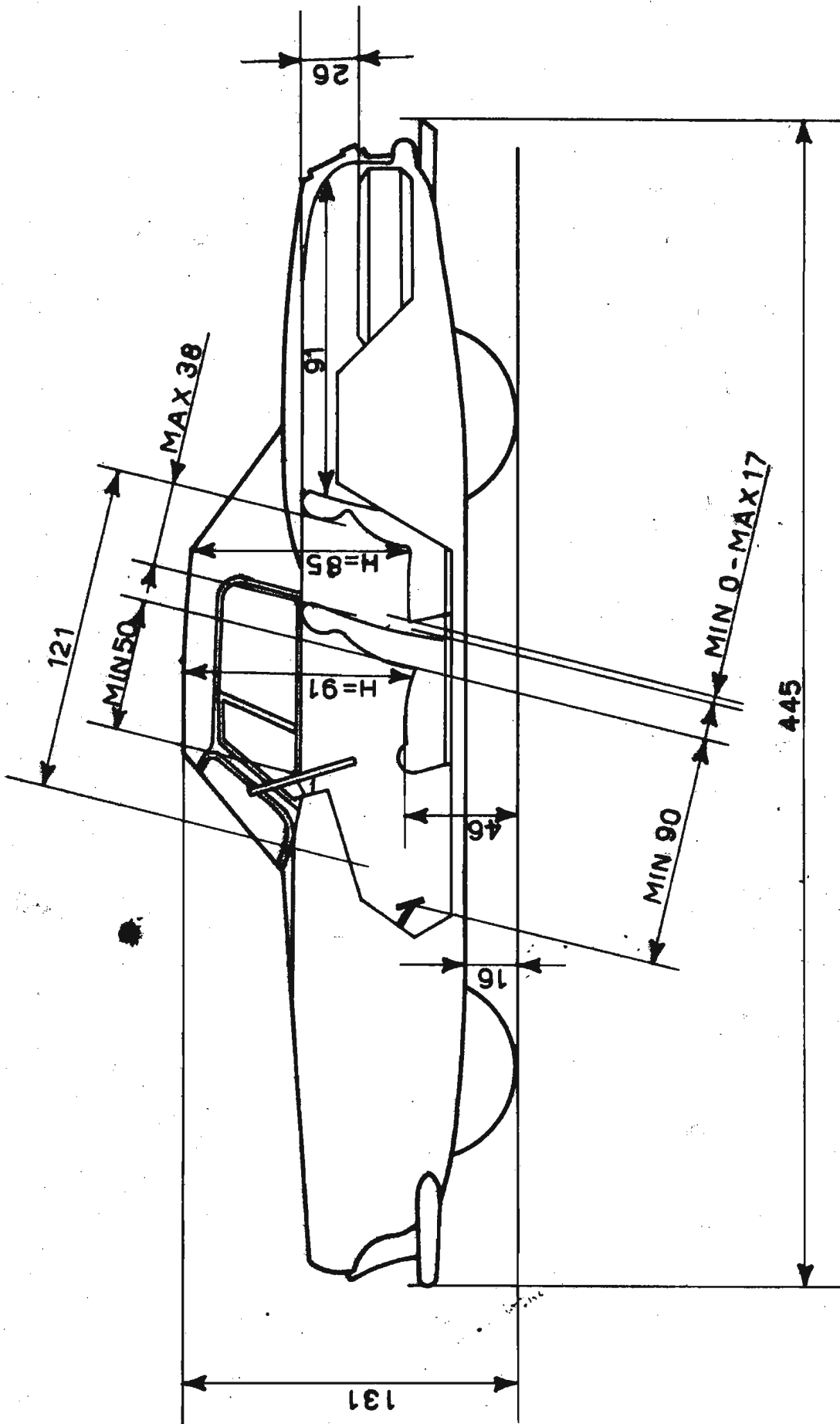
The tool kit supplied with the car contains :

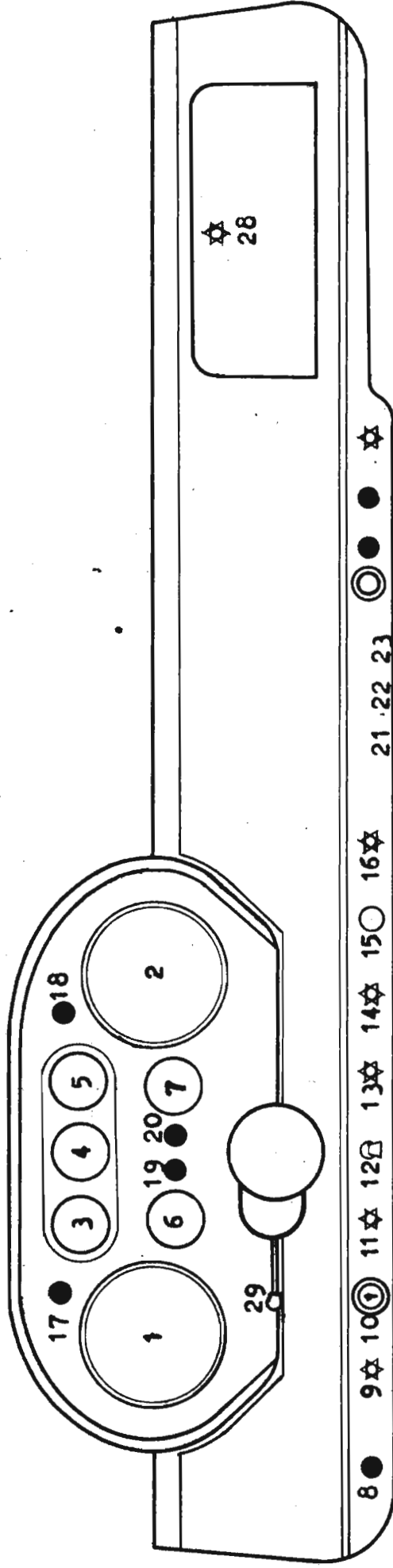
- 1 jack to lift the car
- 1 base on which to rest the jack
- 1 set of spanners ranging from 6 to 22 mm.
- 1 spanner for sparking plugs
- 1 roll spanner
- 1 spanner for carburettors
- 1 curved spanner for wheel nuts
- 1 steel hammer
- 1 pair Universal pliers
- 1 screw driver



INSTRUMENT AND CONTROL PANEL

- |    |  |    |  |
|----|--|----|--|
| 1  | Speedometer                                    | 18 | Lights switch                          |
| 2  | Revs. counter                                  | 19 | Ventilation and heating warning light  |
| 3  | Water thermometer                              | 20 | Fan warning light with magnetic engage |
| 4  | Fuel gauge                                     | 21 | Ventilation and heating switch         |
| 5  | Oil gauge                                      | 22 | Main throttle control switch           |
| 6  | Direction indicator warning light              | 23 | Secondary throttle control switch      |
| 7  | Generator warning light                        | 24 | Warm water circulation control         |
| 8  | Head light indicator                           | 26 | Injection pump safety switch           |
| 9  | Position lights indicator                      | 27 | Starter                                |
| 10 | Direction lights and head lights control lever | 28 | Papers box                             |
| 11 | Ignition key                                   | 29 | Cigarette lighter                      |
| 12 | Windscreen wiper control                       | 30 | Watch                                  |
| 13 | Bonnet opening lever                           | 31 | Lamp switch                            |
| 14 | Reset knob for trip counter                    | 32 | Injection pump warning light switch    |
| 15 | Windscreen wipers                              | 33 | Ventilation inlets                     |
| 16 | Interior                                       | 34 | Ammeter                                |
| 17 | Panel illumination rheostat                    | 35 | Oil temperature gauge                  |





Instrument and control panel - C O N V E R T I B L E

1	Speedometer	16	Dash board light switch
2	REVScounter	17	Warm air from engine compartment warning light
3	Water temperature gauge	18	Left-right turning signal warning light
4	Fuel gauge	19	Position light warning light
5	Oil pressure	20	Headbeam warning light
6	Amperometer	21	Heating control switch
7	Oil thermometer	22	Radiator throttle and fan control switch
8	Fuel pump warning light	23	Hot water circulation control switch
9	windshield wipers control switch	24	Air ventilation on driver feet control switch
10	Ignition	25	Central ventilation control switch
11	Warm air control switch	26	Interior illumination switch
12	Fuel pump commutator	27	Starter
13	Low light and fog light switch	28	Map box
14	Headlight switch	29	Turning & front lights control lever.
15	Cigarette lighter		

27

101/7

F I T T I N G S

- N) 1 Front left headlight
- 2 Front right headlight
- 3 Position light and left direction light
- 4 Position light and right direction light
- 5 Left fog light
- 6 Right fog light
- 7 Direction indicator - left
- 8 Direction indicator - left
- 9 Electric horns
- 10 Generator
- 11 Under bonnet and engine illuminating light
- 12 Switch for the above light
- 13 Ventilation fan magnet
- 14 Magnetic thermal switch
- 15 Engine housing ventilating motor
- 16 Coils
- 17 Starter motor
- 18 Current connector
- 19 Starter
- 20 Windscreen wiper
- 21 Switch for windscreen wiper
- 22 Mileage meter
- 23 Water thermometer
- 24 Fuel Gauge
- 25 Oil pressure counter
- 26 Revolution Counter
- 27 Red Warning light for flashing direction
- 28 High beam indicator
- 29 Red Warning light for generator
- 30 Blue warning light for headlight
- 31 Sliding contact of the horn button
- 32 Electric watch
- 33 Operating pannel for lights
- 34 Switch for box light
- 35 Box light
- 36 Generator regulator
- 37
- 38 Decelerat relay
- 39 Direction relay
- 40 Central switch
- 41 Stop switch
- 42 Radio
- 43 Switch for ceiling lights
- 44 Switch for fog lights and low beam lights
- 45 Operating pannel for lights

./...

61-00-19



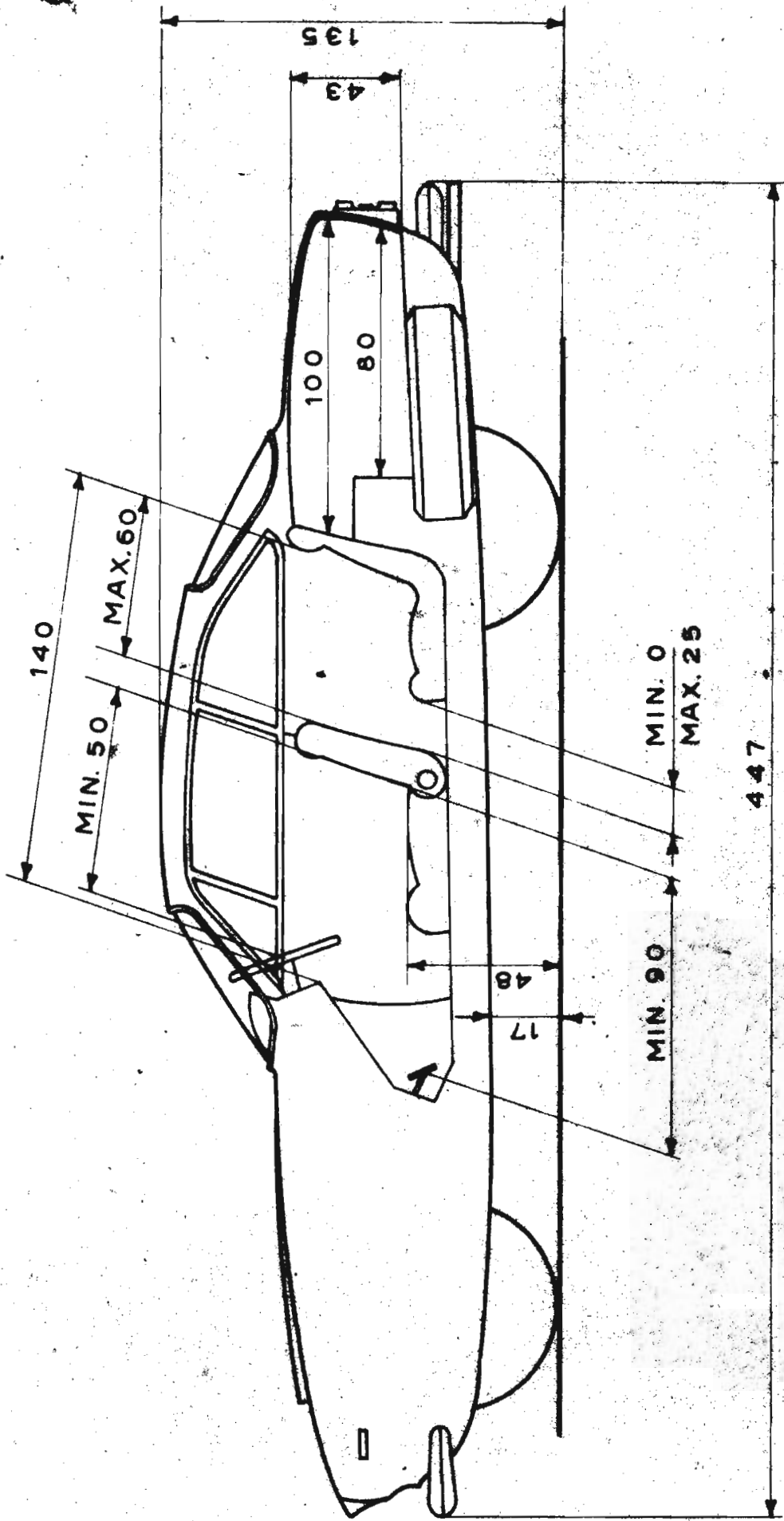
- 101/7
- 28
- N°
- 46 Cigarette lighter
  - 47 Ventilator warning light
  - 48 Ventilator magnet warning light
  - 49 Ventilator switch
  - 50 Thermal switch and injection pump warning light
  - 51 Switch for reverse light
  - 52 Fuses box
  - 53 Button switch on right door for ceiling lights
  - 54 Button switch on left door for ceiling lights
  - 55 Left window regulator motor
  - 56 Right window regulator motor
  - 57 Left window regulator switch
  - 58 Left switch for right window glass
  - 59 Right switch for right window glass
  - 60 Steering column and control
  - 61 Radio Areal
  - 62 Battery
  - 63 Ceiling lights
  - 64 Lights with switch in the boot
  - 65 Petrol level float
  - 66 Left position and rear flashing lights
  - 67 Right position and rear flashing lights
  - 68 Left stop light
  - 69 Right stop light
  - 70 Left reverse light
  - 71 Pressure switch
  - 72 Number plate light
  - 73 Flashing relay
  - 74 Injection pump relay
  - 75 Injection pump safety switch
  - 76 Fuel pump
  - 77 Instruments illumination rheostat

F U S E S    B O X

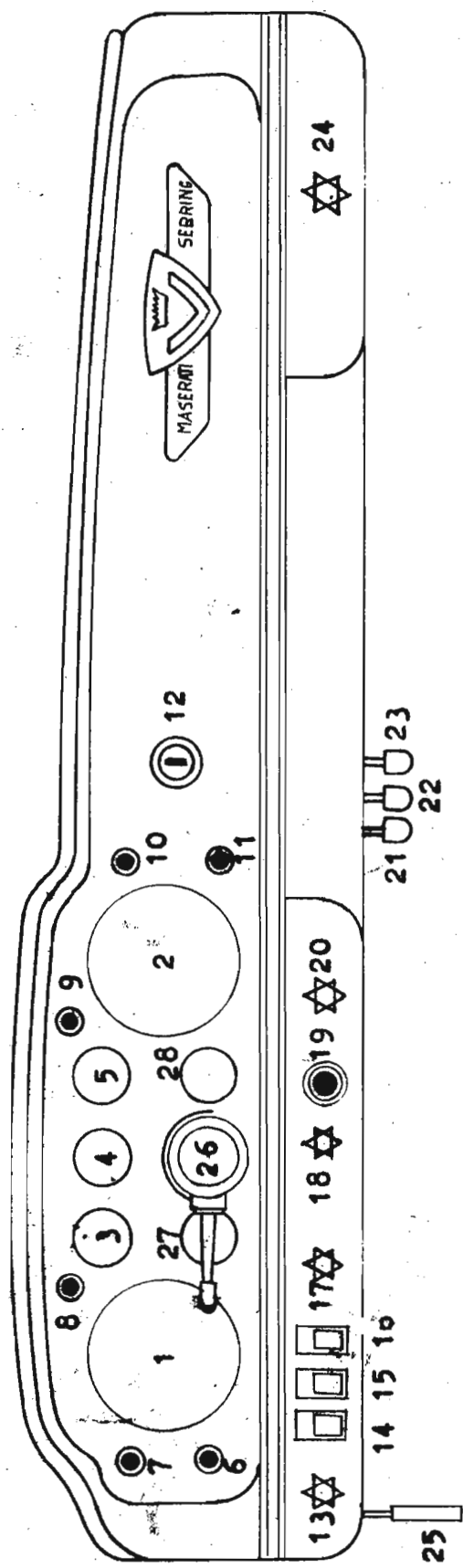
- I Fuse for left high beam light
- II Fuse for right high beam light
- III Fuse for low beam light
- IV Fuse for position, warning, number plate and reverse
- V Fuse for left window regulator
- VI Fuse for window regulator - right
- VII Fuse for windscreen wiper and direction lights
- VIII Fuse for interior lights, panel and watch
- IX Fuse for radio and cigarette lighter
- X Fuse for ventilators and warning lights
- XI Fuse for fuel pump
- XII Fuse for stop lights, generator, warning lights and flashing lights.



29



COUPE' "S" (Vignale) PANEL



PANEL INSTRUMENTS AND CONTROLS OF COUPE' "S"

- 1 Speedometer
- 2 Revs counter
- 3 Water thermometer
- 4 Fuel level indicator
- 5 Oil pressure indicator
- 6 Head lamps warning light
- 7 Position lights indicator
- 8 Right and left direction lights indicator
- 9 Generator warning light
- 10 Radiator fan warning light
- 11 Ventilation and heating fan warning light
- 12 Ignition key
- 13 Windshield wiper control
- 14 Town driving lights
- 15 Headlights control

- 16 Ventilation and heating fan switch
- 17 Dash-board illumination control
- 18 Check
- 19 Petrol pump warning light
- 20 Interior illumination control
- 21 Main throttle control
- 22 Secondary Throttle control
- 23 Hot water circulation control switch
- 24 Map box
- 25 Bennet opening lever
- 26 Front and direction lights control
- 27 Ammeter
- 28 Oil temperature gauge



- 1) Left front lowlight
- 2) Right front lowlight
- 3) left front headlight
- 4) Right front headlight
- 5) Position light and left side flashing light
- 6) Position light and right side flashing light
- 7) left side flashing light
- 8) Right side flashing light
- 9) Electromagnet on the fan
- 10) Front motor for heating and ventilation
- 11) Alternator
- 12) Thermic switch for electromagnet
- 13) Air horn blower
- 14) Distributor for spark plugs ignition
- 15) Windshield wiper
- 16) Rear motor for ventilation and heating system
- 17) Lamps for illumination of engine compartment
- 18) Coils
- 19) Starter
- 20) Pressure switch on the oil ducts.
- 21) Water termometer
- 22) Fuel gauge
- 23) Oil pressure gauge
- 24) Ammeter
- 25) Oil termometer
- 26) Speedometer
- 27) RPM counter
- 28) Electric watch
- 29) Engine compartment illumination switch
- 30) Starting and ignition commutator
- 31) Relais for flashing light
- 32) Transistors regulator for alternator
- 33) Relais for Air horns
- 34) Stop switch on brakes system
- 35) Windshield wiper commutator to 2 nd speed
- 36) Red warning light for flashing light
- 37) Yellow warning light for rear defroster motor
- 38) Green warning light for low light and position light
- 39) Blue warning light for headlight
- 40) Contacts on the steering column
- 41) Relais for flashing light
- 42) Deviolux for lights control
- 43) Relais for lowlight and position light
- 44) Relais for headlight
- 45) Yellow warning light for ventilators and heating.
- 46) Red Warning light for electromagnetic ventilator
- 47) Cigarette lighter
- 48) Instruments illumination reostat
- 49) Radio

./...

1<sup>a</sup> Versione - 1/4/63

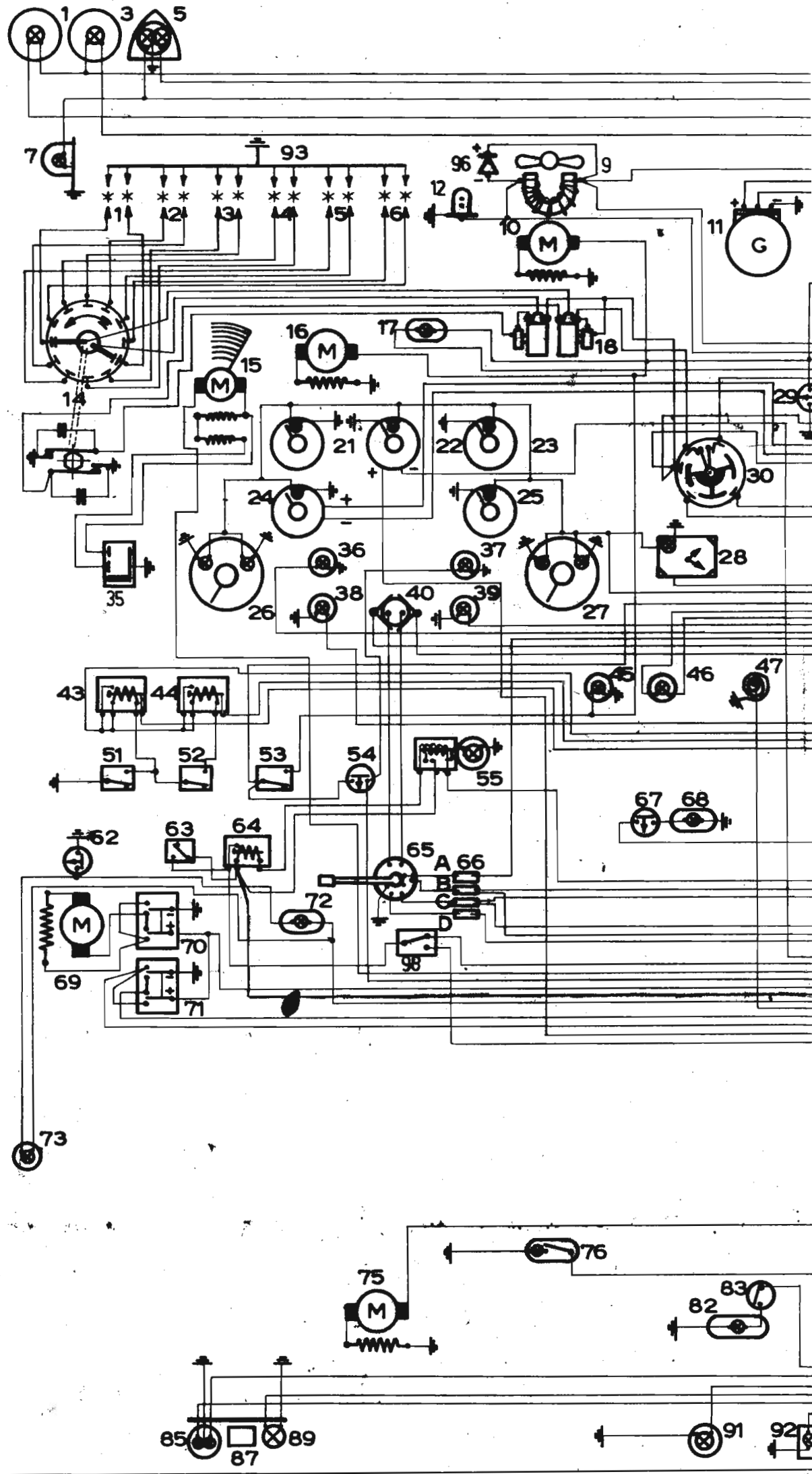
4310

1<sup>a</sup> Versione - 1/4/63

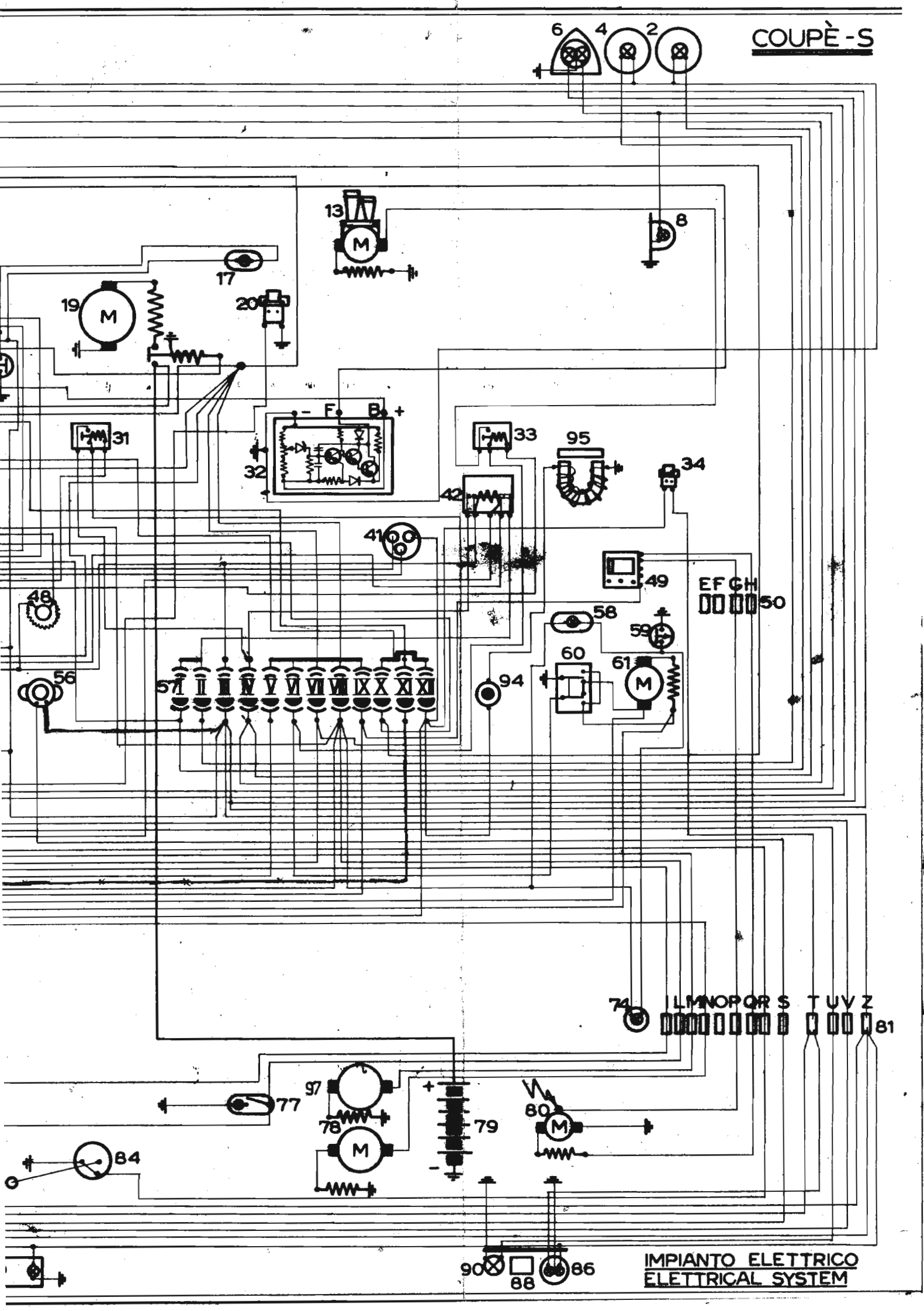
*HARRY S*

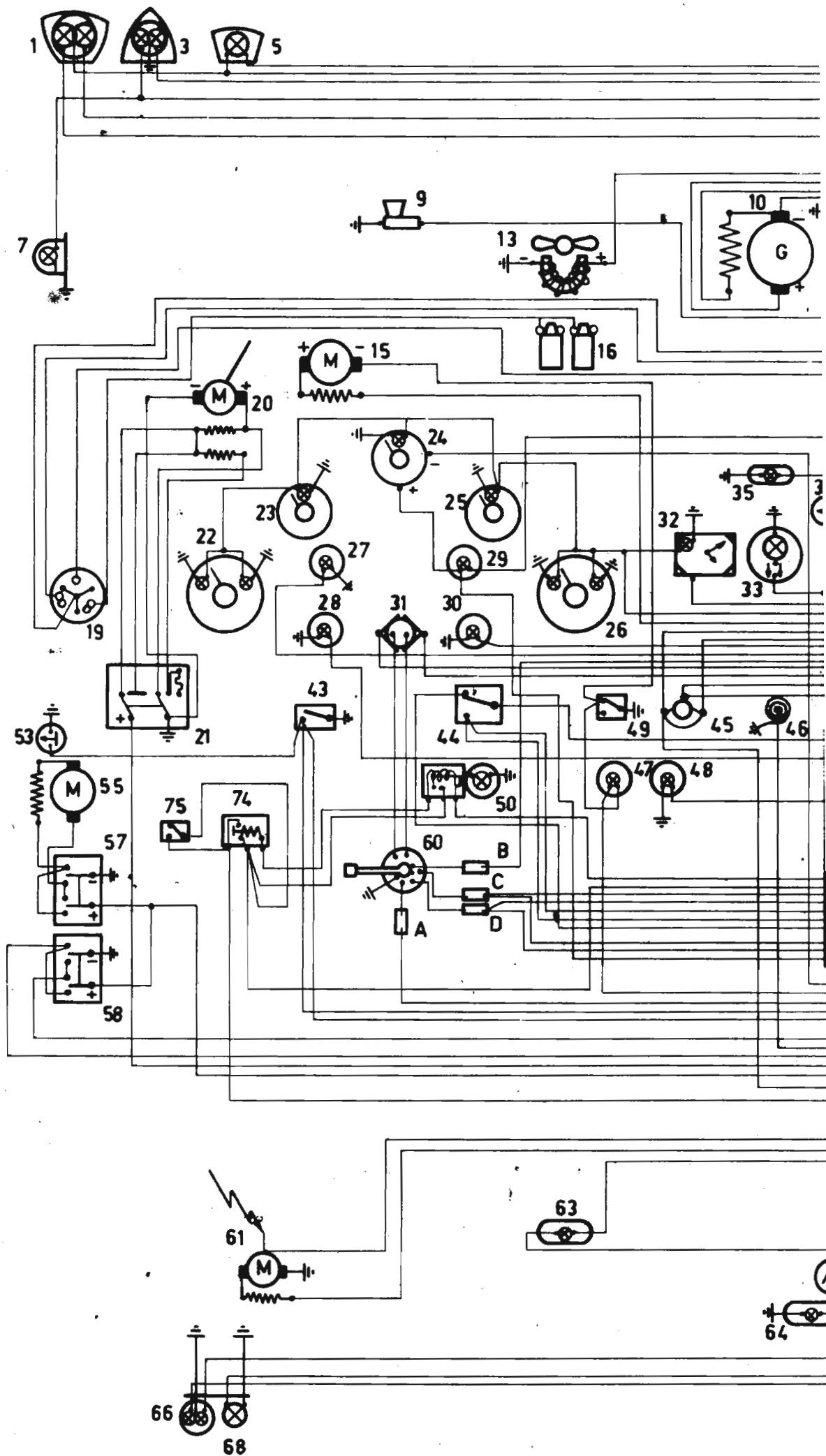
- 50) Radio attachments
- 51) Low and position light switch
- 52) Headlight switch
- 53) Heating ventilators control switch
- 54) Rear defroster control switch
- 55) Thermic switch and red warning light for injection pump
- 56) Transmission reverse gear switch
- 57) Fuses box
- 58) Interior right front light
- 59) right door lights switch
- 60) Right window electric switch
- 61) Right window motor
- 62) Left door light switch
- 63) Injection pump safety switch
- 64) Relais for injection pump
- 65) Steering wheel lights control
- 66) Steering wheel attachment
- 67) Ashtray illumination switch
- 68) Ashtray lights
- 69) Left window motor
- 70) Left window electric switch
- 71) Left and right windows electric switch
- 72) Interior left front light
- 73) Left door red light
- 74) right door red light
- 75) Rear windshield defroster motor
- 76) Interior left light and switch
- 77) Interior right light and switch
- 78) Injection fuel pump motor ( number 1 )
- 79) Generator
- 80) Radio areal motor
- 81) Rear contact screw (12) attachments
- 82) track illumination light
- 83) Luggages compartment illumination switch
- 84) Floater with reostat for fuel gauge
- 85) Position light lamp and left rear stop
- 86) Position light lamp and right rear stop
- 87) Left rear catadioptré
- 88) Right rear catadioptré
- 89) Left rear flashing lamp
- 90) Right rear flashing lamp
- 91) Reverse white lamp
- 92) Plate illumination lights
- 93) Spark plugs
- 94) Air conditioner thermostatic control switch
- 95) Electromagnet on blower.
- 96) Arcing contact for elettromagnet fan
- 97) Injection fuel pump motor ( number 2 )
- 98) Commutator for double pump for fuel injection

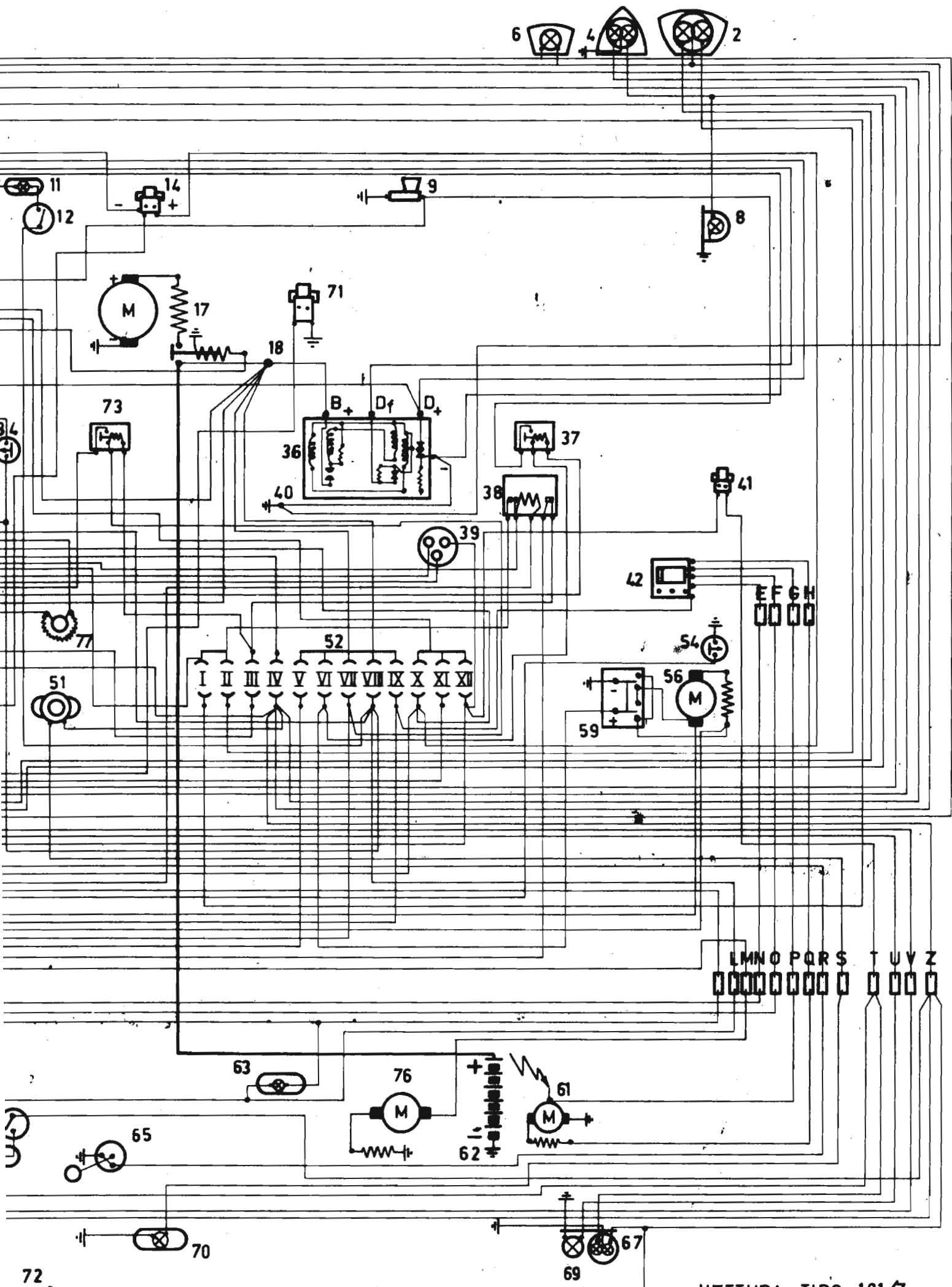
HARRY'S  
WIRING  
DIAGRAM



101/3









**I M P O R T A N T**  
=====

This vehicle has an adjustable silencer approved by the local Department of Civil Motoring (Ispettorato Compartimentale della Motorizzazione Civile e trasporti in Concessione). The terms of the omologation are stamped on the silencer.

The omologation was made according to the pressures with the vehicle at stand, the motor running at maximum revolutions and a noise recorder situated at 7 meters distance from the automobile longitudinal axle, in correspondence with the exhaust tube end, either on the right and left side, in the open, with no trees in the surroundings, reflecting walls or any slight background noise.

But each vehicle, although being regularly omologated as far as the silencer is concerned, may exceed the noise prescribed limits when the engine, at high revolutions and under strong acceleration, is forced to obtain the maximum performances.

---

WE DO NOT GUARANTEE THAT THIS SILENCER WILL CONFORM WITH THE REGULATIONS LAID DOWN BY THE MINISTRY, AND DO NOT GUARANTEE THAT IT WILL REMAIN BELOW THE PRESCRIBED NOISE LIMIT UNDER ALL CONDITIONS OF USE.

---

IN ORDER THAT YOU WILL BE ABLE TO CONTINUE TO DRIVE AND ENJOY YOUR MASERATI TO THE FULLEST EXTENT ; THE FACTORY, OFFICINE ALFIERI MASERATI S.p.A., VIA CIRO MENOTTI 322 MODENA ITALY, WILL BE ONLY TOO GLAD TO FURNISH ANY INFORMATION CONCERNING THE USE AND MAINTENANCE OF THE AUTOMOBILE.