

SERVICE BULLETIN

1976

No. 9

- 126**
- 126 Personal**
- 126 Personal 4**

Fiat 126

Main Data



30194

**Gruppo Automobili
Assistenza Tecnica**

Differences with respect to previous version

ENGINE

- Carburettor with sealed slow running speed adjustment screw (if required by law)

CHASSIS

- New-design front and rear brake drums
- 3/4 in rear brake wheel cylinders (were 5/8 in)
- Rear dampers with progressive spring rate
- New design wheel rim with wheel trim

ELECTRICAL SYSTEM

- Alternator
- Heated backlight (optional)
- Waterproof spark plug caps
- Side lights incorporated in headlamps
- Amber front direction indicators (were white)

BODY

« 126 »

- Different location of front and rear FIAT badges
- Provision for fitting the number plate length-wise
- New windscreen weatherstrip
- New no-draught ventilator control

- New sun roof locking device
- Door mirror
- Matt black finish steering wheel
- Black escutcheon plates for window regulator and door handles
- New design instrument panel including a rocker type lighting switch and a radio housing
- More fore-and-aft adjustment for front seats
- 5-position heated air control lever
- Felt-lined heated air conveyor to reduce noise level inside the passenger compartment
- The tiltable rear seat back is no more available as optional extra

« 126 Personal »

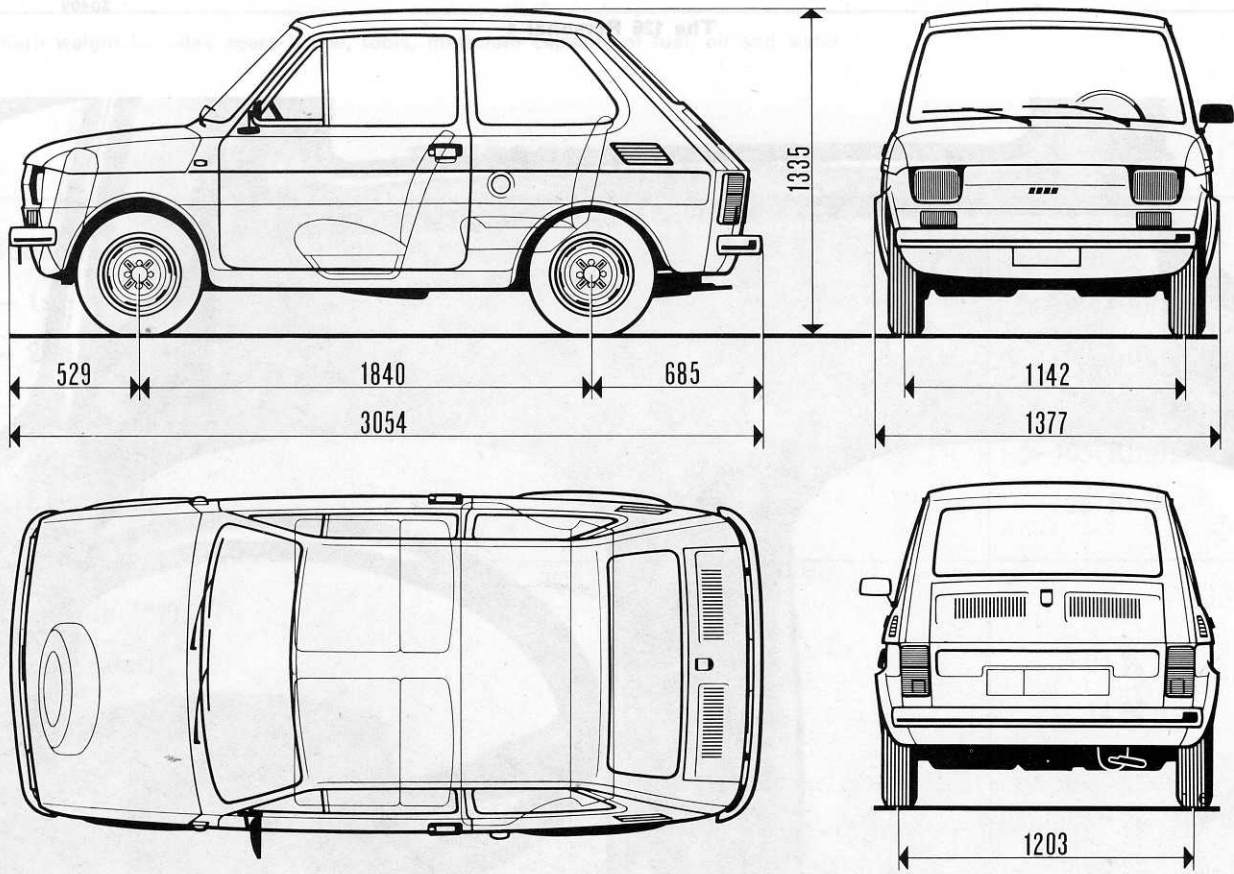
Differences with respect to 126:

- Black finish, elastic resin front and rear bumpers
- Two section rubber side bumpers
- Windscreen wiper arms and blade carriers in matt black finish
- Front hinged rear ventilators
- Instrument panel fully carpeted
- Sun visors with map pocket, driver's side, and vanity mirror, passenger's side
- Gear lever knob in foam rubber
- Handbrake handle in black plastic
- Revised front seats

- Velvetten or luxury imitation leather seat coverings
- Glove box provided with radio loudspeaker housing
- Rear seat consisting of removable cushion lined with zip-fastened case and padded band acting as seat back
- Rear side pockets near wheel arches
- Rear armrests are no more provided
- Floor and door/rear quarter trim pads are fully carpeted
- Plastic rear shelf
- Differences with respect to 126 Personal:
 - 126 « Base » rear seat design with « Personal » seat coverings
 - Rear quarter trim pads with armrests
 - Side pockets are not provided

« 126 Personal 4 »

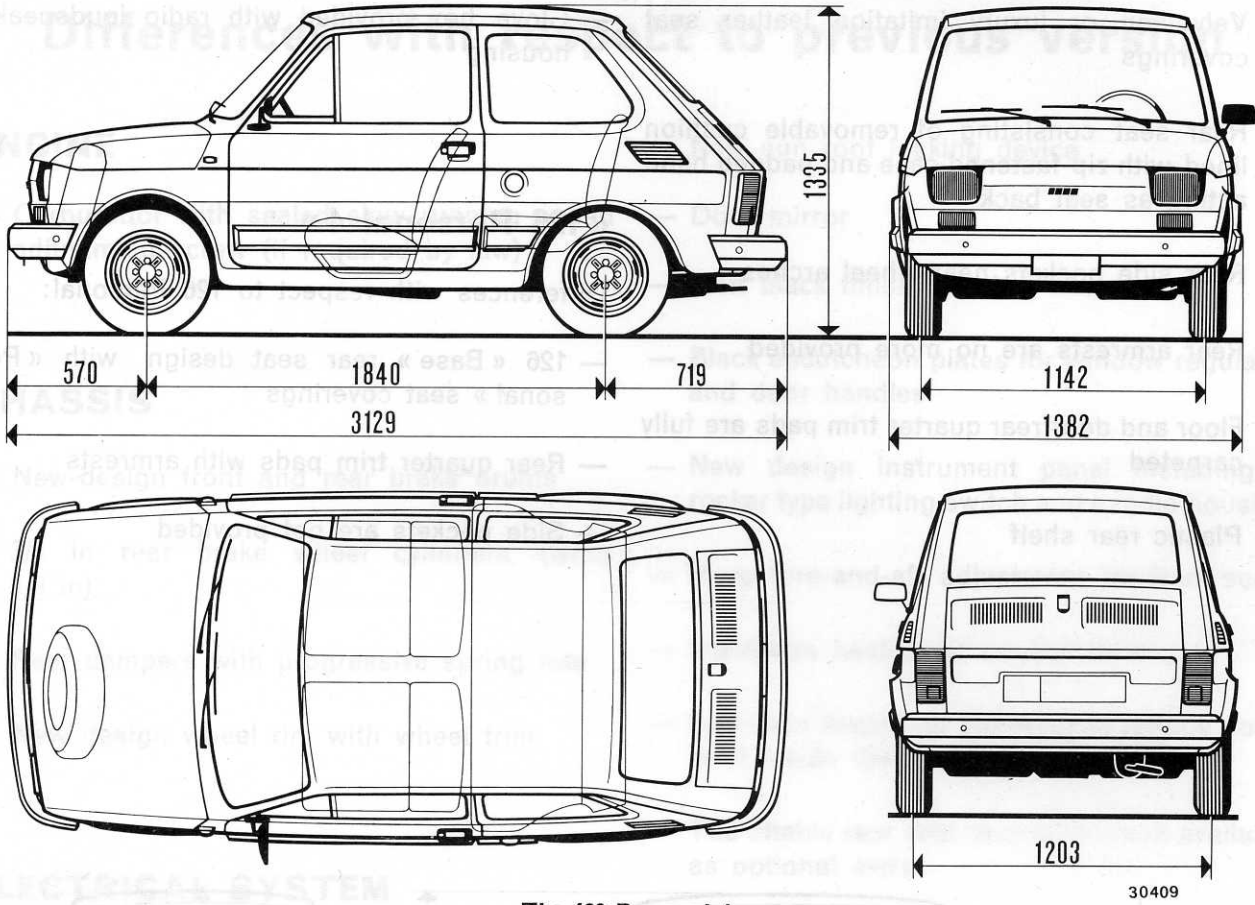
Differences with respect to 126 Personal:



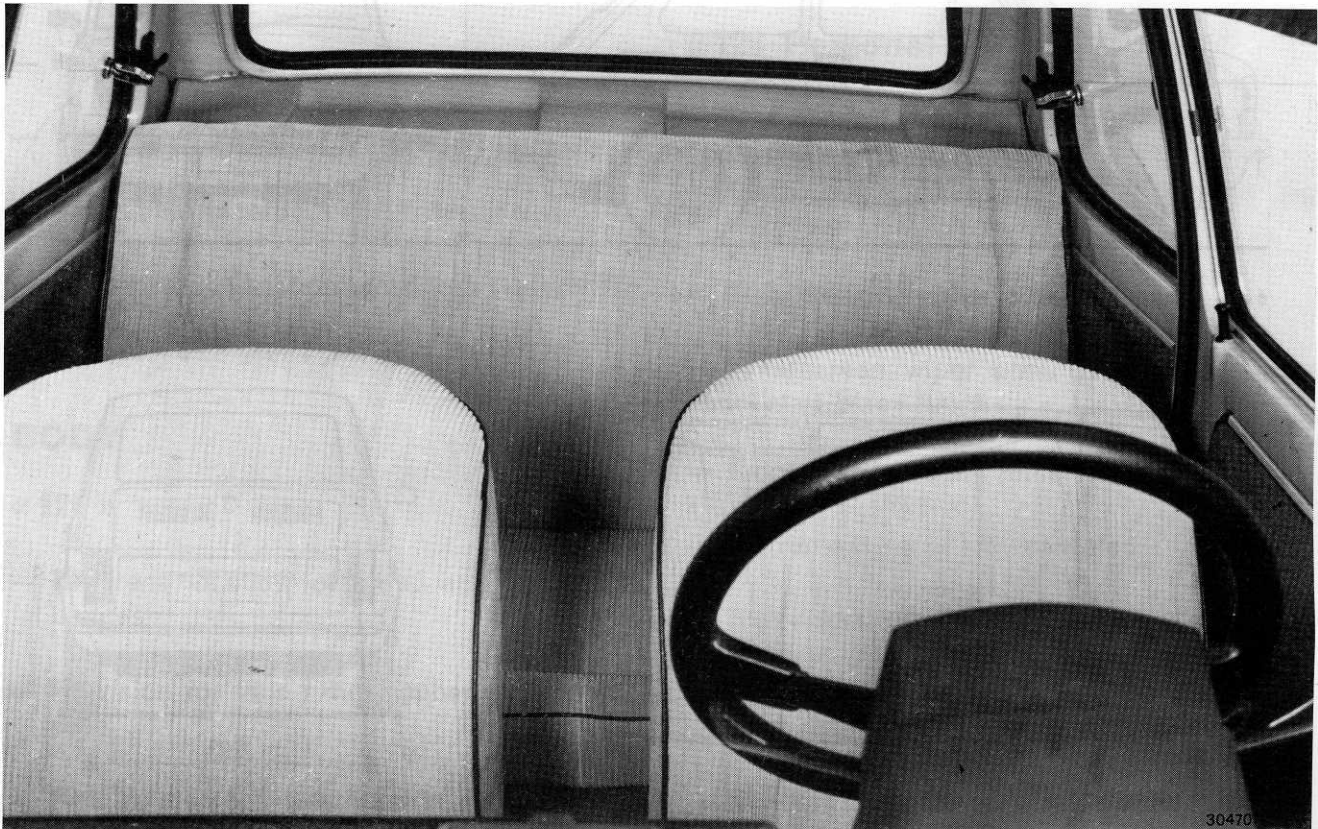
The 126

30410

Max. height refers to an unladen car



The 126 Personal 4



The Passenger Compartment of the 126 Personal 4

GENERAL

IDENTIFICATION DATA

	Chassis	Engine
126	126 A	126 A.000
126 Personal	126 A versione « P »	126 A.000
126 Personal 4	126 A versione « P4 »	126 A.000

NOTE - Sun roof version is coded « T » on identification plate.

WEIGHTS

Kerb weight (*)	600 Kg
Carrying capacity	320 Kg
Max. gross vehicle weight	920 Kg
Towing capacity	400 Kg

(*) Kerb weight includes spare wheel, tools, maximum capacity of fuel, oil and water.

PERFORMANCE DATA

Speeds (**):	
— 1st gear	30 Km/h
— 2nd gear	50 Km/h
— 3rd gear	80 Km/h
— 4th gear	> 105 Km/h
— Reverse	25 Km/h
Gradients (**)	
— 1st gear	24 %
— 2nd gear	14 %
— 3rd gear	8 %
— 4th gear	4 %
— Reverse	30 %

(**) Maximum speeds and climbable gradients refer to a fully laden vehicle after running-in.

CAPACITIES

Description	dm ³	kg	Type of FIAT Recommended Fluid
Fuel tank including a reserve of	~ 21 3.5 to 5	— —	Premium petrol
Engine (incl. filter) ⁽¹⁾	2.5	2.25	oliofiat (see table below)
Driving axle	1.10	1	oliofiat ZC 90
Steering box	—	.08	grassofiat K 600
Brake circuit	.35	.35	Liquido FIAT Etichetta Azzurra DOT 3
Screen washer bottle	2	—	Water and FIAT DP 1 fluid ⁽²⁾

⁽¹⁾ Total lubricating capacity is 2.4 dm³. The tabulated value is the requirement for periodic oil changing.

⁽²⁾ In warm climates use 30 cm³ of FIAT DP 1 per dm³; in cold climates (down to -10° C) use a 50-50 mixture of water and FIAT DP 1. Below -10° C use exclusively FIAT DP 1.

ENGINE OIL GRADE DESIGNATIONS

Atmospheric Temperature	oliofiat VS ⁺	oliofiat MULTIGRADO
	Above CCMC Sequence	
Below -15° C	VS ⁺ 10 W (SAE 10 W)	—
-15° C to 0° C	VS ⁺ 20 W (SAE 20 W)	15 W/40
Up to 35° C	VS ⁺ 30 (SAE 30)	
Above 35° C	VS ⁺ 40 (SAE 40)	

Do not mix different brands or grades.

WHEELS AND TYRES

Wheel type	Disc	
— Rim type	12" x 4.00	
Tyres		
— Type	Radial-ply	
— Size	135 SR 12"	
— Inflation pressure	bar	kg/cm ²
front	1.37	1.4
rear	1.96	2

TECHNICAL DATA AND SERVICING INSTRUCTIONS

This section describes in detail the technical modifications undergone by the new 126 models and relevant servicing instructions which update the Service Manual Print No. 503.025.

ENGINE

GENERAL (Table 00, Sheet 2)

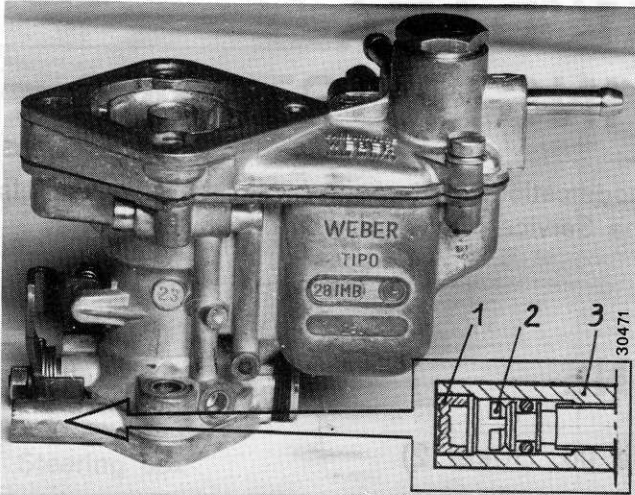
Maximum power at	4700 rpm
Maximum torque at	3200 rpm

PISTONS - PINS - RINGS (Table 10, Sheet 1)

Standard piston diameter measured 57.25 mm from piston crown	
— Grade A	73.420 to 73.430 mm
— Grade B	73.430 to 73.440 mm
— Grade C	73.440 to 73.450 mm

FUEL SYSTEM - LUBRICATION SYSTEM (Table 10, Sheets 3 and 4)

CARBURETTOR	WEBER 28 IMB 3/250
Main jet diameter	1.15 mm
Air correction jet size	2.20 mm
Emulsion tube type	F 74
Float level	7 mm
OIL PUMP	
Backlash between gears	.25 mm

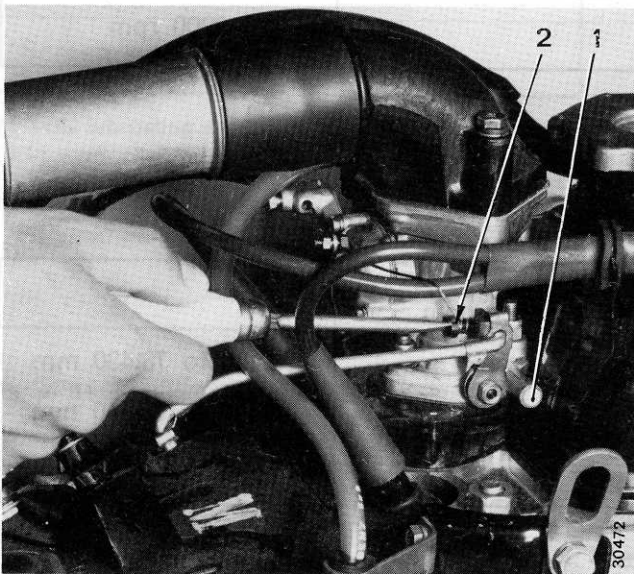


Slow Running Speed

To meet international regulations the slow running volume adjusting screw is now factory sealed by means of a plastic plug.

Showing the Carburettor

1. Plug
2. Slow running volume adjusting screw
3. Screw housing



Should it become necessary to adjust the slow running volume remove the plug, act on the screw as necessary and replace the plug, if requested by law.

Adjusting the Slow Running Speed

- 1 Plastic plug
- 2 Slow running volume adjusting screw

TIGHTENING TORQUES ENGINE (Table 10, Sheet 4)

DESCRIPTION	Part No.	Thread Size	Material	Torque Figure	
				N · m	Kgm
Nut, bell housing the rubber pad stud	1/61008/11	M 8	R 50 Znt (Stud R 80 Znt)	25	2.5

BRAKES

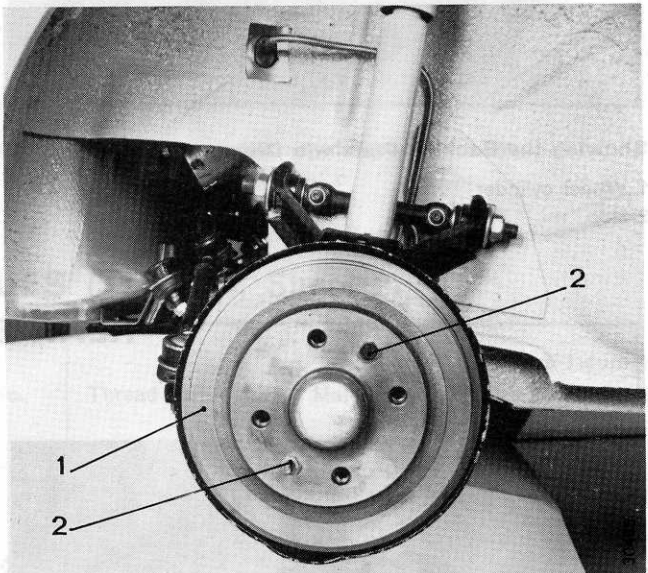
DATA AND CHARACTERISTICS (Table 33, Sheet 1)

Drum diameter	185.24 to 185.53 mm
Wheel cylinder diameter:	
— front	23.80 mm (15/16")
— rear	19.05 mm (3/4")

FRONT BRAKES

To Overhaul or Renew Brake Shoes

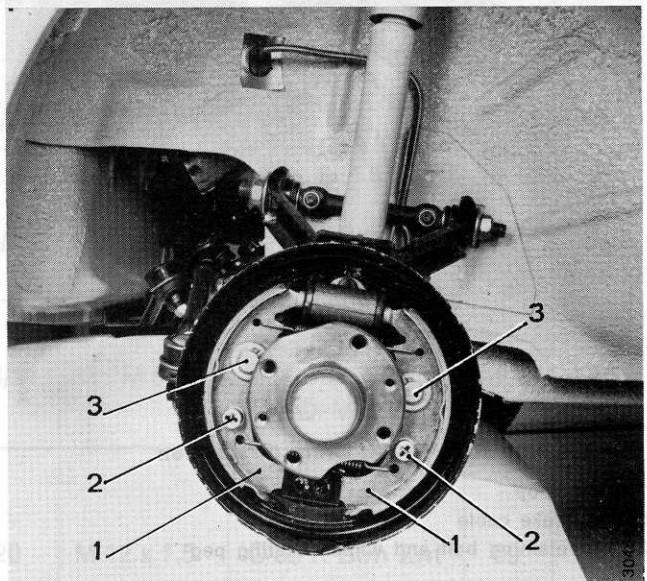
Remove the wheel and slacken hub retaining bolts (2).



Showing the Brake Drum

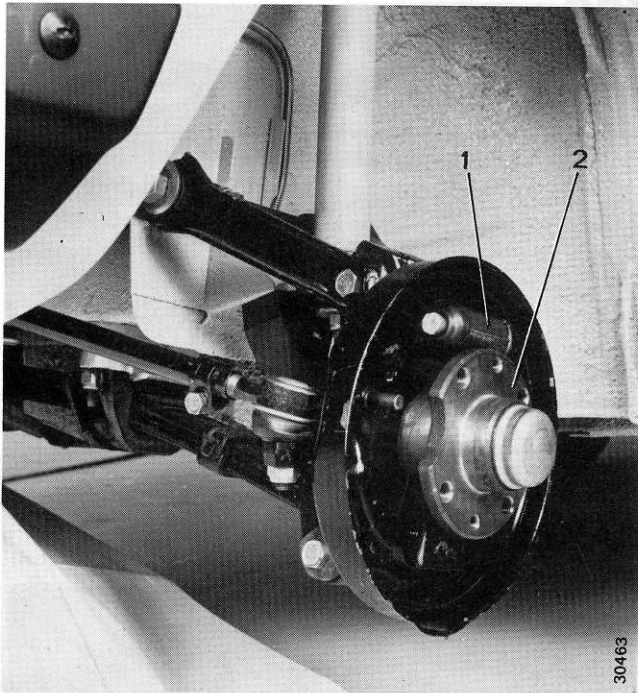
- 1 Drum
- 2 Hub retaining bolts and wheel locating peg

To remove the brake shoes, position the hub so as flange design allows the shoes to come out. If difficulty is experienced in withdrawing the hub use puller screws.



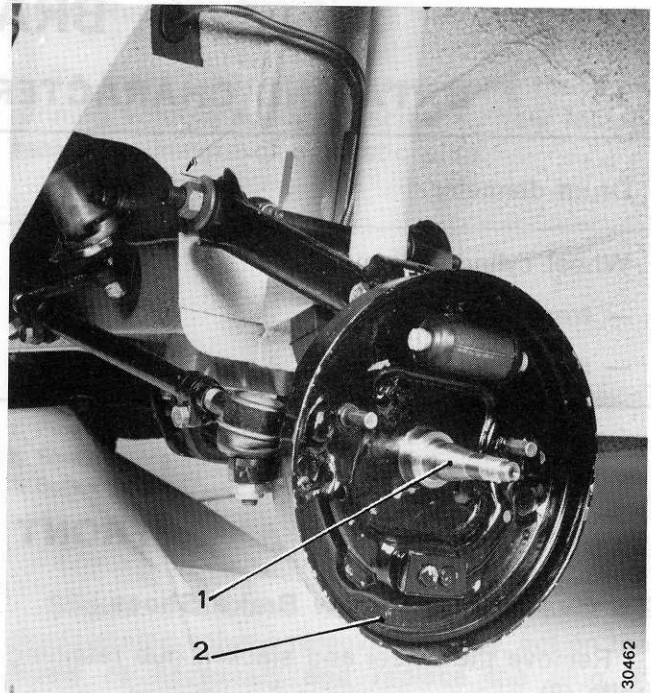
Showing the Front Brake Shoes

- 1 Front brake shoes
- 2 Pins, cups and springs
- 3 Shoe self-adjusting devices



Showing the Backing Plate w/o Drum and Shoes

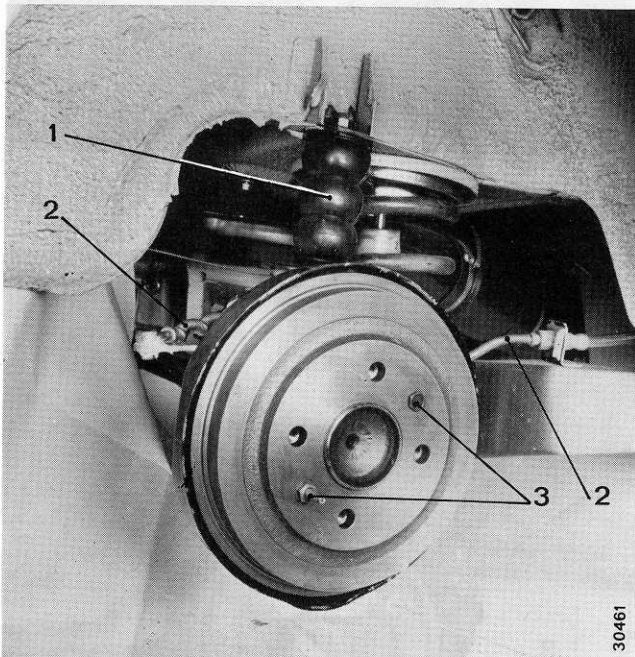
- 1 Wheel cylinder
- 2 Hub



Showing the Backing Plate w/o Drum, Shoes and Hub

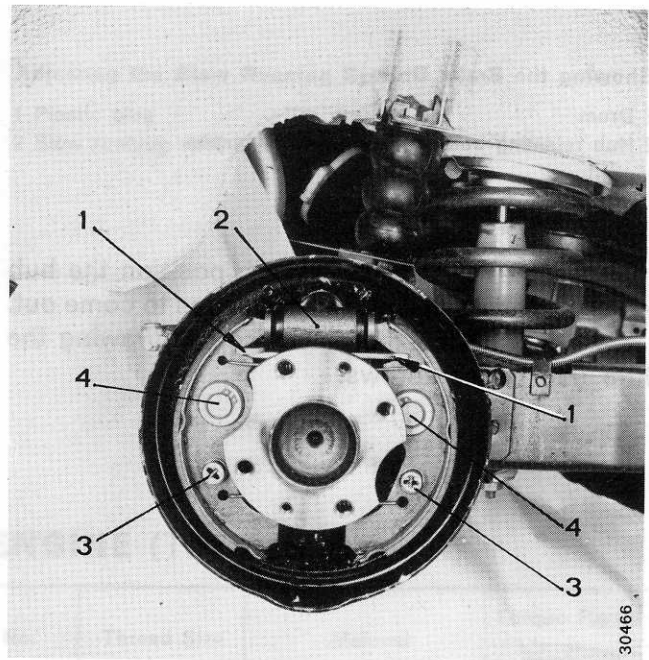
- 1 Hub support
- 2 Backing Plate

REAR BRAKES



Showing the Rear Brake Drum in Position

- 1 Bump stop
- 2 Handbrake cable
- 3 Hub retaining bolt and wheel locating peg



Showing the Rear Brake Drum with Shoes in Position

- 1 Handbrake actuating lever
- 2 Wheel cylinder
- 3 Pins, cups and springs
- 4 Shoes self-centring devices.

SUSPENSIONS

DATA AND CHARACTERISTICS (Table 44, Sheet 1)

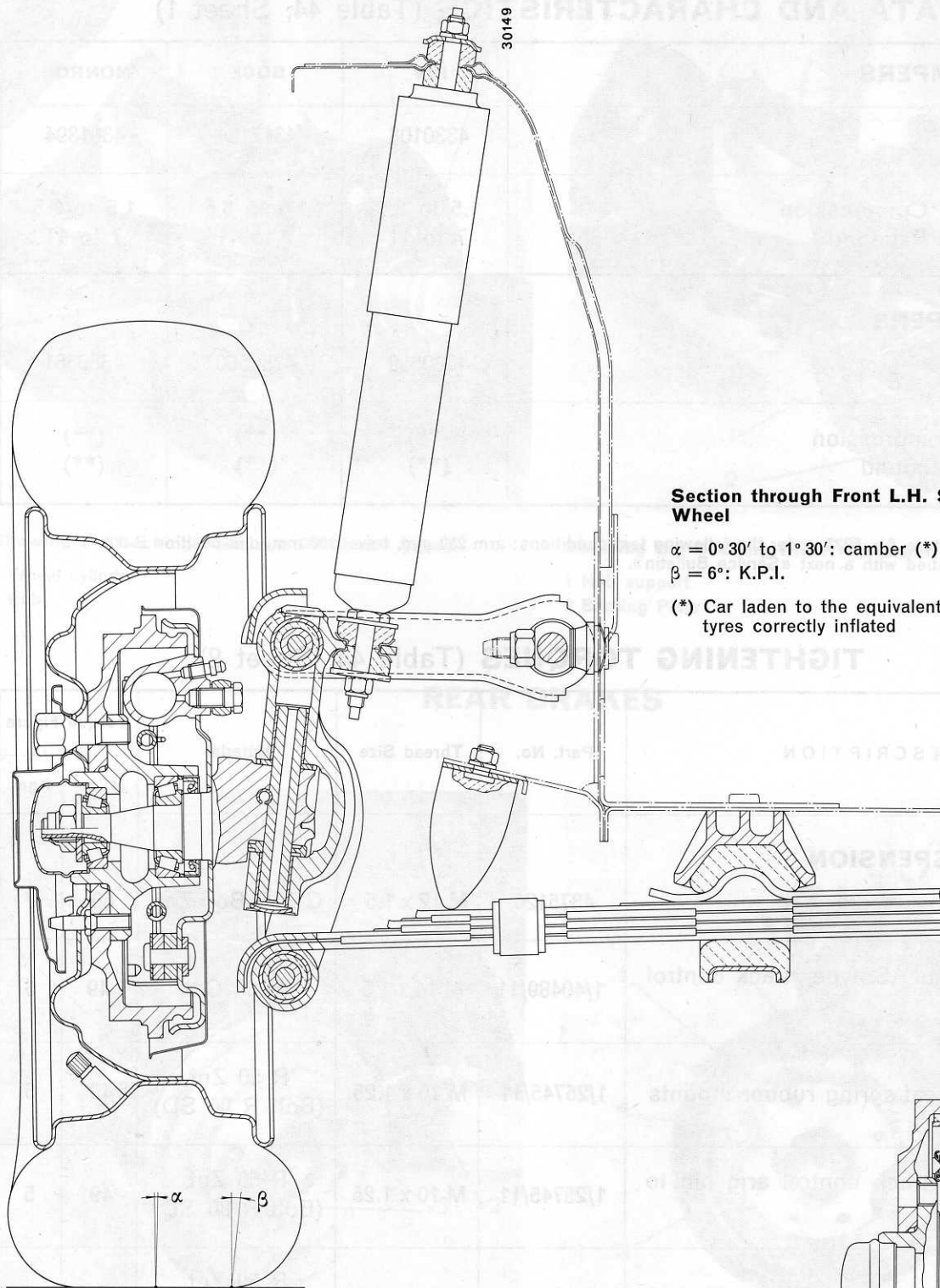
FRONT DAMPERS	RIV	BOGE	MONROE
Part No.	4330103	4317134	4361394
Setting (*) { Compression Rebound	1.5 to 3.5 7 to 11	1.5 to 3.5 7 to 11	1.5 to 3.5 7 to 11
REAR DAMPERS			
Part No.	4380559	4380560	4380561
Setting { Compression Rebound	(**) (**)	(**) (**)	(**) (**)

(*) Data refer to fixture **Ap. 5023** under the following test conditions: arm 250 mm, travel 100 mm, dial position B-90°.
 (**) Data will be issued with a next «Service Bulletin».

TIGHTENING TORQUES (Table 44, Sheet 2)

DESCRIPTION	Part. No.	Thread Size	Material	Torque Figure	
				N . m	Kgm
FRONT SUSPENSION					
Wheel bolts	4375120	M 12 x 1.5	C 35 R Bon Znt	69	7
Self-locking nut, S type, track control arms	1/40489/11	M 14 x 1.5	R 50 Cdt	49	5
Nut securing leaf spring rubber mounts	1/25745/11	M 10 x 1.25	R 50 Znt (Bolt R 80 SD)	49	5
Nut securing track control arm pin to body	1/25745/11	M 10 x 1.25	R 50 Znt (Bolt R 80 SD)	49	5
Nut securing backing plate to hub support	1/61008/11	M 8	R 50 Znt (Bolt R 80) (SD VRNT)	29	3
REAR SUSPENSION					
Wheel bolt	4375120	M 12 x 1.5	C 35 R Bon Znt	69	7

FRONT SUSPENSION



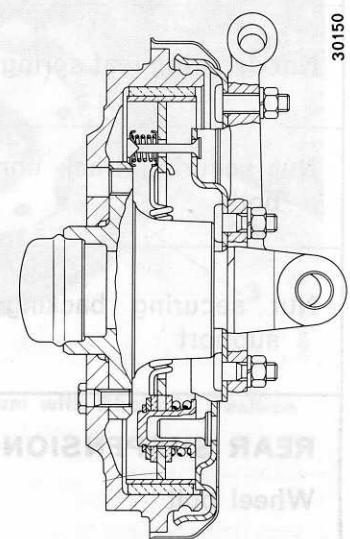
Section through Front L.H. Suspension and Wheel

$\alpha = 0^{\circ} 30'$ to $1^{\circ} 30'$: camber (*)

$\beta = 6^{\circ}$: K.P.I.

(*) Car laden to the equivalent of 4 adults with tyres correctly inflated

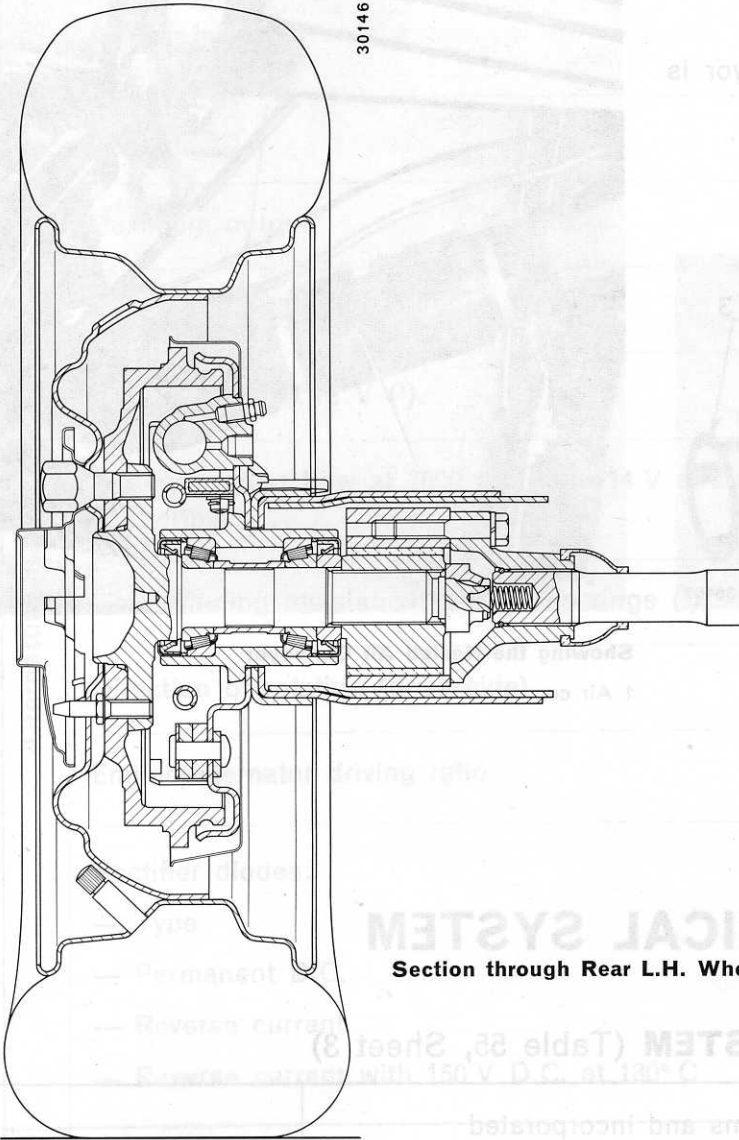
α β



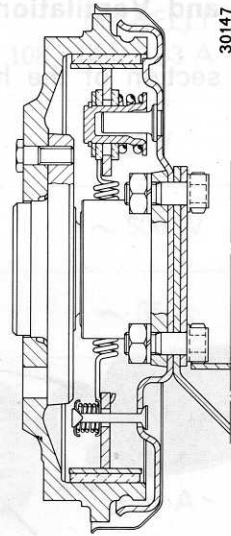
Section through Front L.H. Brake Assembly

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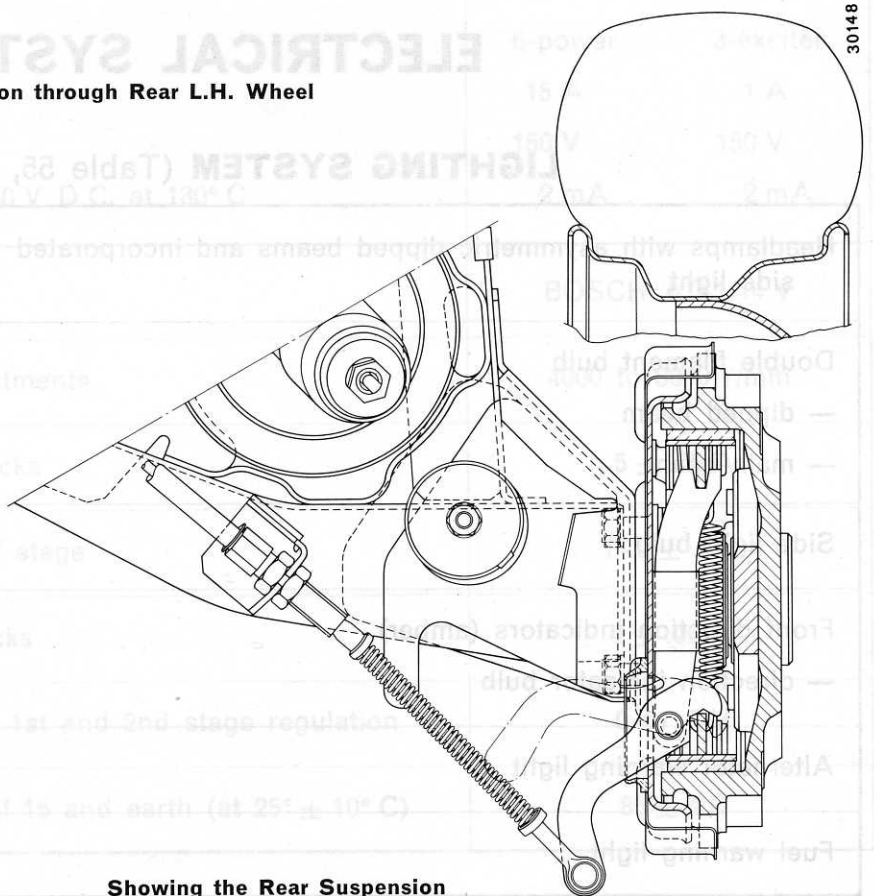
REAR SUSPENSION



Section through Rear L.H. Wheel



Section through Shoes Self-adjusting Device

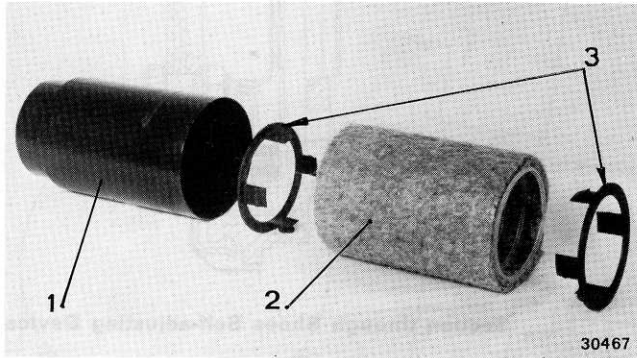


Showing the Rear Suspension

ANCILLARY EQUIPMENT

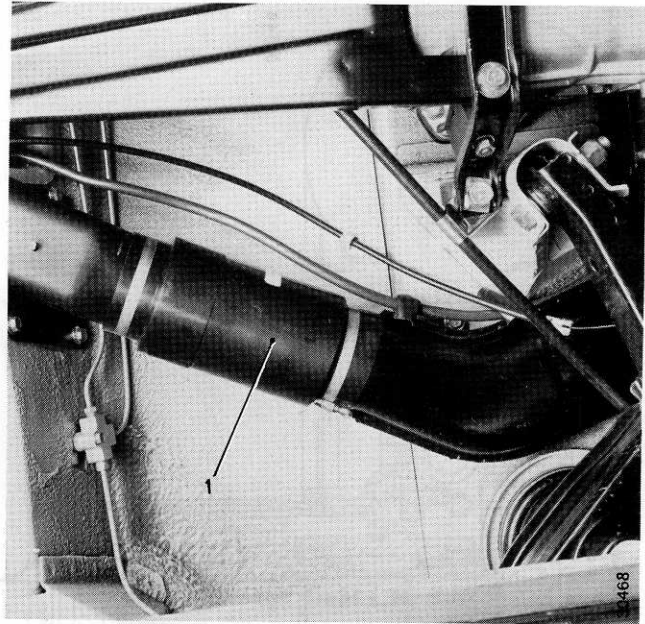
Heating and Ventilation

Front section of the heated air conveyor is felt-lined.



Front Section fo Heated Air Conveyor

- 1 Air conveyor
- 2 Felt lining
- 3 Retaining rings



Showing the Heated Air Conveyor

- 1 Air conveyor

ELECTRICAL SYSTEM

LIGHTING SYSTEM (Table 55, Sheet 3)

Headlamps with asymmetric dipped beams and incorporated side light	two
Double filament bulb	
— dipped beam	40 W
— main beam	45 W
Side light bulb	4 W
Front direction indicators (amber)	two
— direction indicator bulb	21 W
Alternator warning light	1.2 W
Fuel warning light	1.2 W

CHARGING SYSTEM (Table 55, Sheet 2)

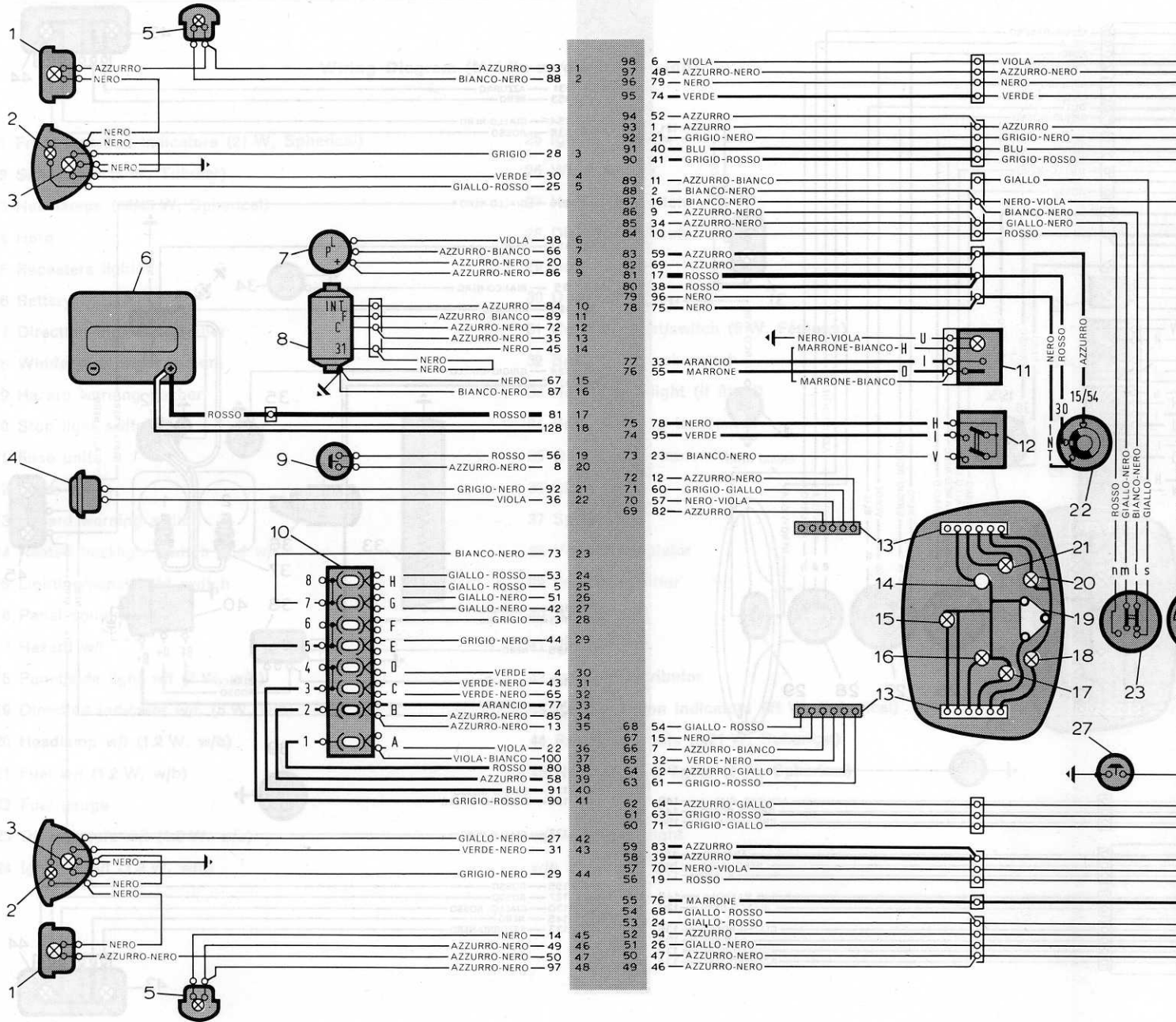
Alternator Charging System	Alternator, type	MARELLI A 108 - 14 V - 33 A - Var. 5
	Voltage	14 V
	Maximum output	~ 500 W
	Maximum current drawn	~ 35 A
	Cut-in speed at 12 V (1)	1150 ± 50 r/min
	Battery current flow at 7000 rpm with 14 V and balanced thermally	≥ 30 A
	Field winding resistance across slip rings (1)	4 ± .4 Ω
	Direction of rotation (drive side)	clockwise
	Engine/alternator driving ratio	1.54 to 1
	Rectifier diodes: — Type — Permanent D.C. — Reverse current — Reverse current with 150 V D.C. at 130° C	6-power 3-exciter 15 A 1 A 150 V 150 V 2 mA 2 mA
Voltage regulator	Type	BOSCH AD 1/14 V
	Alternator speed for adjustments	4000 to 8000 r/min
	Current for 2nd stage checks	.5 ± .05 A
	Regulating voltage for 2nd stage	14.2 ± .3 V
	Current for 1st stage checks	2 ± .05 A
	Voltage difference between 1st and 2nd stage regulation	0 to .7 V
	Resistance across terminal 15 and earth (at 25° ± 10° C)	85 ± 4 Ω

(1) at 20° C.

FUSES (Table 55, Sheet 3)

FUSES Seven 8-A fuses One 16-A fuse	PROTECTED CIRCUITS
1-A (8 A)	<ul style="list-style-type: none"> — Horn — Courtesy light
2-B (*) (16 A)	<ul style="list-style-type: none"> — Direction indicators and warning light — Fuel gauge and warning light — Oil pressure warning light — Stop lights — Windscreen wiper — Heated backlight and warning light (if fitted)
3-C (*) (8 A)	<ul style="list-style-type: none"> — L.H. main beam — Headlamp warning light
4-D (*) (8 A)	<ul style="list-style-type: none"> — R.H. main beam
5-E (*) (8 A)	<ul style="list-style-type: none"> — L.H. dipped beam
6-F (*) (8 A)	<ul style="list-style-type: none"> — R.H. dipped beam
7-G (*) (8 A)	<ul style="list-style-type: none"> — L.H. side light — R.H. rear light — Number plate light (two bulbs)
8-H (*) (8 A)	<ul style="list-style-type: none"> — R.H. side light — Panel/side light warning light — L.H. rear light
<p>Unprotected circuits: ignition, charging, starting and charging warning light.</p>	

(*) With ignition key at MAR.



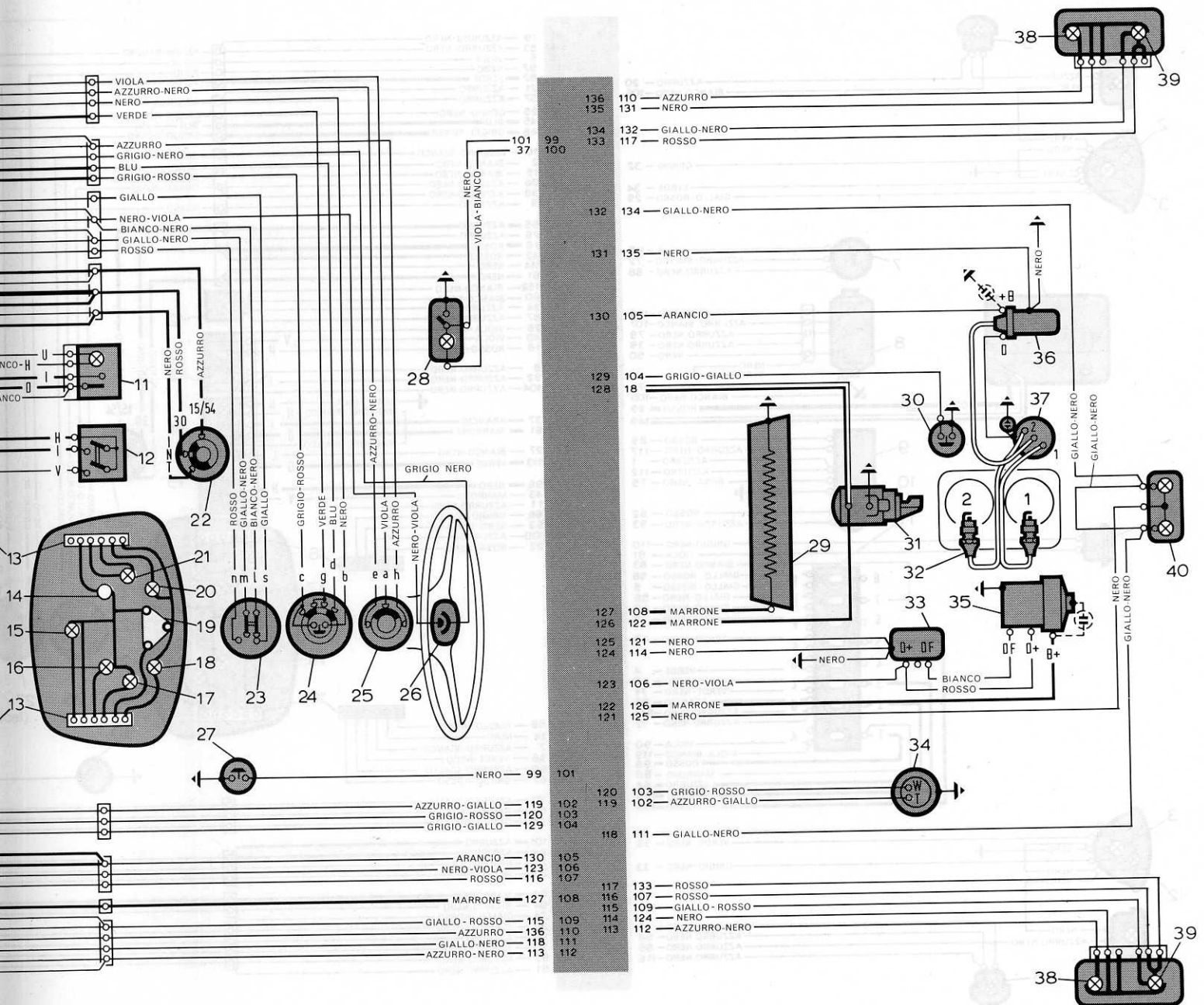
Wiring Diagram (Italian Version)

- 1 Front direction indicators (21 W, Spherical)
- 2 Side lights (4 W, Tubular)
- 3 Headlamps (40/45 W, Spherical)
- 4 Horn
- 5 Repeaters lights
- 6 Battery
- 7 Direction indicator flasher
- 8 Windscreen wiper motor
- 9 Stop light switch
- 10 Fuse unit
- 11 Heated backlight switch and w/l
- 12 Lighting/panel light switch
- 13 Panel connectors
- 14 Spare w/l
- 15 Panel/side light w/l (3 W, w/b)

- 16 Direction indicator w/l (1.2 W, w/b)
- 17 Headlamp w/l (1.2 W, w/b)
- 18 Fuel w/l (1.2 W, w/b)
- 19 Fuel gauge
- 20 Oil pressure w/l (1.2 W, w/b)
- 21 Ignition w/l (1.2 W, w/b)
- 22 Ignition switch
- 23 Wiper switch
- 24 Headlamp switch
- 25 Direction indicator switch
- 26 Horn switch
- 27 Door switch
- 28 Courtesy light/switch (5 W, Festoon)
- 29 Heated backlight (if fitted)

Explanatory Note

Each wire section ends in an identification number. Actual wiring can be traced by looking for the wire number in the adjacent



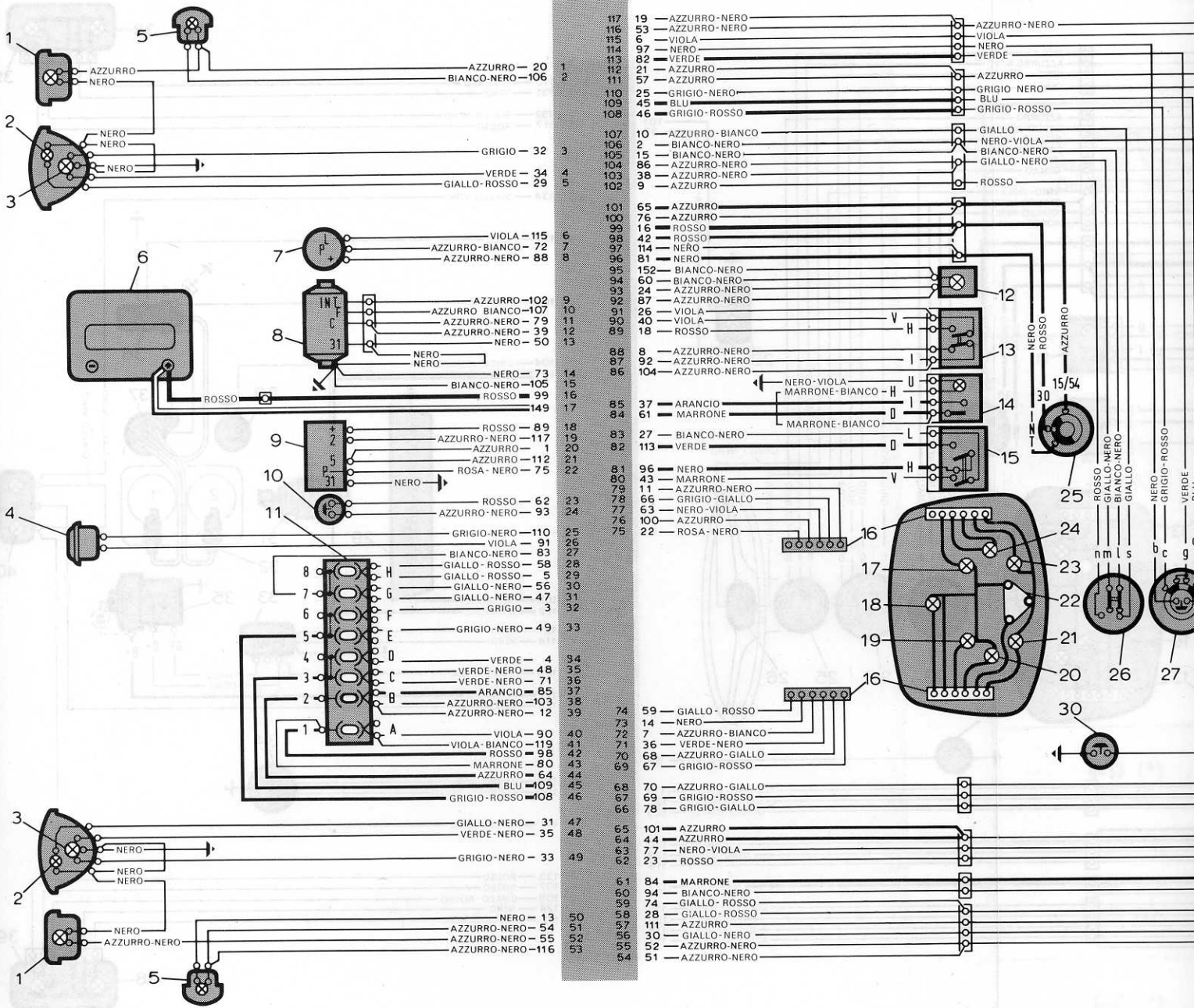
Wiring Diagram (Italian Version)

indicator w/l (1.2 W, w/b)
w/l (1.2 W, w/b)
1.2 W, w/b)
e
re w/l (1.2 W, w/b)
l (1.2 W, w/b)
witch
tch
switch
indicator switch
ch
ch
light/switch (5 W, Festoon)
acklight (if fitted)

- 30 Oil pressure transmitter
- 31 Starter
- 32 Spark plugs
- 33 Voltage regulator
- 34 Fuel transmitter
- 35 Alternator
- 36 Ignition coil
- 37 Ignition distributor
- 38 Rear direction indicators (21 W, Spherical)
- 39 Rear/stop lights (5/21 W, Spherical)
- 40 Number plate lights (5 W, Spherical)

w/l = warning light
w/b = wedge-base

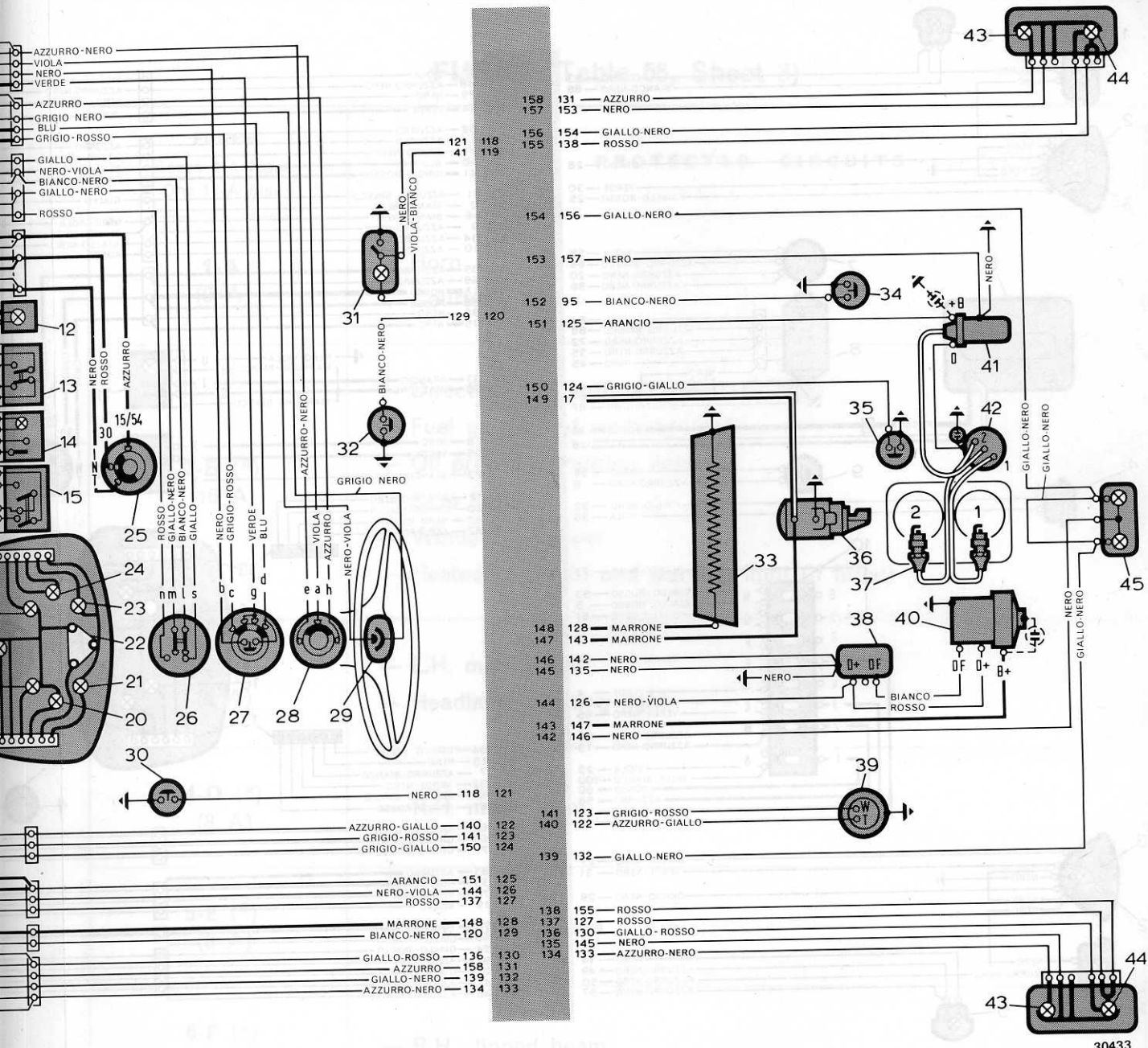
ng for the wire number in the adjacent coloured strip, where wire path is resumed.



Wiring Diagram (Middle-European Version) - se

Explanatory Note

Each wire section ends in an identification number. Actual wiring can be traced by looking for the wire number in the adjacent coloured strip,



(Middle-european Version) - see page 17.

er in the adjacent coloured strip, where wire path is resumed.

Wiring Diagram (Middle-european Version)

- | | |
|--|--|
| 1 Front direction indicators (21 W, Spherical) | 25 Ignition switch |
| 2 Side lights (4 W, Tubular) | 26 Wiper switch |
| 3 Headlamps (40/45 W, Spherical) | 27 Headlamp switch |
| 4 Horn | 28 Direction indicator switch |
| 5 Repeaters lights | 29 Horn switch |
| 6 Battery | 30 Door switch |
| 7 Direction indicator flasher | 31 Courtesy light/switch (5 W, Festoon) |
| 8 Windscreen wiper motor | 32 Brake w/l check switch |
| 9 Hazard warning flasher | 33 Heated backlight (if fitted) |
| 10 Stop light switch | 34 Brake warning transmitter |
| 11 Fuse unit | 35 Oil pressure transmitter |
| 12 Brake w/l | 36 Starter |
| 13 Hazard warning switch | 37 Spark plugs |
| 14 Heated backlight switch and w/l | 38 Voltage regulator |
| 15 Lighting/panel light switch | 39 Fuel transmitter |
| 16 Panel connectors | 40 Alternator |
| 17 Hazard w/l | 41 Ignition coil |
| 18 Panel/side light w/l (3 W, w/b) | 42 Ignition distributor |
| 19 Direction indicator w/l, (3 W, w/b) | 43 Rear direction indicators (21 W, Spherical) |
| 20 Headlamp w/l (1.2 W, w/b) | 44 Rear/stop lights (5/21 W, Spherical) |
| 21 Fuel w/l (1.2 W, w/b) | 45 Number plate lights (5 W, Spherical) |
| 22 Fuel gauge | |
| 23 Oil pressure w/l (1.2 W, w/b) | w/l = warning light |
| 24 Ignition w/l (1.2 W, w/b) | w/b = wedge-base |

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700781
15003
740341

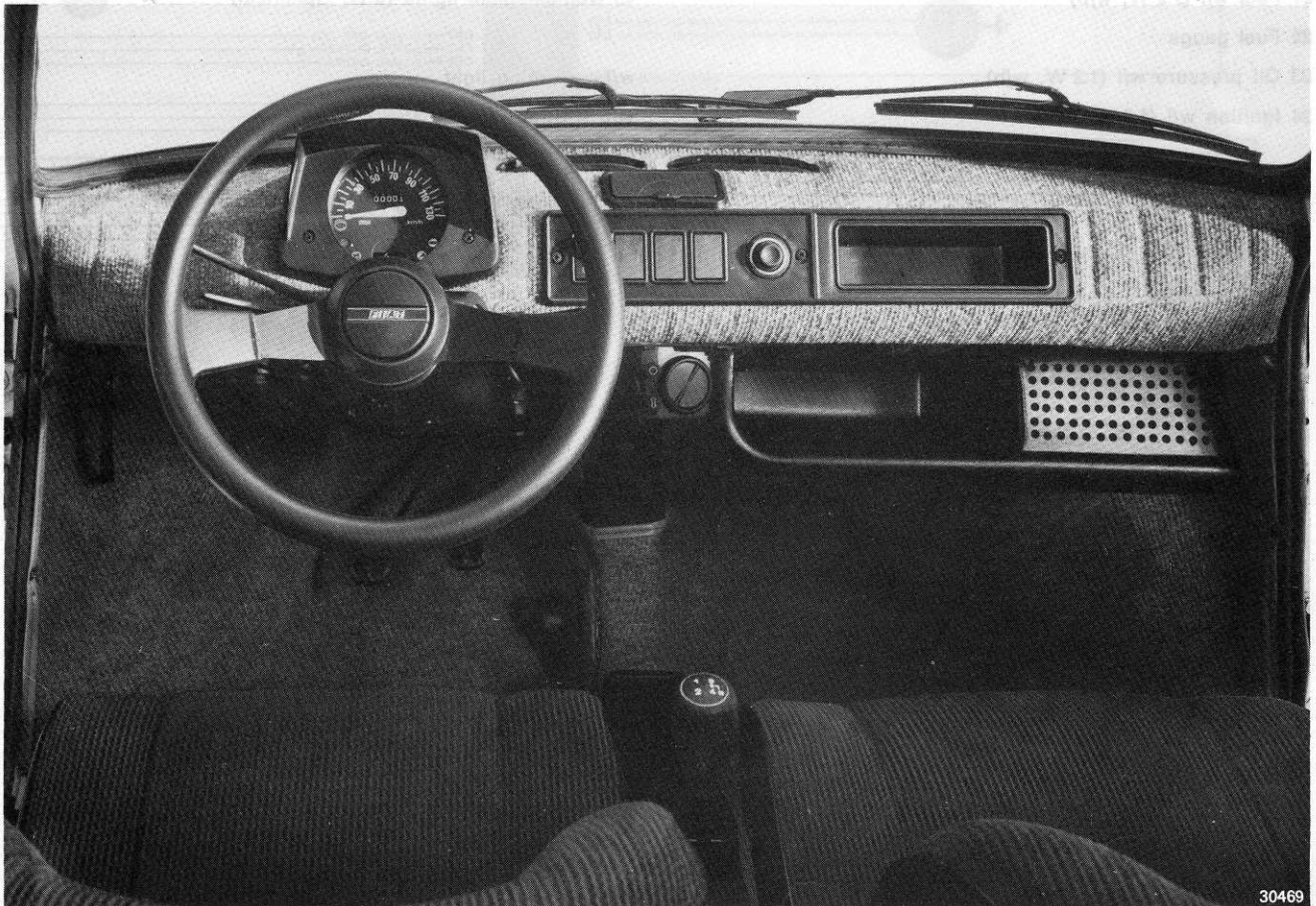
Passenger Compartment Front: Right Side (Front View)

BODY



30473

Rear View of 126 Personal 4



30469

Passenger Compartment Front Section - 126 Personal 4



Passenger Compartment Rear Section - 126 Personal

TOOL EQUIPMENT

New Tools

- A. 50156** - Pulley lock during removal and refitting of alternator and fan (supersedes **A. 50103**).
- A. 70375** - Tool for fitting seal and lock ring bushing to half shaft boots (supersedes **A. 70078**).
- A. 70580** - Support for holding transaxle during removal and refitting (supersedes **A. 70508**).
- A. 74366** - Installer for front wheel outer bearing outer race (Supersedes **A. 74046**).
- A. 74367** - Reaction piece for removing bushes of front track control arm (Supersedes **A. 74054**).

Existing Tools

- Ap. 5031/16** - Plate for grinding front/rear brake shoes (Supersedes **Ap. 5031/1P**).
- A. 40207/814** - Puller clutch shaft pilot bushing, or ball bearing (to be used with **A. 40206/801**) - Supersedes **A. 40207/813**.

- A. 47014** - Puller, front wheel hub cap (Supersedes **A. 47023**).
- A. 72214/13** - Centring flange for grinding front/rear brake drums (Supersedes **A. 72214/6/7/12**).
- A. 72257** - Set of tools (4), wheel cylinder piston locking during fitting (Supersedes **A. 72235**).
- A. 74041** - Installer for front wheel inner bearings and rear wheel inner and outer bearings outer race (Supersedes **A. 74259**).
- A. 74044** - Installer for fitting elastic bushes of front track control arm (Supersedes **A. 74058**).
- A. 74088** - Installer, front wheel hub cap (Supersedes **A. 74059**).
- A. 95121** - Gauge (7 mm dia.) for checking Weber 28 IMB 3/250 float level (Supersedes **A. 95141**).
- A. 95697/3** - Support for measuring rear wheel bearing revolving torque (Supersedes **A. 95697/2**).