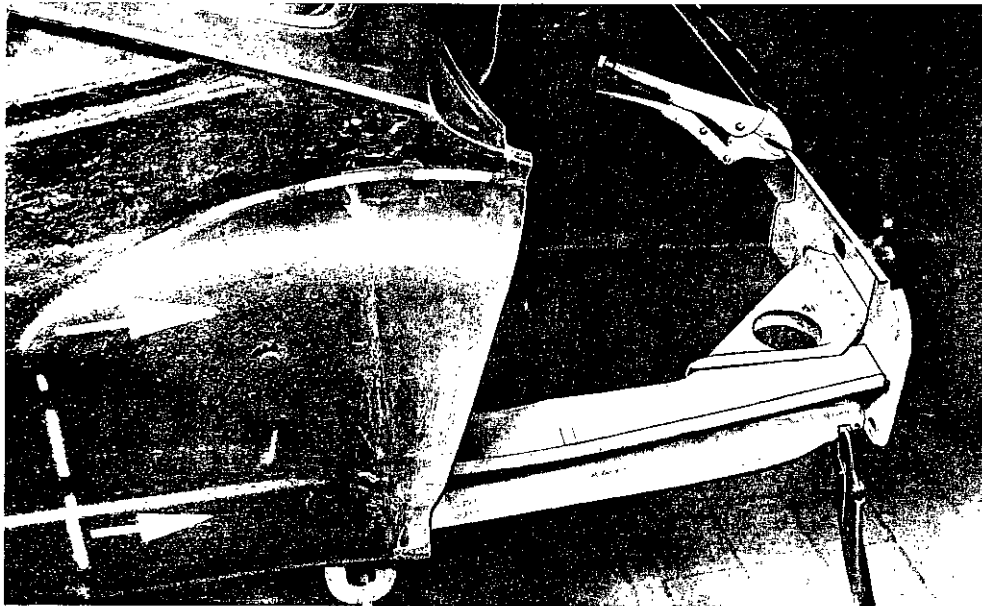
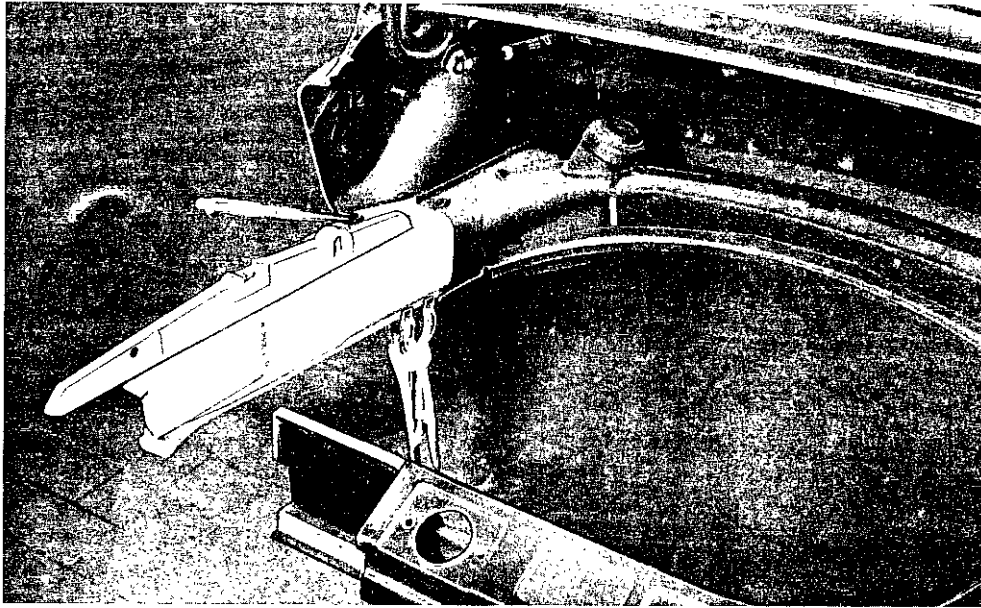


Replacing Part of Inner Side Member

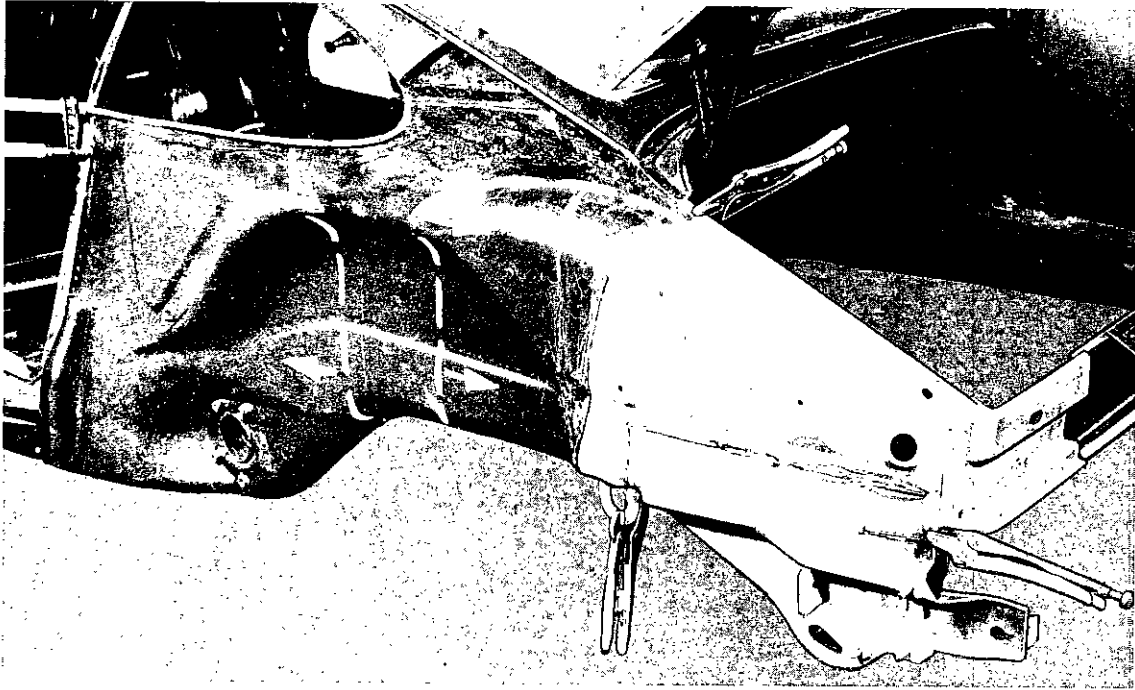
- 7 - Align and weld new parts.
- 7 a - Install side member with about 2 cm (4 inches) overlap. Align, Check engine compartment in longitudinal and diagonal direction. Weld side member.



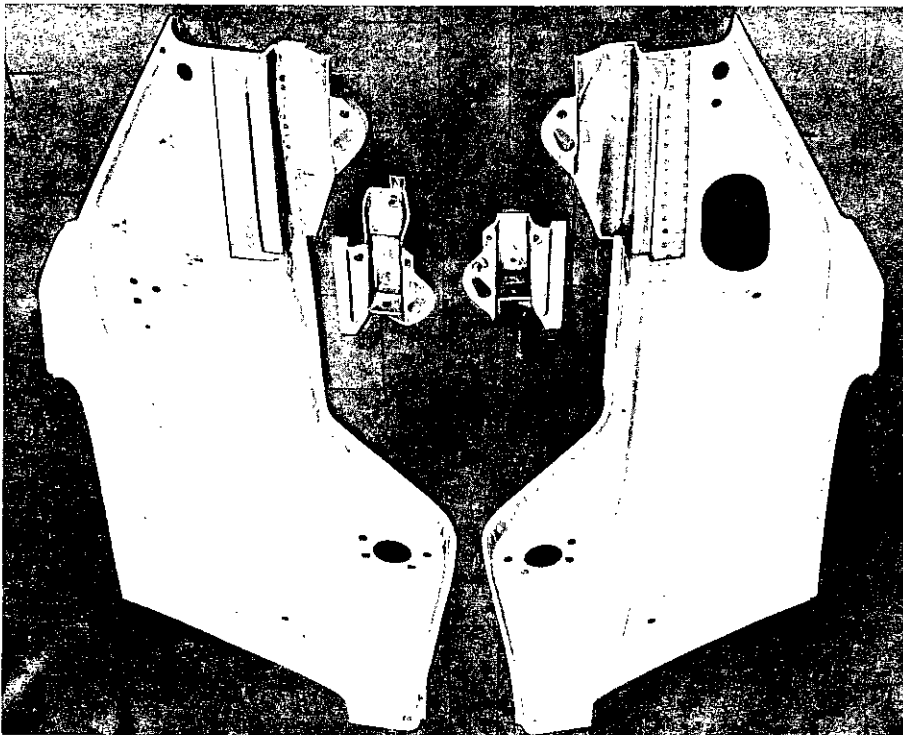
- 7 b - Align and weld inner cross member. Install engine bracket suspension. Align and spot weld.

Replacing Part of Inner Side Member

- 7 c - Align wheelhousing panel, cut and weld with about 2cm (4inches) overlap. Butt weld in area of lid recess. Align wheelhousing panel with contour of lid.

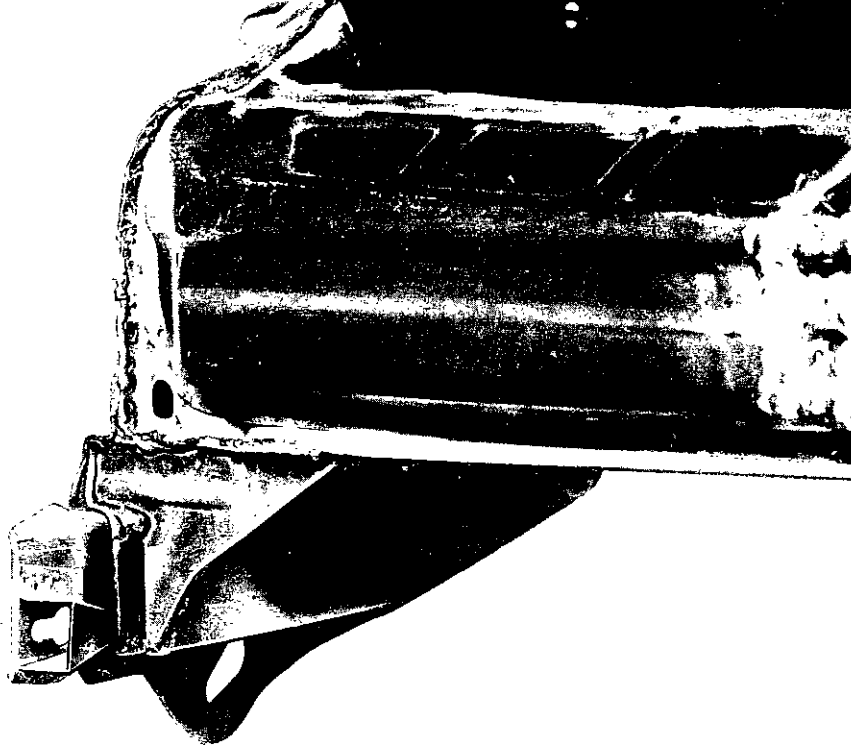


Various marked cutting lines (broken lines).



Replacing Part of Inner Side Member

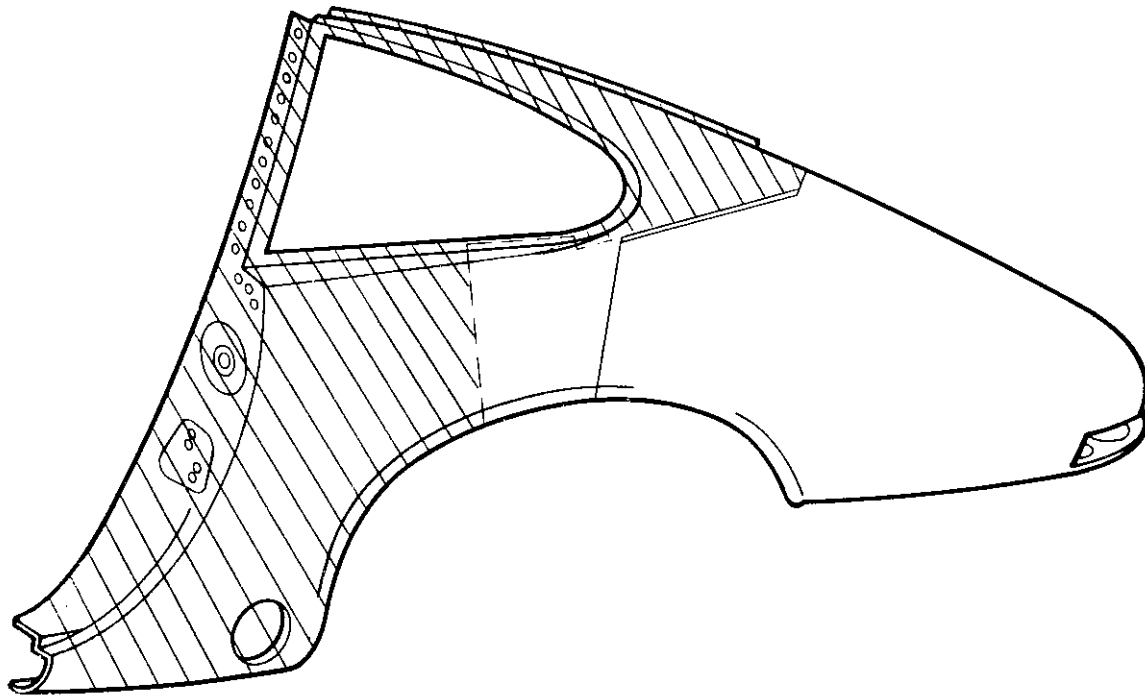
- 8 - Align and butt weld outer section of cross member at center cutting point. Spot weld top and bottom of inner cross member section.



- 9 - Install and weld impact absorber holder.
- Weld impact absorber holder reinforcement to cross member.
 - Braze tube for lid release cable.
 - Spot weld engine seal rails.
- 10 - Install and spot weld rear panel.

Replacing Part of Inner Side Member

- 11 - Align and cut rear fender.
- Cut along cutting line to wheel opening.
 - Cut along cutting line from lid opening to vent window so that it overlaps. Crimp new part using crimping pliers.
 - Shorten crimped surfaces to an overlap of about 3mm (1/8 inch).
- 11 a - Clamp and tack weld fender. Watch lid joint.
- 11 b - Spot weld rain molding in lid opening. Gas weld seam to wheel opening. MIG weld overlap and align fender.



- 12 - Finishing: Weld burnt through welding spots. Clean welding seams and prime, apply body solder if necessary. Seal seams and joints. Apply undercoating.

Elektrische Anlage
Electrical System
Installation électrique
Impianto elettrico

9

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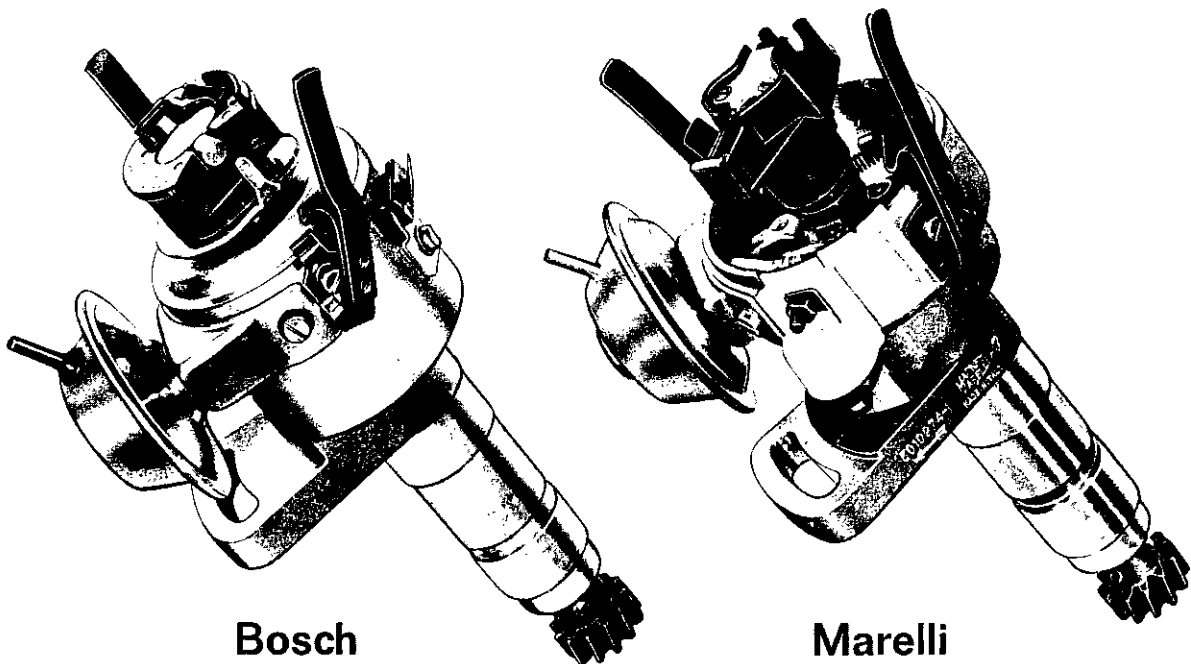
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IGNITION DISTRIBUTOR FOR 2.4 LITER ENGINES -
BEGINNING WITH 1972 MODELS

General Information

Beginning with the 1972-model year, all Type 911 vehicles are equipped with either BOSCH or MARELLI distributors described below.



In the new distributors, engine timing is changed by:

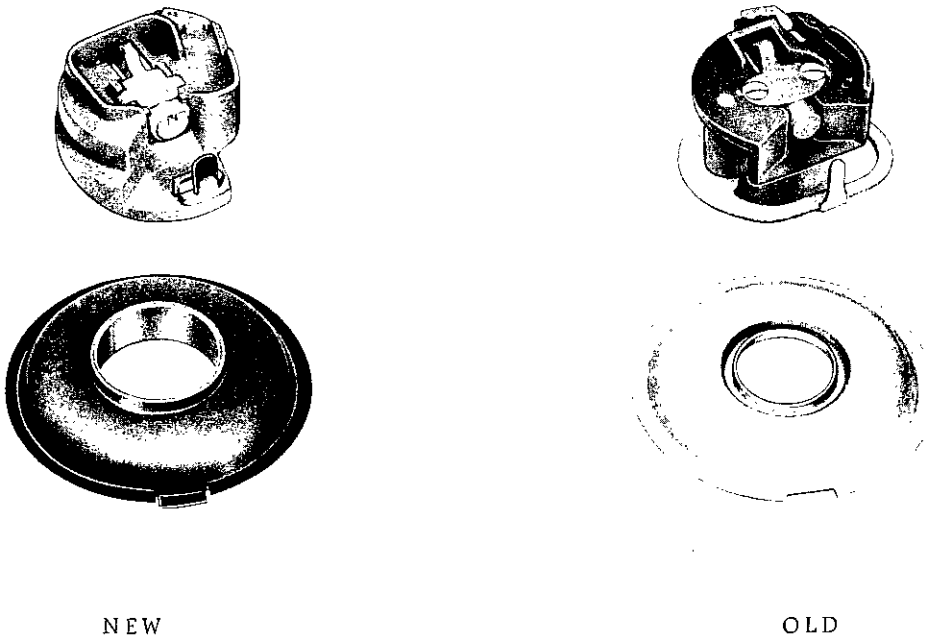
- 1 - Centrifugal weights (responding to engine speed)
- 2 - Vacuum control (responding to throttle valve position)

Speed limiters (engine governors) continue to be used in the distributors. A centrifugal weight built into the rotor of each distributor short-circuits the secondary side of the ignition system at a predetermined cut-off speed. This prevents exceeding maximum engine speed. The distributors for the Type 911 T, E, and S 2.4 liter engines are identical with the exception of the rotors which have different cut-off speeds.

The vacuum control unit retards the ignition timing during idle and low speed ranges. The ignition then fires 5° ATDC. This results in cleaner combustion, reducing the emission of harmful exhaust pollutants. When the throttle opens, vacuum is reduced and the ignition timing is advanced by 10° .

Vehicle Type	BOSCH Distributor	MARELLI Distributor
911 T	0 231 169 003	5 010 974 - 1
911 E	0 231 169 004	5 010 974 - 2
911 S	0 231 169 005	5 010 974 - 3

Beginning with 1973 models, all BOSCH distributors used in Type 911 T, E and S vehicles are equipped with a modified rotor. The new rotor can be installed in distributors used in 1972 model vehicles providing that the old dust cover is replaced with one of the new version.



With this modification, BOSCH distributors are assigned a new part number.

IGNITION DISTRIBUTOR FOR 2.7 LITER ENGINES

Beginning with 1974 models, Type 911 (2.7 liter) and 911 S (2.7 liter) engines are equipped with the BOSCH or MARELLI distributors formerly used in the Type 911 T (2.4 liter) engines. Ignition timing spark advance characteristics, and test specifications applicable to the 2.4 liter engine are also continued.

The cutoff speed in both engine types is 6500 ± 200 rpm.

The BOSCH or MARELLI distributors used in the 2.7 liter CARRERA engines differ from the above described distributors due to a different spark advance characteristic.

Ignition timing at idle is on TDC. Upon opening of the throttle valve, the drop in manifold negative pressure (vacuum) results in the ignition point advancing by 10° crankshaft rotation.

The CARRERA cutoff speed is 7300 rpm.

The distributor used in the 1973 model 2.7 CARRERA engines remains in use in 1974 model engines as well.

DISTRIBUTOR - 1976 MODEL

The distributor advance curves on pages 9.3 - 2/1, 9.3 - 2/3 and 9.3 - 2/4 also apply to the 1976 model 911 S.

The cutoff speeds of the speed limiter are for

911 S 6500 ± 200 rpm

How to read current flow diagrams

In previous wiring diagrams electrical components were shown in the approximate position as you would find them on the car. However, to show the electrical connections between each component in the diagram became more and more difficult as the number of components increased. The result was that it was hard to trace electrical circuits.

To make reading wiring diagrams easier, we revised them completely. The result of intensive studies is a new diagram called "current flow diagram".

Current flow diagrams are laid out by placing circuits of related components one next to the other. The base of each circuit always starts with ground. The location of components on this diagram is no longer related to where the components would be in the car. The layout of the circuits, however, is such that each can be followed much easier to help in troubleshooting of electrical faults.

Looking at a current flow diagram you will find a yellow base line. The numbers in the yellow base line characterize the current tracks in the diagram and are to locate each component that is listed in the legend.

The colored lines in the diagram represent wires in the car, the colors correspond with the actual colors of the wires. The small numbers in the wiring runs indicate the wiring gauge in mm². The thin black lines are not actual wires but internal connections, such as the ground connection of a lamp housing. The base line for ground is the thin black line directly on top of the yellow base line.























































Interrupted wires or connections end in a yellow square. Continuation of this interrupted circuit can be found in the current track using the number in the square.

Each component in the diagram is identified with a letter, sometimes with a letter and a number. Component definition can be found in the legend.

Most connectors or terminals are numbered. These numbers correspond with the numbers that are right next to most connectors on electrical components, such as switches and relays. This numbering system is used on most European cars. Listed below are the most commonly used terminals and their location.

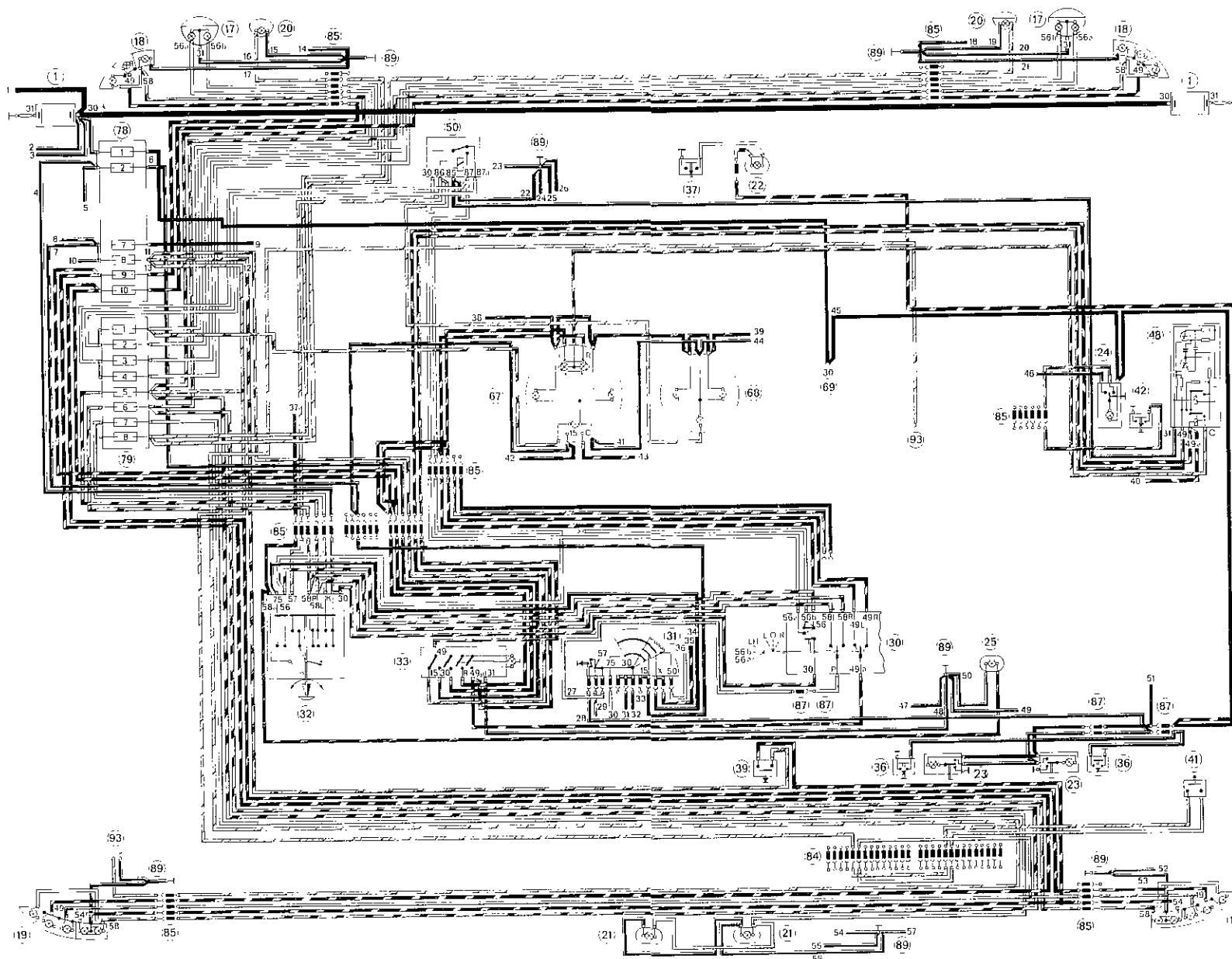
Terminal No.	Location
B+	- on coil, input from ignition switch
D+	- on relay and generator
DF	- on relay and generator
1	- on coil, output to primary distributor lead
4	- on coil, high tension output and on distributor high tension lead
15	- on coil, input from ignition switch
30	- on starter solenoid, input from battery, ignition starter switch, light switch, dimmer relay, and twin horn relay
31	- ground
31 b	- windshield wiper switch and motor
49	- on turn signal bulbs
50	- on both terminals of starter solenoid - ignition starter switch
54	- on stoplight bulbs, steering ignition switch and windshield wiper switch
54 d	- windshield wiper switch and motor
56	- light switch and dimmer relay
56 a	- dimmer relay, headlight low beam
56 b	- headlight high beam
58	- on taillight bulbs, light switch and front parking lights
58 b	- light switch
85, 86, 87	- relay

Electrical Symbols

	Antenna		Heating resistor (element)
	Dipole antenna		Danger! High Voltage
	Direct current		Spark gap
	Alternating current		Condenser
	Three-phase current		Feedthrough (suppressor) condenser
	Generator		Coil, iron core
	Battery cell		Transformer, iron core
	Motor		Diode
	Measuring gauge		Zener diode
	Voltmeter		Transistor
	Ammeter		Thyristor
	Wiring		Mechanical connection of components
	Wire cross section in mm ²		Mechanical connection, spring loaded contact
	Wire junction, fixed		Time switch
	Wire connector, separable		Manually operated switch
	Wire junction, separable		Mechanically operated switch
	Suppression wire		Motor operated switch
	Wire crossing		Relay coil
	Ground		Solenoid coil
	Switch position, open		Relay, electrothermal
	Switch position, closed		Relay, electromagnetic
	Multiple contact switch		Electromagnetic valve (jet)
	Fuse		Boundary line for an assembly
	Light bulb		Horn
	Glow lamp		Loudspeaker
	Resistor		
	Potentiometer		
	Tapped resistor		
	Thermal resistor, automatically regulating		

Electric wiring diagram (Part I) Type 911 T, 911 E, 911 S, Model 72

Printed in Germany - 1, 1971



0.1-2/1

911
9

- | | |
|---|---|
| 1 Battery | 33 Emergency flasher switch
(not applicable in Italy and France) |
| 17 Headlights | 36 Door contact switch |
| 18 Turn signal, parking and side marker
lights
(side marker lights USA only) | 37 Switch for luggage compartment light |
| 19 Tail, stop, turn, back-up and side
marker lights
(side marker lights USA only) | 39 Stop light switch |
| 20 Fog lights (optional) | 41 Back-up light switch |
| 21 License plate light | 42 Switch for glove compartment light |
| 22 Luggage compartment light | 48 Turn signal/emergency flasher unit |
| 23 Interior light | 50 Headlight relay |
| 24 Glove compartment light | 67 Tachometer |
| 25 Ashtray light | 68 Speedometer |
| 30 Flasher, dimmer, wiper/washer switch
with horn ring on steering column | 69 Electric clock |
| 31 Ignition starter switch and steering
lock | 78 Fuse box I (10 terminal) |
| 32 Light switch | 79 Fuse box II (8 terminal) |
| | 84 Multi-connector (14 terminal) |
| | 85 Multi-connector (6 terminal) |
| | 87 Connector (single contact) |
| | 89 Ground connection-body |
| | 93 Rear fog light (optional) |

FUSES:

Fuse box I:

- 1 Interior light, clock, luggage compartment light
- 2 Emergency flasher
- 7 Fresh air fan
- 8 Stop, turn and back-up lights
- 9 Left front turn signal light
- 10 Right front turn signal light

Fuse box II:

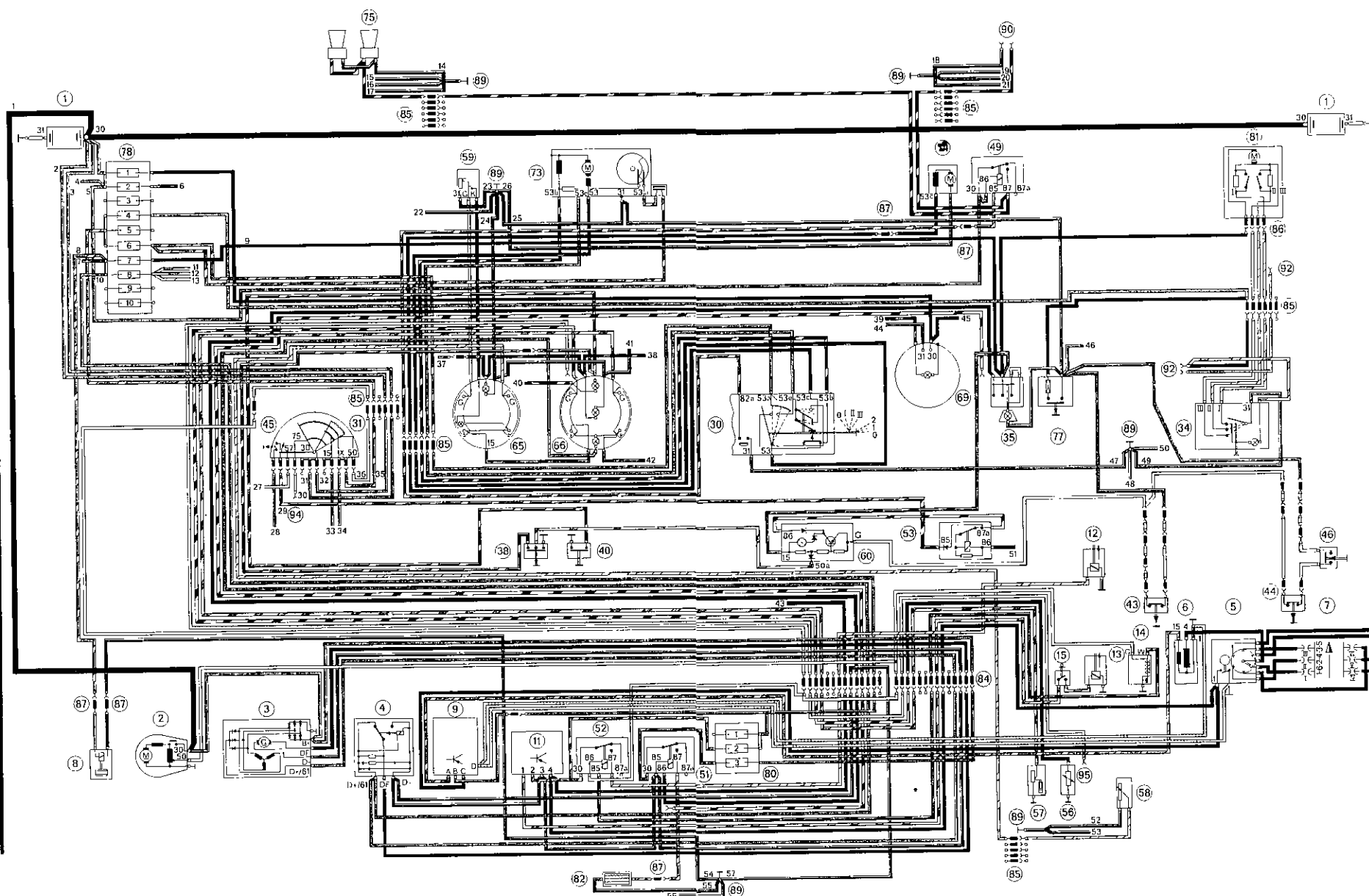
- 1 High beam, left
- 2 High beam, right
- 3 Low beam, left
- 4 Low beam, right
- 5 Side marker, left
- 6 Side marker, right
- 7 License plate light
- 8 (Fog lights)

CAUTION!

Do not disconnect battery while the engine is running as this will damage the alternator.

Electric wiring diagram (Part II) Type 911 T, 911 E, 911 S, Model 72

Printed in Germany - I, 1971



0.1-2/3

- 1 Battery
- 2 Starter
- 3 Alternator
- 4 Governor
- 5 Distributor
- 6 Ignition transformer
- 7 Spark plugs
- 8 Fuel pump
- 9 High tension ignition unit
- 11 Speed switch
- 12 Cold start solenoid (except 911 TV)
- 13 Shut-off solenoid (911 TV: solenoid valve)
- 14 Thermo-time switch (except 911 TV)
- 15 Micro switch
- 30 Flasher, dimmer, wiper/washer switch with horn ring on steering column
- 31 Ignition starter switch and steering lock
- 34 Switch for fan and auxiliary heater
- 35 Rear window defogger switch
- 38 Parking brake contact
- 40 Brake warning light switch (USA only)

- 43 Safety belt contact, driver side (USA only)
- 44 Safety belt contact, passenger side (USA only)
- 45 Buzzer contact (USA only)
- 46 Seat contact, passenger side (USA only)
- 49 Horn relay
- 51 Rear window defogger relay
- 52 Auxiliary starting relay (except 911 TV)
- 53 Buzzer (USA only)
- 56 Oil temperature indicator
- 57 Oil pressure indicator
- 58 Oil level indicator
- 59 Indicator for fuel gauge
- 60 Safety belt warning light (USA only)
- 65 Fuel gauge dial
- 66 Oil temperature gauge dial
- 69 Electric clock
- 73 Wiper motor
- 74 Washer pump
- 75 Horns

- 77 Cigarette lighter
- 78 Fuse box I (10 terminal)
- 80 Fuse box III (3 terminal)
- 81 Fan motor
- 82 Rear window defogger element
- 84 Multi-connector (14 terminal)
- 85 Multi-connector (6 terminal)
- 86 Multi-connector (4 terminal)
- 87 Connector (single contact)
- 89 Ground connection-body
- 90 Optional horn
- 92 Auxiliary combustion heater (optional)
- 94 Radio (optional)
- 95 Oil temperature switch sportomatic (optional)

FUSES:

Fuse box I:

- 1 Interior light, clock, luggage compartment light
- 2 Emergency flasher
- 3 (Electric windows)
- 4 Cigarette lighter
- 5 (Sliding roof)
- 6 Windshield wiper, washer pump
- 7 Fresh air fan
- 8 Stop, turn and back-up lights
- 9 Left front turn signal light
- 10 Right front turn signal light

Fuse box III:

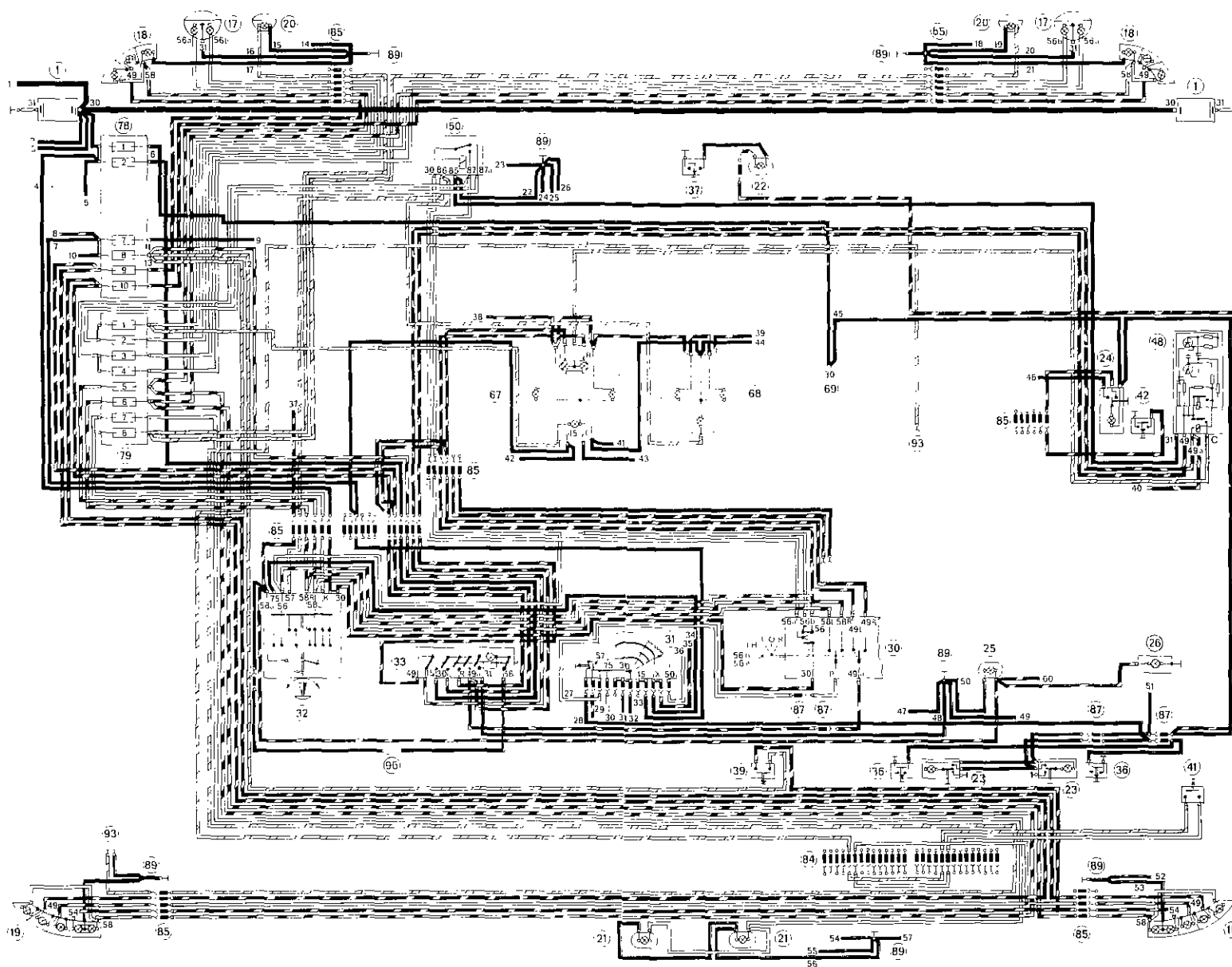
- 1 (Sportomatic)
- 2 Shut-off solenoid, solenoid valve, solenoid for cold starting unit
- 3 Rear window defogger

CAUTION!

Do not disconnect battery while the engine is running as this will damage the alternator.

911
9

Electric wiring diagram (Part I) Type 911 T, 911 E, 911 S, Carrera 2.7, Model 73



- | | |
|---|---|
| 1 Battery | 33 Emergency flasher switch
(not applicable in Italy and France) |
| 17 Headlights | 36 Door contact switch |
| 18 Turn signal, parking and side marker
lights
(side marker lights USA only) | 37 Switch for luggage compartment light |
| 19 Tail, stop, turn, back-up and side
marker lights
(side marker lights USA only) | 39 Stop light switch |
| 20 Fog lights (optional) | 41 Back-up light switch |
| 21 License plate light | 42 Switch for glove compartment light |
| 22 Luggage compartment light | 48 Turn signal/emergency flasher unit |
| 23 Interior light | 50 Headlight relay |
| 24 Glove compartment light | 67 Tachometer |
| 25 Ashtray light | 68 Speedometer |
| 26 Illumination for heating lever
(USA only) | 69 Electric clock |
| 30 Flasher, dimmer, wiper/washer switch
with horn ring on steering column | 78 Fuse box I (10 terminal) |
| 31 Ignition starter switch and steering
lock | 79 Fuse box II (8 terminal) |
| 32 Light switch | 84 Multi-connector (14 terminal) |
| | 85 Multi-connector (6 terminal) |
| | 87 Connector (single contact) |
| | 89 Ground connection-body |
| | 93 Rear fog light (optional) |
| | 96 Resistor (USA only) |

FUSES:

Fuse box I:

- 1 Interior light, clock, luggage compartment light
- 2 Emergency flasher
- 7 Fresh air fan
- 8 Stop, turn and back-up lights
- 9 Left front turn signal light
- 10 Right front turn signal light

Fuse box II:

- 1 High beam, left
- 2 High beam, right
- 3 Low beam, left
- 4 Low beam, right
- 5 Side marker, left
- 6 Side marker, right
- 7 License plate light
- 8 (Fog lights)

CAUTION!

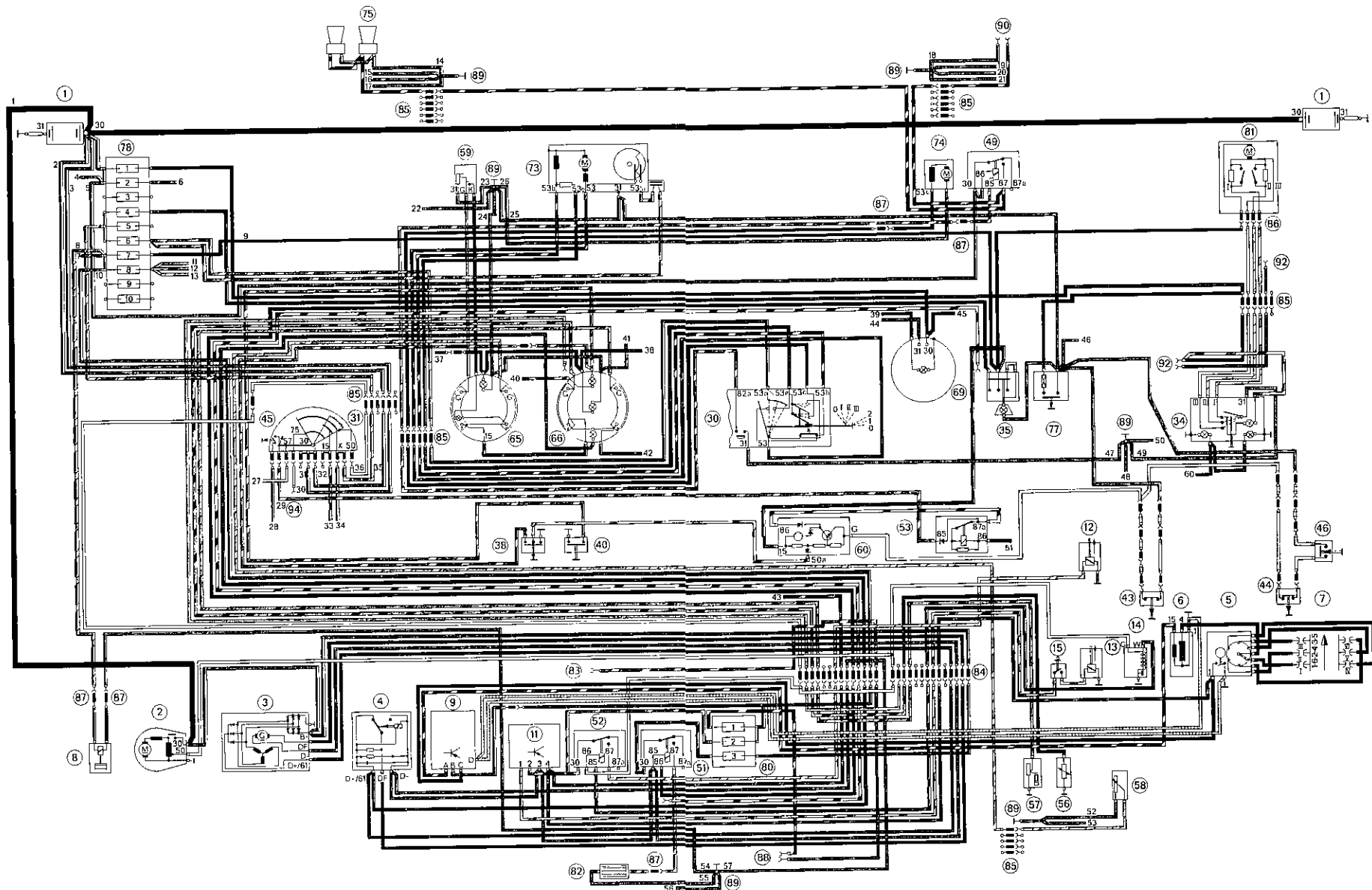
Do not disconnect battery while the engine is running as this will damage the alternator

Electric wiring diagram (Part II) Type 911 T, 911 E, 911 S, Carrera 2.7, Model 73

Printed in Germany - I, 1972

0.1-217

911
9



- 1 Battery
- 2 Starter
- 3 Alternator
- 4 Governor
- 5 Distributor
- 6 Ignition transformer
- 7 Spark plugs
- 8 Fuel pump
- 9 High tension ignition unit
- 11 Speed switch
- 12 Cold start solenoid (except 911 TV)
- 13 Shut-off solenoid (911 TV: solenoid valve)
- 14 Thermo-time switch (except 911 TV)
- 15 Micro switch
- 30 Flasher, dimmer, wiper/washer switch with horn ring on steering column
- 31 Ignition starter switch and steering lock
- 34 Switch for fan and auxiliary heater
- 35 Rear window defogger switch
- 38 Parking brake contact
- 40 Brake warning light switch (USA only)

- 43 Safety belt contact, driver side (USA only)
- 44 Safety belt contact, passenger side (USA only)
- 45 Buzzer contact (USA only)
- 46 Seat contact, passenger side (USA only)
- 49 Horn relay
- 51 Rear window defogger relay
- 52 Auxiliary starting relay (except 911 TV)
- 53 Buzzer (USA only)
- 56 Oil temperature indicator
- 57 Oil pressure indicator
- 58 Oil level indicator
- 59 Indicator for fuel gauge
- 60 Safety belt warning light (USA only)
- 65 Fuel gauge dial
- 66 Oil temperature gauge dial
- 69 Electric clock
- 73 Wiper motor
- 74 Washer pump
- 75 Horns

- 77 Cigarette lighter
- 78 Fuse box I (10 terminal)
- 80 Fuse box III (3 terminal)
- 81 Fan motor
- 82 Rear window defogger element
- 83 Sportomatic (optional)
- 84 Multi-connector (14 terminal)
- 85 Multi-connector (6 terminal)
- 86 Multi-connector (4 terminal)
- 87 Connector (single contact)
- 89 Ground connection-body
- 90 Optional horn
- 92 Auxiliary combustion heater (optional)
- 94 Radio (optional)

FUSES:

Fuse box I:

- 1 Interior light, clock, luggage compartment light
- 2 Emergency flasher
- 3 (Electric windows)
- 4 Cigarette lighter
- 5 (Sliding roof)
- 6 Windshield wiper, washer pump
- 7 Fresh air fan
- 8 Stop, turn and back-up lights
- 9 Left front turn signal light
- 10 Right front turn signal light

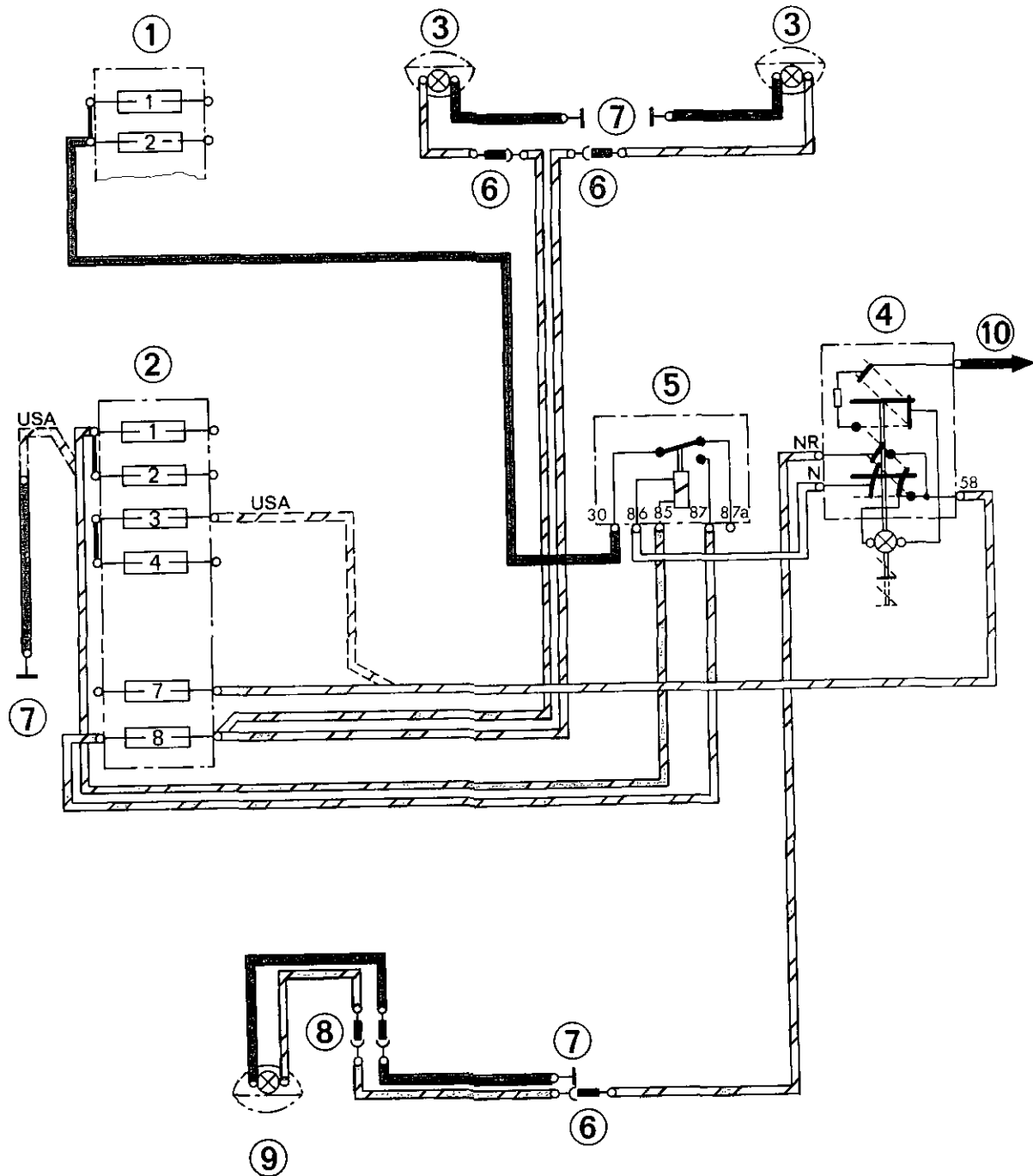
Fuse box III:

- 1 (Sportomatic)
- 2 Shut-off solenoid, solenoid valve, solenoid for cold starting unit
- 3 Rear window defogger

CAUTION!

Do not disconnect battery while the engine is running as this will damage the alternator.

Additional wiring diagram front and rear fog lights, Type 911



1 Fuse box I

2 Fuse box II

3 Fog lights

4 Fog lights switch

5 Relay

6 Multi-connector (6 terminal)

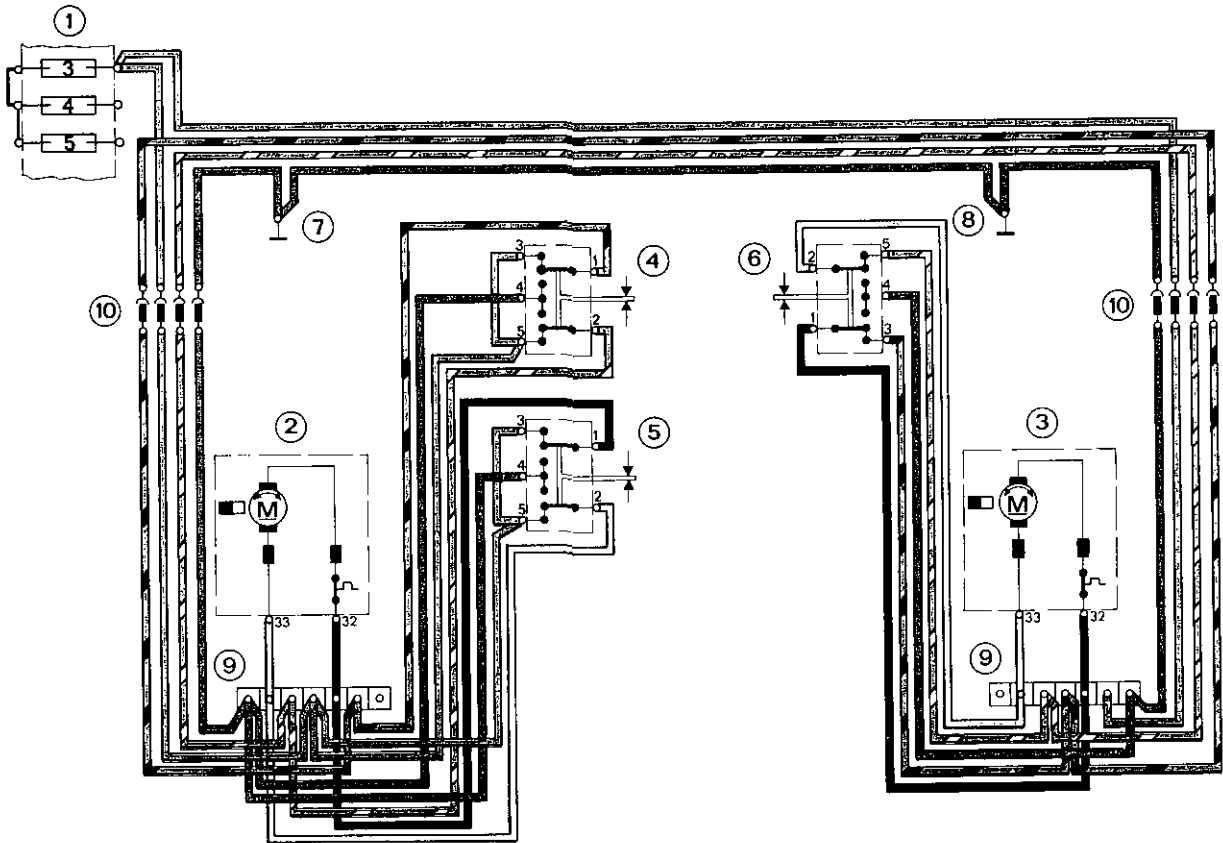
7 Ground connection-body

8 Connector (double contact)

9 Rear fog light

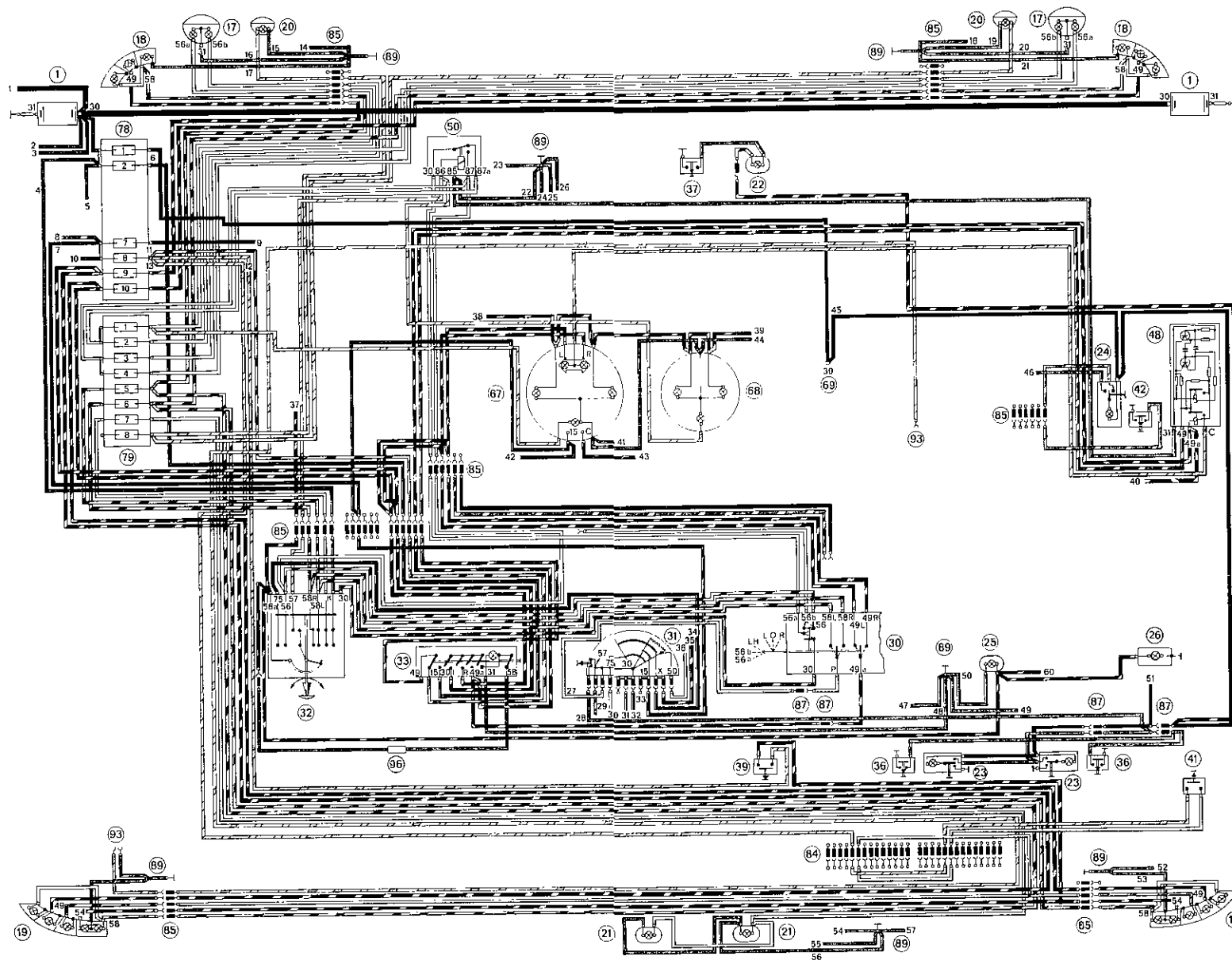
10 Ground connection (cigarette lighter)

Additional wiring diagram electric window opener, Type 911



- | | |
|-----------------------------------|------------------------------------|
| 1 Fuse box I | 6 Switch for passenger side, right |
| 2 Motor, driver side | 7 Ground connection, left |
| 3 Motor, passenger side | 8 Ground connection, right |
| 4 Switch for passenger side, left | 9 Terminal strip |
| 5 Switch for driver side | 10 Connector |

Electric wiring diagram (Part I) Type 911 T with CIS, Model 73



- 1 Battery
- 17 Headlights
- 18 Turn signal, parking and side marker lights
(side marker lights USA only)
- 19 Tail, stop, turn, back-up and side marker lights
(side marker lights USA only)
- 20 Fog lights (optional)
- 21 License plate light
- 22 Luggage compartment light
- 23 Interior light
- 24 Glove compartment light
- 25 Ashtray light
- 26 Illumination for heating lever
(USA only)
- 30 Flasher, dimmer, wiper/washer switch with horn ring on steering column
- 31 Ignition starter switch and steering lock
- 32 Light switch

- 33 Emergency flasher switch
(not applicable in Italy and France)
- 36 Door contact switch
- 37 Switch for luggage compartment light
- 39 Stop light switch
- 41 Back-up light switch
- 42 Switch for glove compartment light
- 48 Turn signal/emergency flasher unit
- 50 Headlight relay
- 67 Tachometer
- 68 Speedometer
- 69 Electric clock
- 78 Fuse box I (10 terminal)
- 79 Fuse box II (8 terminal)
- 84 Multi-connector (14 terminal)
- 85 Multi-connector (6 terminal)
- 87 Connector (single contact)
- 89 Ground connection-body
- 93 Rear fog light (optional)
- 96 Resistor (USA only)

FUSES:

Fuse box I:

- 1 Interior light, clock, luggage compartment light
- 2 Emergency flasher
- 7 Fresh air fan
- 8 Stop, turn and back-up lights
- 9 Left front turn signal light
- 10 Right front turn signal light

Fuse box II:

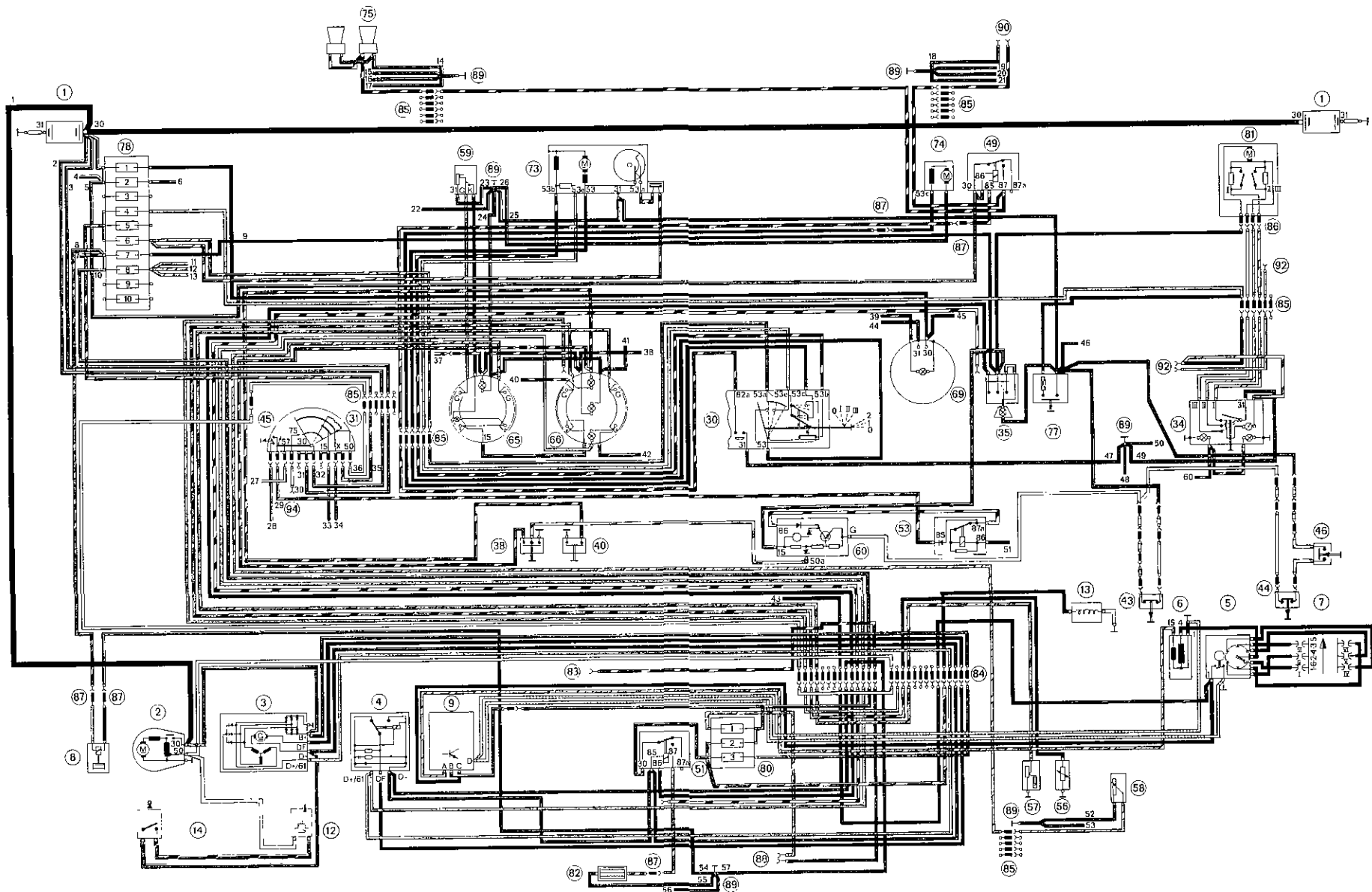
- 1 High beam, left
- 2 High beam, right
- 3 Low beam, left
- 4 Low beam, right
- 5 Side marker, left
- 6 Side marker, right
- 7 License plate light
- 8 (Fog lights)

CAUTION!

Do not disconnect battery while the engine is running as this will damage the alternator.

Electric wiring diagram (Part II) Type 911 T with CIS, Model 73

Printed in Germany - XXVII, 1973



0.1-2/15

911
9

- 1 Battery
- 2 Starter
- 3 Alternator
- 4 Governor
- 5 Distributor
- 6 Ignition transformer
- 7 Spark plugs
- 8 Fuel pump
- 9 High tension ignition unit
- 12 Cold start solenoid
- 13 Control pressure regulating valve with warm-up compensation
- 14 Micro switch
- 30 Flasher, dimmer, wiper/washer switch with horn ring on steering column
- 31 Ignition starter switch and steering lock
- 34 Switch for fan and auxiliary heater
- 35 Rear window defogger switch
- 38 Parking brake contact
- 40 Brake warning light switch (USA only)

- 43 Safety belt contact, driver side (USA only)
- 44 Safety belt contact, passenger side (USA only)
- 45 Buzzer contact (USA only)
- 46 Seat contact, passenger side (USA only)
- 49 Horn relay
- 51 Rear window defogger relay
- 53 Buzzer (USA only)
- 56 Oil temperature indicator
- 57 Oil pressure indicator (optional)
- 58 Oil level indicator (optional)
- 59 Indicator for fuel gauge
- 60 Safety belt warning light (USA only)
- 65 Fuel gauge dial
- 66 Oil temperature gauge dial
- 69 Electric clock
- 73 Wiper motor
- 74 Washer pump
- 75 Horns

- 77 Cigarette lighter
- 78 Fuse box I (10 terminal)
- 80 Fuse box III (3 terminal)
- 81 Fan motor
- 82 Rear window defogger element
- 83 Sportomatic (optional)
- 84 Multi-connector (14 terminal)
- 85 Multi-connector (6 terminal)
- 86 Multi-connector (4 terminal)
- 87 Connector (single contact)
- 88 Gear lever contact SPM (optional)
- 89 Ground connection-body
- 90 Optional horn
- 92 Auxiliary combustion heater (optional)
- 94 Radio (optional)

FUSES:

Fuse box I:

- 1 Interior light, clock, luggage compartment light
- 2 Emergency flasher
- 3 (Electric windows)
- 4 Cigarette lighter
- 5 (Sliding roof)
- 6 Windshield wiper, washer pump
- 7 Fresh air fan
- 8 Stop, turn and back-up lights
- 9 Left front turn signal light
- 10 Right front turn signal light

Fuse box III:

- 1 (Sportomatic)
- 2
- 3 Rear window defogger

CAUTION!

Do not disconnect battery while the engine is running as this will damage the alternator.

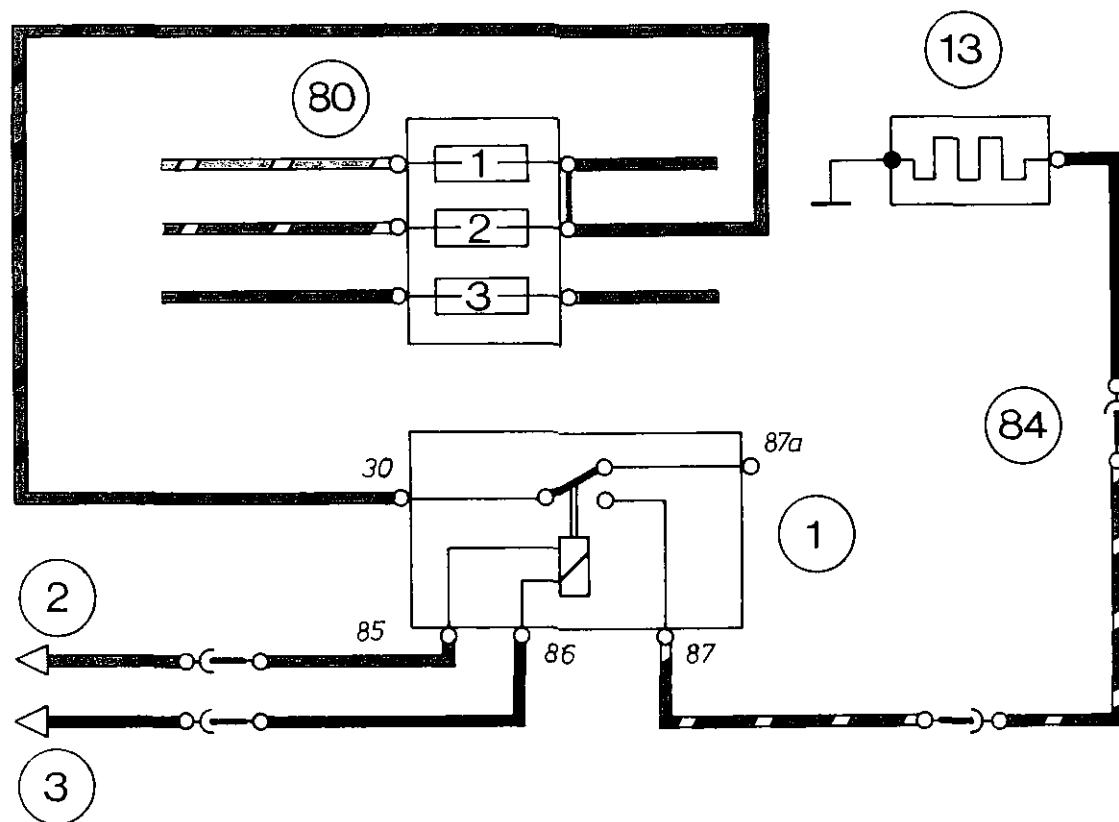
SUPPLEMENT TO ELECTRIC WIRING DIAGRAM
TYPE 911 T WITH CONTINUOUS INJECTION SYSTEM (CIS), 1973 MODEL

Wiring in the area of fuse box III shown on page 0.1 - 2/15 differs in Type 911 T vehicles equipped with the Continuous Injection System (CIS) due to the utilization of differing components. The resulting changes in the wiring diagram can be seen in the circuit schematic shown below.

The red/white wire originally connected to fuse No. 2 now is connected to terminal No. 87 of the newly added solenoid switch. The red/white wire currently attached to fuse No. 2 has no function in CIS-equipped vehicles even though it continues to be installed for production reasons.

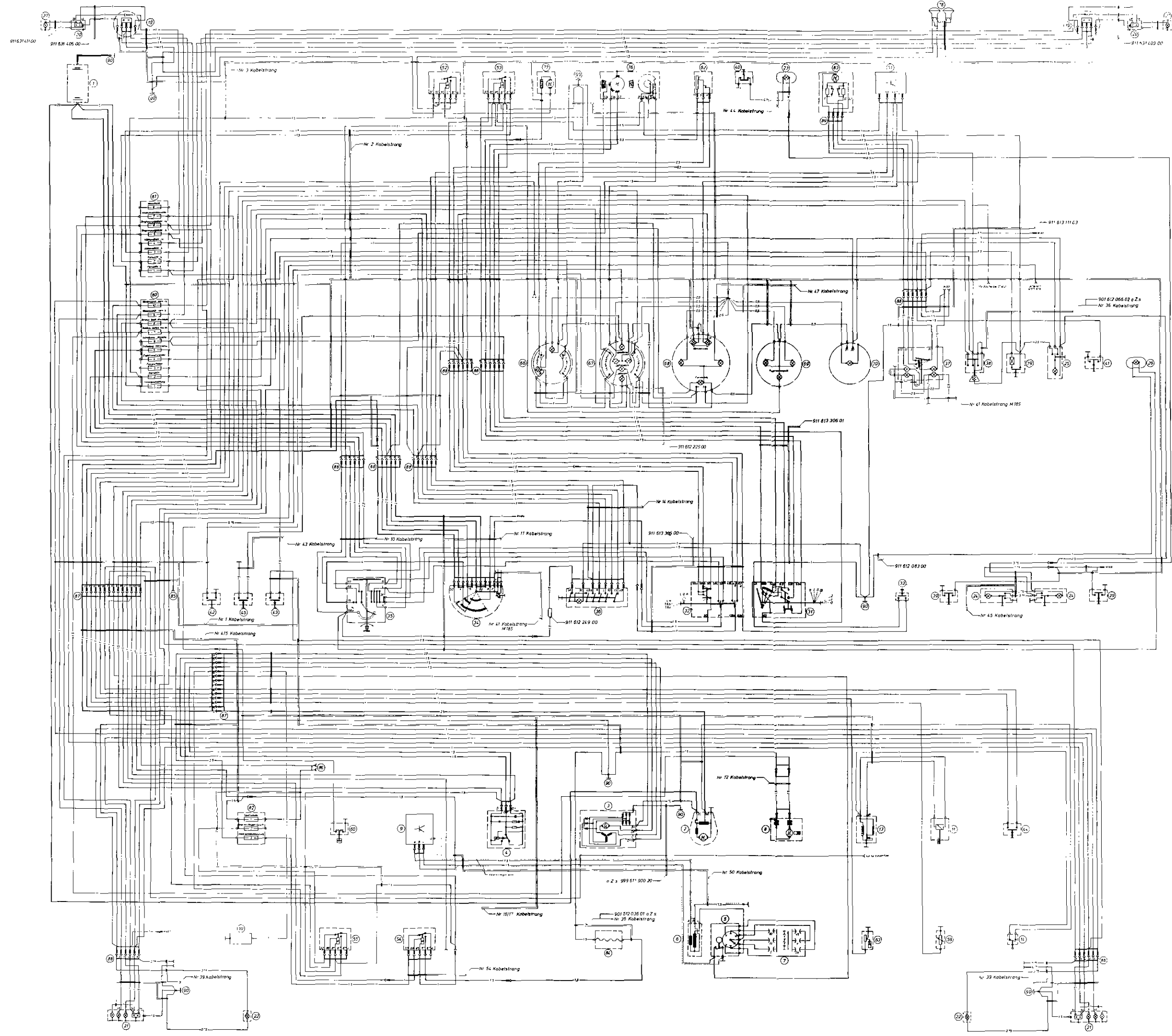
The added solenoid switch is installed in the same place where the cold start enrichment solenoid normally is located in vehicles equipped with the mechanical fuel injection system.

This wiring circuit ensures that the warm-up regulator does not come into action until electric current is produced by the alternator, that is, only when the engine actually is running. This system prevents preparation of an overly lean starting fuel/air mixture if a longer time lag should occur between the time the ignition is switched on and the engine started.



- 1 Solenoid switch
- 2 To voltage regulator, terminal D- (ground)
- 3 To voltage regulator, terminal D+/61

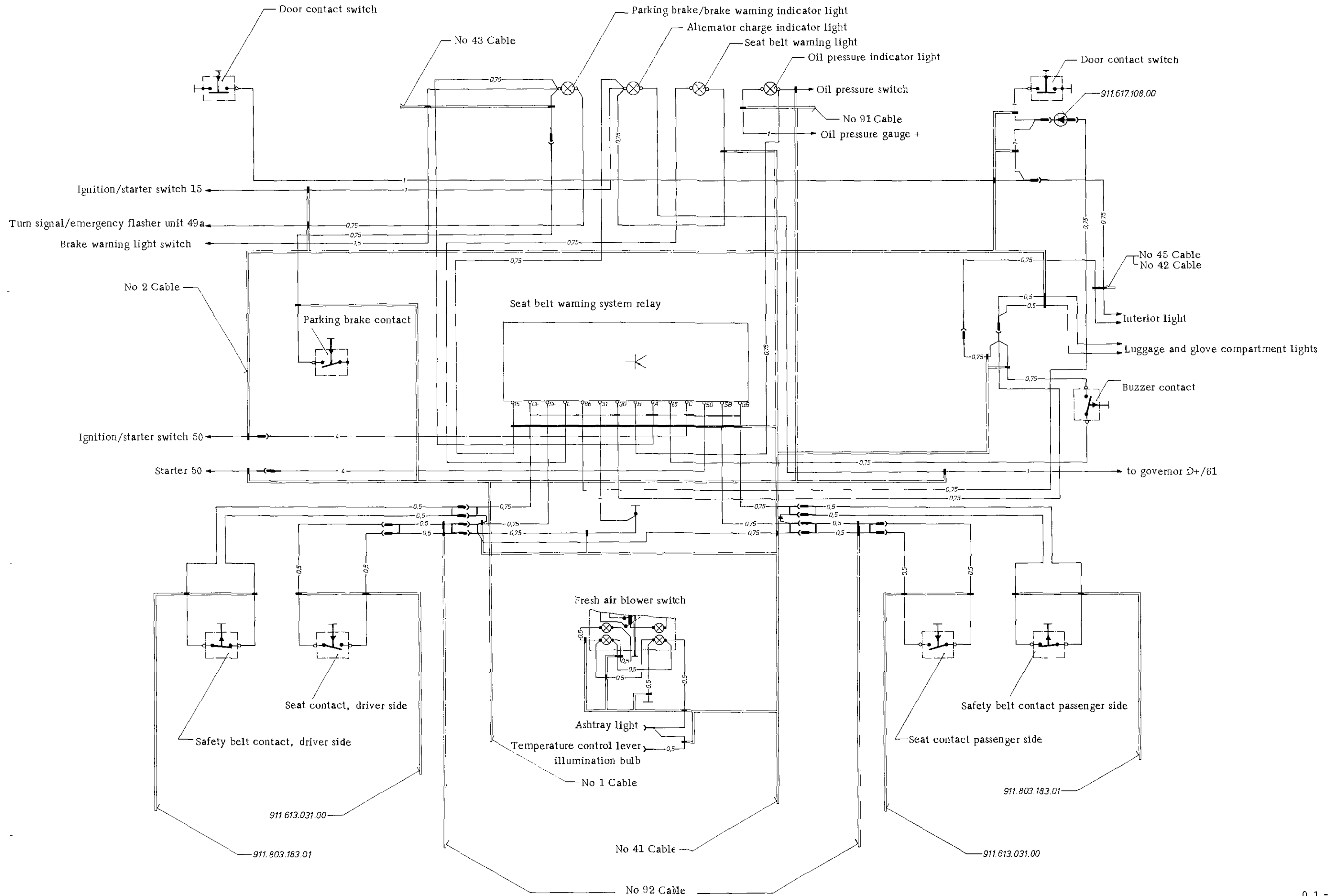
- 13 Warm-up regulator
- 80 Fuse box III
- 84 14-pole connector, connector No. 10



Electric wiring diagram 911, 911S - Model 74 - USA

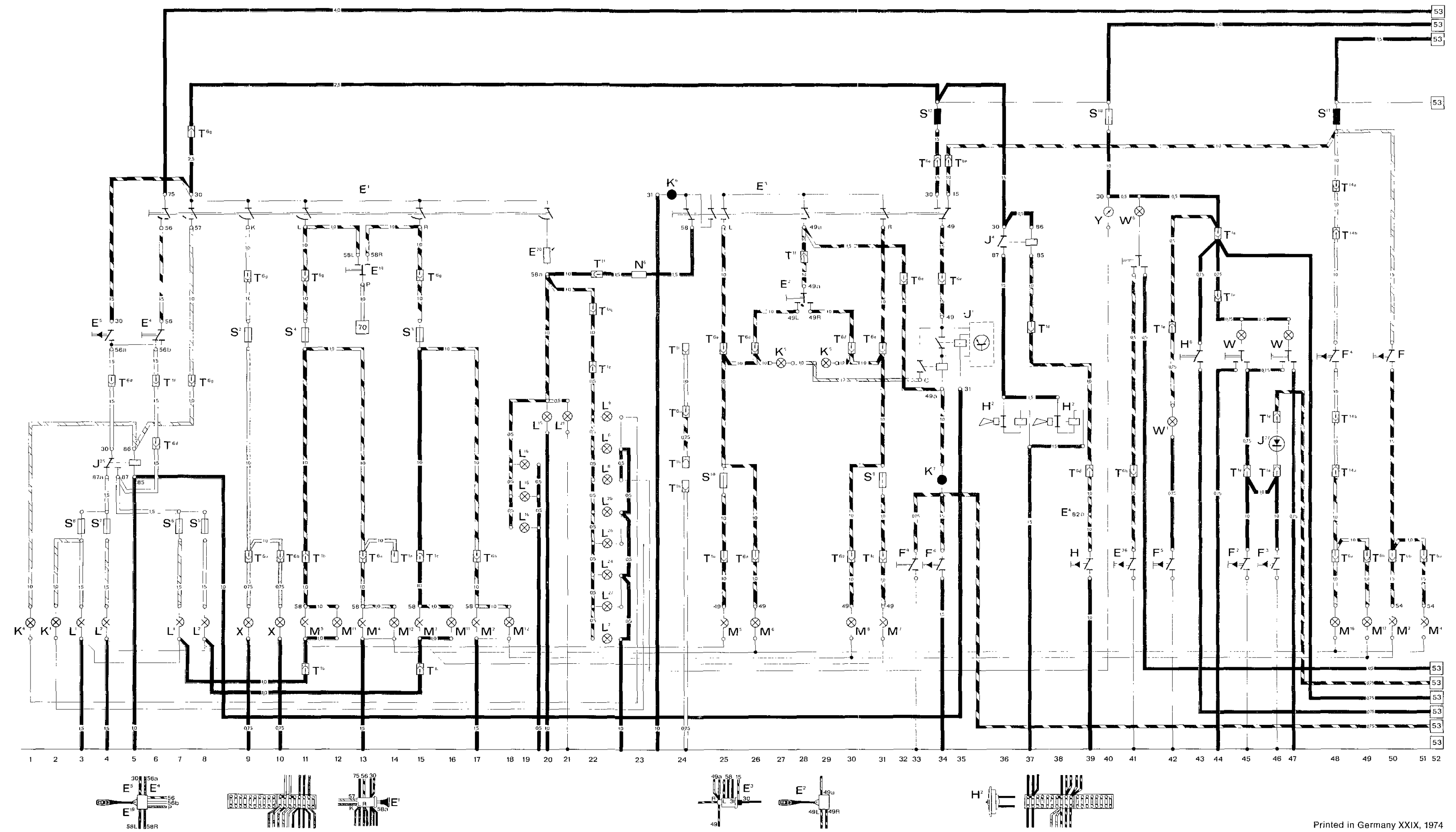
- 1 Battery
- 2 Starter
- 3 Alternator
- 4 Governor
- 5 Distributor
- 6 Ignition transformer
- 7 Spark plugs
- 8 Fuel pump
- 9 High tension ignition unit
- 10 Control pressure regulating valve with warm-up compensation
- 11 Cold start solenoid
- 13 Thermo-time switch
- 14 Micro switch
- 19 Head lights
- 20 Turn signal and parking lights
- 21 Tail, stop, turn, back-up and side marker lights
- 22 License plate light
- 23 Luggage compartment light
- 24 Interior light
- 25 Glove compartment
- 26 Ashtray light
- 27 Side marker light
- 31 Windshield wiper/washer switch
- 32 Flasher/dimmer switch
- 33 Horn button
- 34 Ignition starter switch and steering lock
- 35 Light switch
- 36 Emergency flasher switch
- 37 Switch for fan and auxiliary heater
- 38 Rear window defogger switch
- 39 Door contact switch
- 40 Switch for luggage compartment light
- 41 Switch for glove compartment light
- 42 Parking brake contact
- 43 Stop light switch
- 44 Back-up light switch
- 45 Brake warning light switch
- 51 Turn signal/emergency flasher unit
- 52 Horn relay
- 53 Headlight relay
- 54 Rear window defogger relay
- 55 Relay for control pressure regulating valve
- 59 Oil temperature indicator
- 60 Oil pressure switch
- 61 Oil level indicator
- 62 Indicator for fuel gauge
- 63 Oil pressure indicator
- 66 Fuel gauge dial
- 67 Oil temperature gauge dial
- 68 Tachometer
- 69 Speedometer
- 70 Electric clock
- 76 Wiper motor
- 77 Washer pump
- 78 Horns
- 79 Cigarette lighter
- 80 Fuse box I (10 terminal)
- 81 Fuse box II (8 terminal)
- 82 Fuse box III (3 terminal)
- 83 Fan motor
- 84 Rear window defogger element
- 85 Gear lever contact SPM (optional)
- 86 Connector SPM (double)
- 87 Multi-connector (14 terminal)
- 88 Multi-connector (6 terminal)
- 89 Multi-connector (4 terminal)
- 90 Ground connection - body

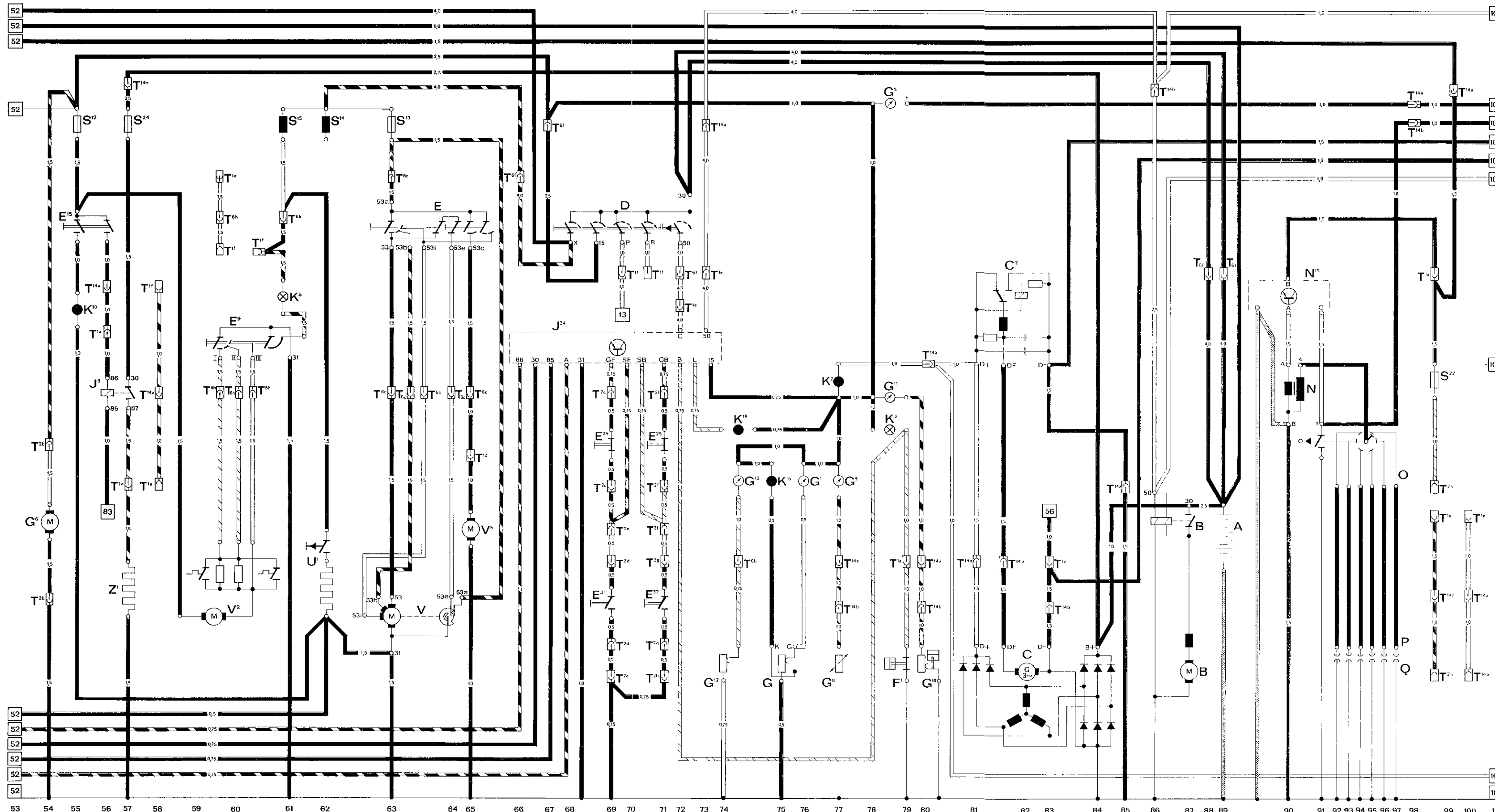
ADDITIONAL WIRING DIAGRAM, SEAT BELT WARNING SYSTEM
TYPE 911, 911S, MODEL 74 - USA



Current flow diagram, Type 911 USA, Model 74

- | Description | Current track |
|--|-----------------------|
| E ¹ — Headlight switch | 6, 8, 9, 11, 15, 20 |
| E ² — Turn signal switch | 28 |
| E ³ — Emergency flasher switch | 24, 25, 28, 31, 34 |
| E ⁴ — Dimmer switch | 6, 39 |
| E ⁵ — Headlight flasher switch | 4 |
| E ¹⁹ — Parking light switch | 13 |
| E ²⁰ — Instrument panel illumination potentiometer | 20 |
| E ²⁴ — Switch for glove compartment light | 41 |
| F — Stop light switch | 50 |
| F ² — Left door switch | 45 |
| F ³ — Right door switch | 46 |
| F ⁴ — Back-up light switch | 48 |
| F ⁵ — Switch for luggage compartment light | 42 |
| F ⁶ — Brake warning switch | 34 |
| F ⁷ — Parking brake switch | 33 |
| H — Horn switch | 39 |
| H ² — Horns | 36, 38 |
| H ⁶ — Key warning buzzer contact | 43 |
| J ¹ — Hazard / turn signal flasher | 33, 34, 35 |
| J ⁴ — Horn relay | 36, 37 |
| J ²⁵ — Headlight relay | 4, 5 |
| J ²⁷ — Diode for seat belt warning system | 46 |
| K ¹ — High beam indicator light | 2 |
| K ⁴ — Parking lights indicator light | 1 |
| K ⁵ — Turn signal indicator light | 27, 29 |
| K ⁶ — Hazard flasher indicator light | 24 |
| K ⁷ — Parking brake / brake warning indicator light | 34 |
| L ¹ — Sealed beam unit, left headlight | 3, 7 |
| L ² — Sealed beam unit, right headlight | 4, 8 |
| L ⁶ — Speedometer illumination light | 22 |
| L ⁷ — Fuel gauge illumination light | 22 |
| L ⁸ — Clock illumination light | 22 |
| L ¹⁵ — Ashtray illumination light | 20 |
| L ¹⁶ — Heater control assembly illumination light | 19 |
| L ²¹ — Temperature control lever illumination light | 21 |
| L ²⁴ — Oil temperature indicator illumination light | 22 |
| L ²⁶ — Tachometer illumination light | 22 |
| L ²⁷ — Oil pressure indicator illumination light | 22 |
| M ² — Right stop / rear light | 17, 50 |
| M ⁴ — Left stop / rear light | 13, 51 |
| M ⁵ — Left front turn signal / parking light | 11, 25 |
| M ⁶ — Left rear turn signal | 26 |
| M ⁷ — Right front turn signal / parking light | 15, 31 |
| M ⁸ — Right rear turn signal | 30 |
| M ¹¹ — Front side marker light | 12, 16 |
| M ¹² — Rear side marker light | 14, 18 |
| M ¹⁶ — Left back-up light | 48 |
| M ¹⁷ — Right back-up light | 49 |
| N ⁵ — Resistor | 23 |
| S ² — Fuses | 9, 15, 11 |
| to S ¹⁷ on the | 8, 7, 4 |
| S ¹⁷ fuse box | 3, 31, 25, 48 |
| S ¹⁸ | 34 |
| T ¹ — Cable connector, single | 40 |
| a — near regulator panel | 14 |
| b — behind sealed beam unit, left | 11, 25 |
| c — behind sealed beam unit, right | 15, 31 |
| d — behind fuse box | 37 |
| e — on luggage compartment floor | 22, 42, 44, 45, 46 |
| f — behind instrument panel | 6, 22, 24, 28 |
| g — near left rear lights | 24 |
| T ⁶ — Cable connector, sixfold | |
| a — in the engine compartment, rear left | 9, 13, 24, 26, 48, 51 |
| b — in the engine compartment, rear right | 10, 17, 30, 49, 50 |
| d — below instrument panel | 4, 6, 26, 30, 39 |
| e — below instrument panel | 25, 31, 32, 34 |
| g — below instrument panel | 8, 9, 11, 15, 22 |
| h — below instrument panel | 41 |
| T ¹⁴ — Cable connector, fourteenfold | |
| a — on regulator panel, front | 48 |
| b — on regulator panel, rear | 48 |
| W — Interior light | 45, 46 |
| W ² — Luggage compartment light | 42 |
| W ⁶ — Glove compartment light | 41 |
| X — License plate light | 9, 10 |
| Y — Clock | 40 |

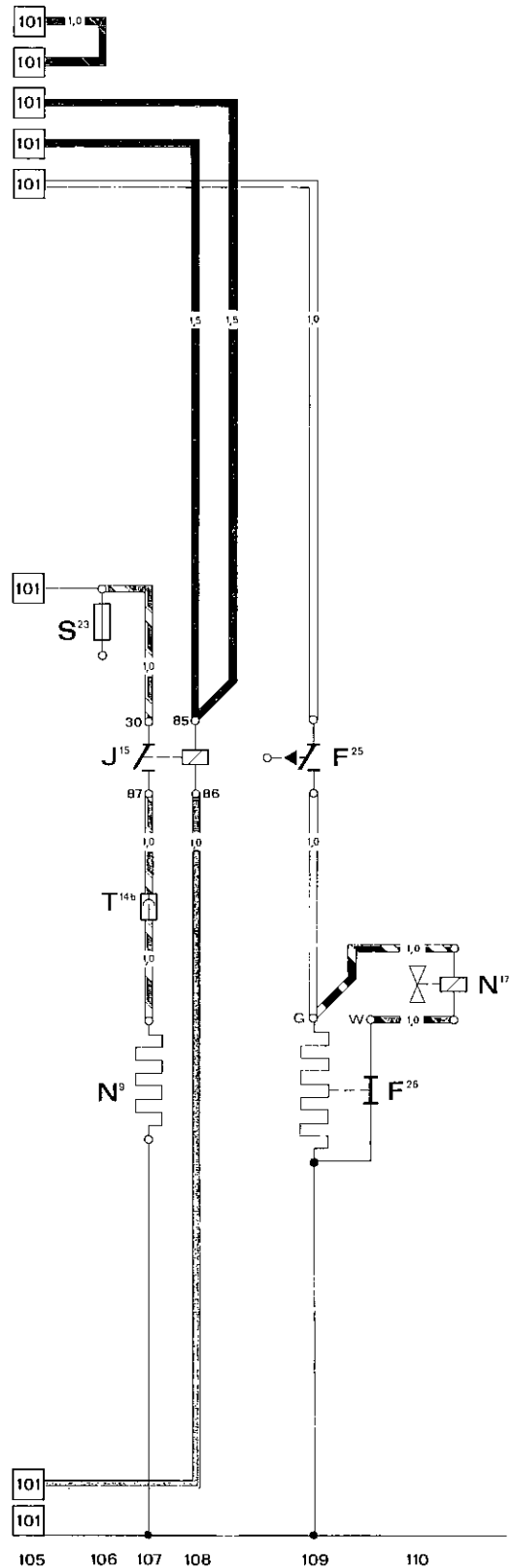




Description	Current track
A — Battery	89
B — Starter	86, 87
C — Generator	81, 82, 83, 84
C ² — Voltage regulator	81, 82, 83
D — Ignition / starter switch	68, 69, 70, 71, 72
E — Windshield wiper switch	63, 64, 65
E ⁹ — Fresh air blower switch	60
E ¹⁵ — Rear window defogger switch	55, 56
E ²⁴ — Left seat belt switch	69
E ²⁵ — Right seat belt switch	71
E ³¹ — Left seat sensor switch	69
E ³² — Right seat sensor switch	71
F ¹ — Oil pressure switch	79
G — Fuel sender unit	75
G ¹ — Fuel gauge	76
G ⁵ — Tachometer	78
G ⁶ — Fuel pump	54
G ⁸ — Oil temperature sender unit	77
G ⁹ — Oil temperature indicator	77
G ¹⁰ — Oil pressure sender unit	80
G ¹¹ — Oil pressure indicator	78
G ¹² — Oil level sender unit	74
G ¹³ — Oil level gauge	74
J ⁹ — Rear window defogger relay	56, 57
J ³⁴ — Seat belt warning system relay with integrated buzzer	66, 67, 68, 69, 70, 71, 72, 73
K ² — Generator charge indicator light	77
K ³ — Oil pressure indicator light	78
K ⁸ — Blower indicator light	61
K ¹⁰ — Rear window defogger indicator light	55
K ¹⁶ — Low fuel warning light	75
K ¹⁹ — Seat belt warning light	74
N — Ignition transformer	90
N ¹⁵ — High tension ignition unit	90
O — Distributor	91, 92, 93, 94, 95, 96, 97
P — Spark plug connector	92, 93, 94, 95, 96, 97
Q — Spark plug	92, 93, 94, 95, 96, 97
S ¹² — Fuses	55, 63
to — on the	62
S ¹⁵ — fuse box	61
S ²² — Fuses on the	99
S ²⁴ — rear fuse box (regulator panel)	57
T ¹ — Cable connector, single	56, 57, 58, 79, 83, 99
a — near regulator panel	65
e — on luggage compartment floor	60, 72, 73, 100
f — behind instrument panel	58, 60, 61, 69, 70
g — below shift lever housing	99
T ² — Cable connector, double	99
a — below regulator panel	54
b — in engine compartment, left	69
c — near left seat	69
d — below left seat	69
e — near left seat	69
f — near right seat	71
g — below right seat	71
h — near right seat	71
T ⁴ — Cable connector, sixfold	74
b — in engine compartment, right	63, 64, 65
c — below instrument panel	66, 67, 72, 88, 89
f — below instrument panel	60, 61
h — below instrument panel	60, 61
T ¹⁴ — Cable connector, fourteenfold	56, 58, 73, 77, 80, 85, 98, 99, 100
a — on regulator panel, front	57, 77, 80, 81, 83, 86, 98, 100
b — on regulator panel, rear	62
U ¹ — Cigar lighter	62
V — Windshield wiper motor	63, 64
V ² — Blower motor	60
V ⁵ — Washer pump	65
Z ¹ — Rear window defogger	57

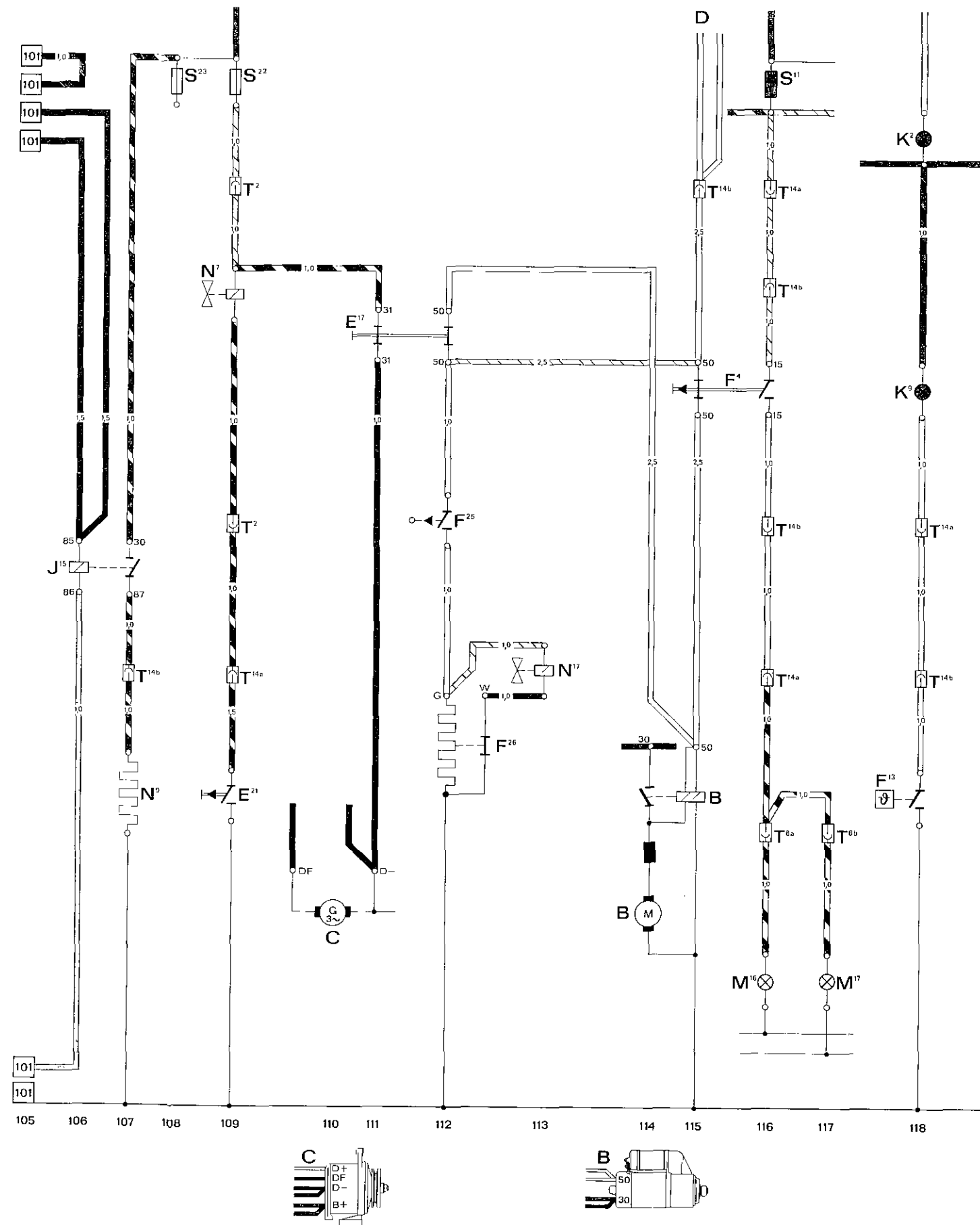
Additional current flow diagram CIS-injection engine, Type 911, Model 74

Description	Current track
F25 - Throttle valve switch	109
F26 - Thermo-switch for cold start valve	109
J15 - Relay for warm-up regulator	107, 108
N9 - Warm-up regulator	107
N17 - Cold start valve	110
S23 - Fuse on the rear fuse box	106
T14b - Cable connector, fourteenfold on regulator panel, rear	107



Additional current flow diagram CIS-injection and Sportomatic, Type 911, Model 74

Description	Current track
B - Starter	114, 115
C - Generator	110, 111
D - to ignition / starter switch	115
E ¹⁷ - Starter cutout switch (bypass switch)	111, 112
E ²¹ - Selector lever contact	109
F ⁴ - Back-up light switch	115, 116
F ¹³ - Oil temperature switch	118
F ²⁵ - Throttle valve switch (micro switch)	112
F ²⁶ - Thermo-switch for cold start valve	112
J ¹⁵ - Relay for warm-up regulator	106, 107
K ² - Generator charge indicator light	118
K ⁹ - Oil temperature indicator light	118
M ¹⁶ - Left back-up light	116
M ¹⁷ - Right back-up light	117
N ⁷ - Control valve	109
N ⁹ - Warm-up regulator	107
N ¹⁷ - Cold start valve	113
S ¹¹ - Fuse on the fuse box	116
S ²² - Fuse on the rear fuse box (regulator panel)	109
S ²³ - Fuse on the rear fuse box (regulator panel)	108
T ² - Cable connector, double, below regulator panel	109
T ⁶ - Cable connector, sixfold	
a - in engine compartment, rear left	116
b - in engine compartment, rear right	117
T ¹⁴ - Cable connector, fourteenfold	
a - on regulator panel, front	109, 116, 118
b - on regulator panel, rear	107, 115, 116, 118



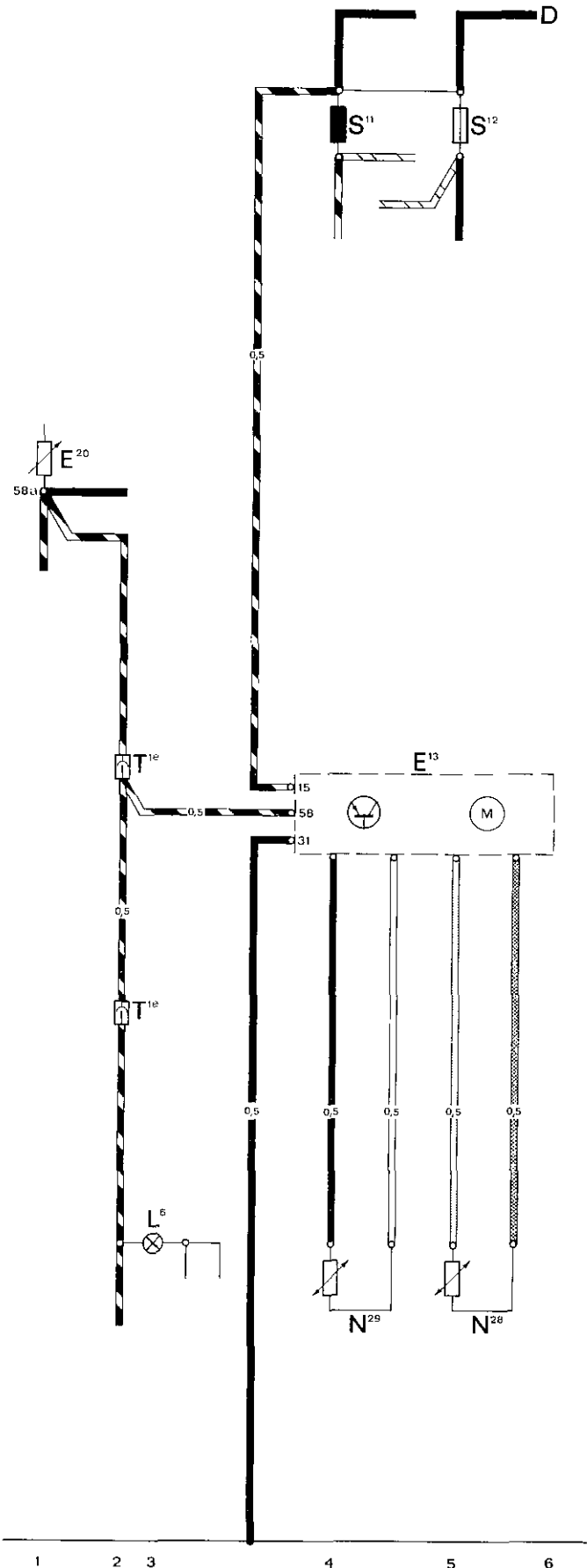
**Additional current flow diagram CIS-injection
and Sportomatic, Type 911, Model 74**

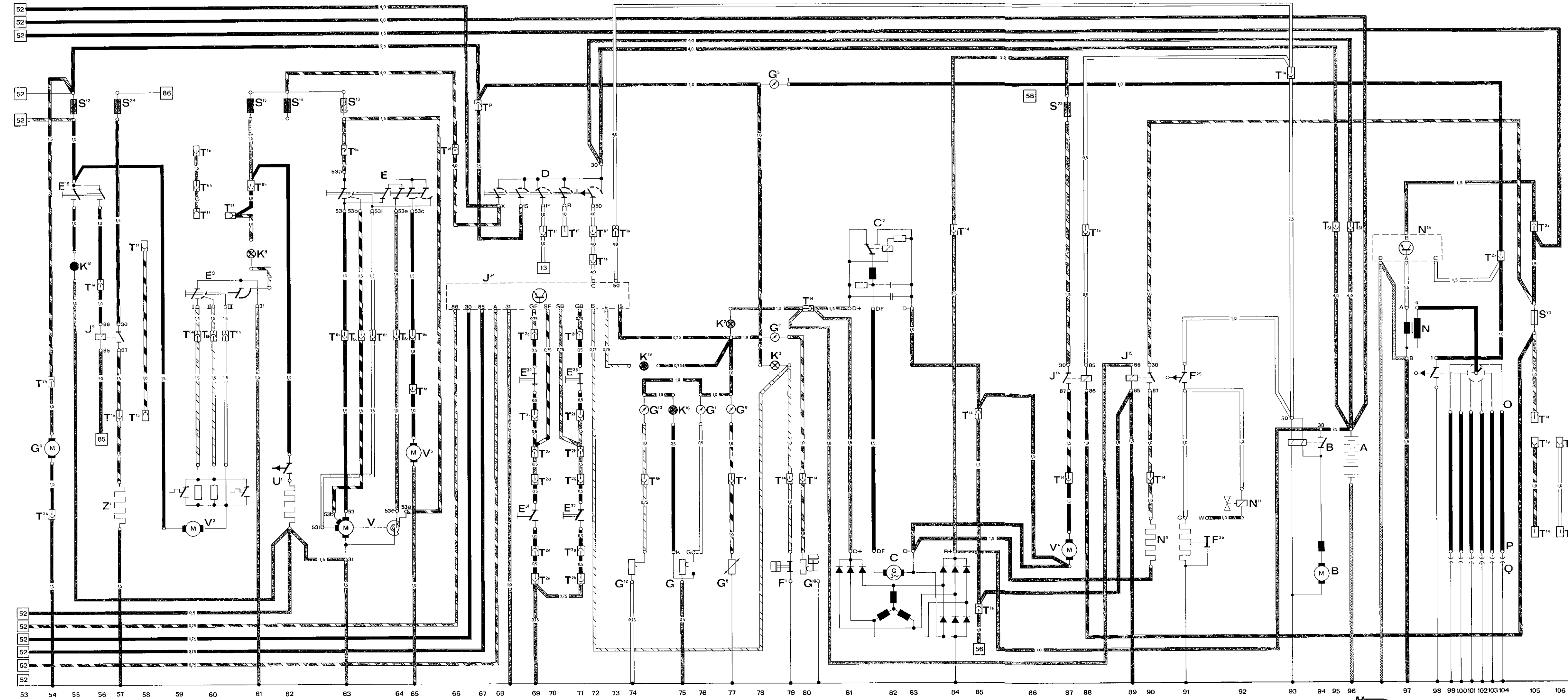
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Additional current flow diagram automatic heating system, Type 911

9

Description	Current track
D - to ignition/starter switch	6
E ¹³ - Control unit for automatic heating system	4, 5
E ²⁰ - Instrument panel illumination potentiometer	1
L ⁶ - Speedometer illumination light	3
N ²⁸ - Interior temperature sensor	5
N ²⁹ - Exterior temperature sensor	4
S ¹¹ - Fuses in the	4
S ¹² - fuse box	5
T ^{1e} - Cable connector, single, on luggage compartment floor	2





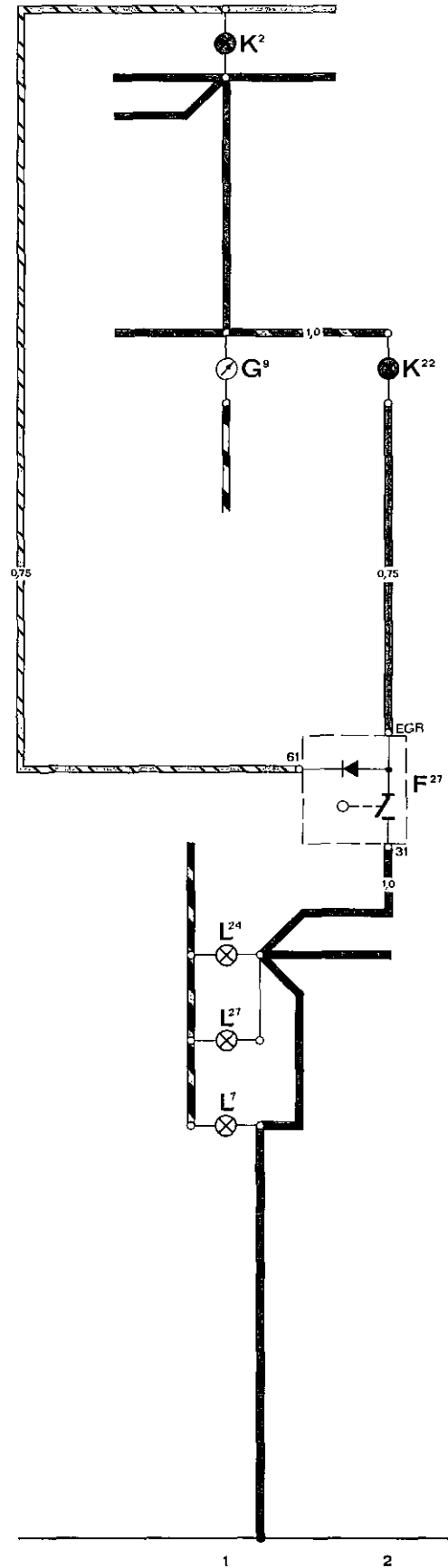
Description	Current track	
A	Battery	96
B	Starter	93, 94
C	Generator	81, 82, 83, 84
C ¹	Voltage regulator	81, 82, 83
D	Ignition / starter switch	68, 69, 70, 71, 72
E	Windshield wiper switch	63, 64, 65
E ²	Fresh air blower switch	60
E ¹⁵	Rear window defogger switch	55, 56
E ²⁴	Left seat belt switch	69
E ²⁵	Right seat belt switch	71
E ³¹	Left seat sensor switch	69
E ³²	Right seat sensor switch	71
F ¹	Oil pressure switch	79
F ²⁵	Throttle valve switch	91
F ²⁶	Thermo-switch for cold start valve	91
G	Fuel sender unit	75
G ¹	Fuel gauge	76
G ⁵	Tachometer	78
G ⁶	Fuel pump	54
G ⁸	Oil temperature sender unit	77
G ⁹	Oil temperature indicator	77
G ¹⁰	Oil pressure sender unit	80
G ¹¹	Oil pressure indicator	78
G ¹²	Oil level sender unit	74
G ¹³	Oil level gauge	74
J ⁹	Rear window defogger relay	56, 57
J ¹⁴	Relay for heater blower	87, 88
J ¹⁵	Relay for warm-up regulator	89, 90
J ³⁴	Seat belt warning system relay with integrated buzzer	66, 67, 68, 69, 70, 71, 72, 73
K ²	Generator charge indicator light	77
K ³	Oil pressure indicator light	78
K ⁸	Blower indicator light	61
K ¹⁰	Rear window defogger indicator light	55
K ¹⁵	Low fuel warning light	75
K ¹⁶	Seat belt warning light	74
N	Ignition transformer	97
N ¹	Warm-up regulator	90
N ¹⁵	High tension ignition unit	97
N ¹⁷	Cold start valve	92
O	Distributor	98-104
P	Spark plug connector	99-104
Q	Spark plug	99-104
S ¹²	Fuses	55, 63
S ¹⁵	on the fuse box	62
S ²²	Fuses on the rear fuse box (regulator panel)	61, 105
S ²⁴	Fuses on the rear fuse box (regulator panel)	87
T ¹	Cable connector, single	57
T ²	Cable connector, double	58, 59, 85, 88, 65, 60, 72, 73, 58, 60, 61, 69, 70, 105
T ⁶	Cable connector, sixfold	104, 105
T ¹⁴	Cable connector, fourteenfold on regulator panel	54, 69, 69, 69, 71, 71, 71, 74, 63, 64, 65, 66, 67, 72, 95, 96, 60, 61, 77, 79, 80, 84, 85, 87, 90, 93, 105, 106
U ¹	Cigar lighter	62
V	Windshield wiper motor	63, 64
V ²	Blower motor	60
V ⁴	Heater blower	87
V ⁵	Washer pump	65
Z ¹	Rear window defogger	57

Current flow diagram, Type 911 USA, Model 75

Additional current flow diagram California, Type 911, Model 75

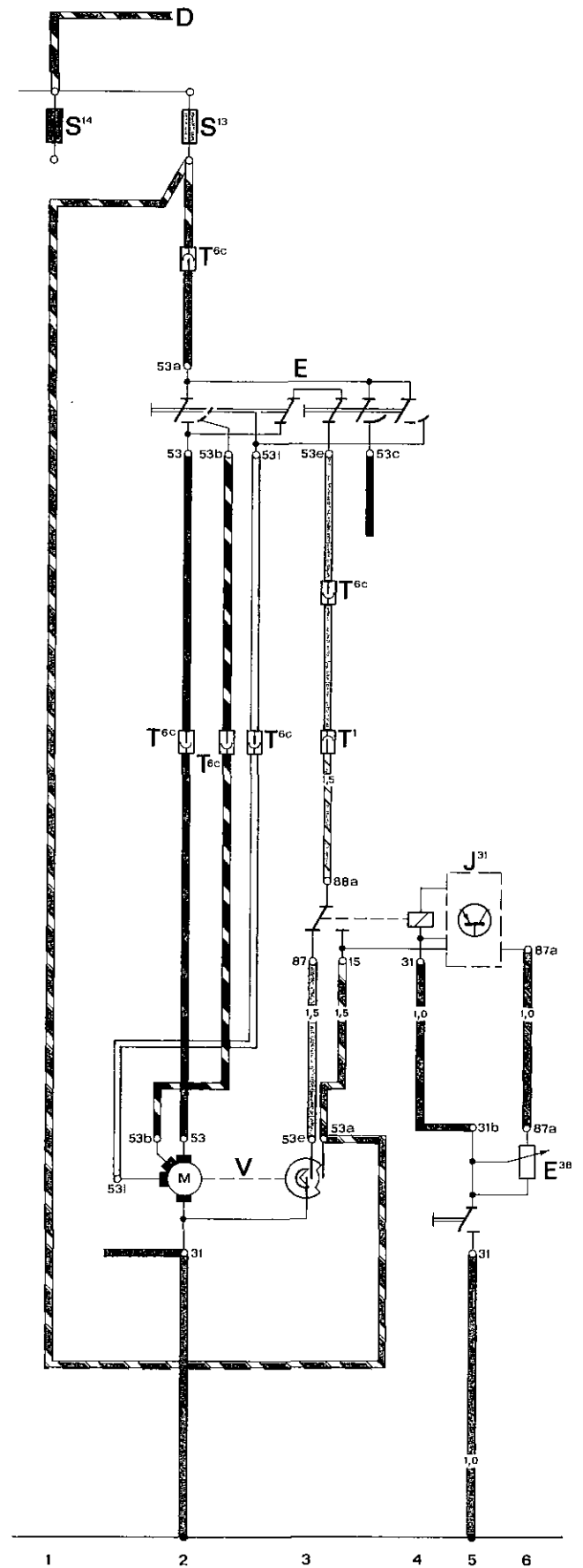
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Description	Current track
F ²⁷ - Mileage counter switch (EGR)	2
G ⁹ - Oil temperature indicator	1
K ² - Generator charge indicator light	1
K ²² - EGR warning light	2
L ⁷ - Fuel gauge illumination light	1
L ²⁴ - Oil temperature indicator illumination light	1
L ²⁷ - Oil pressure indicator illumination light	1



Additional current flow diagram intermittent wiper operation, Type 911

Description	Current track
D - to ignition/starter switch	2
E - Windshield wiper switch	2, 3, 4
E ³⁸ - Potentiometer for intermittent wiper operation	5, 6
J ³¹ - Relay for intermittent wiper operation	3, 4, 5
S ¹³ - Fuses in the	2
S ¹⁴ - fuse box	1
T ¹ - Cable connector, single, on luggage compartment floor	3
T ^{6c} - Cable connector, sixfold, below instrument panel	2
V - Windshield wiper motor	2, 3



Additional current flow diagram headlight washers, Type 911

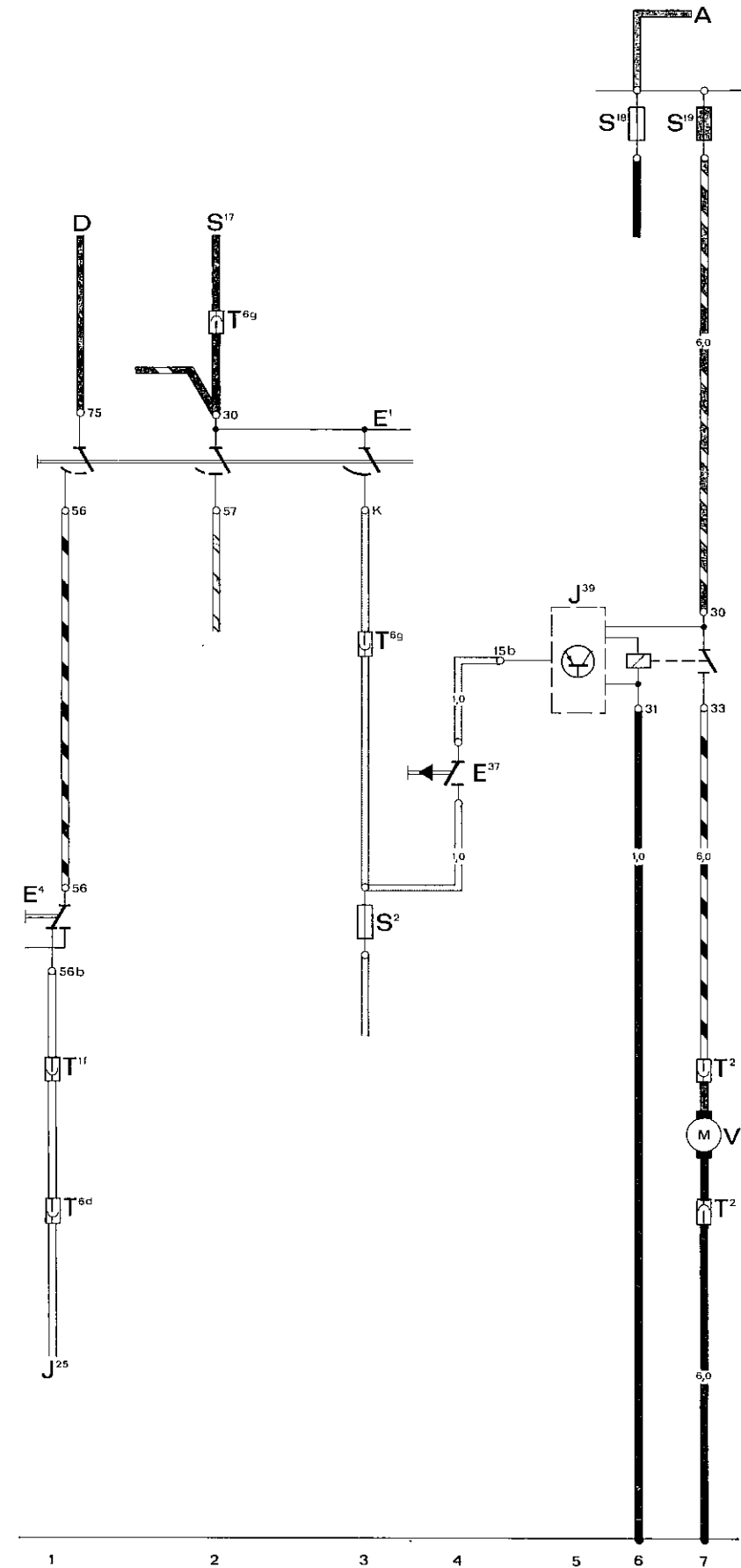
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Description

- A - to battery
- D - to ignition/starter switch
- E¹ - Headlight switch
- E⁴ - Dimmer switch
- E³⁷ - Headlight washer switch
- J²⁵ - to headlight relay (from model 76 to fuse S⁶)
- J³⁹ - Headlight washer relay
- S¹⁷ - to fuse S¹⁷
- S² - Fuses
- S¹⁸ - in the
- S¹⁹ - fuse box
- T^{1f} - Cable connector, single, behind instrument panel
- T² - Cable connector, double, near battery
- T⁶ - Cable connector, sixfold
 - d - below instrument panel
 - g - below instrument panel
- V¹¹ - Headlight washer pump

Current track

- 7
- 1
- 1, 2, 3
- 1
- 4
- 1
- 5, 6, 7
- 2
- 3
- 6
- 7
- 1
- 7
- 1
- 3
- 7

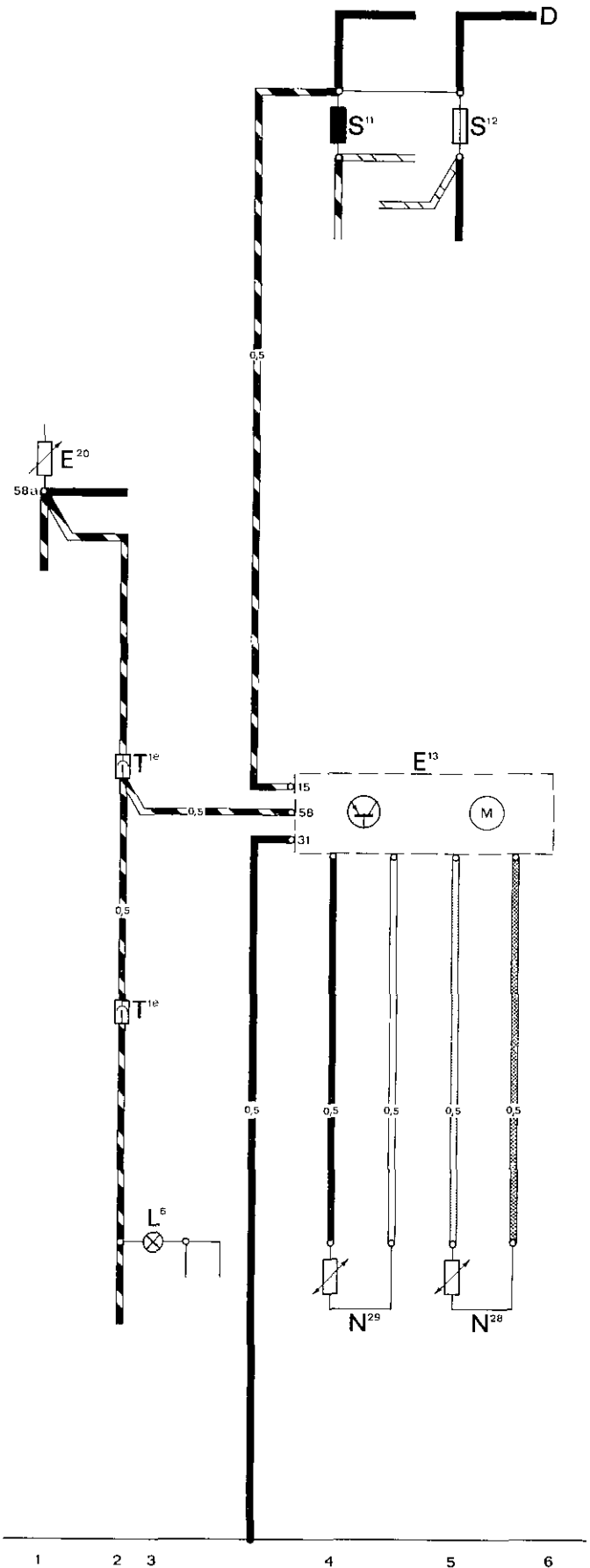


**Additional current flow diagram
headlight washers, Type 911**

9

Additional current flow diagram automatic heating system, Type 911

Description	Current track
D - to ignition/starter switch	6
E ¹³ - Control unit for automatic heating system	4, 5
E ²⁰ - Instrument panel illumination potentiometer	1
L ⁶ - Speedometer illumination light	3
N ²⁸ - Interior temperature sensor	5
N ²⁹ - Exterior temperature sensor	4
S ¹¹ - Fuses in the	4
S ¹² - fuse box	5
T ^{1e} - Cable connector, single, on luggage compartment floor	2



Additional current flow diagram electric sliding roof, Type 911

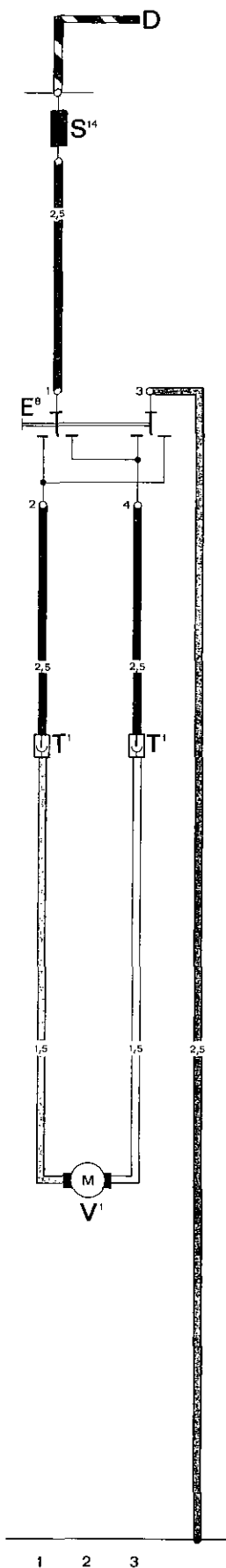
9

Description

- D - to ignition/starter switch
- E⁸ - Switch for sliding roof
- S¹⁴ - Fuse in the fuse box
- T¹ - Cable connector, single,
near sliding roof motor
- V¹ - Sliding roof motor

Current track

- 3
- 1, 3
- 1
- 1, 3
- 2



ADDITIONAL CURRENT FLOW DIAGRAM

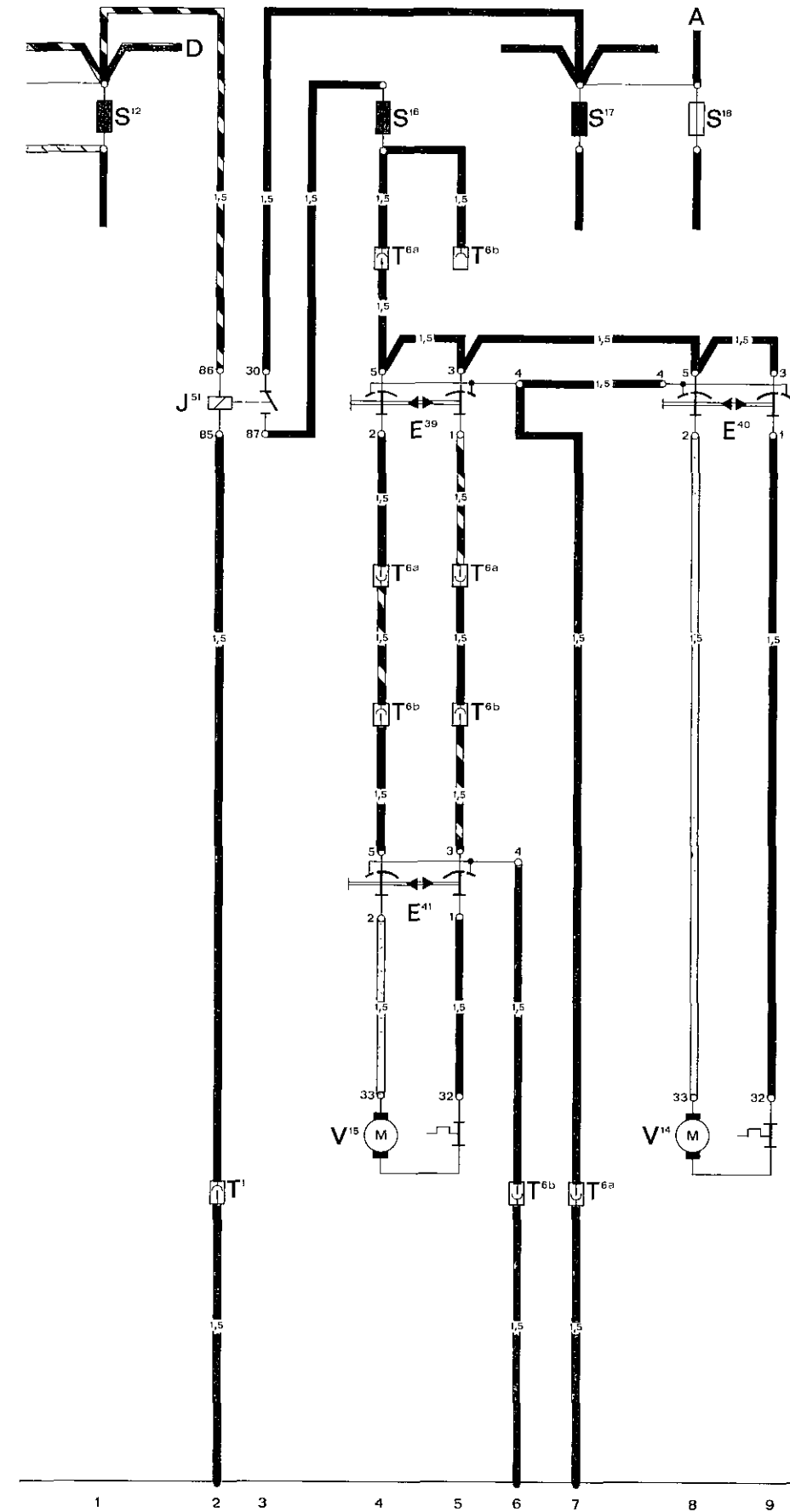
ELECTRIC WINDOW CONTROLS

Modification - 1977 Models

The electric connection for the window regulating motor is no longer made at fuse S 16, but S 21 instead.

Additional current flow diagram power windows, Type 911

Description	Current track
A - to battery	9
D - to ignition/starter switch	2
E ³⁹ - Power window switch, driver side, for passenger side	4, 5
E ⁴⁰ - Power window switch, driver side	8, 9
E ⁴¹ - Power window switch, passenger side	4, 5
J ⁵¹ - Power window relay	2, 3
S ¹² - Fuses	1
S ¹⁶ - in	4
S ¹⁷ - the	7
S ¹⁸ - fuse box	8
T ¹ - Cable connector, single, behind fuse box	2
T ⁶ - Cable connector, sixfold	
a - in door well, left	4, 5, 7
b - in door well, right	4, 5, 6
V ¹⁴ - Power window motor, left	8, 9
V ¹⁵ - Power window motor, right	4, 5

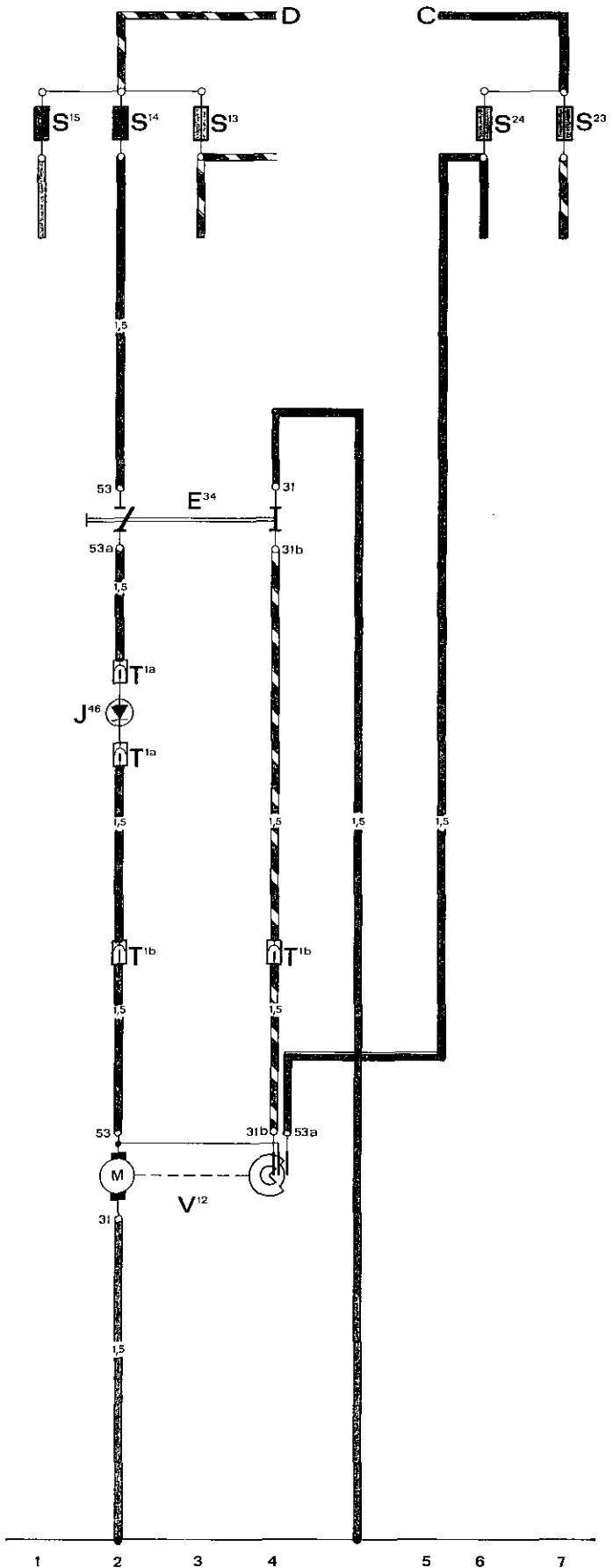


**Additional current flow diagram
power windows, Type 911**

9

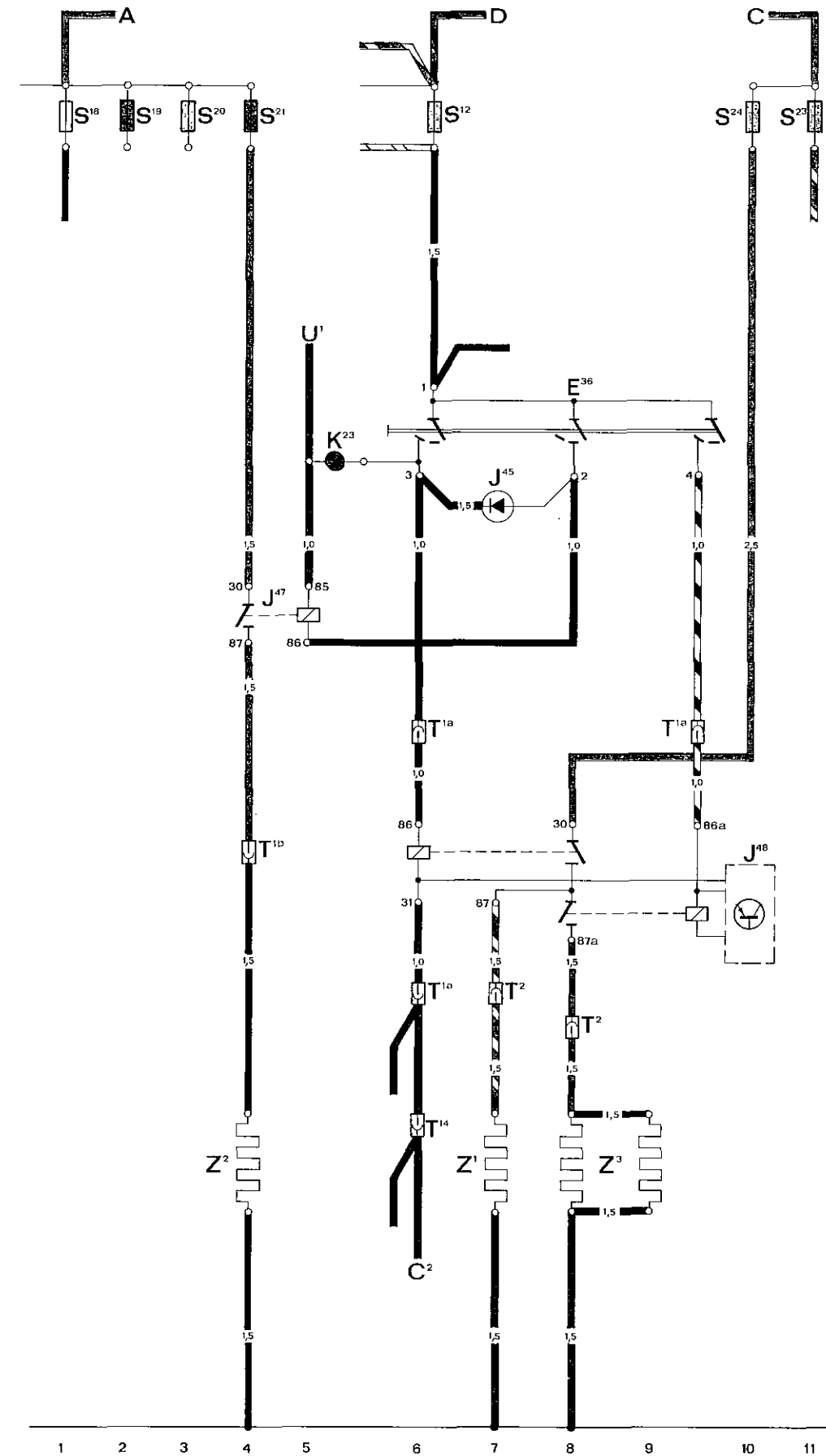
Additional current flow diagram rear window wiper, Type 911

Description	Current track
C - to generator	5
D - to ignition/starter switch	4
E ³⁴ - Rear wiper switch	2, 4
J ⁴⁶ - Diode for rear wiper	2
S ¹³ - Fuses	3
S ¹⁴ - in the	2
S ¹⁵ - fuse box	1
S ²³ - Fuses in the	7
S ²⁴ - rear fuse box	6
T ¹ - Cable connector, single	
a - behind instrument panel	2
b - in engine compartment, left	2, 4
V ¹² - Rear wiper motor	2, 4



Additional current flow diagram windshield and rear window defoggers Type 911

Description	Current track
A - to battery	2
C - to generator	10
C ² - to voltage regulator	6
D - to ignition/starter switch	7
E ³⁶ - Windshield and rear window defogger switch	6, 8, 9
J ⁴⁵ - Diode for windshield defogger	7
J ⁴⁷ - Windshield defogger relay	4, 5
J ⁴⁸ - Relay for two-stage rear window defogger	6, 7, 8, 10
K ²³ - Windshield and rear window defogger indicator light	5
S ¹² - Fuses	6
S ¹⁸ - in	1
to - the	2, 3
S ²¹ - fuse box	4
S ²³ - Fuses in the	11
S ²⁴ - rear fuse box	10
T ¹ - Cable connector, single	
a - below regulator panel	6, 10
b - behind fuse box	4
T ² - Cable connector, double, below regulator panel	7, 8
T ¹⁴ - Cable connector, fourteenfold	6
U ¹ - to cigar lighter	5
Z ¹ - Rear window defogger, stage 1	7
Z ² - Windshield defogger	4
Z ³ - Rear window defogger, stage 2	8, 9

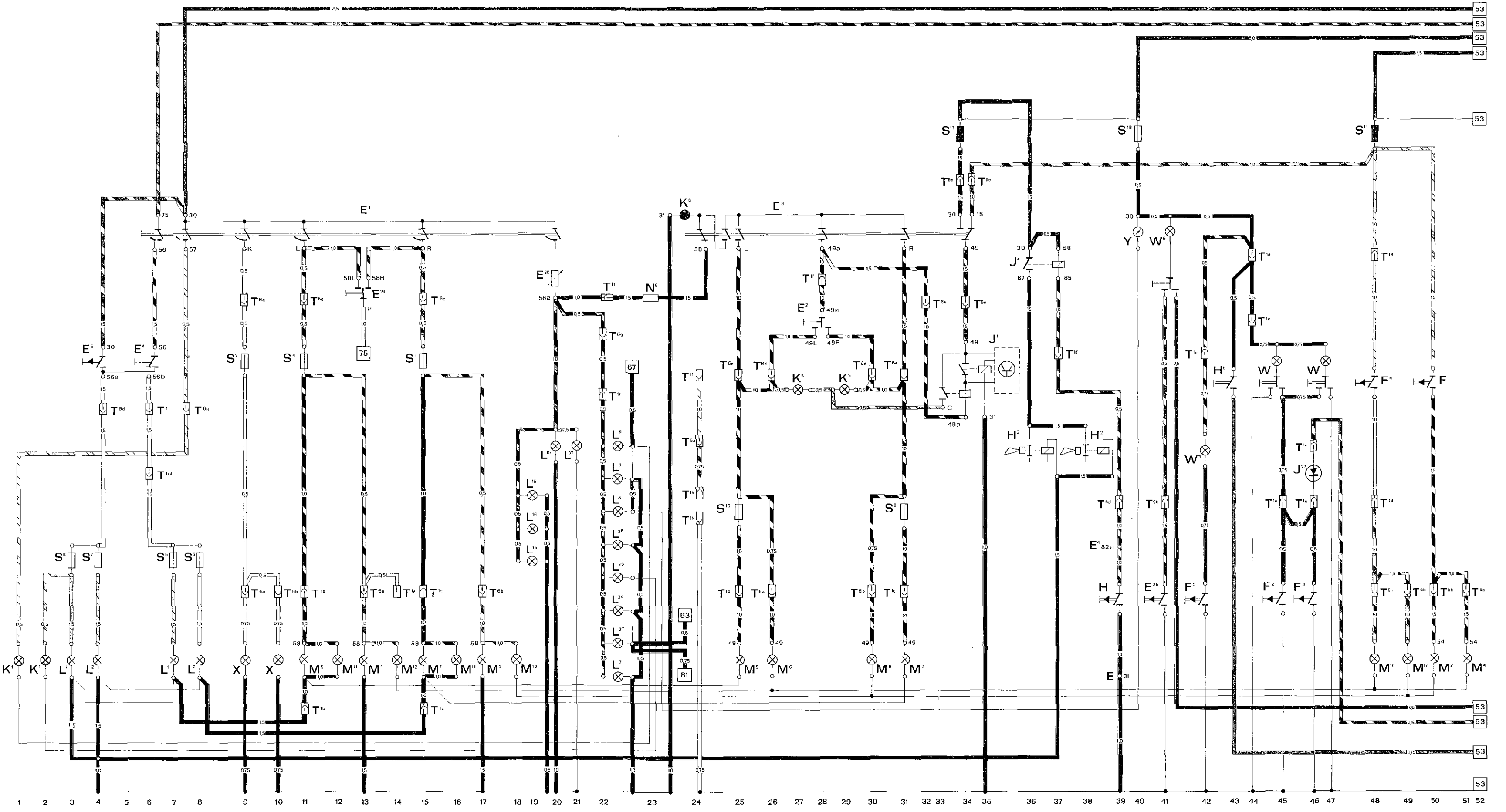


**Additional current flow diagram
windshield and rear window defoggers
Type 911**

9

9 Current flow diagram, Type 911 S, USA, Model 76

Description	Current track
E	39
E ¹	6, 8, 9, 11, 15, 20
E ²	28
E ³	24, 25, 28, 31, 34
E ⁴	6, 39
E ⁵	4
E ¹⁹	13
E ²⁰	20
E ²⁶	41
F	50
F ²	45
F ³	46
F ⁴	48
F ⁵	42
H	39
H ²	36, 38
H ⁶	43
J ¹	33, 34, 35
J ⁴	36, 37
J ²⁵	4, 5
J ²⁷	46
K ¹	2
K ⁴	1
K ⁵	27, 29
K ⁶	24
L ¹	3, 7
L ²	4, 8
L ⁶	22
L ⁷	22
L ⁸	22
L ¹⁵	20
L ¹⁴	19
L ²¹	21
L ²⁴	22
L ²⁶	22
L ²⁷	22
L ²⁸	22
M ²	17, 50
M ⁴	13, 51
M ⁵	11, 25
M ⁶	26
M ⁷	15, 31
M ⁸	30
M ¹¹	12, 16
M ¹²	14, 18
M ¹⁴	48
M ¹⁷	49
N ⁶	23
S ²	9, 15, 11
S ¹¹	8, 7, 4
S ¹⁷	3, 31, 25, 48
S ¹⁸	34
T ¹	40
T ¹	14
a	11, 25
b	15, 31
c	37
d	22, 42, 44, 45, 46
e	6, 22, 24, 28
f	24
g	9, 13, 24, 26, 48, 51
h	10, 17, 30, 49, 50
i	4, 6, 26, 30, 39
j	25, 31, 32, 34
k	8, 9, 11, 15, 22
l	41
T ¹⁴	48
W	45, 46
W ³	42
W ⁶	41
X	9, 10
Y	40



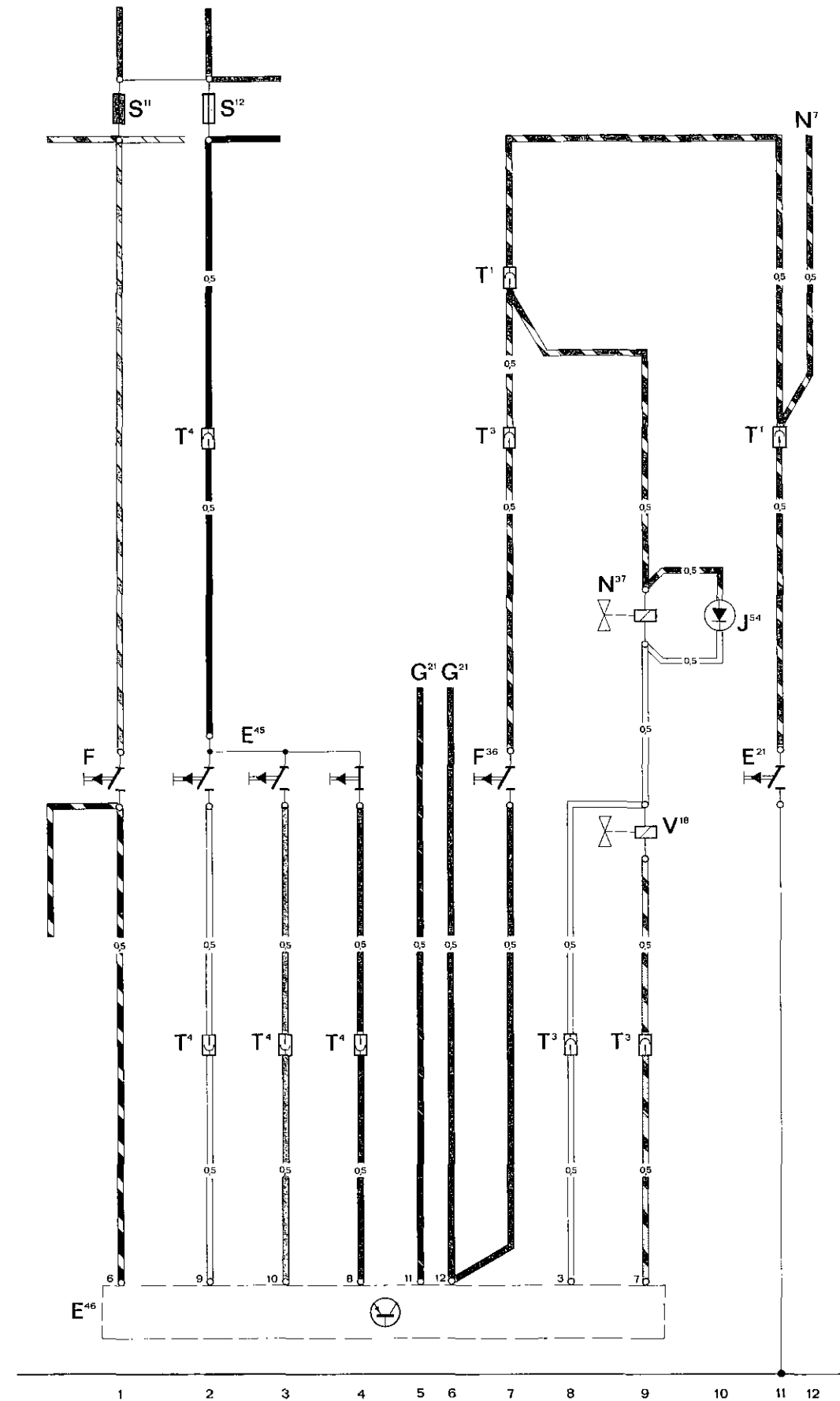
Current flow diagram, Type 911 S, USA, Model 76 **9**

Current flow diagram, Type 911 S, USA, Model 76

**Additional current flow diagram
automatic speed control, Type 911**

Additional current flow diagram automatic speed control, Type 911

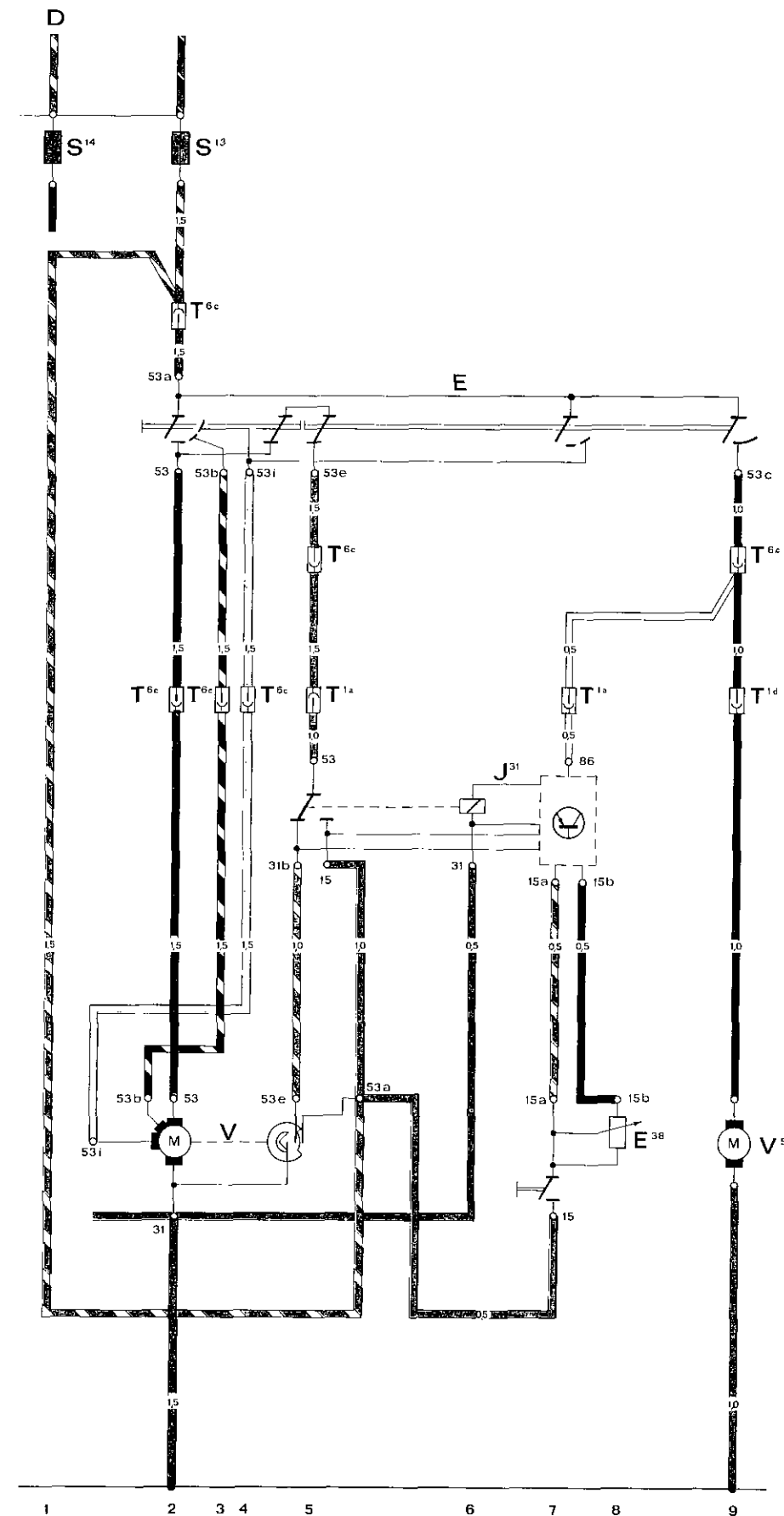
Description	Current track
E ²¹ - Selector lever contact (Sportomatic)	11
E ⁴⁵ - Speed control switch	2, 3, 4
E ⁴⁶ - Control unit for speed control	1-9
F - Stop light switch	1
F ³⁶ - Clutch pedal switch	7
G ²¹ - to speedometer (terminal 31 b)	5
G ²¹ - to speedometer (ground)	6
J ⁵⁴ - Diode for speed control	10
N ⁷ - to control valve	12
N ³⁷ - Solenoid valve for speed control	9
S ¹¹ - Fuses in the	1
S ¹² - fuse box	2
T ¹ - Cable connector, single, in tunnel	7, 11
T ³ - Cable connector, triple, in footwell, left	7, 8, 9
T ⁴ - Cable connector, quadruple, below instrument panel	2, 3, 4
V ¹⁸ - Control element	9



**Additional current flow diagram
intermittent wiper operation, Model 76**

Additional current flow diagram intermittent wiper operation, Model 76

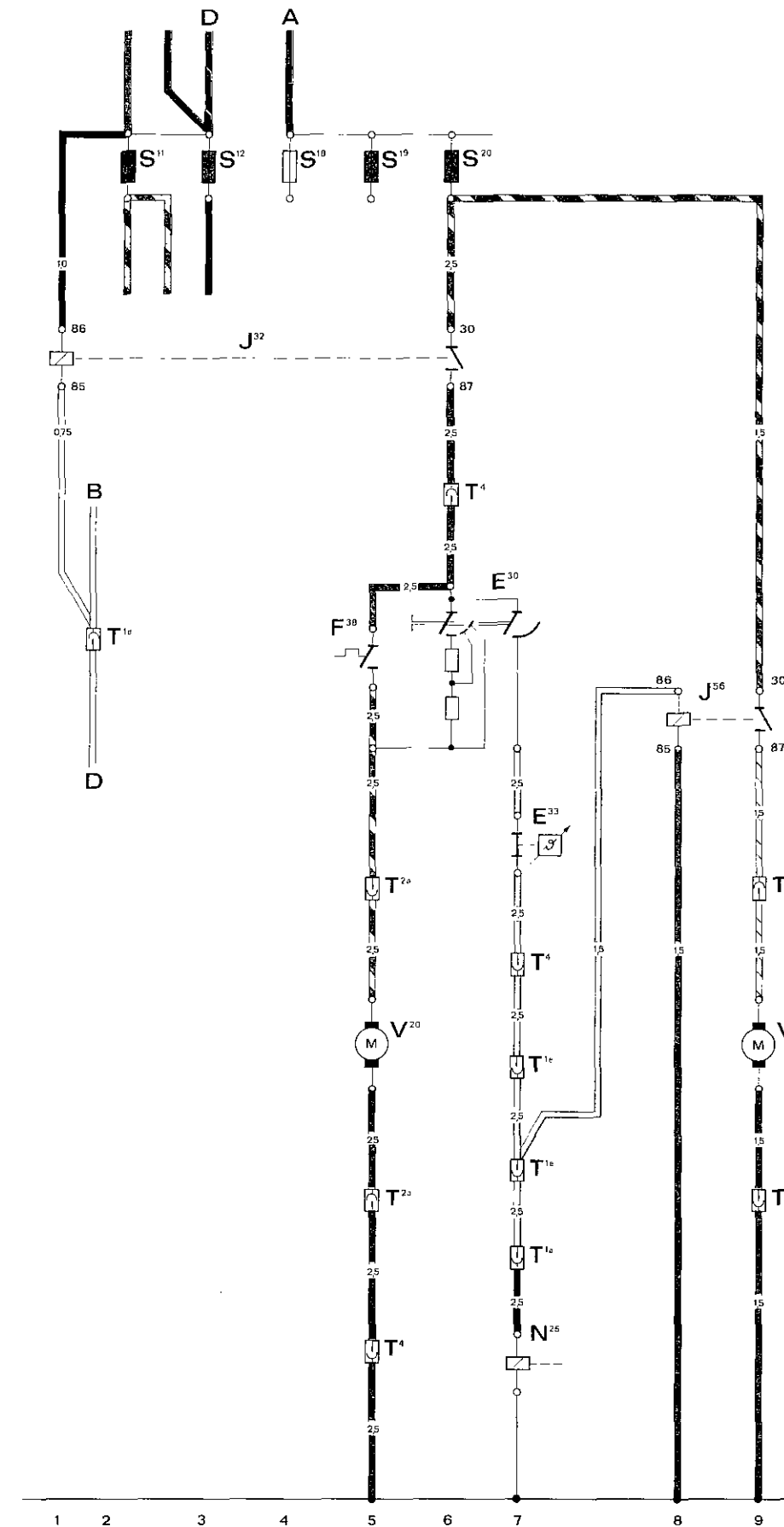
Description	Current track
D - to ignition/starter switch	1
E - Windshield wiper switch	2, 5, 7, 9
E ³⁰ - Potentiometer for intermittent wiper operation	7, 8
J ³¹ - Relay for intermittent wiper operation	5, 6, 7, 8
S ¹³ - Fuses in the	2
S ¹⁴ - fuse box	1
T ¹ - Cable connector, single	
a - on luggage compartment floor	5, 7
d - behind fuse box	9
T ^{6c} - Cable connector, sixfold,	
below instrument panel	2, 3, 4, 5, 9
V - Windshield wiper motor	2, 5
V ⁵ - Washer pump	9



**Additional current flow diagram
air conditioner with front condenser**

Additional current flow diagram air conditioner with front condenser

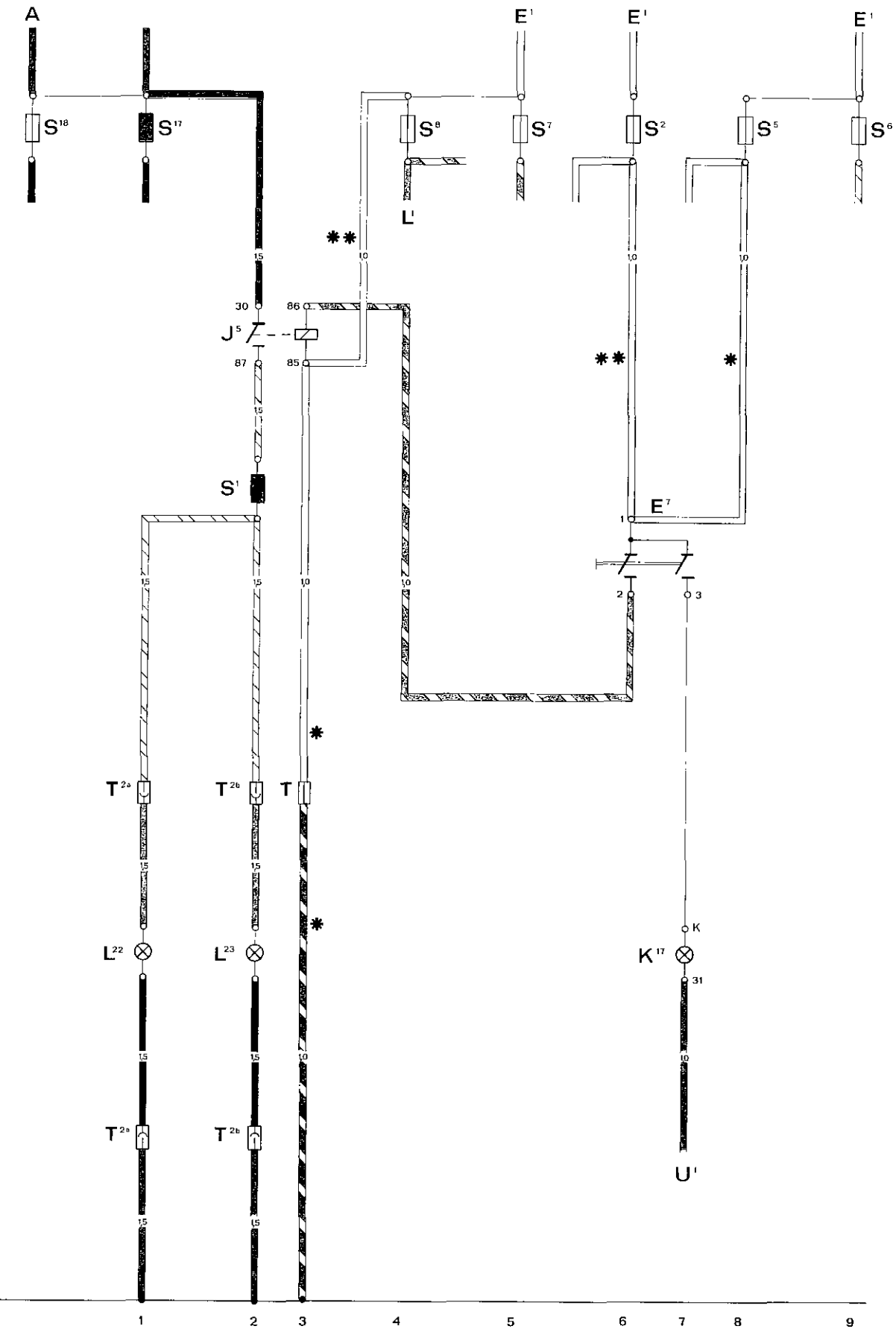
Description	Current track
A - to battery	4
B - to starter	2
D - to ignition/starter switch, terminal 50	2
D - to ignition/starter switch, terminal 15	3
E ³⁰ - Blower switch	6, 7
E ³³ - Temperature switch	7
F ³⁰ - Thermostat	5
J ³² - Power supply relay	1, 6
J ⁵⁶ - Relay for condenser fan	8, 9
N ²⁵ - Electromagnetic clutch	7
S ¹¹ - Fuses	2
S ¹² - in	3
S ¹⁸ - the	4
S ¹⁹ - fuse	5
S ²⁰ - box	6
T ¹ - Cable connector, single	
a - near regulator panel	7
e - on luggage compartment floor	2, 7
T ² - Cable connector, double	
a - near evaporator blower	5
b - near battery	9
T ⁴ - Cable connector, fourfold, below instrument panel	5, 6, 7
V ¹⁹ - Condenser fan	9
V ²⁰ - Evaporator blower	5



Additional current flow diagram fog lights

- Description
- A - to battery
 - E¹ - to headlight switch
 - E⁷ - Fog light switch
 - J⁵ - Fog light relay
 - K¹⁷ - Fog light indicator light
 - L¹ - to left headlight
 - L²² - Left fog light
 - L²³ - Right fog light
 - S¹ -
 - S² - Fuses
 - S⁵ - in
 - à - the
 - S⁶ - fuse
 - S¹⁷ - box
 - S¹⁸ -
 - T - Cable connector
 - T² - Cable connector, double
 - a - in luggage compartment, left
 - b - in luggage compartment, right

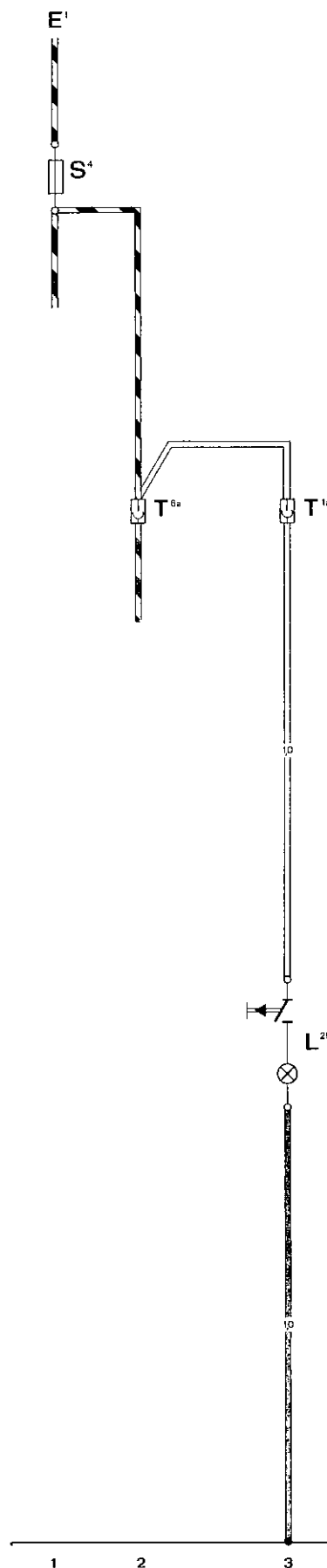
- Current track
- 1
 - 5, 6, 9
 - 6, 7
 - 2, 3
 - 7
 - 4
 - 1
 - 2
 - 2
 - 6
 - 8
 - 9
 - 5, 4
 - 1
 - 1
 - 3
 - 1
 - 2



Additional current flow diagram engine compartment light

9

Description	Current track
E ¹ - to headlight switch	1
L ²⁹ - Engine compartment light	3
S ⁴ - Fuse in fuse box	1
T ^{1a} - Cable connector, single, near regulator panel	3
T ^{6a} - Cable connector, sixfold, in engine compartment, rear left	2

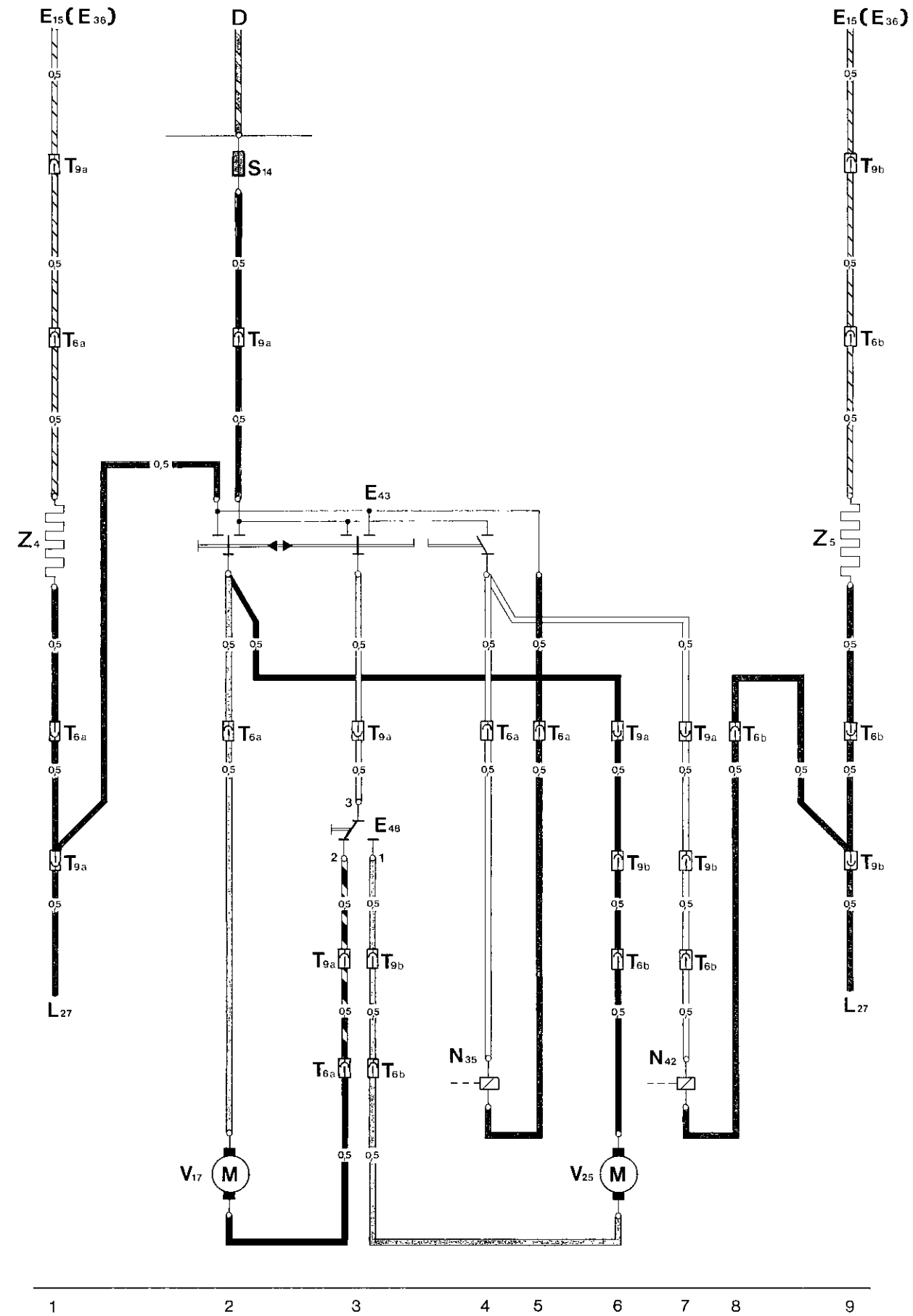


**Additional current flow diagram
remotely controlled outside mirrors, Type 911**

9

Additional current flow diagram remotely controlled outside mirrors, Type 911

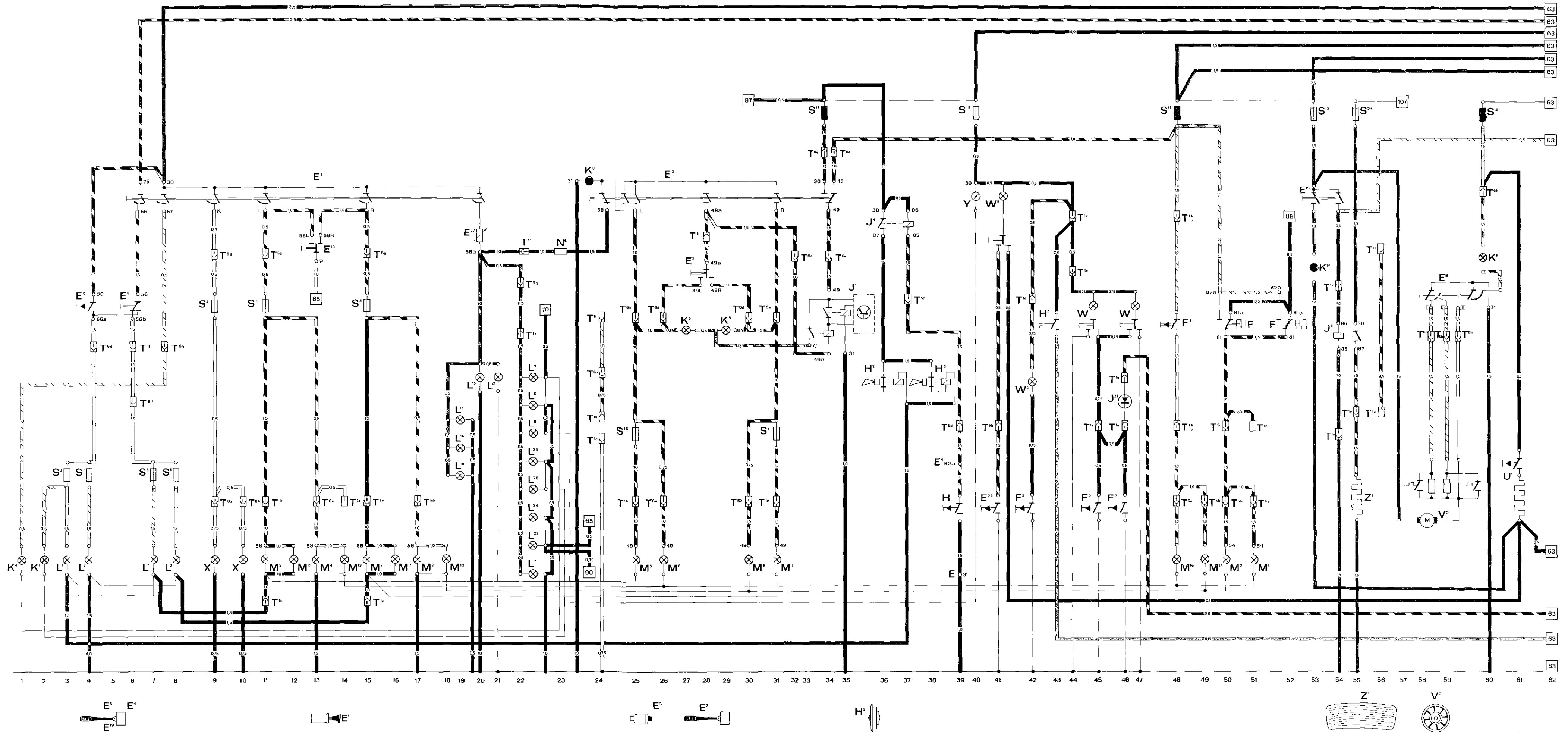
Description	Current track
D - to ignition/starter switch	2
E ¹⁵ - to rear window defogger switch	1, 9
E ⁴³ - Mirror control switch	2, 3, 4, 5
E ⁴⁸ - Change-over switch for mirror control	3
L ²⁷ - to oil pressure indicator light	1, 9
N ³⁵ - Magnetic clutch for mirror control, driver side	4
N ⁴² - Magnetic clutch for mirror control, passenger side	7
S ¹⁴ - Fuse on fuse box	2
T ⁶ - Cable connector, sixfold	
a - in mirror housing, driver side	1, 2, 3, 4, 5
b - in mirror housing, passenger side	3, 6, 7, 8, 9
T ⁹ - Cable connector, ninefold	
a - on luggage compartment floor, left	1, 2, 3, 6, 7
b - on luggage compartment floor, right	3, 6, 7, 9
V ¹⁷ - Mirror control motor, driver side	2
V ²⁵ - Mirror control motor, passenger side	6
Z ⁴ - Outside mirror defogger, driver side	1
Z ⁵ - Outside mirror defogger, passenger side	9



Current flow diagram, Type 911 S, USA, Model 77 **9**

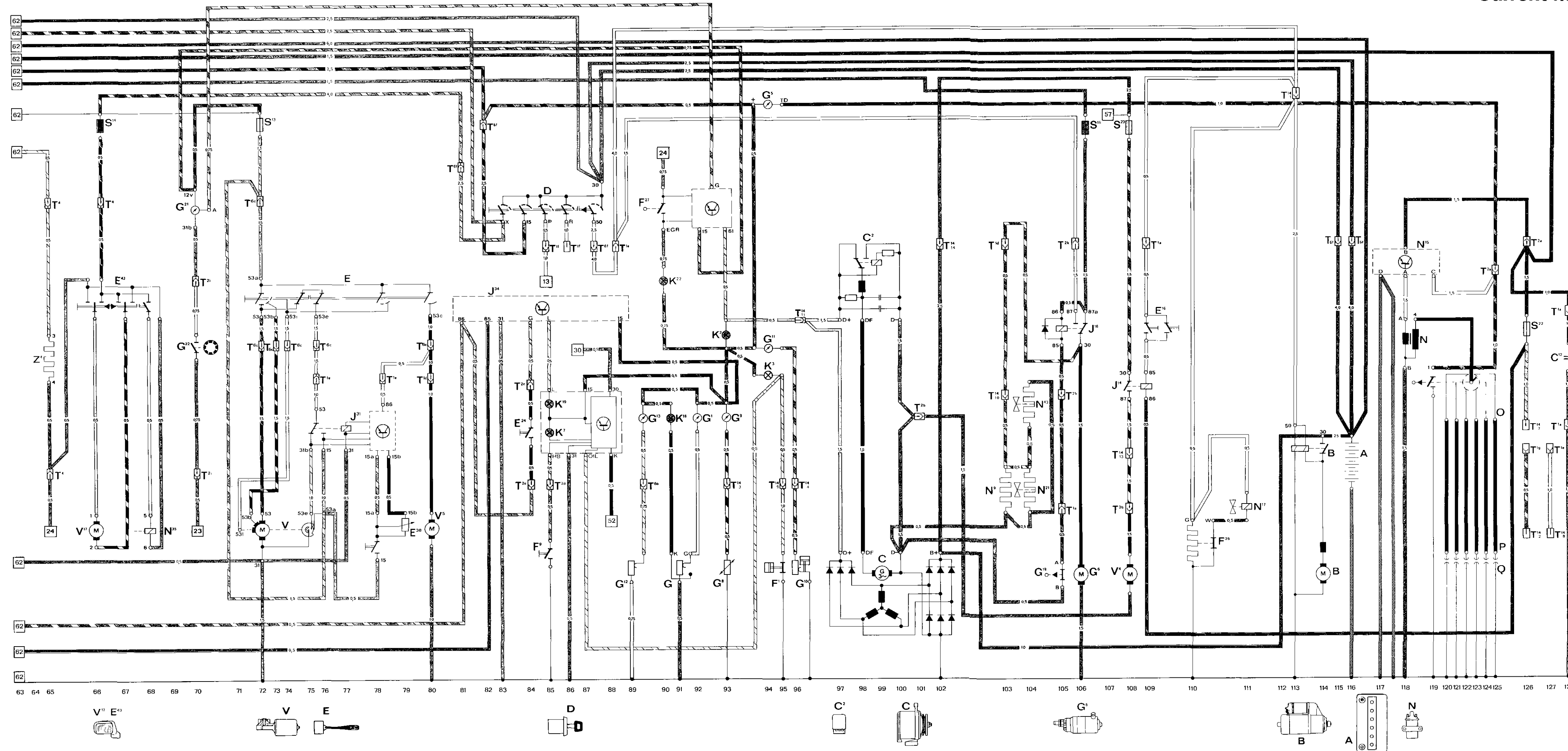
9 Current flow diagram, Type 911 S, USA, Model 77

Description	Current track
E	39
E ¹	6, 8, 9, 11, 15, 20
E ²	28
E ³	24, 25, 28, 31, 34
E ⁴	6, 39
E ⁵	4
E ⁹	58, 59, 60
E ¹⁵	53, 54
E ¹⁹	13
E ²⁰	20
E ²⁶	41
F	50, 52
F ²	45
F ³	46
F ⁴	48
F ⁵	42
H	39
H ²	36, 38
H ⁶	43
J	33, 34, 35
J ⁴	36, 37
J ⁹	54, 55
J ²⁷	46
K ¹	2
K ⁴	1
K ⁵	27, 29
K ⁶	24
K ⁸	60
K ¹⁰	53
L ¹	3, 7
L ²	4, 8
L ⁶	22
L ⁷	22
L ⁸	22
L ¹⁵	20
L ¹⁶	19
L ²¹	21
L ²⁴	22
L ²⁶	22
L ²⁷	22
M ²	17, 50
M ⁴	13, 51
M ⁵	11, 25
M ⁶	26
M ⁷	15, 31
M ¹¹	30
M ¹²	12, 16
M ¹⁶	14, 18
M ¹⁷	49
N ⁶	23
S ²	9, 15, 11
S ¹²	8, 7, 4
S ¹⁵	3, 31, 25, 48, 53
S ¹⁷	60
S ¹⁸	34
S ²⁴	40
T ¹	55
T ^{1a}	14, 54, 55, 56
T ^{1b}	11, 25
T ^{1c}	15, 31
T ^{1d}	37
T ^{2d}	22, 42, 44, 45, 46, 51
T ⁶	6, 22, 24, 28, 56
T ^{6a}	24
T ^{6b}	9, 13, 24, 26, 48, 51
T ^{6c}	10, 17, 30, 49, 50
T ^{6d}	4, 6, 26, 30, 39
T ^{6e}	25, 31, 32, 34
T ^{6f}	8, 9, 11, 15, 22
T ^{6g}	41, 58, 59, 60
T ¹⁴	48
U ¹	61
V ²	58, 59
W	45, 46
W ³	42
W ⁶	41
X	9, 10
Y	40
Z ¹	55



**Current flow diagram,
Type 911 S, USA, Model 77**

9

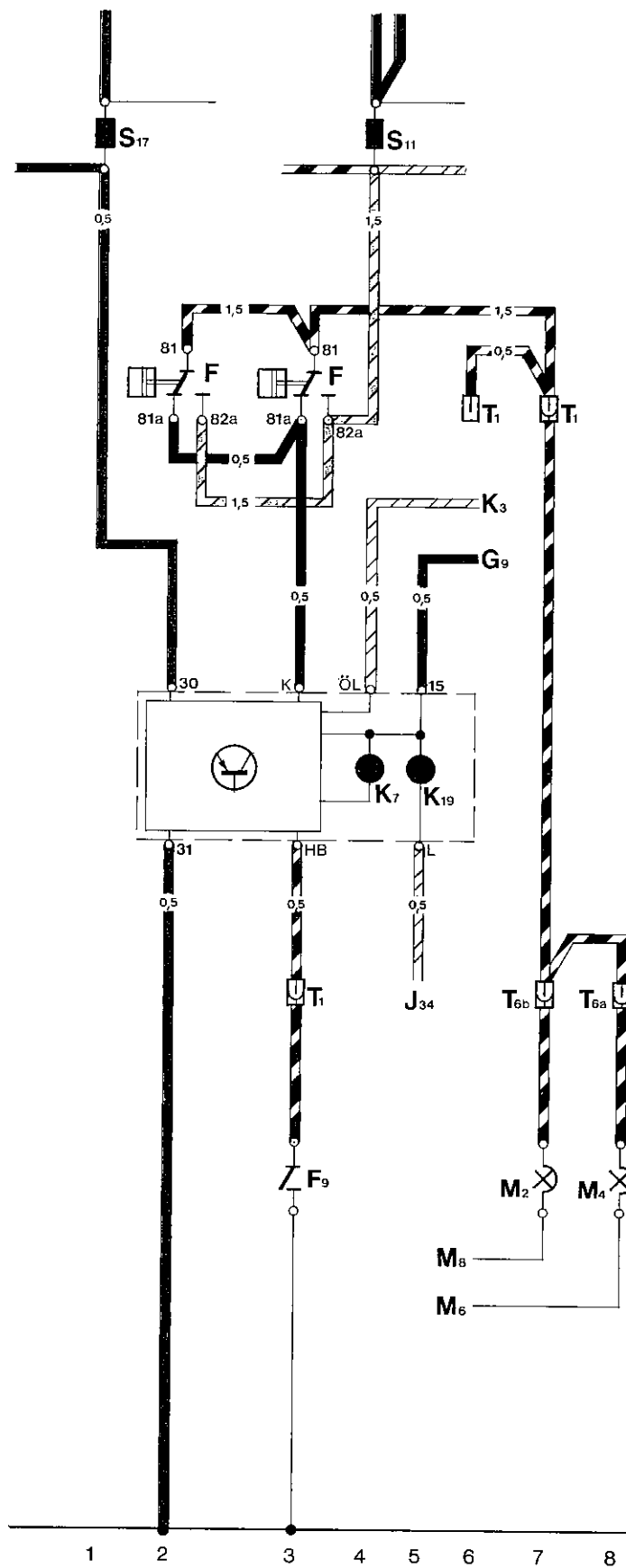


Description	Current track	
A	Battery	116
B	Starter	113, 114
C	Generator	97 - 102
C ²	Voltage regulator	98, 99
C ¹²	Capacitor for ignition unit	128
D	Ignition / starter switch	83 - 88
E	Windshield wiper switch	72 - 80
E ¹⁶	Heater blower switch	109
E ²⁴	Left seat belt switch	84
E ³⁸	Potentiometer for intermittent wiper operation	78, 79
E ⁴³	Outside mirror control switch	66, 67, 68
F ¹	Oil pressure switch	95
F ⁹	Parking brake switch	85
F ²⁶	Thermo-switch for cold start valve	110
F ²⁷	Mileage counter switch (EGR)	90 - 93
G	Fuel sender unit	91
G ¹	Fuel gauge	92
G ⁵	Tachometer	94
G ⁶	Fuel pump	106
G ⁸	Oil temperature sender unit	93
G ⁹	Oil temperature indicator	93
G ¹⁰	Oil pressure sender unit	96
G ¹¹	Oil pressure indicator	94
G ¹²	Oil level sender unit	89
G ¹³	Oil level gauge	89
G ¹⁹	Air meter contact	105
G ²¹	Speedometer	70
G ²²	Speedometer sensor	70
J ¹⁴	Relay for heater blower	108, 109
J ¹⁶	Relay for fuel pump	105, 106
J ³¹	Relay for intermittent wiper operation	75 - 78
J ³¹	Seat belt warning system relay with integrated buzzer	81 - 88
K ²	Generator charge indicator light	93
K ⁷	Oil pressure indicator light	94
K ⁷	Parking brake / brake warning light	85
K ¹⁶	Low fuel warning light	90
K ¹⁹	Seat belt warning light	85
K ²²	EGR warning light	90
N	Ignition transformer	118
N ⁹	Warm-up regulator	103
N ¹⁵	High tension ignition unit	118
N ¹⁷	Cold start valve	111
N ²¹	Supplementary air valve	104
N ³⁶	Magnetic clutch for mirror control	68
N ⁴³	Thermovalve	104
O	Distributor	119 - 125
P	Spark plug connector	120 - 125
Q	Spark plug	120 - 125
S ¹³	Fuses	72
S ¹⁴	on the fuse box	66
S ¹⁶	Fuses on the rear fuse box (regulator panel)	106
S ²²	Fuses on the rear fuse box (regulator panel)	126
S ²³	Fuses on the rear fuse box (regulator panel)	108
T ¹	Cable connector, single	105, 109, 128
T ²	Cable connector, double	80, 103
T ²	a - near regulator panel	76, 78, 88, 127
T ²	d - behind fuse box	85, 86
T ²	e - on luggage compartment floor	126
T ²	f - behind instrument panel	
T ²	g - below shift lever housing	
T ²	i - in tunnel, rear	
T ²	k - below regulator panel	105, 106
T ⁴	Cable connector, quadruple, on luggage compartment floor	65, 66
T ⁶	Cable connector, sixfold	
T ⁶	b - in engine compartment, right	89
T ⁶	c - below instrument panel	72, 73, 74, 76, 80
T ⁶	f - below instrument panel	81, 82, 87, 115, 116
T ¹⁴	Cable connector, fourteenfold on regulator panel	93, 95, 96, 102, 103, 108, 113, 126, 127
V	Windshield wiper motor	72, 75
V ⁴	Heater blower	108
V ⁵	Washer pump	80
V ¹⁷	Outside mirror control motor	66
Z ⁴	Outside mirror defogger	65

Additional current flow diagram brake booster, Type 911

9

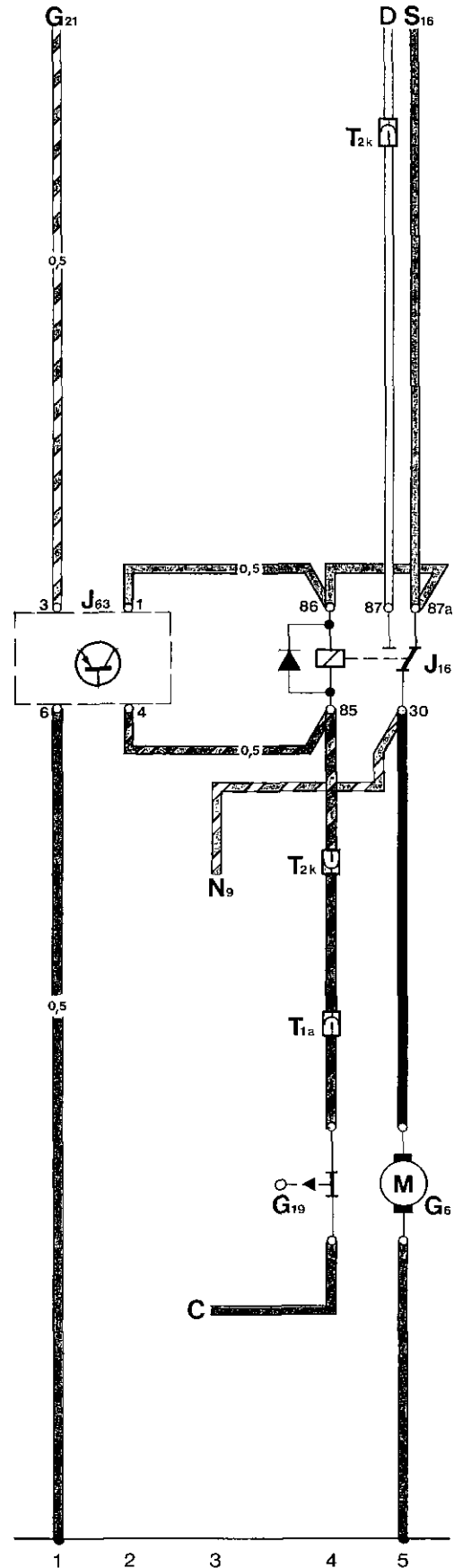
Description	Current track
F - Stop light switch	2, 3
F ⁹ - Parking brake switch	3
G ⁹ - to oil temperature indicator (terminal 15)	6
J ³⁴ - to seat belt warning system relay	5
K ³ - to oil pressure indicator light	6
K ⁷ - Parking brake/brake warning light	4
K ¹⁹ - Seat belt warning light	5
M ² - Right stop light	7
M ⁴ - Left stop light	8
M ⁶ - to left rear turn signal (ground)	6
M ⁸ - to right rear turn signal (ground)	6
S ¹¹ - Fuses on the	4
S ¹⁷ - fuse box	1
T ¹ - Cable connector, single, behind instrument panel	3, 6, 7
T ⁶ - Cable connector, sixfold a - in engine compartment, left b - in engine compartment, right	8
	7



Additional current flow diagram speed limiter, Type 911

9

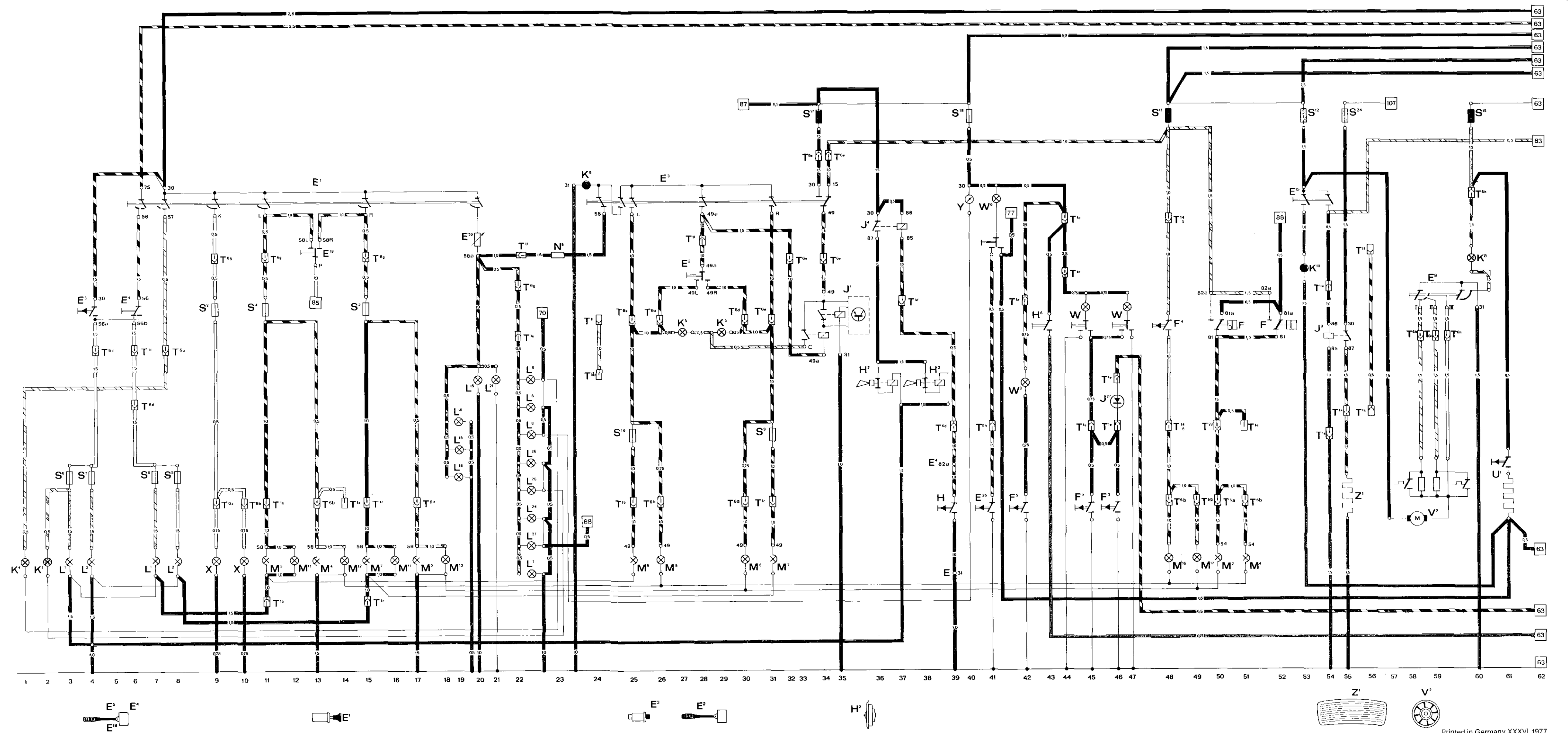
Description	Current track
C - to generator	3
D - to ignition/starter switch	5
G ⁶ - Fuel pump	5
G ¹⁹ - Air meter contact	4
G ²¹ - to speedometer (terminal A)	1
J ¹⁶ - Relay for fuel pump	4, 5
J ⁶³ - Speed limiter relay	1, 2
N ⁹ - to warm-up regulator	3
S ¹⁶ - to fuse 16	5
T ^{1a} - Cable connector, single, near regulator panel	4
T ^{2k} - Cable connector, double, below regulator panel	4, 5



Current flow diagram, Type 911 SC, USA, Model 78 **9**

9 Current flow diagram, Type 911 SC, USA, Model 78

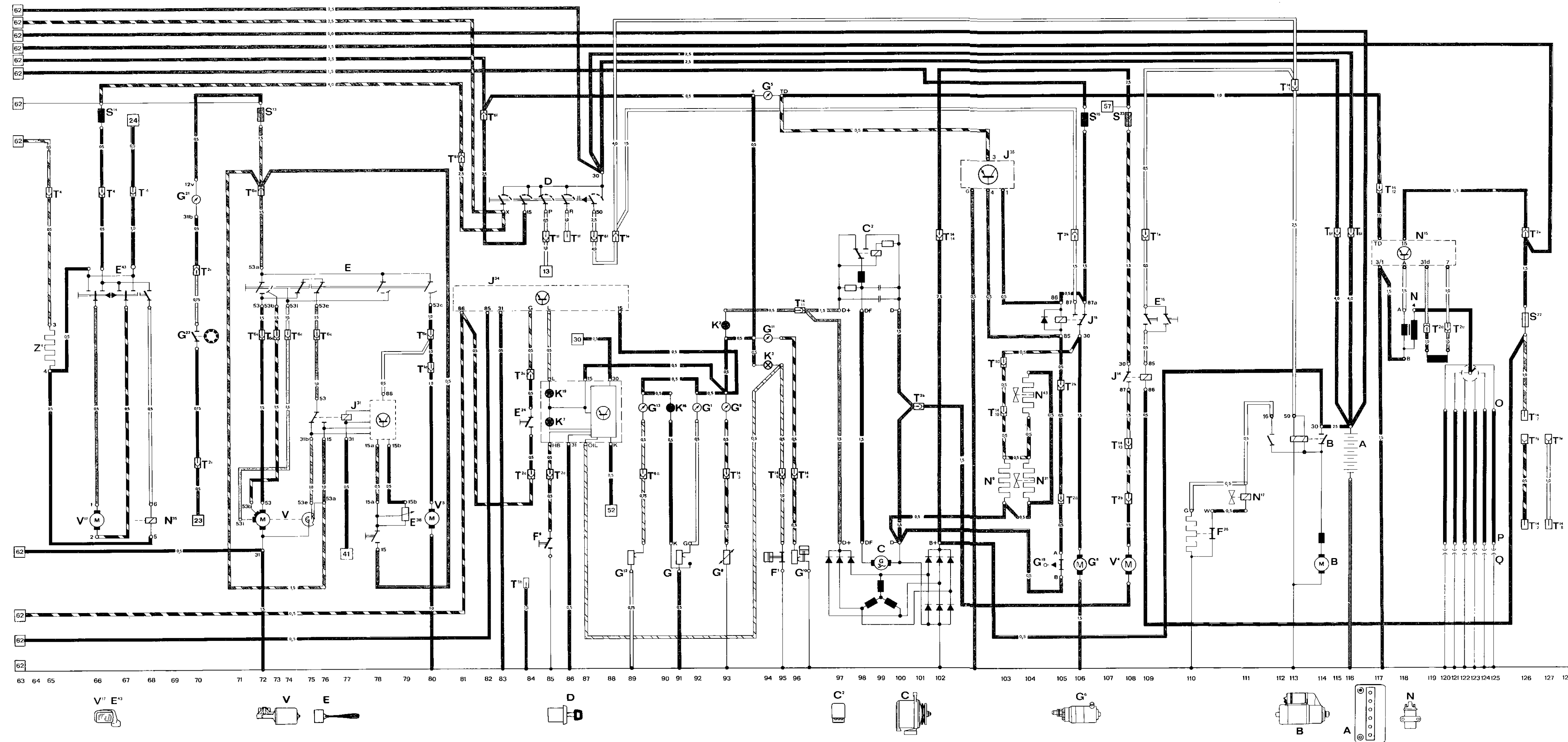
- | Description | Current track |
|---|------------------------|
| E - Windshield wiper switch | 39 |
| E ¹ - Headlight switch | 6, 8, 9, 11, 15, 20 |
| E ² - Turn signal switch | 28 |
| E ³ - Emergency flasher switch | 24, 25, 28, 31, 34 |
| E ⁴ - Dimmer switch | 6, 39 |
| E ⁵ - Headlight flasher switch | 4 |
| E ⁹ - Fresh air blower switch | 58, 59, 60 |
| E ¹⁵ - Rear window defogger switch | 53, 54 |
| E ¹⁹ - Parking light switch | 13 |
| E ²⁰ - Instrument panel illumination potentiometer | 20 |
| E ²⁶ - Switch for glove compartment light | 41 |
| F ¹ - Stop light switch | 50, 52 |
| F ² - Left door switch | 45 |
| F ³ - Right door switch | 46 |
| F ⁴ - Back-up light switch | 48 |
| F ⁵ - Switch for luggage compartment light | 42 |
| H - Horn switch | 39 |
| H ² - Horns | 36, 38 |
| H ⁶ - Key warning buzzer contact | 43 |
| J ¹ - Hazard / turn signal flasher | 33, 34, 35 |
| J ⁴ - Horn relay | 36, 37 |
| J ⁹ - Rear window defogger relay | 54, 55 |
| J ²⁷ - Diode for seat belt warning system | 46 |
| K ¹ - High beam indicator light | 2 |
| K ⁴ - Parking lights indicator light | 1 |
| K ⁸ - Turn signal indicator light | 27, 29 |
| K ⁶ - Hazard flasher indicator light | 24 |
| K ⁸ - Blower indicator light | 60 |
| K ¹⁰ - Rear window defogger indicator light | 53 |
| L ¹ - Sealed beam unit, left headlight | 3, 7 |
| L ² - Sealed beam unit, right headlight | 4, 8 |
| L ⁶ - Speedometer illumination light | 22 |
| L ⁷ - Fuel gauge illumination light | 22 |
| L ⁸ - Clock illumination light | 22 |
| L ¹⁵ - Ashtray illumination light | 20 |
| L ¹⁶ - Heater control assembly illumination light | 19 |
| L ²¹ - Temperature control lever illumination light | 21 |
| L ²⁴ - Oil temperature indicator illumination light | 22 |
| L ²⁶ - Tachometer illumination light | 22 |
| L ²⁷ - Oil pressure indicator illumination light | 22 |
| M ² - Right stop / rear light | 17, 50 |
| M ⁴ - Left stop / rear light | 13, 51 |
| M ⁶ - Left front turn signal / parking light | 11, 25 |
| M ⁷ - Right front turn signal / parking light | 15, 31 |
| M ⁸ - Right rear turn signal | 26 |
| M ¹¹ - Front side marker light | 12, 16 |
| M ¹² - Rear side marker light | 14, 18 |
| M ¹⁶ - Left back-up light | 48 |
| M ¹⁷ - Right back-up light | 49 |
| N ⁶ - Resistor | 23 |
| S ² - Fuses | 9, 15, 11 |
| S ¹² - on the | 8, 7, 4 |
| S ¹⁶ - fuse box | 3, 31, 25, 48, 53 |
| S ¹⁷ - fuse box | 60 |
| S ¹⁸ - fuse box | 34 |
| S ²⁴ - Fuse on the rear fuse box | 40 |
| T ¹ - Cable connector, single | 55 |
| T ^{1a} - near regulator panel | 14, 54, 55, 56 |
| T ^{1b} - behind sealed beam unit, left | 11, 25 |
| T ^{1c} - behind sealed beam unit, right | 15, 31 |
| T ^{1d} - behind fuse box | 37 |
| T ^{1e} - on luggage compartment floor | 22, 42, 44, 45, 46, 51 |
| T ^{1f} - behind instrument panel | 6, 22, 24, 28, 56 |
| T ^{2d} - Cable connector, double, on luggage compartment floor | 50 |
| T ⁶ - Cable connector, sixfold | |
| T ^{6a} - in the engine compartment, rear left | 9, 17, 30, 49, 50 |
| T ^{6b} - in the engine compartment, rear right | 10, 24, 26, 48, 51 |
| T ^{6c} - below instrument panel | 4, 6, 26, 30, 39 |
| T ^{6d} - below instrument panel | 25, 31, 32, 34 |
| T ^{6e} - below instrument panel | 8, 9, 11, 15, 22 |
| T ^{6f} - below instrument panel | 41, 58, 59, 60 |
| T ¹⁴ - Cable connector, fourteenfold on regulator panel | 48 |
| U ¹ - Cigar lighter | 61 |
| V ² - Blower motor | 58, 59 |
| W - Interior light | 45, 46 |
| W ³ - Luggage compartment light | 42 |
| W ⁶ - Glove compartment light | 41 |
| X - License plate light | 9, 10 |
| Y - Clock | 40 |
| Z ¹ - Rear window defogger | 55 |



Current flow diagram,

9

Type 911 SC, USA, Model 78



Description	Current track
A - Battery	116
B - Starter	113, 114
C - Generator	97 - 102
C ² - Voltage regulator	96, 99
D - Ignition / starter switch	83 - 88
E - Windshield wiper switch	72 - 80
E ¹⁶ - Heater blower switch	109
E ²⁴ - Left seat belt switch	84
E ³⁸ - Potentiometer for intermittent wiper operation	78, 79
E ⁴³ - Outside mirror control switch	66, 67, 68
F - Oil pressure switch	95
F ⁹ - Parking brake switch	85
F ²⁶ - Thermo-switch for cold start valve	110
G - Fuel sender unit	91
G ¹ - Fuel gauge	92
G ⁵ - Tachometer	94
G ⁶ - Fuel pump	106
G ⁸ - Oil temperature sender unit	93
G ⁹ - Oil temperature indicator	93
G ¹⁰ - Oil pressure sender unit	96
G ¹¹ - Oil pressure indicator	94
G ¹² - Oil level sender unit	89
G ¹³ - Oil level gauge	89
G ¹⁹ - Air meter contact	105
G ²¹ - Speedometer	70
G ²² - Speedometer sensor	70
J ¹⁴ - Relay for heater blower	108, 109
J ¹⁶ - Relay for fuel pump	105, 106
J ²¹ - Relay for intermittent wiper operation	75 - 78
J ²⁴ - Seat belt warning system relay with integrated buzzer	81 - 88
J ²⁵ - Speed switch	103
K ² - Generator charge indicator light	93
K ³ - Oil pressure indicator light	94
K ⁷ - Parking brake / brake warning light	85
K ¹⁶ - Low fuel warning light	90
K ¹⁹ - Seat belt warning light	85
N - Ignition transformer	118
N ⁹ - Warm-up regulator	103
N ¹⁵ - High tension ignition unit	118
N ¹⁷ - Cold start valve	111
N ²¹ - Supplementary air valve	104
N ²⁵ - Magnetic clutch for mirror control	68
N ⁴³ - Thermo valve	104
O - Distributor	119 - 125
P - Spark plug connector	120 - 125
Q - Spark plug	120 - 125
S ¹³ - Fuses	72
S ¹⁴ - on the fuse box	66
S ¹⁶ - fuse box	106
S ²² - Fuses on the rear fuse box (regulator panel)	126
S ²³ - rear fuse box (regulator panel)	108
T ¹ - Cable connector, single	
a - near regulator panel	105, 109
d - behind fuse box	80, 103
e - on luggage compartment floor	88, 127
f - behind instrument panel	85, 86
g - below shift lever housing	126
h - near battery	84
T ² - Cable connector, double	
a - below regulator panel	105, 126
b - in engine compartment, left	101, 108
c - near left seat	84
d - on luggage compartment floor	85
e - near distributor	119, 120
i - in tunnel, rear	70
k - below regulator panel	105, 106
T ⁴ - Cable connector, quadruple, on luggage compartment floor	65, 66, 67
T ⁶ - Cable connector, sixfold	
a - in engine compartment, right	89
c - below instrument panel	72, 73, 74, 76, 80
f - below instrument panel	81, 82, 87, 115, 116
T ¹⁴ - Cable connector, fourteenfold on regulator panel	93, 95, 96, 102, 103, 108, 113, 117, 126, 127
V - Windshield wiper motor	72, 75
V ⁴ - Heater blower	108
V ⁵ - Washer pump	80
V ¹⁷ - Outside mirror control motor	66
Z ⁴ - Outside mirror defogger	65

**Additional current flow diagram
power windows
Type 911 from model 77**

9

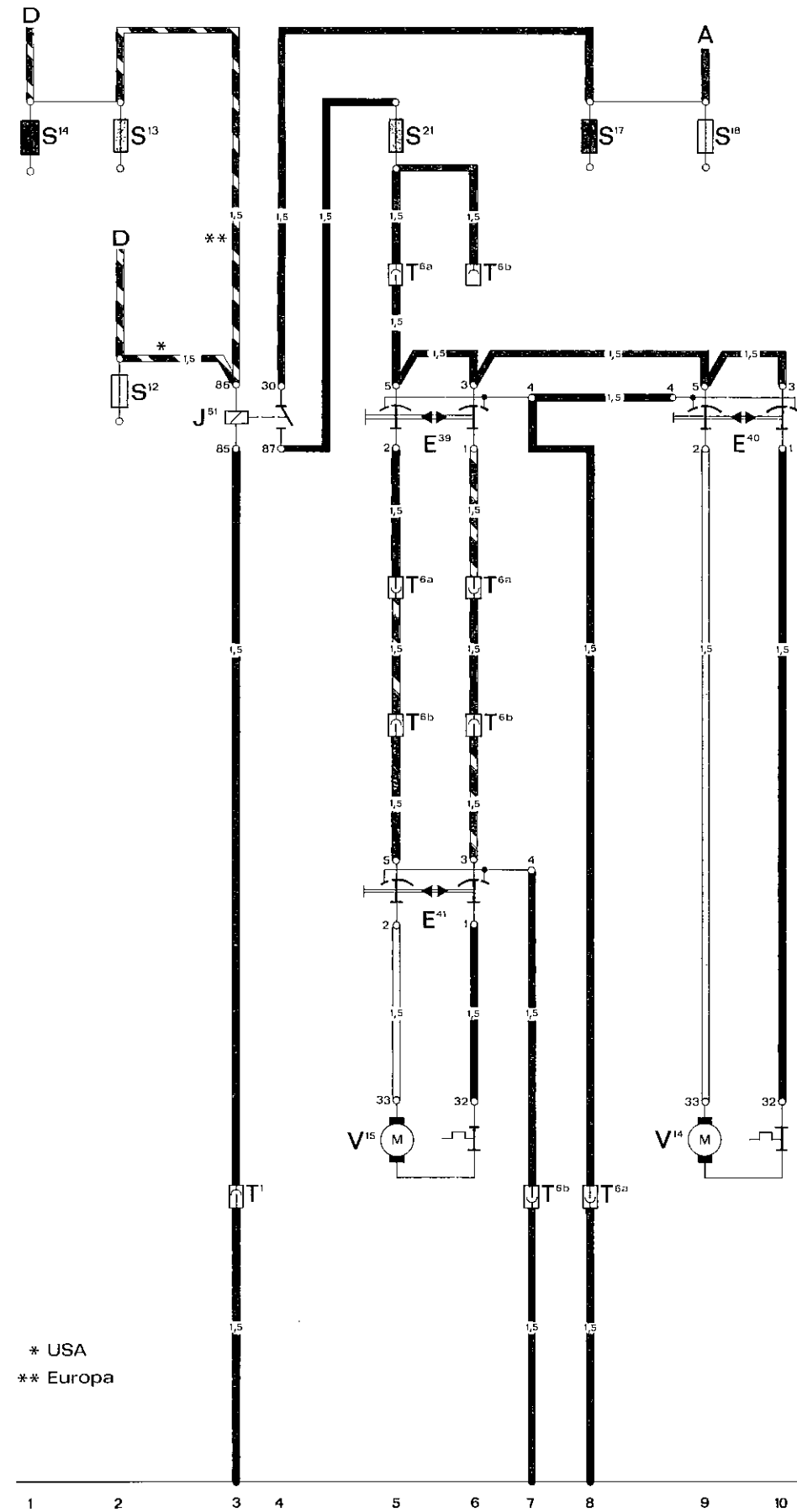
Additional current flow diagram power windows Type 911 from model 77

Description

- A - to battery
- D - to ignition/starter switch (terminal X)
- D - to ignition/starter switch (terminal 15)
- E³⁹ - Power window switch, driver side, for passenger side
- E⁴⁰ - Power window switch, driver side
- E⁴¹ - Power window switch, passenger side
- J⁵¹ - Power window relay
- S¹² - Fuse
- S¹³ - Fuse
- S¹⁴ - Fuse
- S¹⁷ - Fuse
- S¹⁸ - Fuse
- S²¹ - Fuse
- T¹ - Cable connector, single, behind fuse box
- T⁶ - Cable connector, sixfold
 - a - in door well, left
 - b - in door well, right
- V¹⁴ - Power window motor, left
- V¹⁵ - Power window motor, right

Current track

- 9
- 1
- 2
- 5, 6
- 9, 10
- 5, 6
- 3, 4
- 2
- 2
- 1
- 8
- 9
- 5
- 3
- 5, 6, 8
- 5, 6, 7
- 9, 10
- 5, 6



**Additional Current Flow Diagram
Air Conditioner (M 399)
Type 911 from model 77**

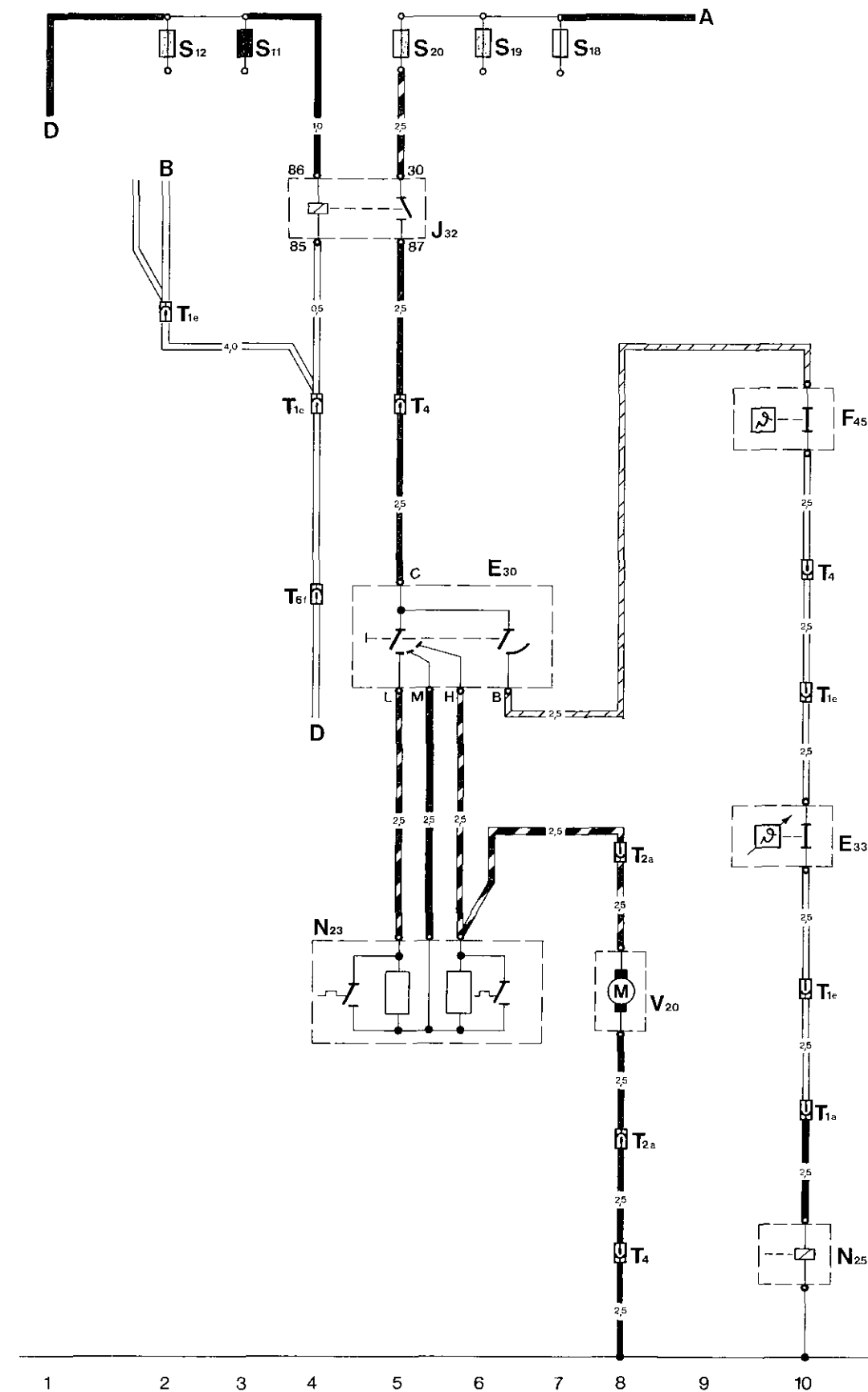
Additional Current Flow Diagram Air Conditioner (M 399) Type 911 from model 77

Description

- A - to battery
- B - to starter (terminal 50)
- D - to ignition/starter switch (terminal 15)
- D - to ignition/starter switch (terminal 50)
- E³⁰ - Switch for AC
- E³³ - Temperature switch for AC
- F⁴⁵ - Thermo-switch for AC (excess temperature)
- J³² - Relay for AC
- N²³ - Resistor for evaporator blower
- N²⁵ - Electromagnetic clutch
- S¹¹ - Fuse
- S¹² - Fuse
- S¹⁸ - Fuse
- S¹⁹ - Fuse
- S²⁰ - Fuse
- T¹ - Wire connector, single
 - a - near compressor
 - e - on luggage compartment floor
- T² - Wire connector, two-pole
 - a - near evaporator blower
- T⁴ - Wire connector, four-pole, below instrument panel
- T^{6f} - Wire connector, six-pole, below instrument panel
- V²⁰ - Evaporator blower

Current track

- 9
- 2
- 1
- 4
- 5, 6
- 10
- 10
- 4, 5
- 5, 6
- 10
- 3
- 2
- 7
- 6
- 5
- 10
- 2, 4, 10
- 8
- 5, 8, 10
- 4
- 8



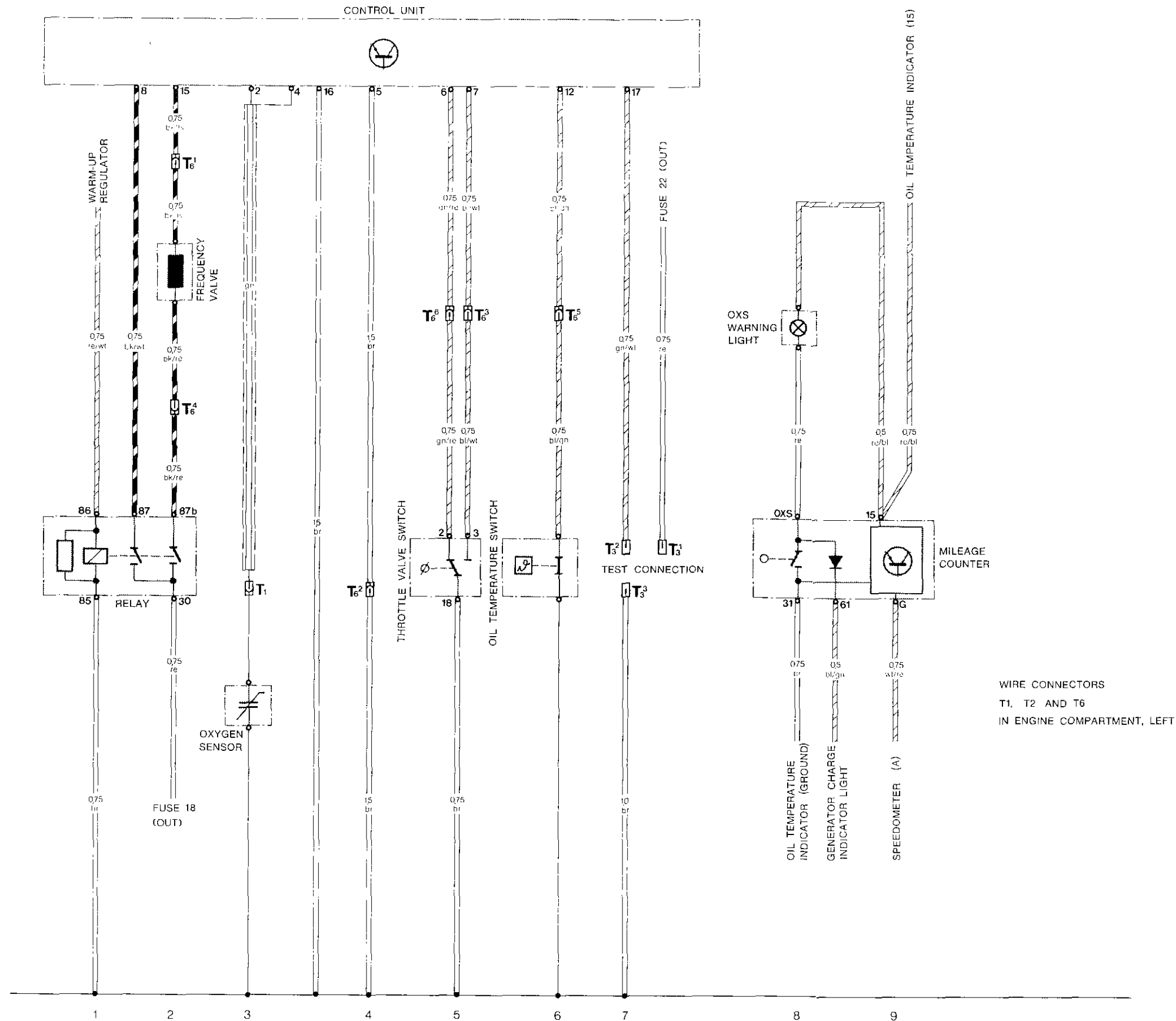
Additional Current Flow Diagram

Type 911 SC USA, Model 80

Oxygen Sensor System

Additional Current Flow Diagram, Type 911 SC USA, Model 80

Oxygen Sensor System



Current Flow Diagram

Type 911 SC USA Model 81

- PART I** POWER SUPPLY, STARTER
FUEL PUMP
HEATER VENTILATOR
IGNITION
- PART II** HEADLIGHT, FRONT TURN SIGNAL, HAZARD FLASHER
- PART III** REAR LIGHT, BRAKE LIGHT
HORNS
INTERIOR LIGHT
IGNITION/STARTER SWITCH

REAR WINDOW DEFOGGER
- PART IV** OUTSIDE MIRROR
FRESH AIR BLOWER
CIGARETTE LIGHTER
WINDSHIELD WIPER
POWER WINDOWS
- PART V** OXYGEN SENSOR SYSTEM
INSTRUMENT, SENDER UNITS
- PART VI** OXYGEN SENSOR SYSTEM

Current Flow Diagram

Type 911 SC USA Model 81

9

WIRE CONNECTORS

T1 - ONE POLE

- A - NEAR REGULATOR PANEL
- B - BEHIND HEADLIGHT LEFT
- C - BEHIND HEADLIGHT RIGHT
- D - BEHIND FUSE BOX
- E - ON LUGGAGE COMPARTMENT FLOOR
- F - BEHIND INSTRUMENT PANEL

T2 - TWO POLE

- A - BELOW REGULATOR PANEL
- B - IN ENGINE COMPARTMENT LEFT
- C - NEAR DISTRIBUTOR
- D - IN TUNNEL REAR
- E - BELOW REGULATOR PANEL
- F - ON LUGGAGE COMPARTMENT FLOOR
- G - NEAR LEFT SEAT

T3 - THREE-POLE

- A - ON LUGGAGE COMPARTMENT FLOOR
- B - IN ENGINE COMPARTMENT

T6 - SIX POLE

- A - IN ENGINE COMPARTMENT LEFT
- B - IN ENGINE COMPARTMENT RIGHT
- C - BELOW INSTRUMENT PANEL
- D - BELOW INSTRUMENT PANEL
- E - BELOW INSTRUMENT PANEL
- F - BELOW INSTRUMENT PANEL
- G - BELOW INSTRUMENT PANEL
- H - BELOW INSTRUMENT PANEL
- I - IN DOOR WELL LEFT
- K - IN DOOR WELL RIGHT

T12 - TWELVE-POLE IN ENGINE COMPARTMENT

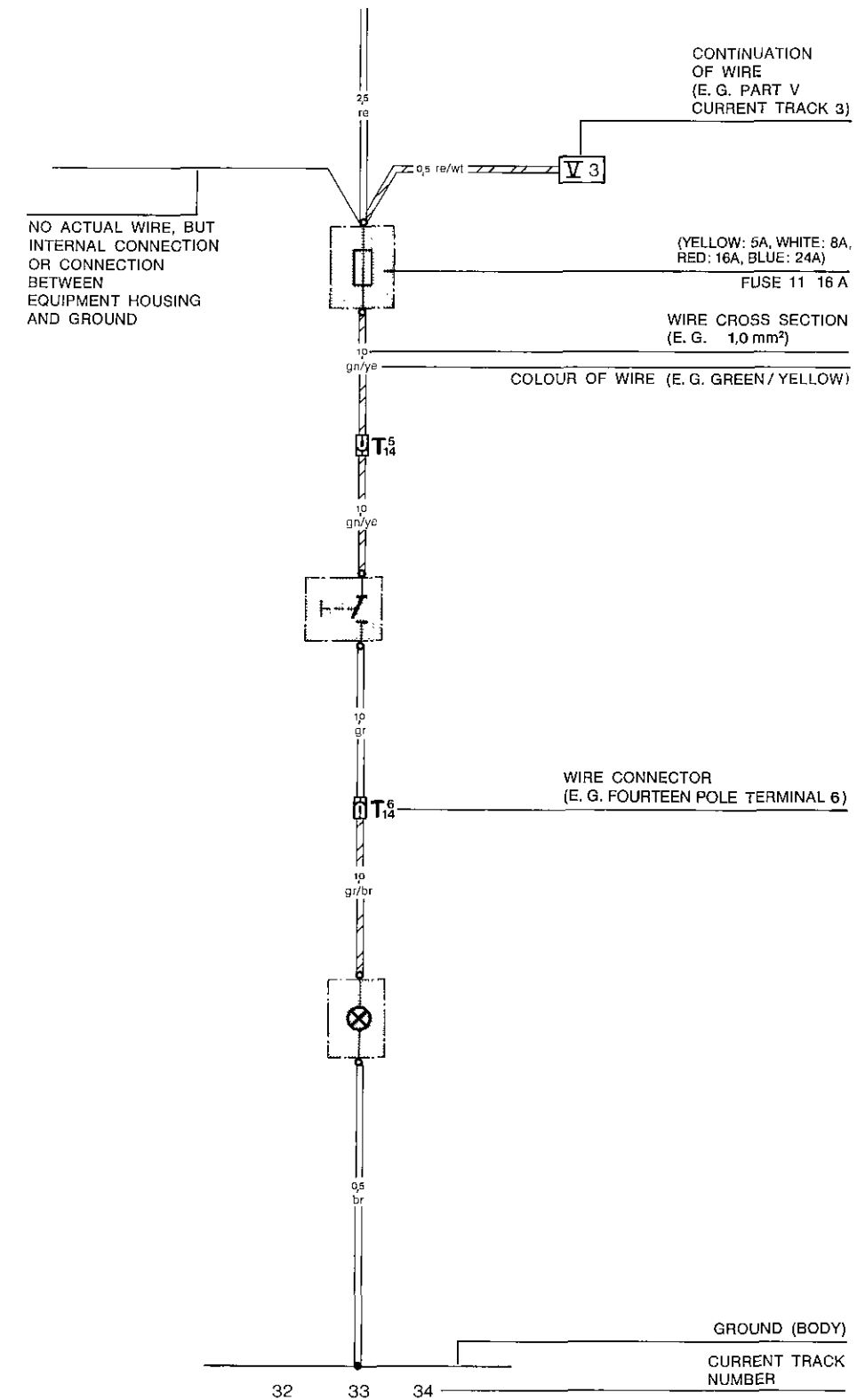
T14 - FOURTEEN POLE ON REGULATOR PANEL

GROUND TERMINALS

- ① ON ENGINE
- ② IN LUGGAGE COMPARTMENT
- ③ BATTERY
- ④ IN ENGINE COMPARTMENT
- ⑤ ON LUGGAGE COMPARTMENT FLOOR
- ⑥ NEAR FUSE BOX

WIRE COLOURS

- | | | |
|------------|-------------|-------------|
| BK - BLACK | GN - GREEN | BR - BROWN |
| WT - WHITE | YE - YELLOW | BL - BLUE |
| RE - RED | GR - GREY | VI - VIOLET |



Current Flow Diagram Type 911 SC USA Model 81, Part I

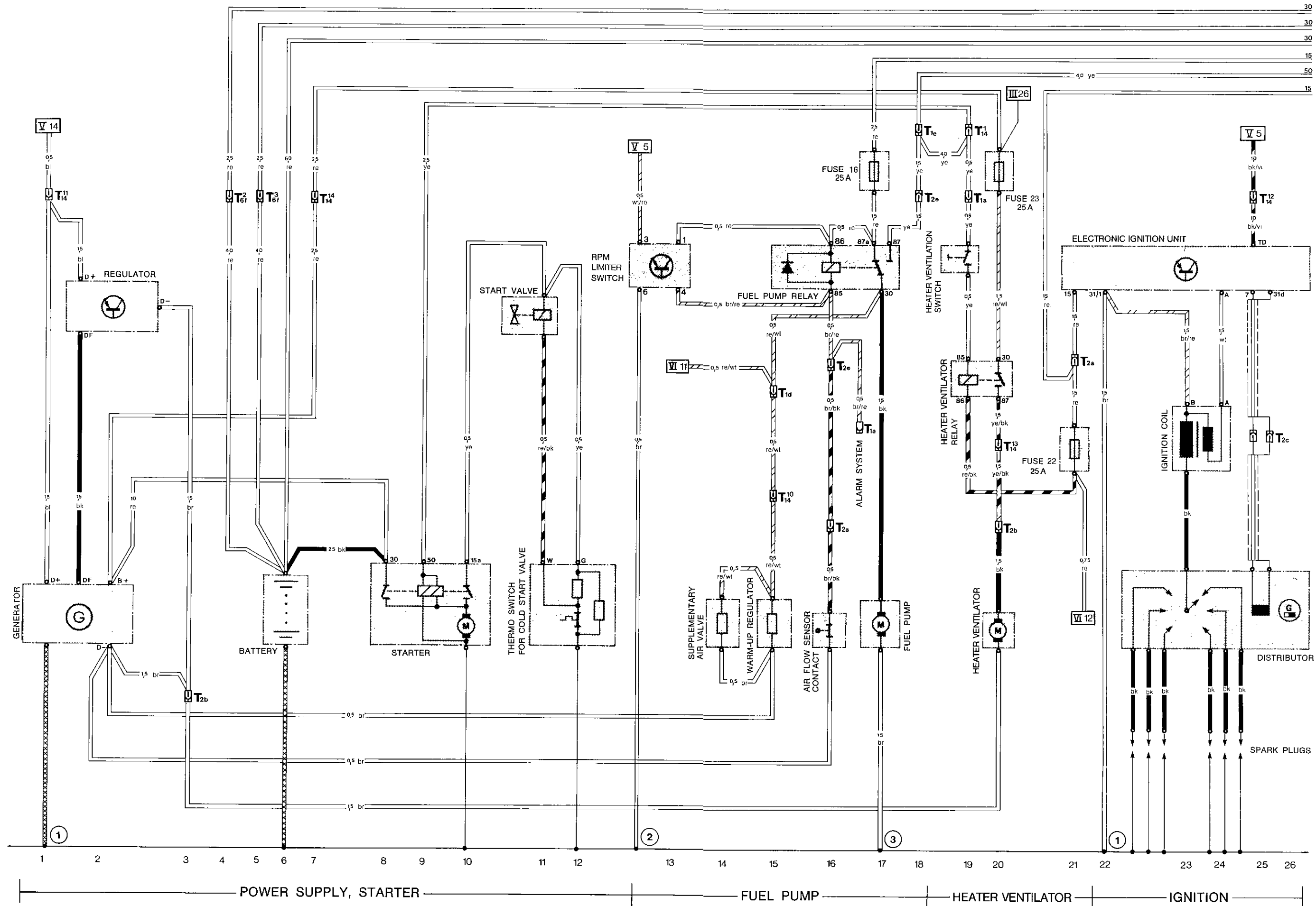
POWER SUPPLY, STARTER

FUEL PUMP

HEATER VENTILATOR

IGNITION

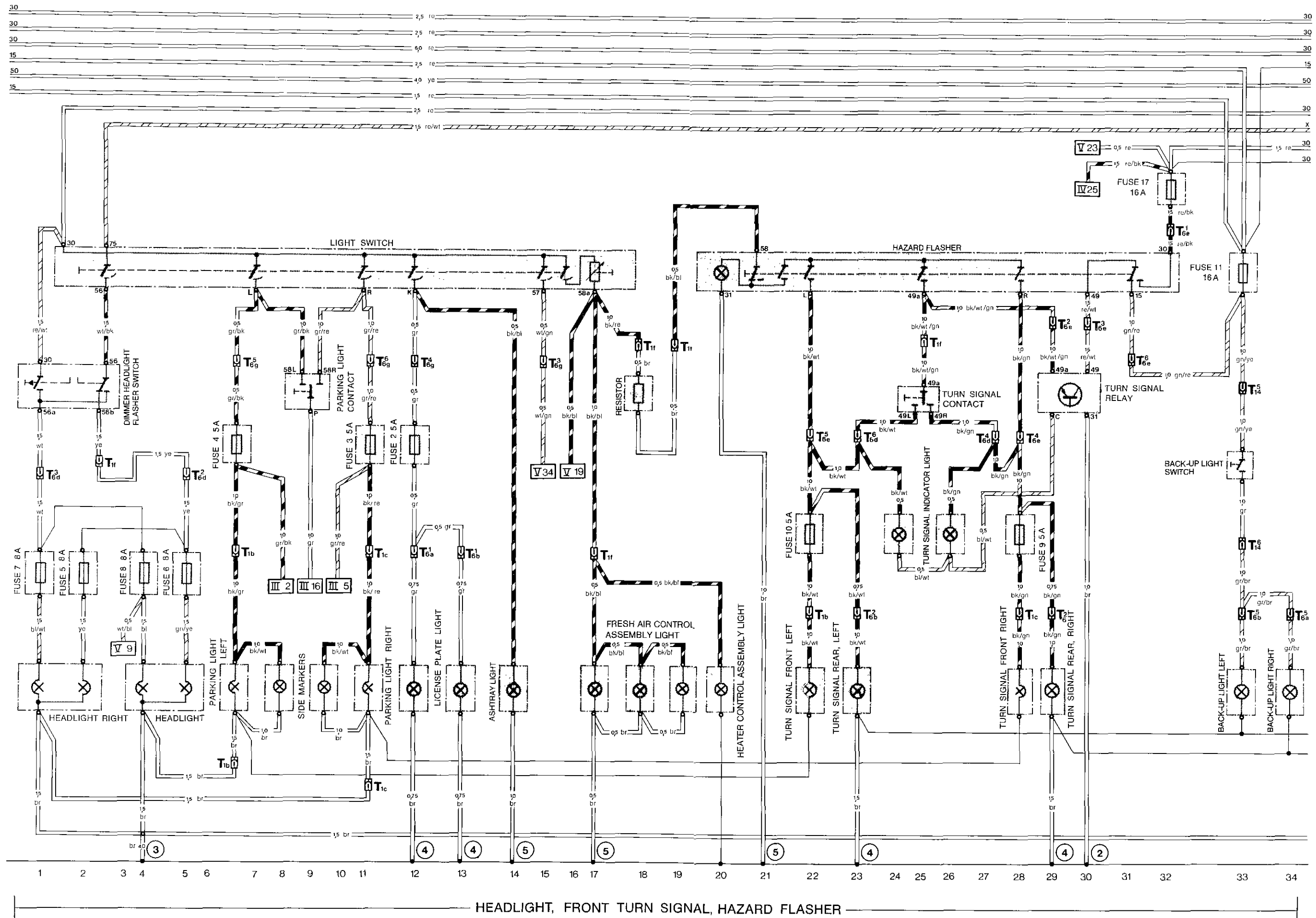
Current Flow Diagram Type 911 SC USA, Model 81, Part I



Current Flow Diagram Type 911 SC USA Model 81, Part II

HEADLIGHT, FRONT TURN SIGNAL,
HAZARD FLASHER

Current Flow Diagram Type 911 SC USA, Model 81, Part II



Current Flow Diagram Type 911 SC USA Model 81, Part III

REAR LIGHTS, BRAKE LIGHTS

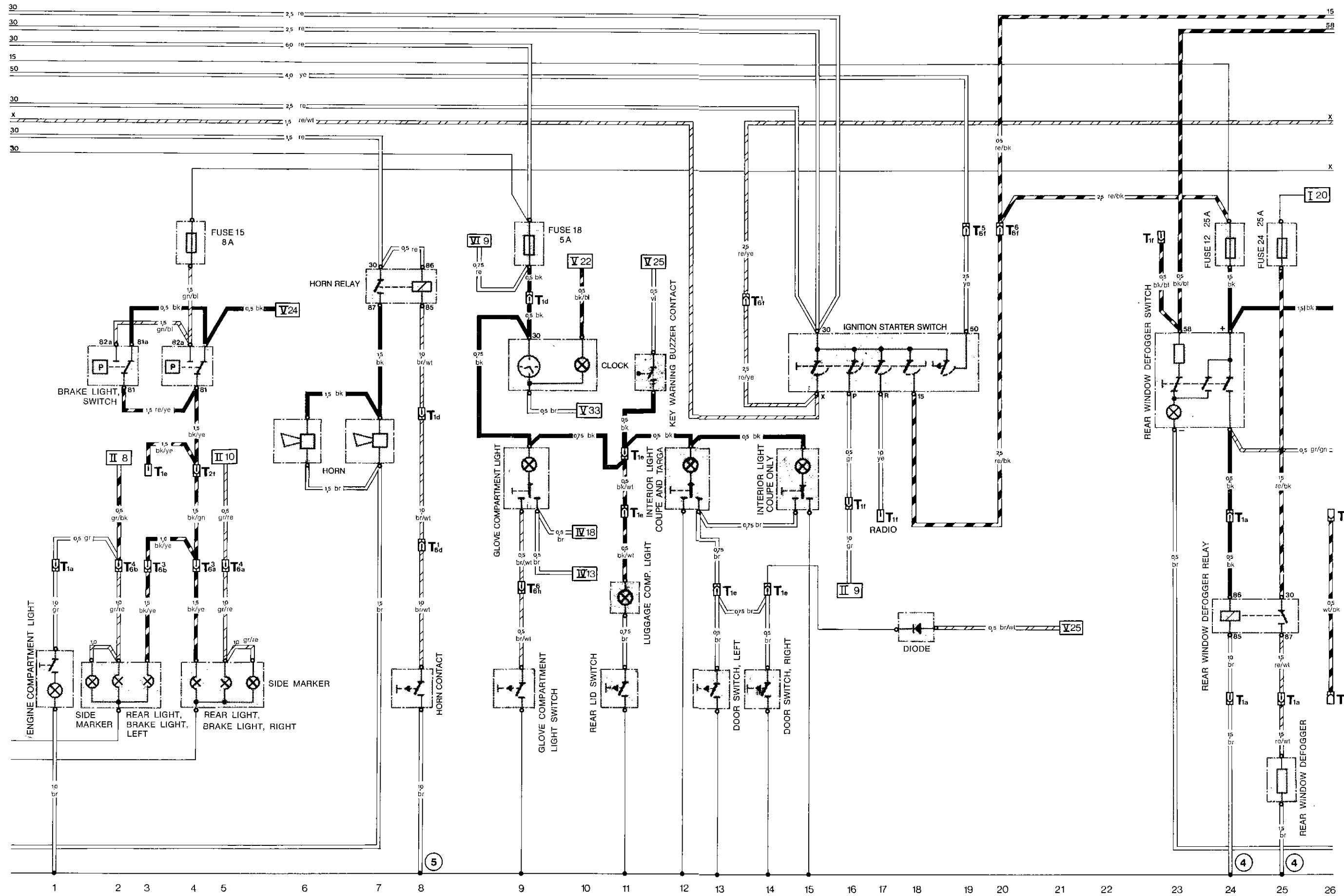
HORNS

INTERIOR LIGHT

IGNITION/STARTER SWITCH

REAR WINDOW DEFOGGER

Current Flow Diagram Type 911 SC USA, Model 81, Part III



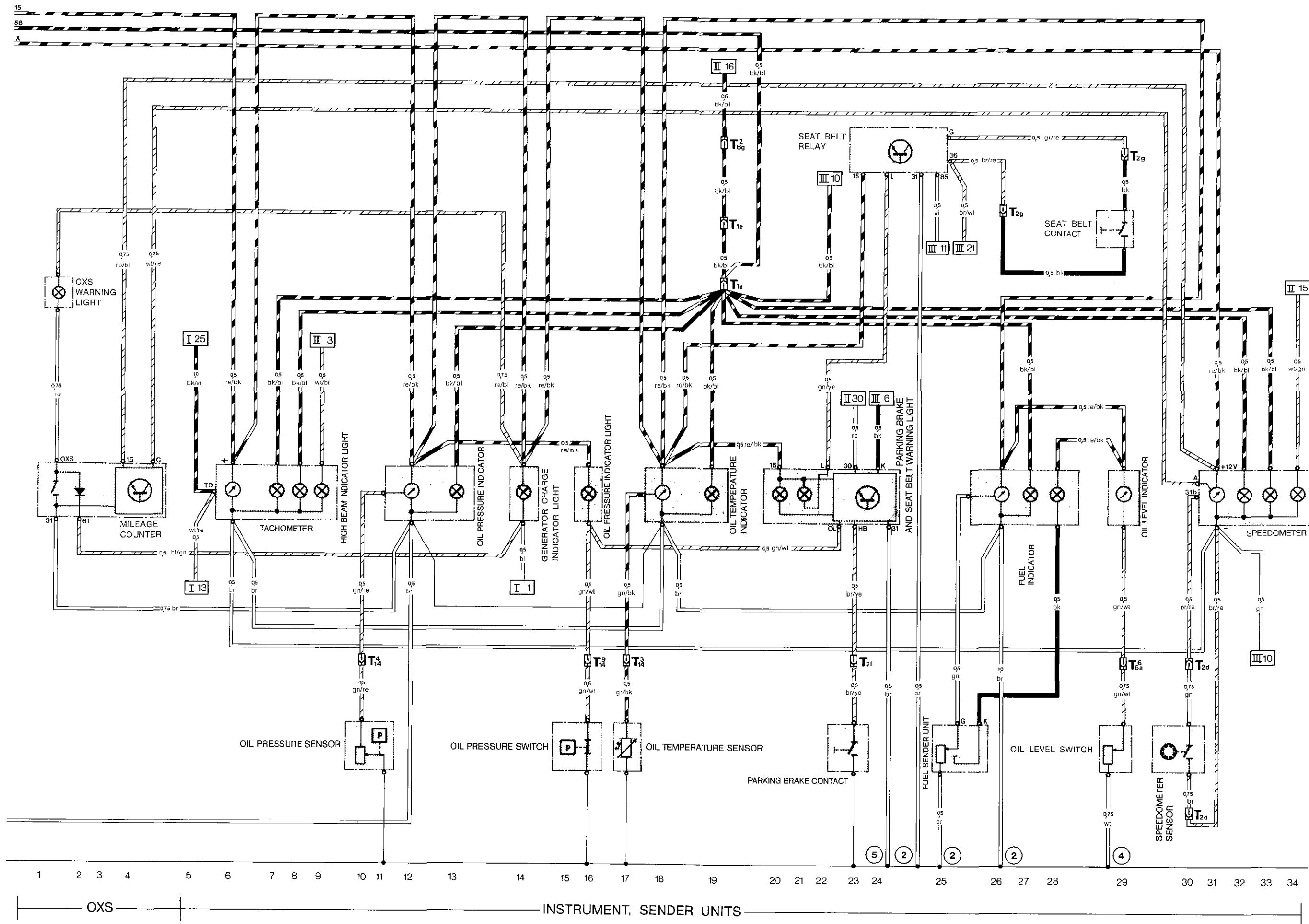
Current Flow Diagram Type 911 SC USA Model 81, Part IV

OUTSIDE MIRROR
FRESH AIR BLOWER
CIGARETTE LIGHTER
WINDSHIELD WIPER
POWER WINDOWS

Current Flow Diagram Type 911 SC USA Model 81, Part V

OXYGEN SENSOR SYSTEM
INSTRUMENT, SENDER UNITS

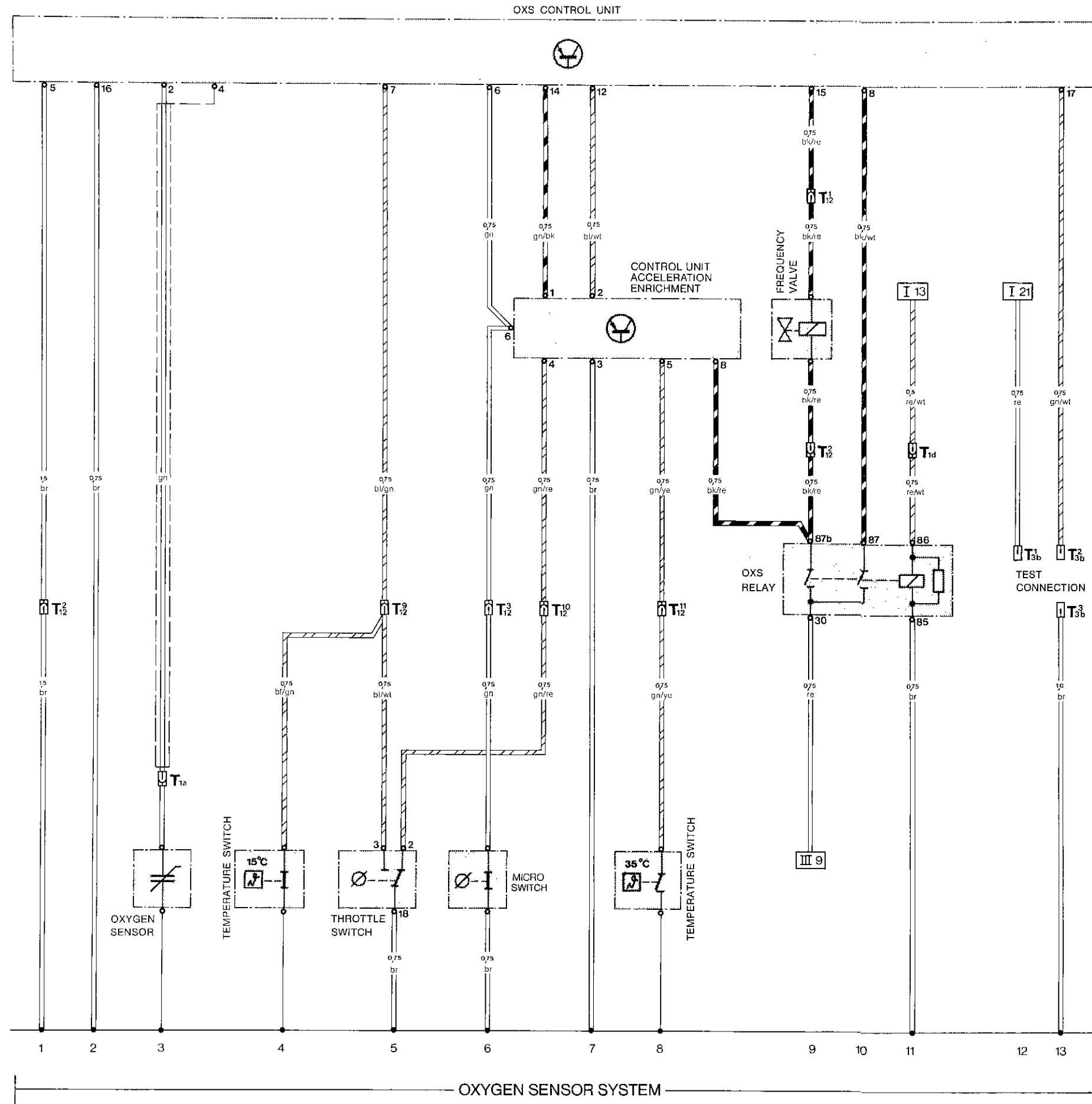
Current Flow Diagram Type 911 SC USA, Model 81, Part V



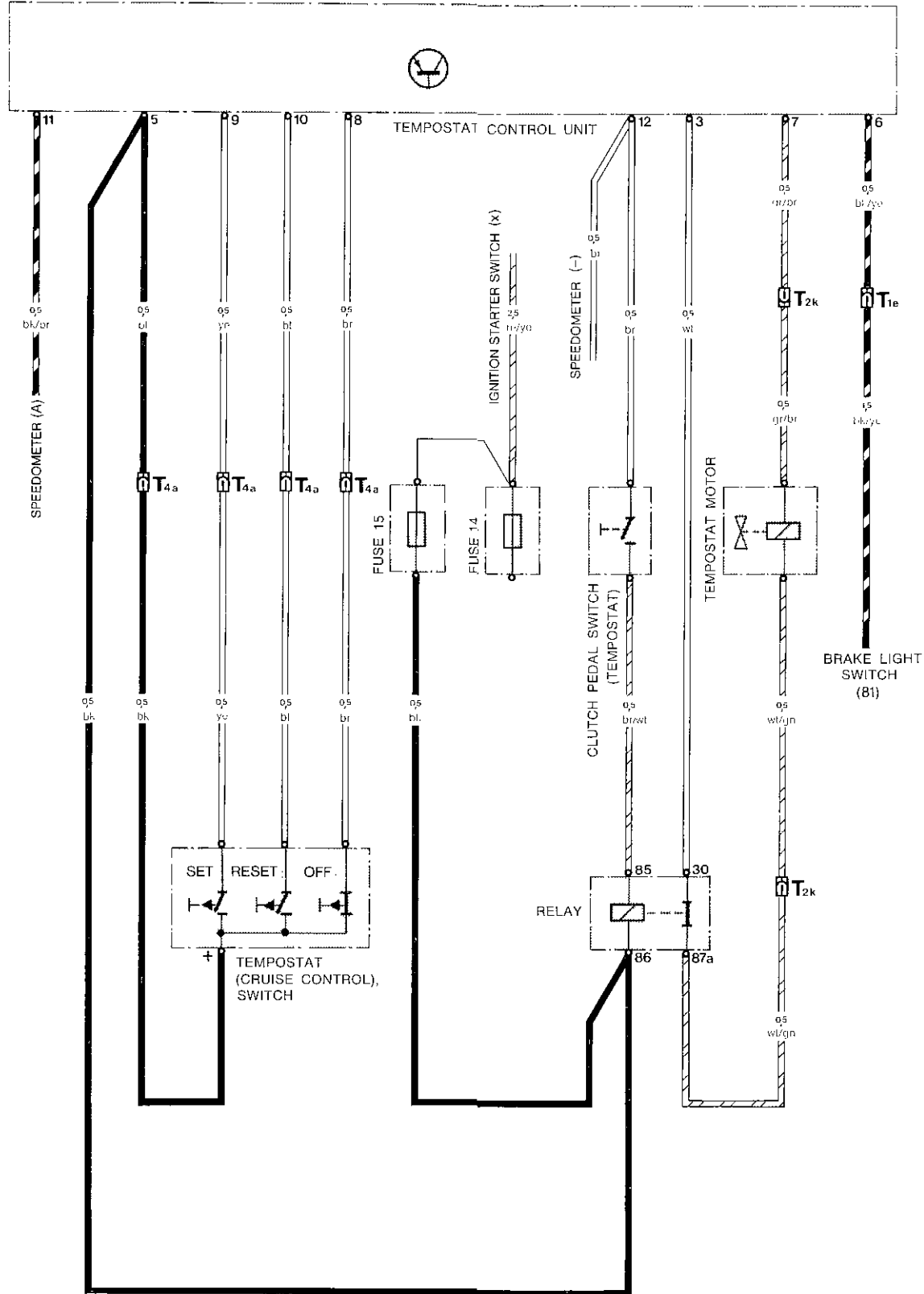
Current Flow Diagram Type 911 SC USA Model 81, Part VI

OXYGEN SENSOR SYSTEM

Current Flow Diagram Type 911 SC USA, Model 81, Part VI

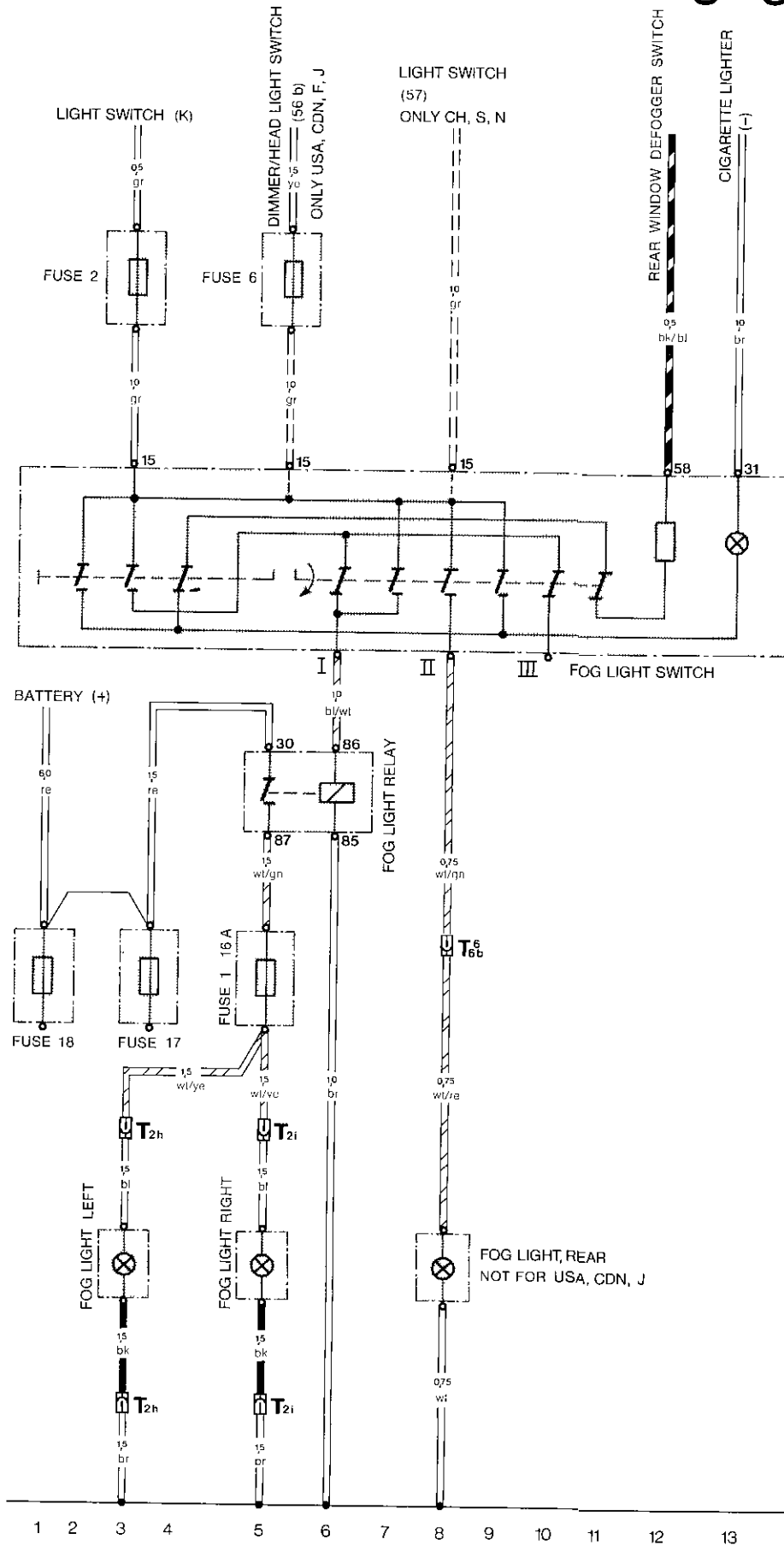


Additional Current Flow Diagram Type 911 SC Cruise control (Tempostat)



Additional Current Flow Diagram

Type 911 SC FROM MODEL 81 Fog light

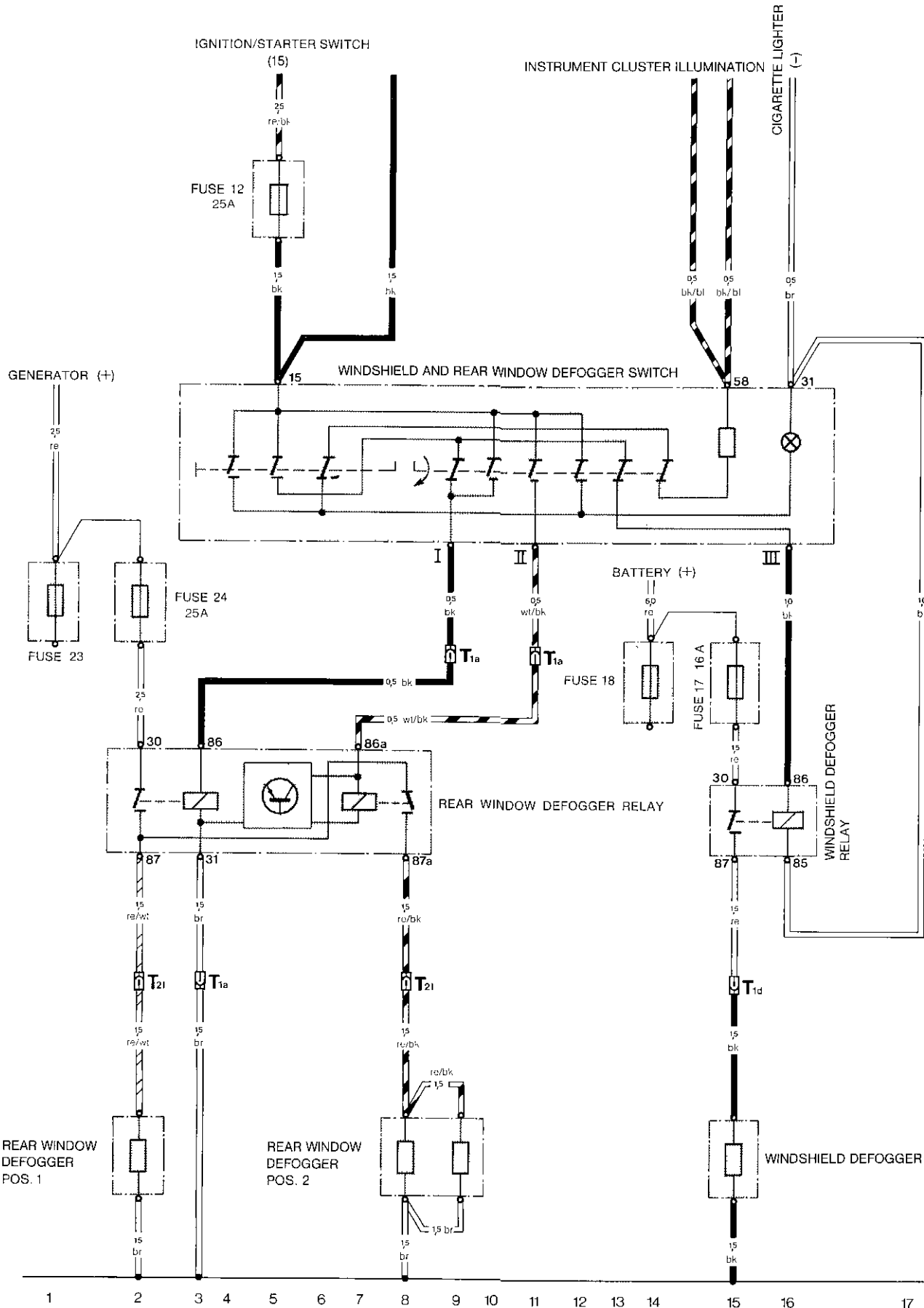


1 2 3 4 5 6 7 8 9 10 11 12 13

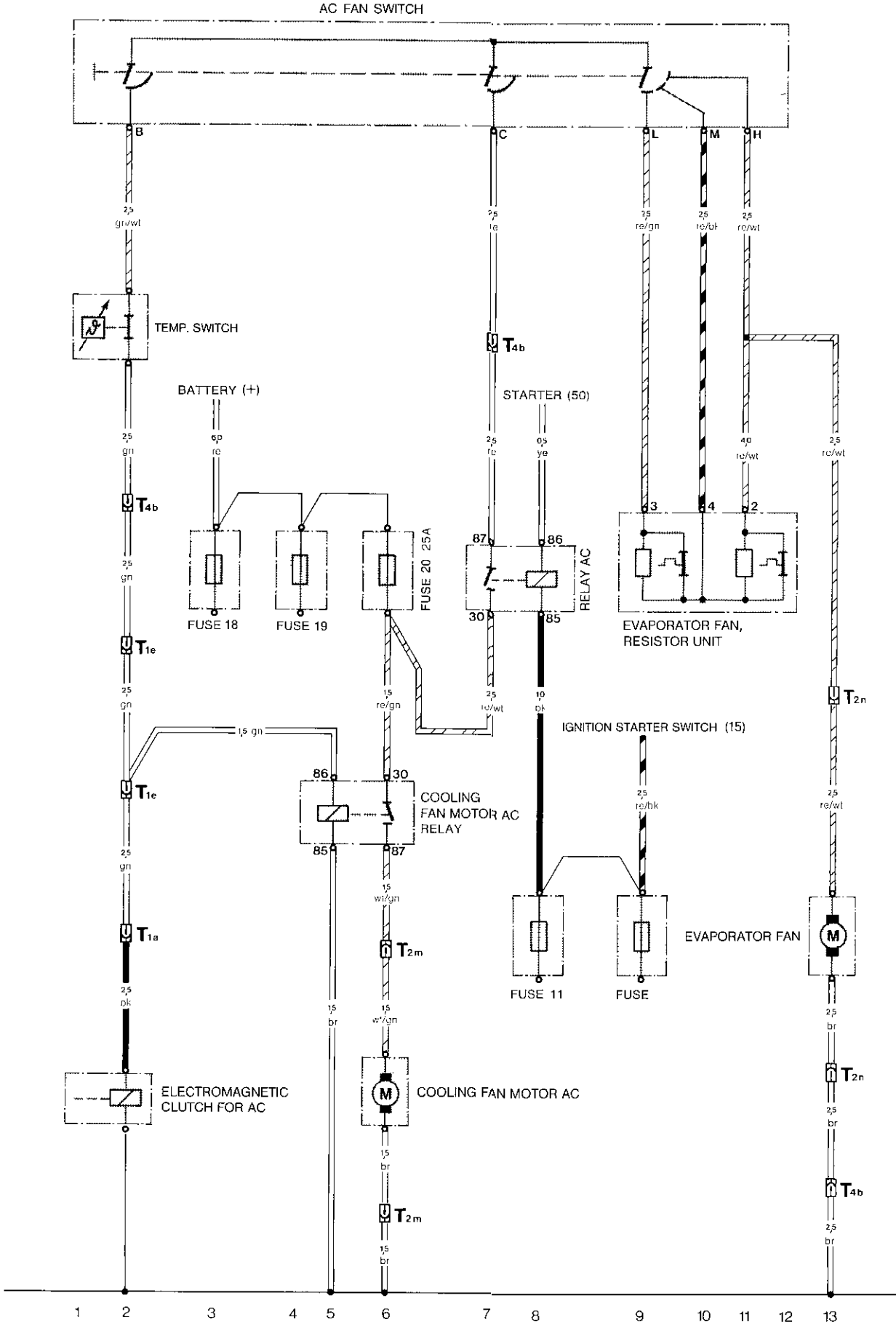
Additional Current Flow Diagram

Type 911 SC FROM MODEL 81

WINDSHIELD AND REAR WINDOW DEFOGGER



Additional Current Flow Diagram Type 911 SC Air Condition



Current Flow Diagram

Type 911 SC USA Model 82

- PART I** POWER SUPPLY, STARTER
 FUEL PUMP
 HEATER VENTILATOR
 IGNITION
- PART II** HEADLIGHT, FRONT TURN SIGNAL, HAZARD FLASHER
- PART III** REAR LIGHT, BRAKE LIGHT
 HORNS
 INTERIOR LIGHT
 IGNITION/STARTER SWITCH
- REAR WINDOW DEFOGGER
- PART IV** OUTSIDE MIRROR
 FRESH AIR BLOWER
 CIGARETTE LIGHTER
 WINDSHIELD WIPER
 POWER WINDOWS
- PART V** OXYGEN SENSOR SYSTEM
 INSTRUMENT, SENDER UNITS
- PART VI** OXYGEN SENSOR SYSTEM
 HEADLIGHT WASHER

Current Flow Diagram

Type 911 SC USA Model 82

WIRE CONNECTORS

T1 - ONE POLE

- A - NEAR REGULATOR PANEL
- B - BEHIND HEADLIGHT LEFT
- C - BEHIND HEADLIGHT RIGHT
- D - BEHIND FUSE BOX
- E - ON LUGGAGE COMPARTMENT FLOOR
- F - BEHIND INSTRUMENT PANEL

T2 - TWO POLE

- A - BELOW REGULATOR PANEL
- B - IN ENGINE COMPARTMENT LEFT
- C - NEAR DISTRIBUTOR
- D - IN TUNNEL REAR
- E - BELOW REGULATOR PANEL
- F - ON LUGGAGE COMPARTMENT FLOOR
- G - NEAR LEFT SEAT
- P - NEAR BATTERY

T3 - THREE-POLE

- A - ON LUGGAGE COMPARTMENT FLOOR
- B - IN ENGINE COMPARTMENT

T6 - SIX POLE

- A - IN ENGINE COMPARTMENT LEFT
- B - IN ENGINE COMPARTMENT RIGHT
- C - BELOW INSTRUMENT PANEL
- D - BELOW INSTRUMENT PANEL
- E - BELOW INSTRUMENT PANEL
- F - BELOW INSTRUMENT PANEL
- G - BELOW INSTRUMENT PANEL
- H - BELOW INSTRUMENT PANEL
- I - IN DOOR WELL LEFT
- K - IN DOOR WELL RIGHT

T12 - TWELVE-POLE
IN ENGINE COMPARTMENT

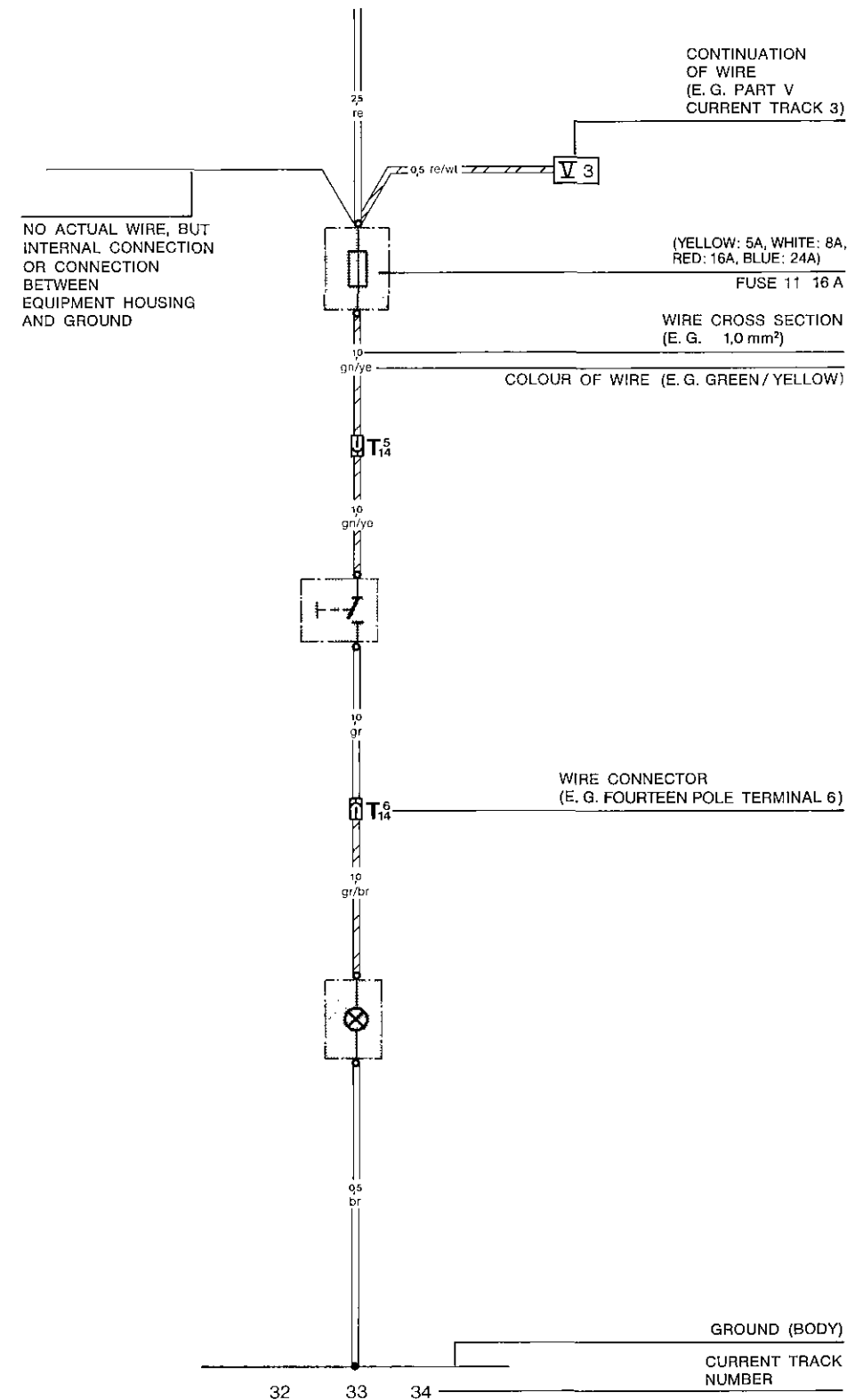
T14 - FOURTEEN POLE
ON REGULATOR PANEL

GROUND TERMINALS

- ① ON ENGINE
- ② IN LUGGAGE COMPARTMENT
- ③ BATTERY
- ④ IN ENGINE COMPARTMENT
- ⑤ ON LUGGAGE COMPARTMENT FLOOR
- ⑥ NEAR FUSE BOX

WIRE COLOURS

- | | | |
|------------|-------------|-------------|
| BK - BLACK | GN - GREEN | BR - BROWN |
| WT - WHITE | YE - YELLOW | BL - BLUE |
| RE - RED | GR - GREY | VI - VIOLET |



Current Flow Diagram Type 911 SC USA Model 82, Part I

POWER SUPPLY, STARTER

FUEL PUMP

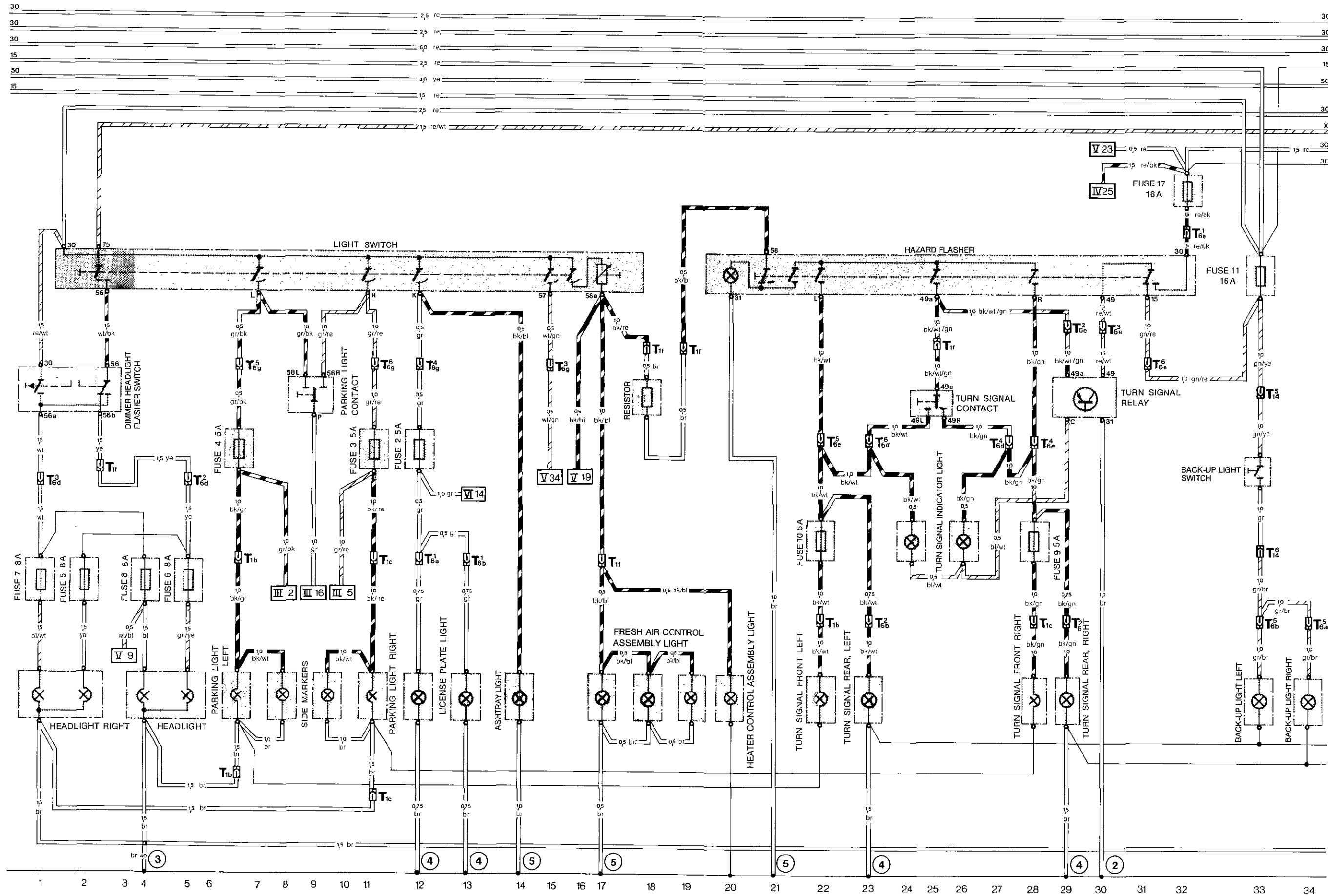
HEATER VENTILATOR

IGNITION

Current Flow Diagram Type 911 SC USA Model 82, Part II

HEADLIGHT, FRONT TURN SIGNAL,
HAZARD FLASHER

Current Flow Diagram Type 911 SC USA, Model 82, Part II



Current Flow Diagram Type 911 SC USA Model 82, Part III

REAR LIGHTS, BRAKE LIGHTS

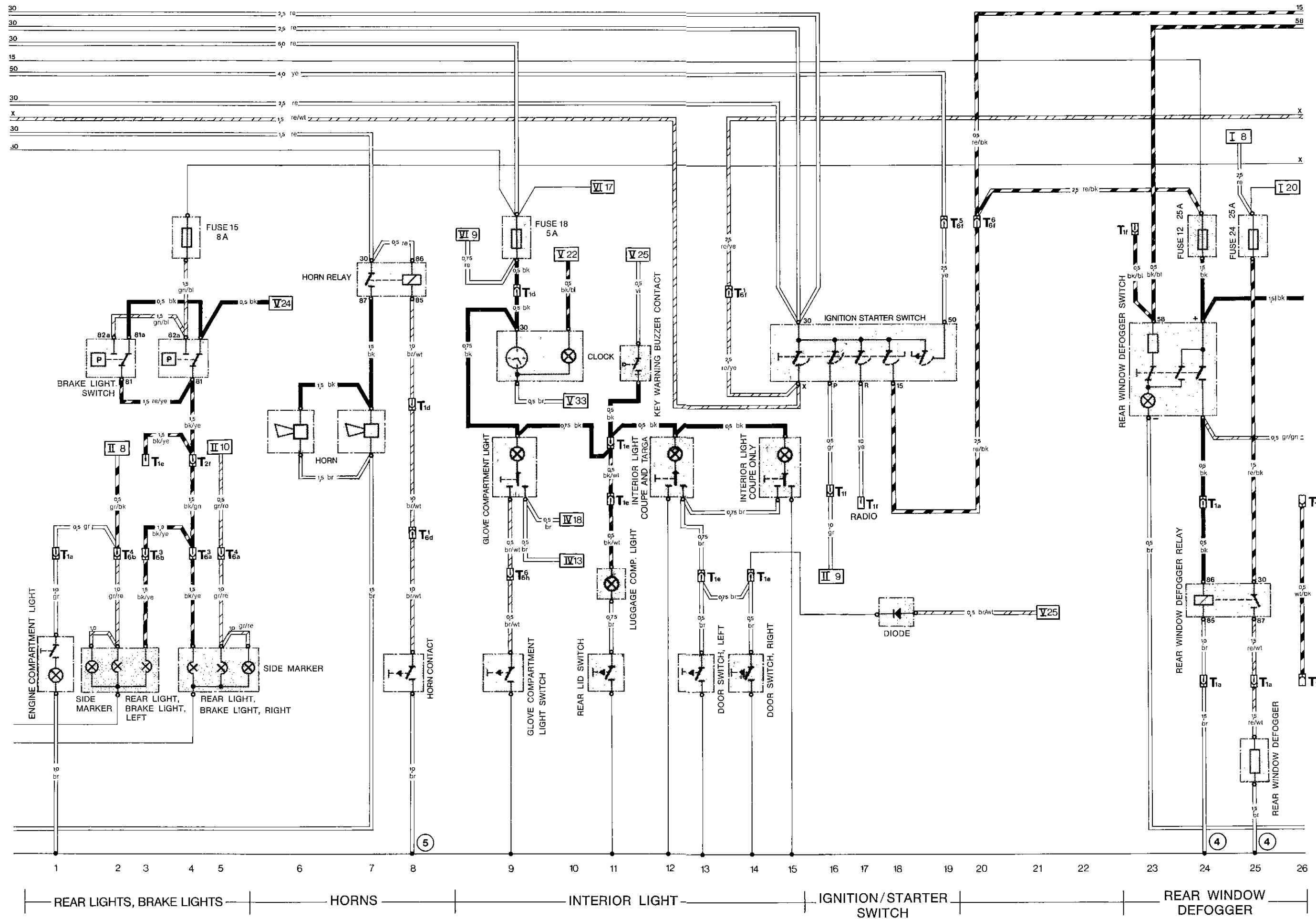
HORNS

INTERIOR LIGHT

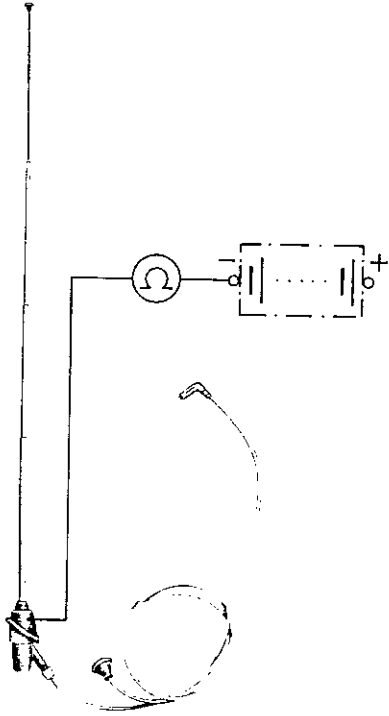
IGNITION/STARTER SWITCH

REAR WINDOW DEFOGGER

Current Flow Diagram Type 911 SC USA, Model 82, Part III

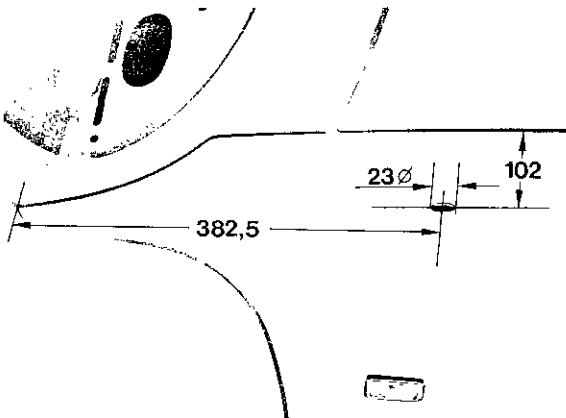


When installing antenna make sure there is perfect ground contact between base of antenna and fender.

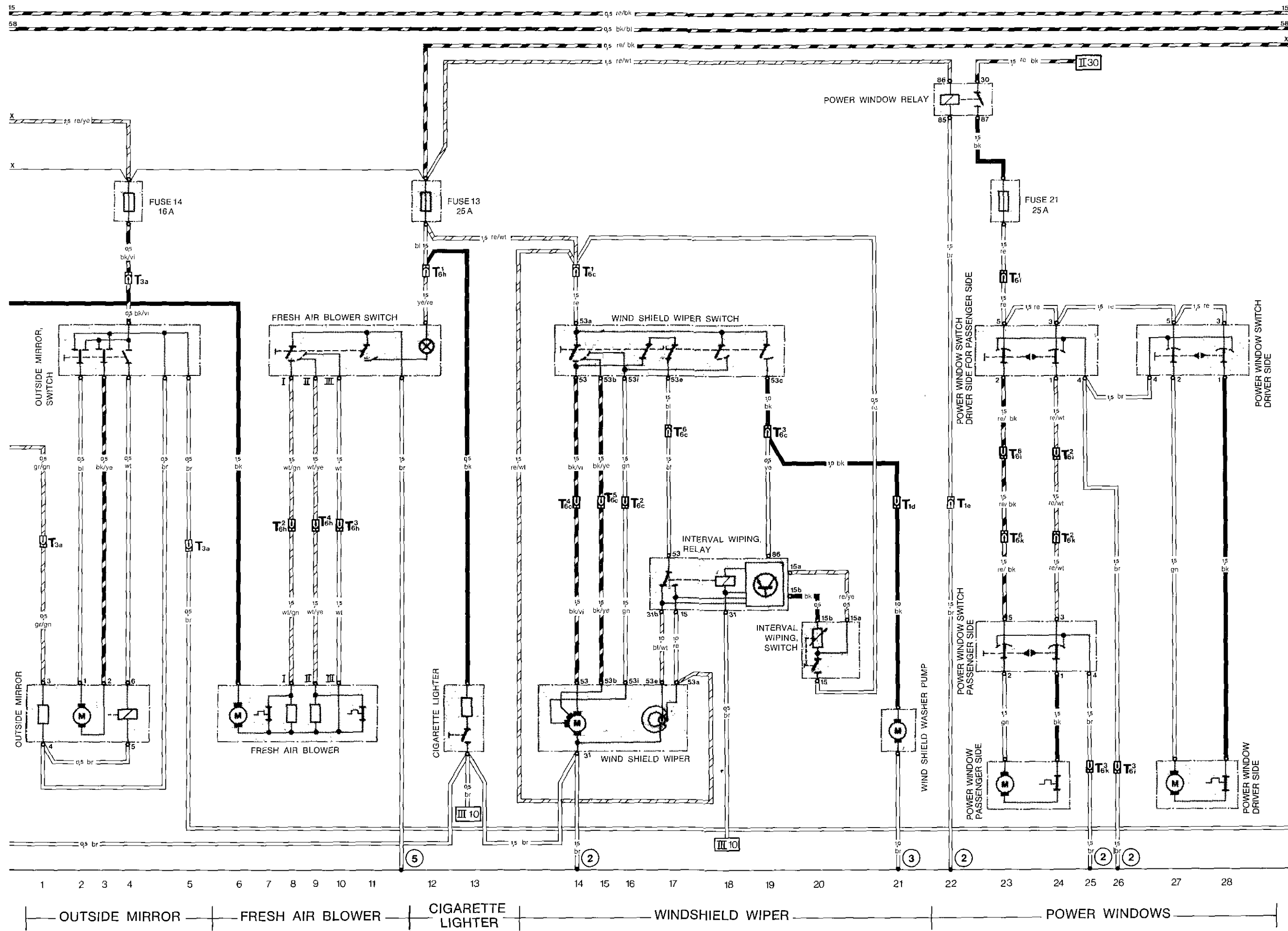


Base ground to battery negative pole = 0 ohm.

Installed distance for automatic antenna.



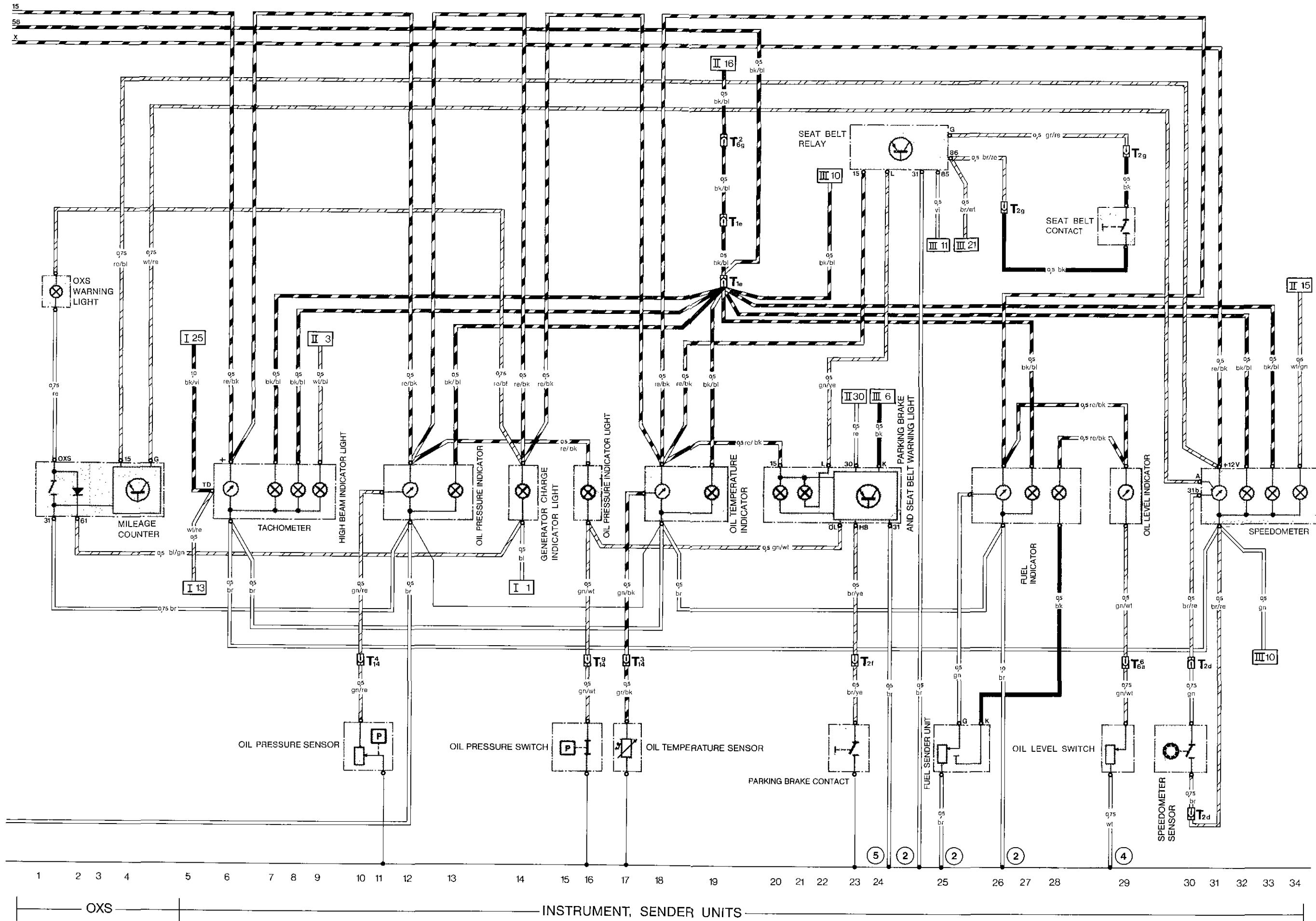
Current Flow Diagram Type 911 SC USA, Model 82, Part IV



Current Flow Diagram Type 911 SC USA Model 82, Part V

OXYGEN SENSOR SYSTEM
INSTRUMENT, SENDER UNITS

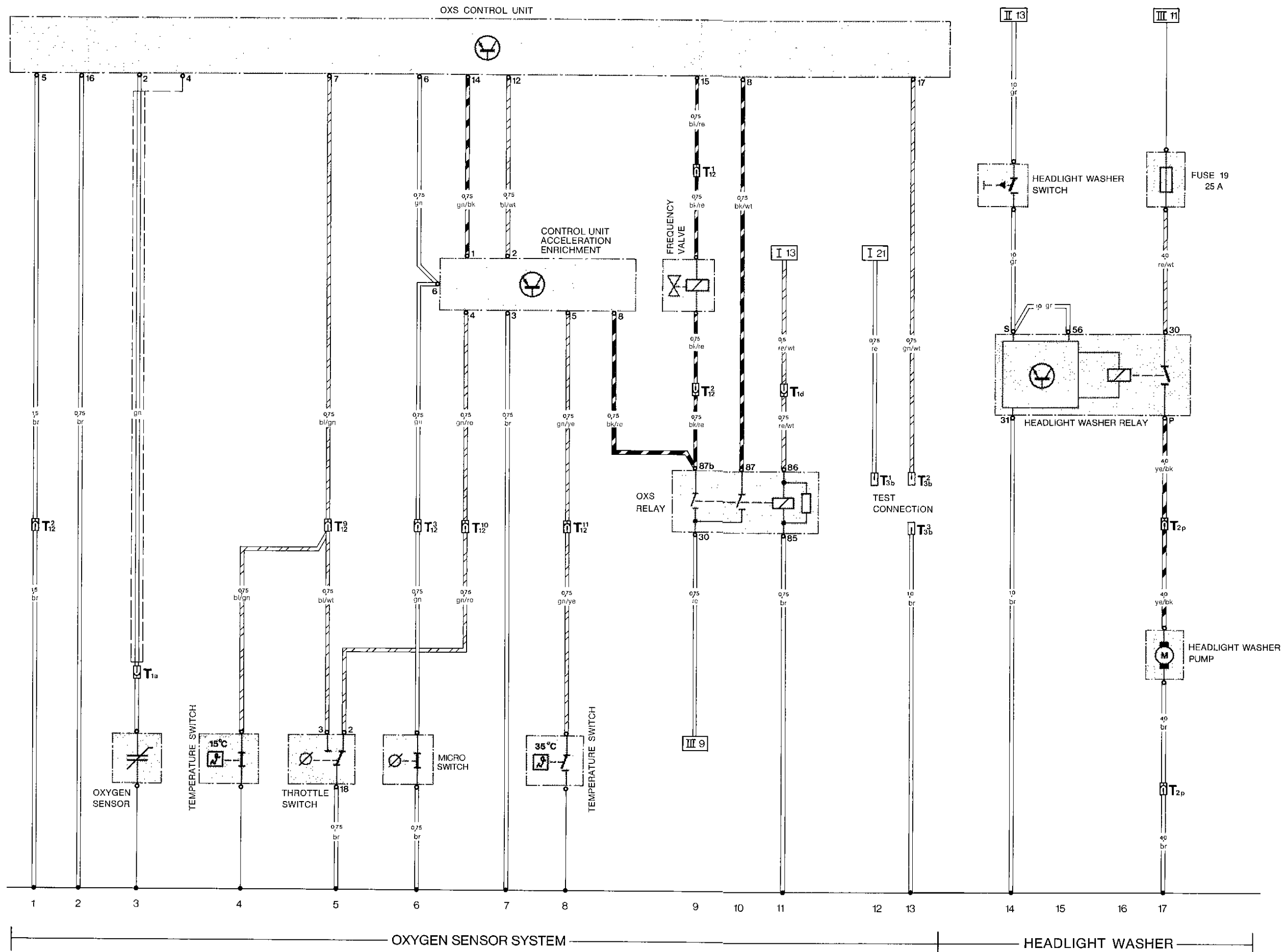
Current Flow Diagram Type 911 SC USA, Model 82, Part V



Current Flow Diagram Type 911 SC USA Model 82, Part VI

OXYGEN SENSOR SYSTEM
HEADLIGHT WASHER

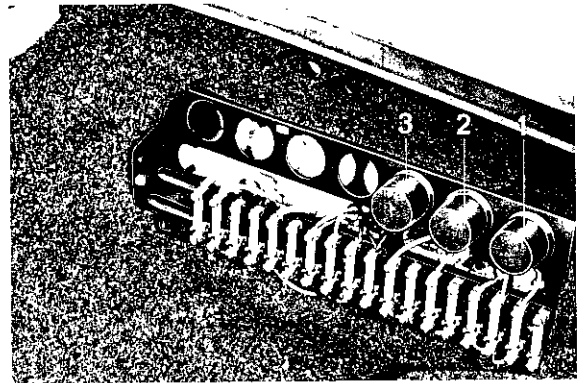
Current Flow Diagram Type 911 SC USA, Model 82, Part VI



LOCATION OF RELAYS AND FUSES IN THE VEHICLE EFFECTIVE
WITH 1974 MODELS

Beginning with 1974 models, the fuse box is located on the left side panel of the luggage compartment near the brake fluid reservoir. The plastic cover can be removed from the fuse box by lightly pressing its top downward.

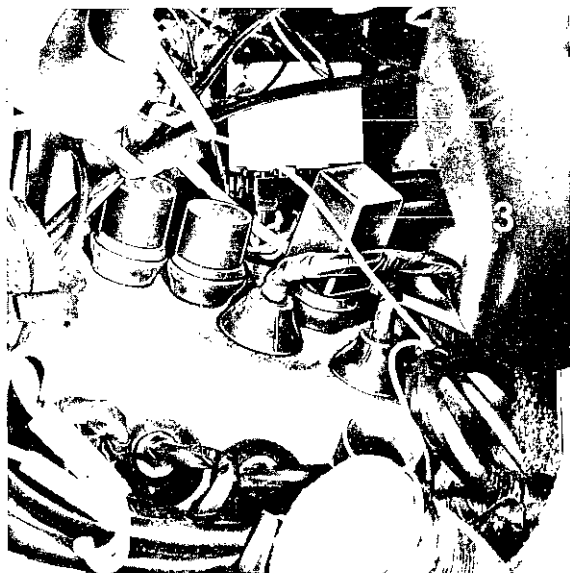
The fuse box contains 18 fuses and, depending on options, 1 to 3 standard relays.



- 1 - Relay for air conditioning
- 2 - Relay for fog lamps
- 3 - Relay for signal horn

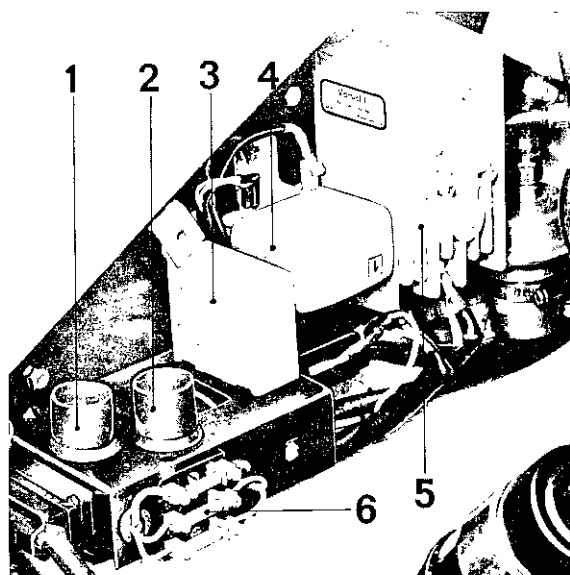
Mounting space for 4 additional relays has been provided for possible expansion of the electrical system.

A fuse listing is contained in the wiring diagrams. The fuses are identified in the diagrams in an ascending numerical order whereby the forward-most fuse in the vehicle bears the designation S 1.



Additional fuses and relays are located on the luggage compartment floor (left, as seen in direction of driving), as well as on the mounting plate in the engine compartment.

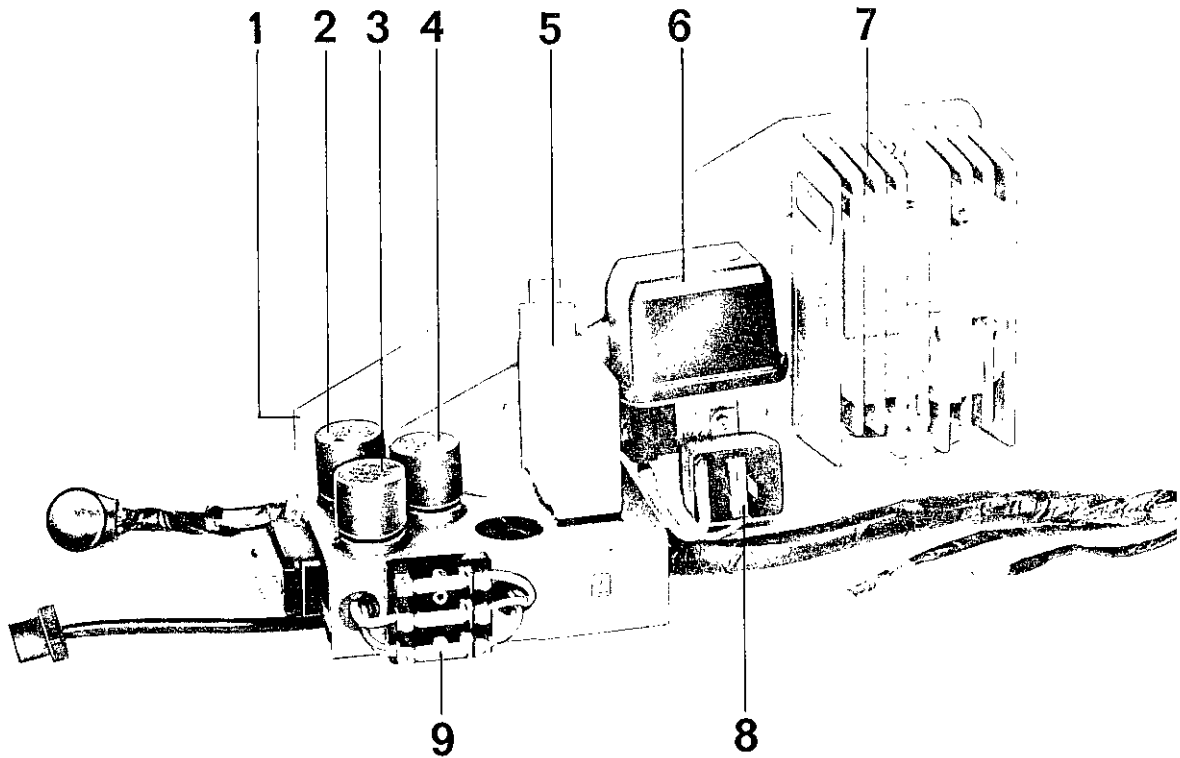
- 1 - Vacant
- 2 - Relay for heated windshield
- 3 - Relay for emergency flasher
- 4 - Logic-relay for safety belt warning system



- 1 - Relay for single stage heated rear window (not installed with two-stage version)
- 2 - Cold start relay
- 3 - Control relay for two-stage heated rear window (not installed with single stage version)
- 4 - Voltage regulator
- 5 - CDS trigger unit
- 6 - Rear fuse box

Vehicles not equipped with CIS (fuel injection) have the RPM-transducer installed adjacent to the two-stage heated rear window relay.

The 1975 911 S and Carrera models have a modified relay plate.



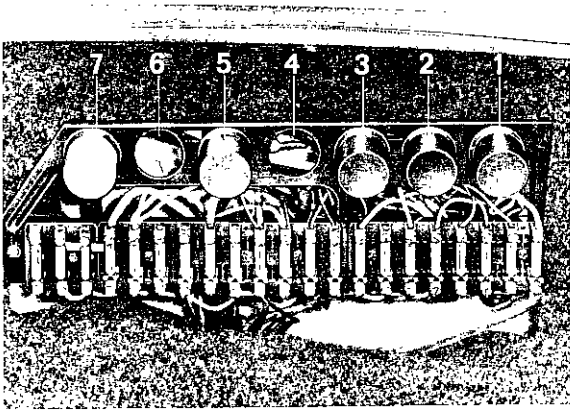
- 1 - Relay plate
- 2 - Standard relay for 1-stage rear window defogger (deleted for 2-stage heater)
- 3 - Standard relay for heater blower
- 4 - Standard relay for warm-up regulator
- 5 - Control relay for 2-stage rear window defogger (deleted for 1-stage heater)
- 6 - Voltage regulator
- 7 - Capacitor discharge ignition control unit
- 8 - Radio (interference) suppressor
- 9 - Rear fuse box (fuses S 22 thru S 24 of wiring diagram)

Note

The relay positions for the heater blower and warm-up regulator were interchanged in some vehicles.

LOCATION OF RELAYS AND FUSES - 1976 MODEL

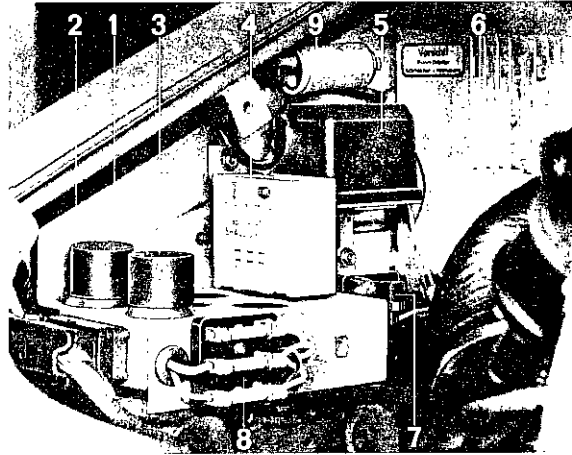
Depending on the car's equipment, the relay carrier in the fuse box is fitted with up to 5 relays.



- 1 - Air conditioner relay
- 2 - Foglight relay
- 3 - Horn relay
- 4 - Vacant
- 5 - Electric window winder relay
- 6 - Vacant
- 7 - Fuel pump relay

The fuel pump relay also controls the warm-up regulator and auxiliary air regulator. It has a red cover to distinguish it from the standard relays.

The fuse box has 21 fuses. The last fuse (S 21) as seen in the driving direction is for the fuel pump for 1976 models.



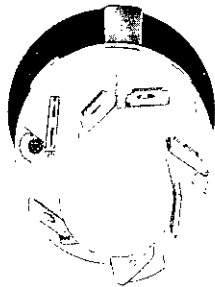
The warm-up regulator relay is omitted.

- 1 - Relay plate
- 2 - Relay for single stage rear window defogger (omitted for 2-stage defogger)
- 3 - Relay for heater blower
- 4 - Relay for 2-stage rear window defogger (omitted for single stage defogger).
- 5 - Voltage regulator
- 6 - CDI control unit
- 7 - Radio (interference) suppressor
- 8 - Rear fuse box (fuses S 22 thru S 24 of current flow diagram)
- 9 - Capacitor (only for Bosch CDI control unit) - omitted as from 1978 models -

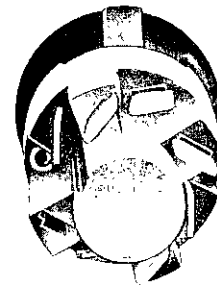
HAZARD WARNING FLASHER

Beginning with 1973 models, all Type 911 vehicles are equipped with a new hazard warning flasher.

The new flasher can be identified by its white plastic base; the old flasher was all black. The new flasher is additionally equipped with Terminal 58 which is needed.

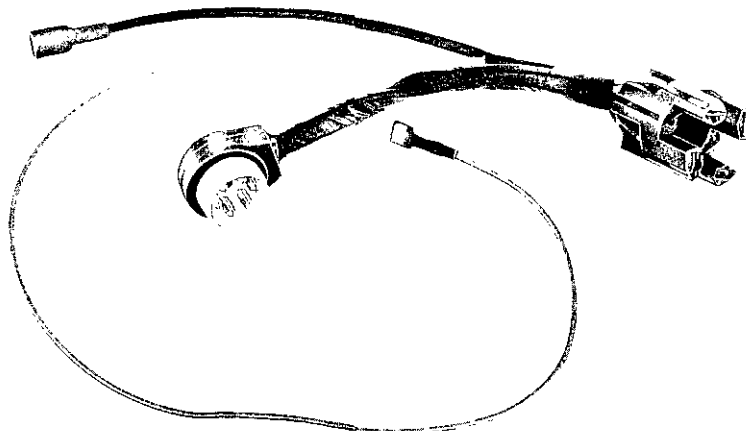


NEW



OLD

Since this modification required repositioning of the terminal tabs, it is not possible to install the new hazard warning flasher into vehicles of pre-1973 vintage unless the new wire loom (with white coupling) is used or the terminals are changed in the coupling of the old loom to match those in the new flasher. This would require removal of the brown wire, together with the flat terminal socket, from the plug-in connector (watch retention hook) and inserting it into the adjacent, formerly unused, receptacle.



ALTERNATOR - 1975 MODELS

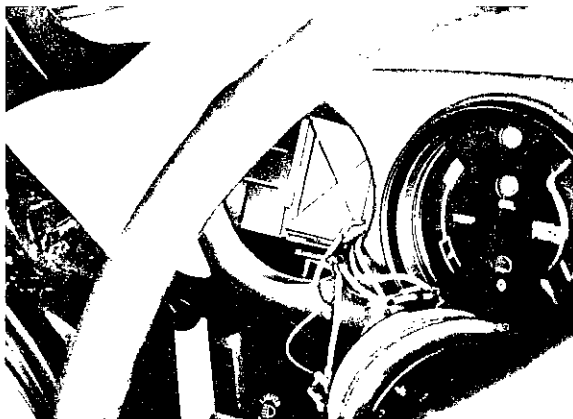
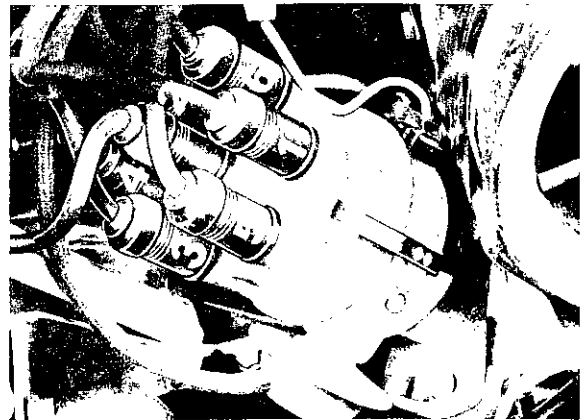
An 840 W alternator (same size as the 770 W alternator used previously) is installed as of the 1975 model year. The 840 W alternator will be replaced by one of 980 W later in the 1975 model year. This alternator will be 9.3 mm longer. The blower housing, already designed for this size, has a ring installed with the 840 W alternator to compensate for the 9.3 mm deeper hole in the blower housing. This ring is to be omitted when a 980 W alternator is service installed in such a vehicle.

A new voltage regulator is also introduced for the 1975 models. It is applicable to both new alternators (840 and 980 watts).

A modified hub extension is installed with the introduction of the 980 W Alternator. This part must also be installed if a 980 W alternator is service installed in a vehicle. If the former hub extension is left in the vehicle, there will be a large gap between it and the blower housing.

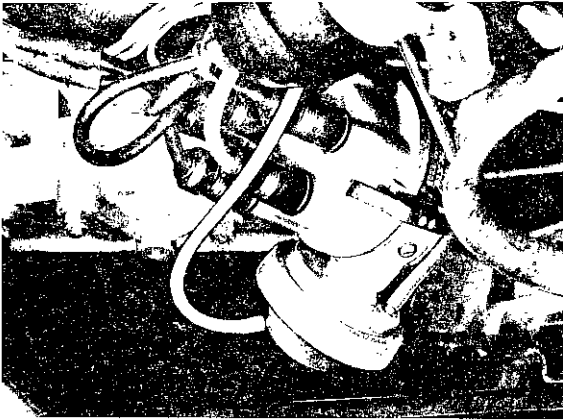
IGNITION SYSTEM MODIFICATIONS - 1978 MODELS

1. All 911 models are equipped with a breakerless capacitor discharge ignition system (similar to that of 930 Turbo).
2. CDI unit and distributor have been changed.
3. Ignition control: centrifugal advance and vacuum retard.
4. Speed control:
Electronic speed relay, cut-out of fuel pump at 6850 \pm 150 1/min.
5. Distributor turns counterclockwise. Consequently the breakerless CDI system cannot be serviced installed in earlier vehicles.



Changes to Ignition System - 1980 Model

The 911 SC is equipped with a distributor having a double vacuum unit for retard and advance ignition control.



STARTER

General Information

Beginning with 1972 models, starter power output is increased from 0.8 HP to 1.5 HP. Both starter types are basically of the same design.

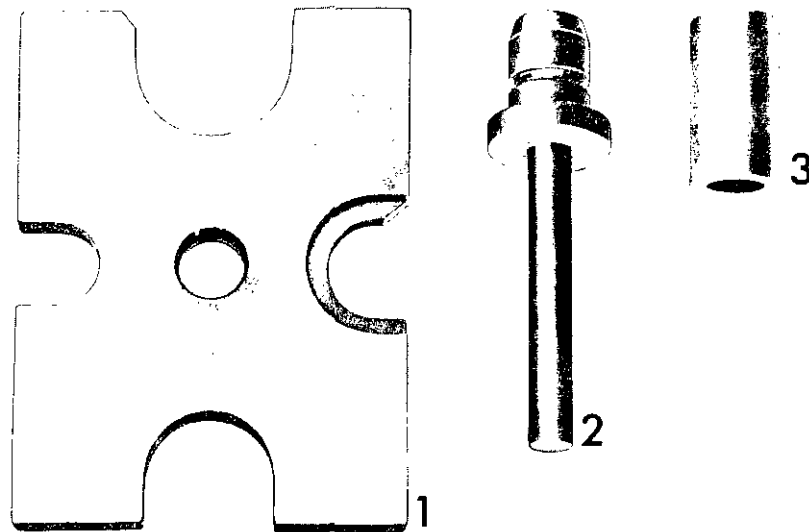
Specifications for GB 12 V 1.5 HP (BOSCH #: 0 001 312 100)

Voltage	12 V
Power rating	1.5 HP
No-load current draw @ 11.5 volts	50 - 80 amps
No-load speed	7300 - 9300 rpm
Stall torque current draw @ 6 volts	690 - 780 amps
Minimum voltage for solenoid draw-in	7.5 volts
Brush pressure	800 - 900 grams
Armature end-play	0.1 - 0.3 mm

Beginning with the end of April 1972, only vehicles equipped for countries in the northern hemisphere and Canada continue to be equipped with the 1.5 HP starter. All other Type 911 T, E and S vehicles will again be equipped with the 0.8 HP starter.

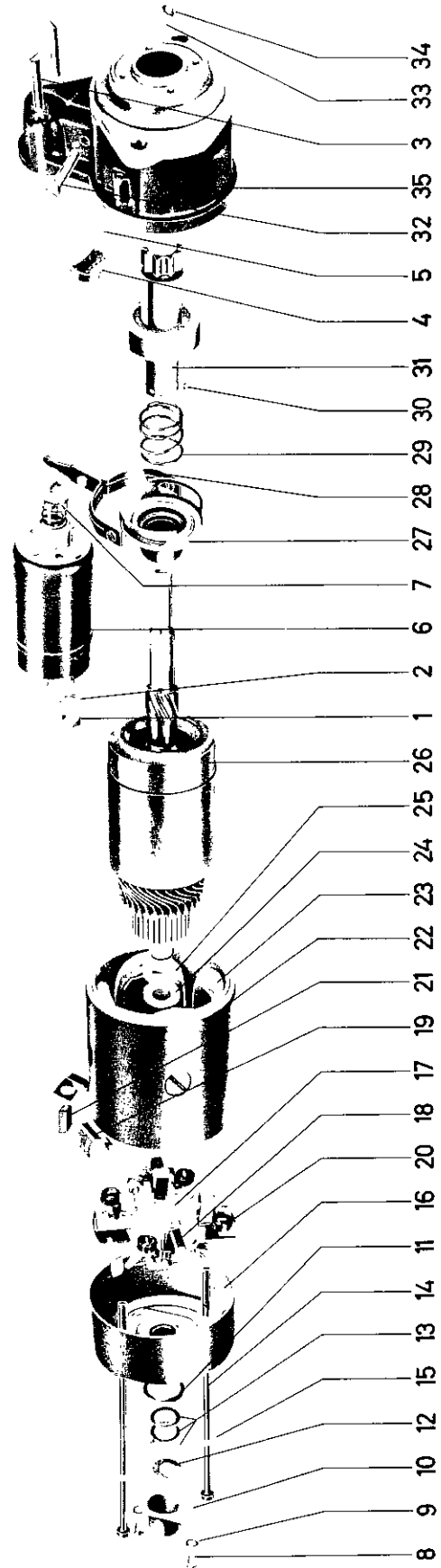
DISASSEMBLING AND ASSEMBLING STARTER

TOOLS



Nr.	Description	Special Tool	Remarks
1	Press plate	VW 401	
2	Press block	VW 411	
3	Press pipe	VW 418a	31.5 mm dia.

Disassembling and Assembling Starter



Nr.	Description	Qty	Note when		Special instructions see
			removing	installing	
1	Nut	1			
2	Lock washer	1			
3	Retaining screw	2			
4	Rubber block	1		Position rubber block tip in field frame recess.	
5	Disc	1			
6	Solenoid	1	Pull pinion engagement assembly forward.	Check solenoid current draw and free movement of core. Seal, lubricate lightly.	
7	Disengagement spring	1			
8	Fillister screw	2			
9	Washer	2			
10	Dust cap	1		Seal.	
11	O-ring	1	Replace if damaged.		
12	Retainer	1			
13	Shim		Note number of shims. Adjust armature endplay to 0.1 - 0.3 mm (0.004 - 0.012 in.)		
14	Bolt	2		Seal with paste.	
15	Washer	2			
16	Brush-end cover	1	Check bearing bushing, replace if necessary (remove with VW 401, VW 411, and VW 418a).	Ground-connecting surface to field frame must be free of paint or grease. Upon assembling, seal and lubricate lightly.	
17	Brush carrier plate	1		Check position of rotation detent for proper ground to field frame.	

Nr.	Description	Qty	Note when		Special instructions see
			removing	installing	
18	Negative brush	2	Check for cracks, dirt, and tight connection.	Brushes must move freely in holder. Replace in sets only.	
19	Positive brush				
20	Brush spring	4	Lift with wire hook.	Brush pressure ca. 800 - 900 grams (28-32 oz.).	
21	Rubber grommet	1		Check for proper sealing.	
22	Field frame	1		Check for proper ground between brush end cover and drive housing.	
23	Field coil			Check continuity. Replace coil if burned.	
24	Insulating washer	1		Locate against brush carrier plate.	
25	Thrust washer	1		Locate against commutator.	
26	Armature	1	Vertical runout 0.03 mm; minimum diameter 33.3 mm; if necessary, undercut segment insulation 0.8 mm deep.	Check for grounding. Check soldered points between segments and soldered tabs. Install armature together with actuating lever.	
27	Actuating sleeve	1			
28	Actuating lever	1		Replace if bent.	
29	Engagement spring	1		Coat heavily with Ft 2-v-3 grease or similar.	
30	Detent balls	10		Install packed in lithium grease.	
31	Overrun clutch	1			
32	Pivot bolt	1		Grease lightly.	
33	Lock washer	1			
34	Nut	1			
35	Drive housing	1		Seal joining surfaces between solenoid and drive housing, and field frame and drive housing. Coat lightly with oil.	

Instructions for Removal and Installation

Beginning with 1974 models, Type 911 and 911 S vehicles are equipped with the 0.8 HP starter motor. The 1.5 HP starter, standard in the 2.7 liter Carrera vehicles, can be installed on special order.

A battery-starter lead with a cross-section of 25 mm² is used in conjunction with the 0.8 HP starter motor; this lead has a cross-section of 35 mm² in vehicles equipped with the 1.5 HP starter motor. For easier identification, both battery leads are color-coded about 800 mm from the starter connector:

white band	-	25 mm ²
yellow band	-	35 mm ²

It is necessary to replace the battery-starter cable when replacing the 0.8 HP starter motor with the 1.5 HP unit in 1974 model and later vehicles.

The type of cable installed in pre-1974 vehicles must be determined in such cases, although no color coding will be found.

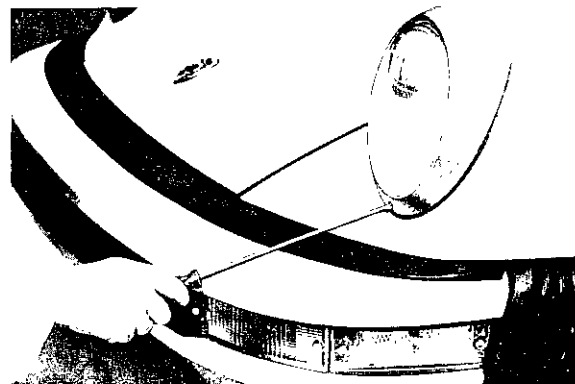
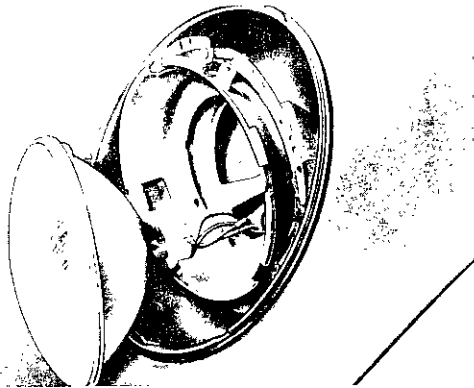
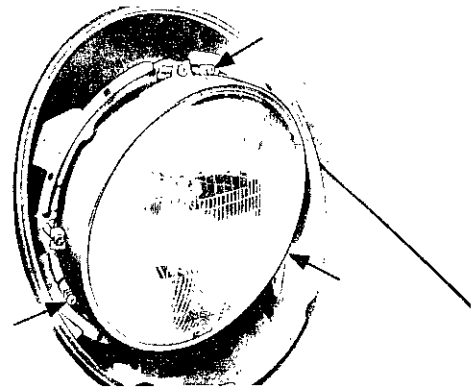
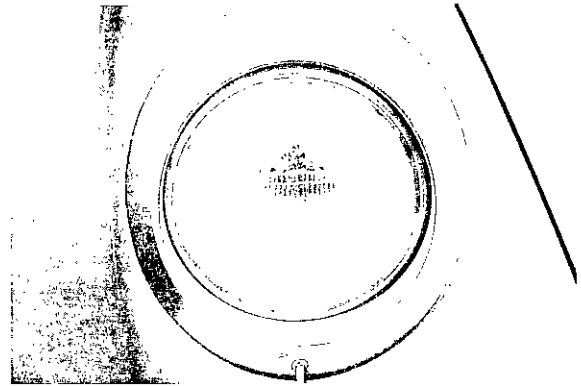
Standard Equipment	To end of 1971 models	From 1972 model to May 1972	From May 1972
Starter Power Rating	0.8 HP	1.5 HP	0.8 HP
Cross-Section of Battery-Starter Cable	25 mm ²	35 mm ²	35 mm ²

Excepted from the above are all vehicles equipped with the Sportomatic transmission, which were equipped exclusively with the 0.8 HP starters and 25 mm² cables; and Carrera 2.7 vehicles which were furnished only with the 1.5 HP starter and 35 mm² cable.

SEALED BEAM HEADLIGHTS

Replacing Sealed Beam

1. Unscrew retaining screw and remove lamp rim.
2. Remove only the 3 screws (arrows) which secure the lamp unit retaining ring, remove retaining ring and withdraw sealed beam unit.
3. Disconnect plug from rear of unit.
4. Attach plug to rear of new unit.
5. Insert sealed beam unit and retaining ring tighten hold-down-screws.
6. Install lamp rim and tighten retaining screw. It is best to first screw the Philips-headscrew in by a few turns and then to seat the lamp unit in its upper retainer. Afterwards tighten the Philips-headscrew.



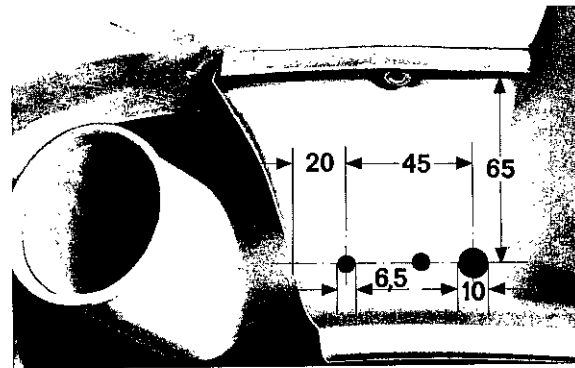
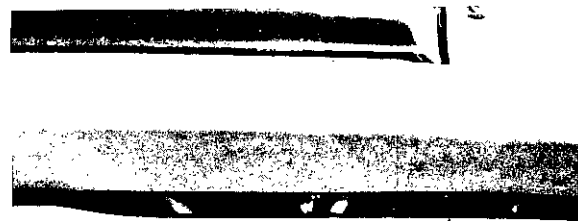
Beginning with the 1974 models, it is necessary to use the extra-long Philips screwdriver when loosening or tightening the headlamp retaining screw (Special Tool P 388).

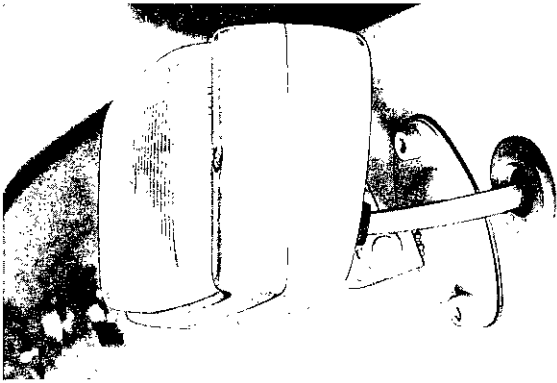
FOG LAMPS AND FOG TAIL LAMP

Subsequent Installation

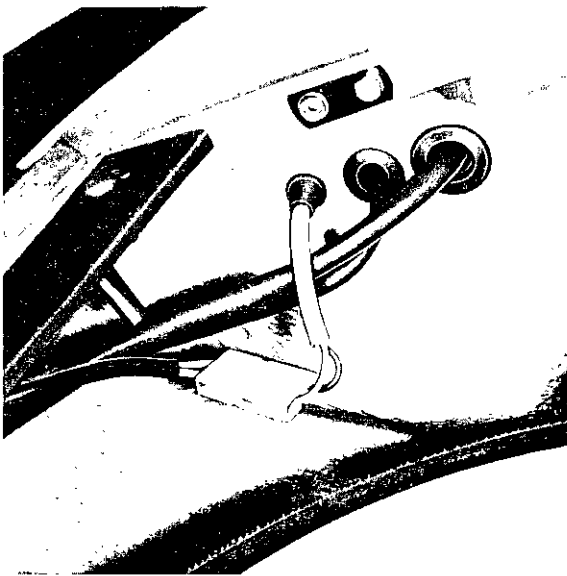
1. Disconnect battery ground strap.
2. Drill holes for lamp mounting and rubber grommets in front and rear bumper skirts. Make sure that the hole arrangement is made exactly as in the illustration for each of the two fog lamps.

(Dimensions are in mm)





3. Install the outer and inner fog lamp mounting plates. The plate with the larger bulge is mounted outside, together with the rubber gasket. Use two Allen-head, M 6 x 15 bolts with washers and lock washers on each lamp unit. Place a toothed washer between the lamp bracket and lamp mounting plate. Fasten the lamp to the mounting plates with a lock ring and M 10 nut.

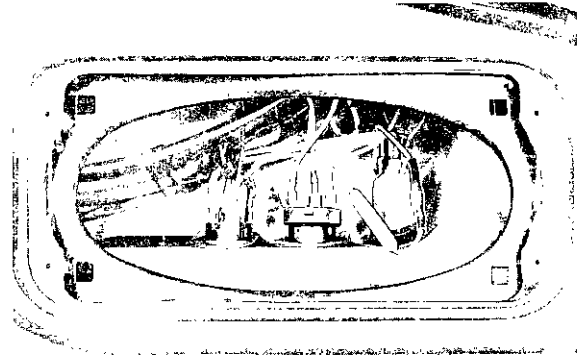


4. Thread the electrical wire through the bumper skirt and the already present holes in the wheelhouse into the luggage compartment, then press the grommets into place. The windshield washer reservoir must be removed for this operation (see 4.4-1/1).

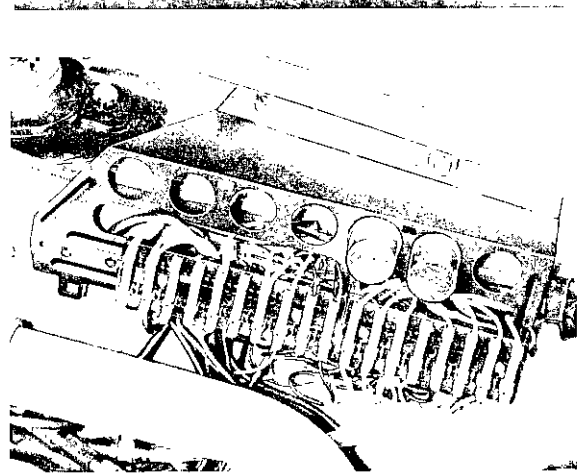
5. Remove loudspeaker cover and loudspeaker. This fog lamp switch should be installed between the rear window defroster switch and the cigarette lighter. A hole of 20 mm dia. has to be cut in the instrument panel cover; the holes are already made in the instrument panel and luggage compartment pan. Mark center of the hole by pushing a pin through the back of the instrument panel cover. Cut the hole by using a compass for marking and then carefully cutting the cover with a knife, or by using an appropriate rotary cutter and cutting the cover to the sheetmetal base.

Vehicles manufactured to U.S. specifications are furnished with the hole already made; it is covered with a plug.

Remove plug from luggage compartment pan and install a grommet in its place, or else cut a hole in the plug. Insert switch assembly from the rear, fasten with ring nut, and screw the knob in.



6. Remove luggage compartment lining and detach fuse box. Install the wires in such way that the two two-pole connectors will be located adjacent to the fog lamp wires. Fasten the wires along the front cross panel with the metal tabs already there. The relay switch socket should be pushed in from the front and the relay switch then plugged into it. The wires are then pushed along the luggage compartment floor to the fog lamp switch. The speedometer should be removed during this installation. Make sure that the wire does not touch the windshield wiper drive components.



7. Wires leading from the fog lamps should connect brown with black, and white/yellow with blue. The brown ground wire should be connected to the ground bolt in the cross panel near the battery.

Connect wires to fuse box as follows:

red wire to	Fuse # 17 top
grey wire to	Fuse # 2 bottom
white wire to	Fuse # 8 top
white/green wire to	Fuse # 1 top
both white/yellow wires to	Fuse # 1 bottom

Refasten fuse box and replace luggage compartment lining.

NOTE:

In vehicles manufactured to U.S. specifications, the connections differ as follows:

grey wire to	Fuse # 6 bottom
white wire to	Ground (lengthen the wire)

To preclude mistakes, note that the fuses are numbered 1 thru 18 (in vehicles equipped with air conditioning the numbers go thru 23), starting in front in the direction of travel. The fuse number code is also used in the wiring diagram.

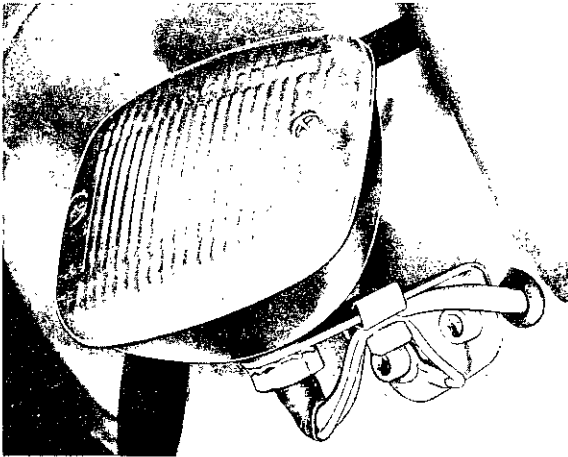
The wires are connected to the switch as follows:

blue/white wire to Terminal N
grey wire to Terminal 58

A white/green wire is already installed in the vehicle; it is accessible through the loud-speaker cutout and can be found taped to the wire loom located there. Remove the tape and connect the wire to Terminal NR. The negative (-) terminal at the switch should be connected to the ground at the cigarette lighter through a resistor of 100 ohms.

NOTE:

If only the fog lamps, or one fog tail lamp is installed, a simple push-pull switch is used instead of the pull-turn switch. In addition, the resistor in the ground wire connecting the switch and the cigarette lighter is not used.



8. Unfasten wire attached to the rear part of the left tail lamp assembly. Push rubber grommet into the 10 mm hole in the bumper skirt and lead the wire from inside out. Attach fog tail lamp bracket to the bumper skirt with 2 Allen-head bolts M 6 x 15, lock washers and washers.

Attach a connector to the white cable and fasten it to the skirt with one of the two bolts. Lead the white/green wire through the grommet into the lamp unit and connect. Install wedge-base bulb (18 watts) and close lamp unit. The lamp retaining nut should be tightened firmly for proper ground connection.

Attach wire to lamp bracket with a wire clip.

9. Reconnect battery and check lamp operation. When the switch knob is pulled out, the fog lamps are switched on and the yellow control light glows with reduced brightness. When the knob is turned, the fog tail lamp is switched on and the yellow control light glows with full intensity.

10. Adjusting Lamps

An optical lamp adjuster should be used for adjusting the fog lamps. When the driver's seat is occupied, the upper bright/dark intensity line must be on the marker line, extending horizontally over the entire screen.

The lens of the fog tail lamp must be positioned vertically to the road and at a right angle to the longitudinal vehicle axis.

ADJUSTMENT INSTRUCTIONS

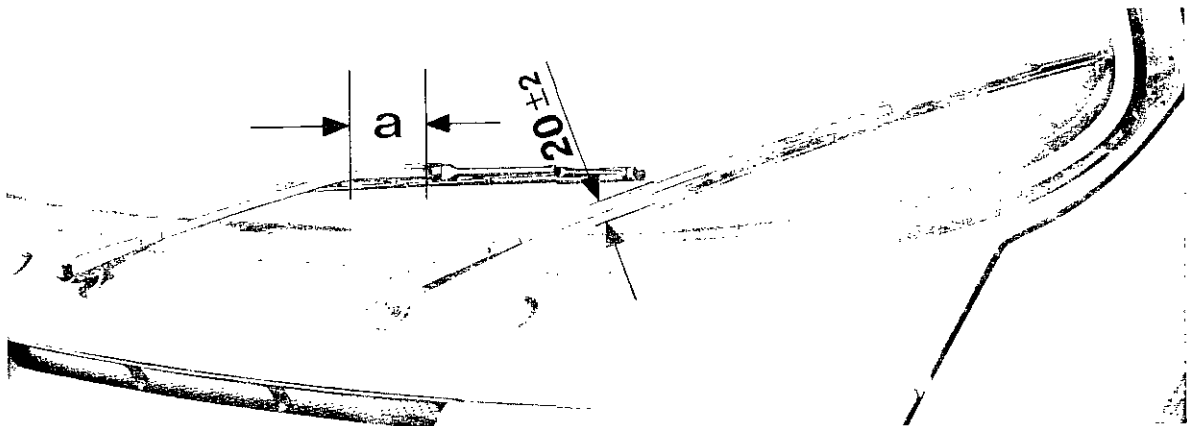
Beginning with February 1972 and the below given chassis serial numbers, all type 911 vehicles are equipped with modified windshield wiper arms:

Type	VIN
911 T Coupe	911 250 1075
911 T Targa	911 251 0905
911 E Coupe	911 220 0529
911 E Targa	911 221 0419
911 S Coupe	911 230 0818
911 S Targa	911 231 0482

When adjusting the new windshield wiper arms make sure that the outer (left) arm does not rest against the decorative strip, and the distance of 20 mm (25/32 in) is maintained between both arms.

Check that blades are positioned properly by operating the wipers for a few strokes.

NOTE: When operating the windshield wipers, make sure the windshield is wet.



The difference for dimension a between the old and new wiper arms is:

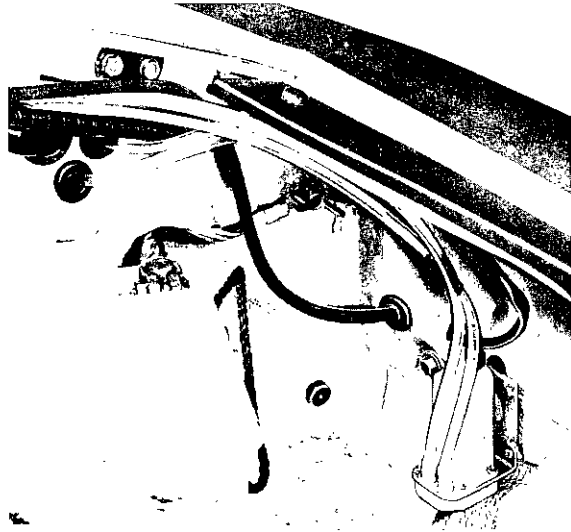
- a - approx. 35 mm (1 3/8 in) (old)
- a - approx. 60 mm (2 3/8 in) (new)

WINDSHIELD WASHER PUMP

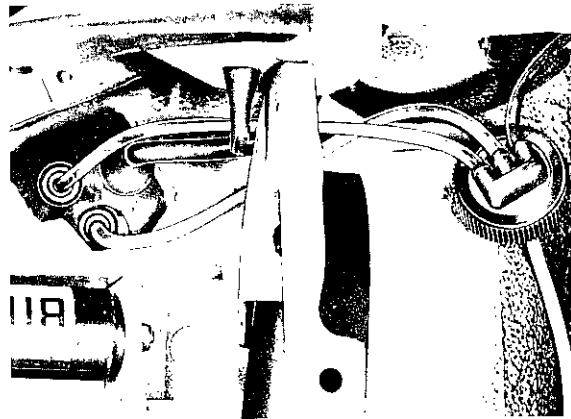
Removal and Installation

The windshield washer pump in 1974 model vehicles is located at the lock transverse panel near the battery.

Both electrical wires and water hoses must be detached prior to removal of the pump.



When connecting the wires, it is necessary to note the proper polarity, that is, the brown wire must be connected to the terminal marked (-). The nipple marked D is connected to the hose leading to the spray nozzles through the T-joint. A hose leads from each (the connection B and a connection in the T-joint) to the threaded cap in the windshield washer reservoir which, effective with 1974 models, is located under the left front fender. An additional connection in the reservoir cap is a vent hose which leads to the water filler neck within the tank filler compartment.

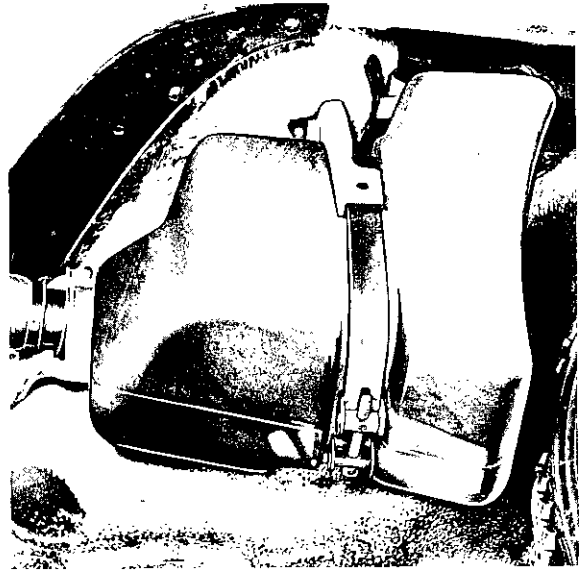


WATER RESERVOIR FOR WINDSHIELD WASHER SYSTEM

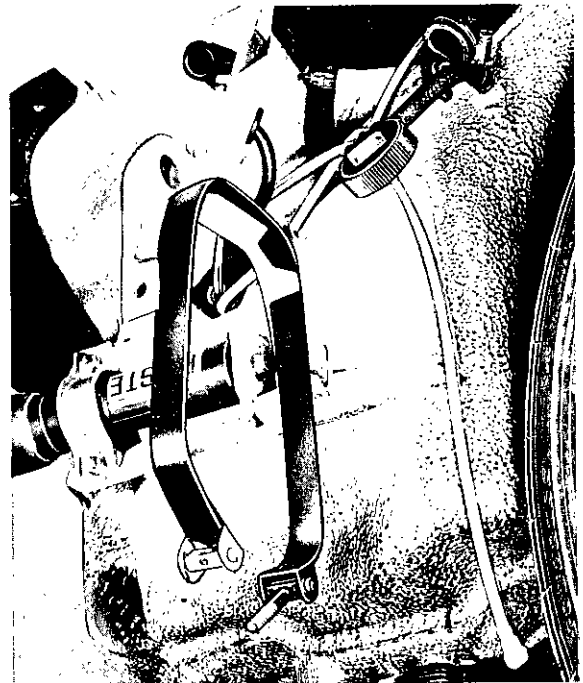
Removal and Installation

The left front wheel must be removed when removing the water reservoir. The bumper does not have to be removed.

The reservoir is attached to the vehicle by means of a strap which is bolted to the headlamp compartment. The reservoir can be taken out rearward after the attachments are unfastened, the filler hose detached, and the threaded cap removed.



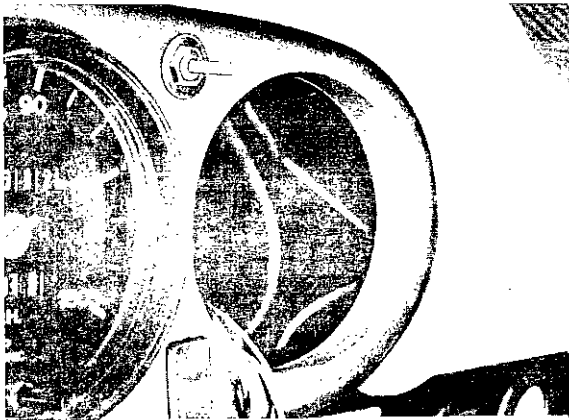
Make sure during installation that the mounting strap is seated properly in the support bracket.



INTERMITTENT WINDSHIELD WIPER SWITCH

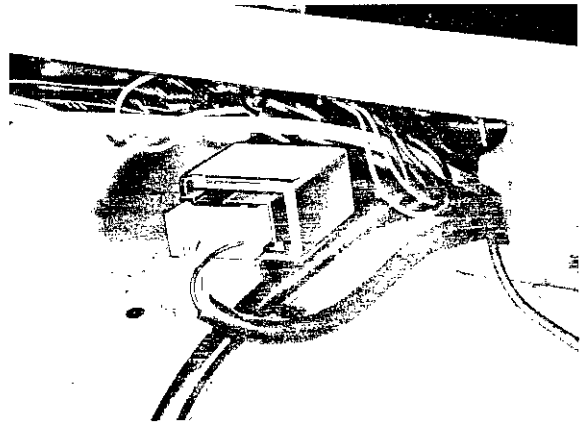
Removing and Installing Potentiometer

1. Disconnect battery ground strap.
2. Remove clock.
3. Pull off potentiometer knob, unscrew nut and take out potentiometer to front.



Removing and Installing Intermittent Relay

1. Remove blower housing.
2. Pull plug off of intermittent relay and unscrew mounting screws.



Note

The potentiometer on cars prior to 1976 model is located next to steering column on right side.

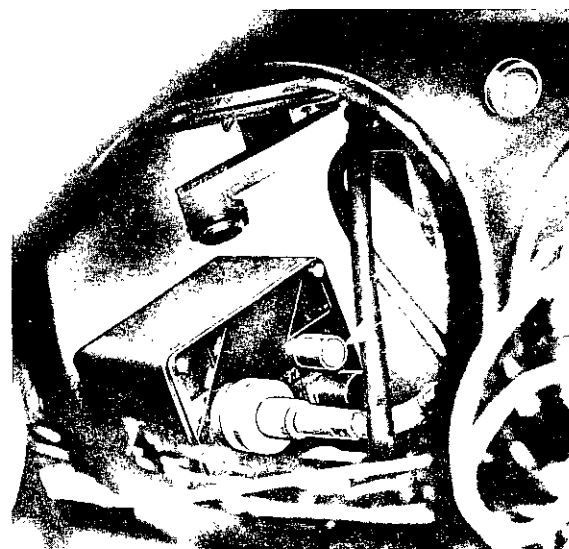
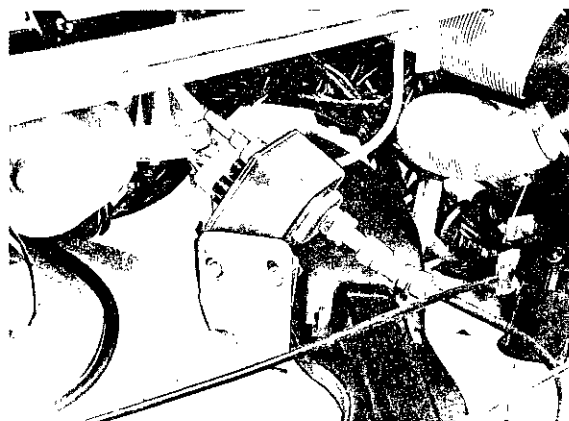
Exhaust gas recirculation control

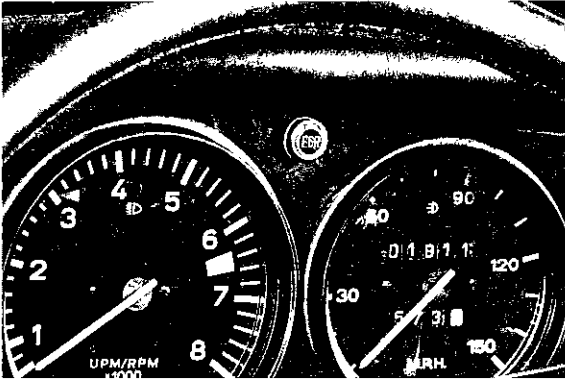
All 1975 models with California equipment have exhaust gas recirculation (EGR) to reduce the pollution from exhaust gases.

Parts of the EGR system are subject to a certain amount of wear and have to be inspected and/or replaced at certain intervals (see Group 1).

An elapsed mileage odometer is installed beneath the blower housing to control the inspection intervals. The EGR indicator lamp will light up after 30,000 miles have been driven. After inspection of the EGR system, the elapsed mileage odometer must be reset to zero as follows:

1. Disconnect battery ground strap.
2. Remove tachometer.
3. Using an appropriate tool (small screwdriver, punch or something similar) press the pin on the elapsed mileage odometer housing in to the stop.

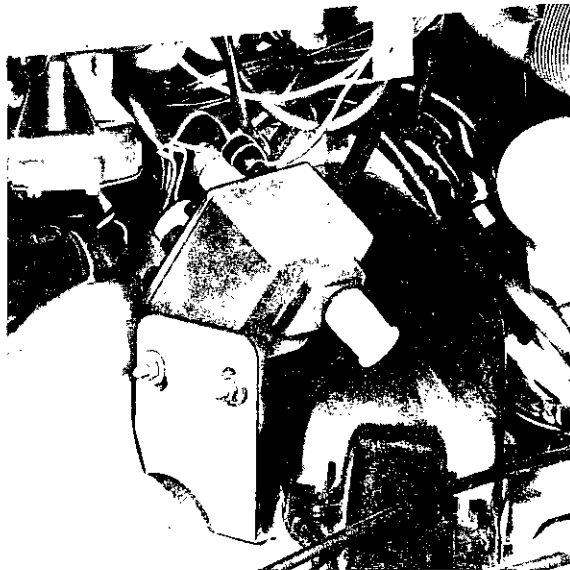
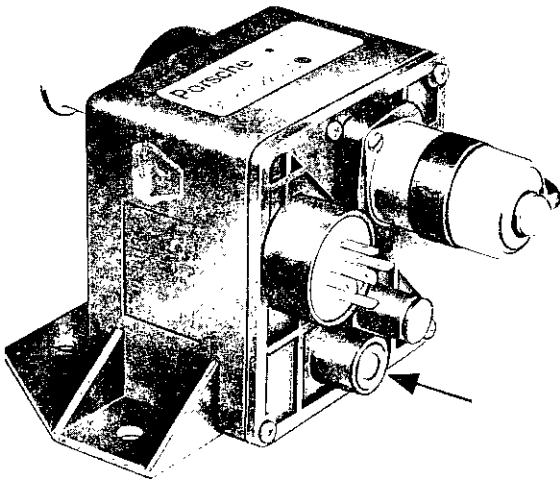




The EGR indicator lamp comes on when the ignition is turned on and goes out when the engine starts. This wiring hookup provides a method of checking the indicator lamp before each start.

An altered elapsed mileage odometer is installed in all models in conjunction with the electronic speedometer, effective with the 1976 model.

Mounting, removal and installation of this switch is identical to that of the former elapsed mileage odometer. This also applies when resetting to zero.



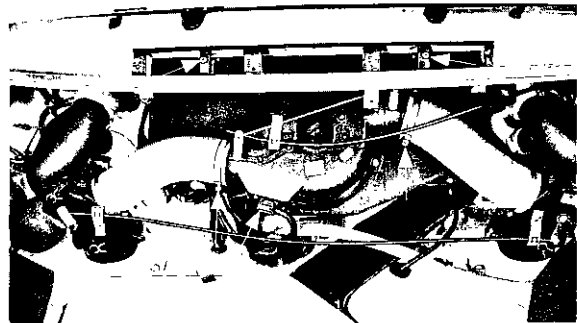
REMOVING AND INSTALLING SPEEDOMETER CABLE

Note

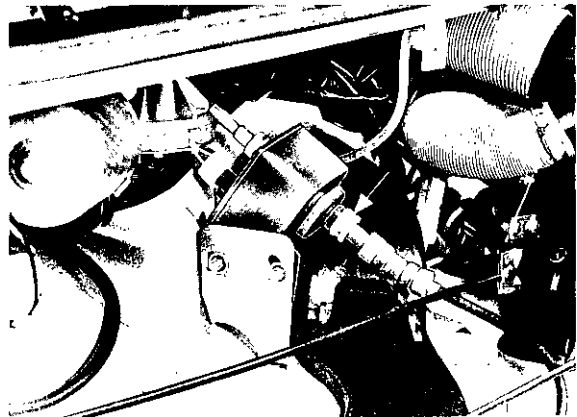
The blower housing of California equipped cars has to be removed to be able to detach the speedometer cable at the EGR elapsed mileage odometer switch. Pull the speedometer out of the dashboard of all other models to detach the speedometer cable.

Removing

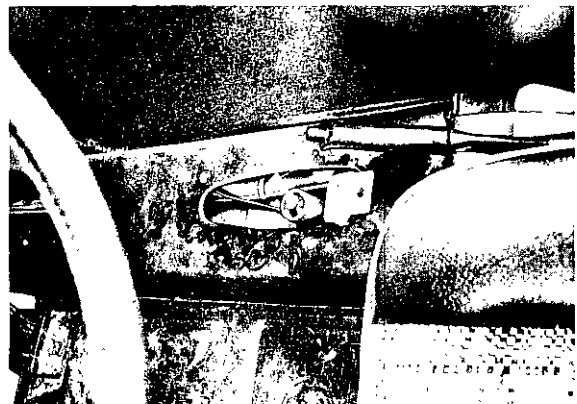
1. Remove blower housing. Do not lock operating cables.

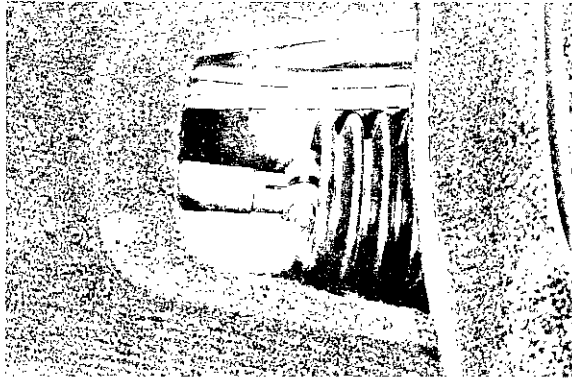


2. Detach speedometer cable at EGR elapsed mileage odometer switch. Tie a string to end of cable.



3. Remove tunnel cover in car. Remove gearshift lever housing. Take off plastic strap.





4. Remove cover at back of tunnel.
Take off plastic strap.



5. Disconnect speedometer cable beneath car at transmission.
6. Pull speedometer cable toward rear out of car.

Installing

1. Tie string to speedometer cable and pull in cable toward front.
2. Secure speedometer cable to car tunnel with 2 plastic straps.

Caution

Make sure that cable is installed without kinks or bends.
Install seal at transmission.

ELECTRONIC SPEEDOMETER

Checking Electronic Speedometer Sensor

Remove tunnel cover in front of emergency seats. Disconnect the flat male plugs at the connector in the tunnel and connect a test buzzer to the wires leading back. Lift car at rear axle and turn right rear wheel by hand. Lock left rear wheel. The buzzer must sound off 8 times for each two revolutions of the wheel. If not, replace the sensor.

The left rear wheel need not be locked, if a car is equipped with a limited slip differential. In this case the buzzer sounds off 8 times for each one revolution.

Checking Electronic Speedometer

1. Connect and disconnect very quickly the two wires in the tunnel that lead forward. A distributor can be applied to help, if both wires are connected to terminal 1 and the distributor housing, and the distributor shaft is turned by hand as quickly as possible. Remove the speedometer if there is no deflection of the needle. Check all wire connections to the speedometer and replace the speedometer if necessary.

Turn on the ignition for this test.

2. The operation of the electronic speedometer of Type 911 and Turbo Carrera Models can also be checked as follows:

Disconnect wire from terminal TD of tachometer and instead connect the wire from terminal 31 b on the speedometer.

The speedometer must now show a reading according to the engine speed. If there is no needle deflection, the speedometer must be replaced.

Relation between engine speed and speedometer reading:

$$\text{Speedometer reading (MPH)} = \frac{\text{engine speed (rpm)} \times 180}{\text{calibration number}}$$

Example:

$$55 \text{ MPH} = \frac{2000 \text{ rpm} \times 180}{6524 \text{ pulses/mile}}$$

The calibration number is embossed on speedometer housing.

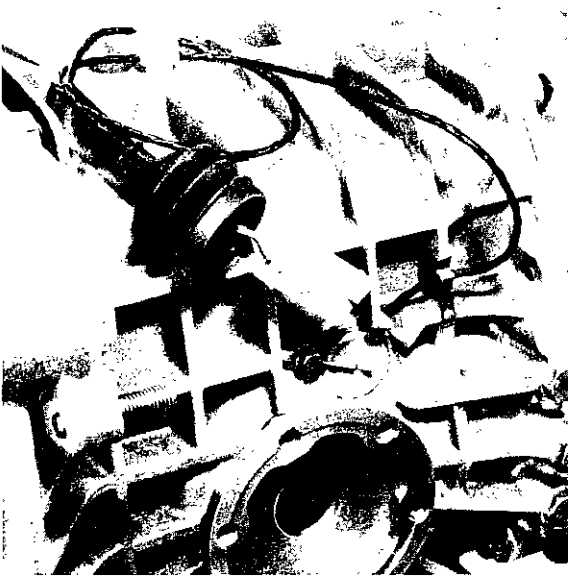
CAUTION

The testing method at point 2 can no longer be used on speedometers after manufacturing date 1/77.

There is danger of damaging an electronic component in the speedometer.

Removing and Installing Electronic Speedometer Sensor

1. Remove right rear wheel.



2. Remove hex head screw and take holder off of sensor.
3. Take sensor wires out of holders and pull sensor out of transmission case.
4. Separate connector in tunnel and pull out sensor wire toward rear.

Note

The polarity need not be observed when connecting the sensor wire.

SAFETY BELT WARNING SYSTEM

Beginning with January 1972, all USA export vehicles are equipped with the safety belt warning system required by law. This system consists of 2 inertia reel safety belts with automatic locking retractors, a control lamp with the inscription "Fasten Seat Belt", a seat contact switch built into the passenger seat, a new parking brake switch, and a modified buzzer.

The three-pole buzzer can still be used as replacement for the formerly used two-pole buzzer in vehicles not equipped with the safety belt warning system.

An electric switch is built into each safety belt buckle. The switch is closed when the belts are not worn, providing ground for Terminal G of the control lamp. If Terminal 50a does not have a ground connection through the handbrake switch at the same time, a transistor incorporated in the control lamp becomes conductive. Since the buzzer Terminal 86 is energized at all times, and Terminal 15 of the control lamp is energized when the ignition is on, the control lamp will light up and the buzzer sound off.

When the belt is put on, the contact in the belt buckle opens and Terminal G ceases to have a ground connection.

The passenger seat is equipped with a seat contact which breaks the ground connection from the belt buckle on passenger side to Terminal G in the control lamp when the seat is unoccupied.

The reminder to wear seat belts is given by the control lamp with the inscription "Fasten Seat Belt" and the simultaneously audible sound of the buzzer whenever

the ignition is switched on,
the driver (and passenger) have not put the seat belts on,
the parking brake is fully released.

The former function of the buzzer remains unchanged.

SEAT BELT WARNING SYSTEM 1974 MODELS

The seat belt warning system has been changed effective with the 1974 models.

The new system consists of 2 three-point seat belt assemblies with automatic locking retractors, a control lamp with the inscription FASTEN SEAT BELTS, a seat contact in each seat, and the so-called logic relay switch with an integrated buzzer. The formerly used separate buzzer is discontinued. Also, the control lamp circuit has been changed so that it cannot be used in cars of pre-1974 vintage.

The following steps must be performed to start the engine:

1. The engine can be started at any time when no load is placed on the seats (for instance, starting from the outside).
2. Whenever a load is placed on a seat, the seat belt must be buckled. This applies to both driver's and passenger's seats. It may become necessary to buckle the seat belt when a heavier piece of luggage is placed upon it. Since the action sequence of "Occupy Seat - Fasten Seat Belt" is monitored by the logic relay switch, the engine will not start if either the driver or passenger should fasten the seat belt prior to occupying the seat.
When the proper action sequence is not followed, the buzzer and the control lamp with the inscription FASTEN SEAT BELT are activated as soon as the ignition switch is turned on.
3. It is possible to restart the engine without fastening the seat belt if the restarting occurs within 2 ± 1 minutes of shutdown.

The acoustic and optical warning system will be activated whenever any of the following conditions occur when the engine is running:

1. When a load is placed on a seat without buckling the seat belt.
2. If the action sequence of "Occupy Seat - Fasten Seat Belt" was not followed in that order.
3. When the load is removed from a seat in which the belt is buckled for more than 10 seconds and is then placed back on it.

In all of the above cases the warning system can be activated only when the parking brake is in the off position. The warning condition can be cancelled by refastening the seat belts in proper sequence.

The buzzer integrated in the logic relay switch also is part of the ignition key warning system.



An improved interlock relay for the seat belt warning system was introduced around the middle of December 1973.

With the introduction of this relay, the warning system is only activated (engine running) if the seat belts are unfastened while the seats are occupied.

SEAT BELT WARNING SYSTEM FROM FEBRUARY 14, 1975

All models have a modified seat belt warning system as of February 24, 1975.

The belt contact switch on the passenger's side and both seat contact switches are omitted. A timer relay with a built-in buzzer replaces the interlock relay. The connection between the seat belt warning system and starter is omitted, i.e. the starter can be used any time.

"Fasten Seat Belt" warning light always lights up when the ignition is switched on and goes off in 4 to 8 seconds regardless if belts are worn or not. If the driver's belt is not worn a buzzer will also come on with the warning light. The passenger's belt has nothing to do with the warning system.

CONTROL ILLUMINATION

Beginning with the 1973 models the following controls are illuminated:

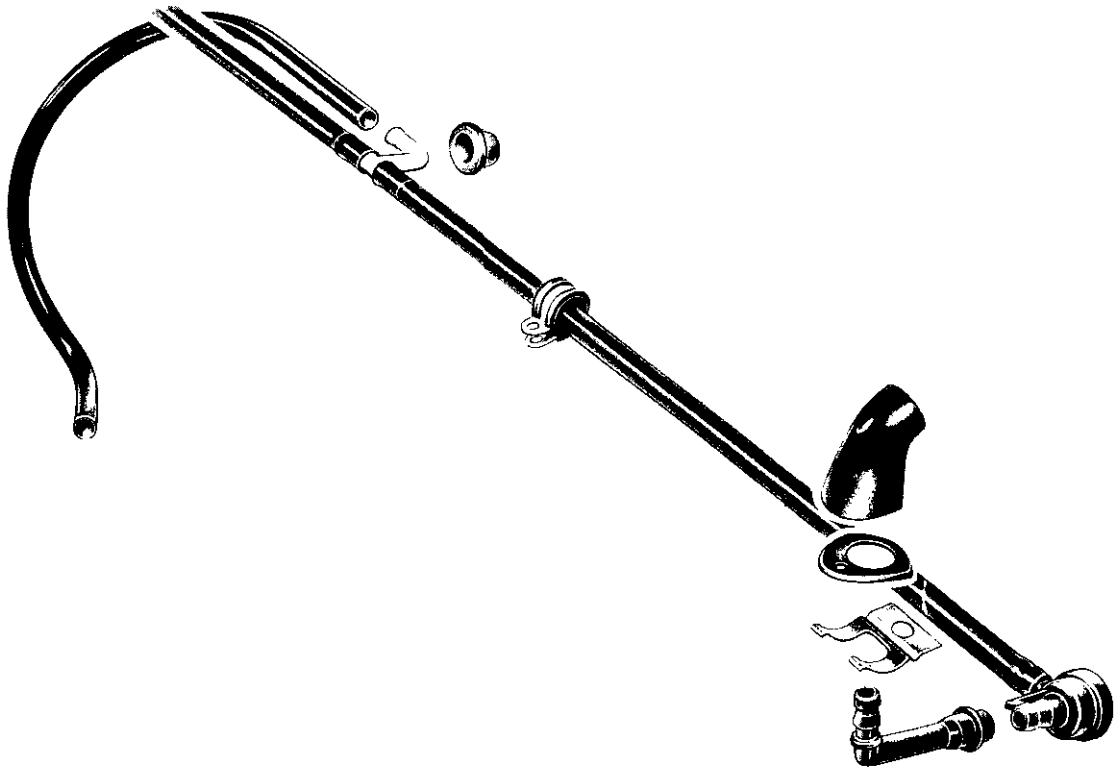
1. Heater control lever on the center tunnel.
2. Fan control switch on the instrument panel.
3. Hazard warning flasher control switch.

All lamps are connected to the instrument illumination circuit permitting dimming.

HEADLIGHT WASHERS

Depressing the switch in the instrument panel operates the water pump, which is bolted to the front hood lock panel. It is controlled by a relay located next to it. At a pressure of about 2.8 bar, a valve opens and a stream of high pressure water goes to the spray jets. The relay limits the washing phase to about 0.3 seconds. If this time is not sufficient to clean headlights, depress switch again.

The container (in front of the left front wheel) holds about 9 liters (2.2 US gal.) of fluid. It is also used to provide fluid for the windshield washer.

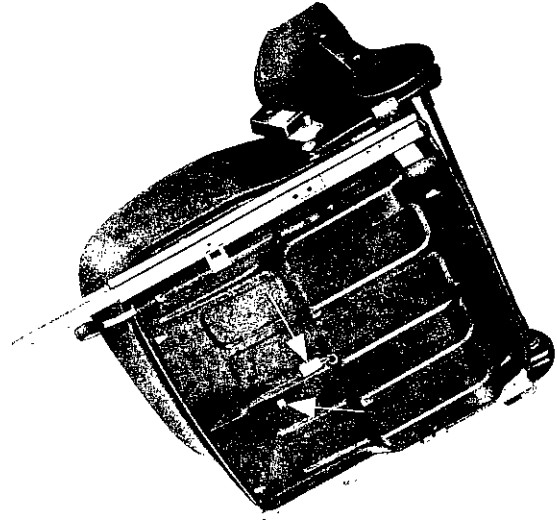


SAFETY BELT WARNING SYSTEM

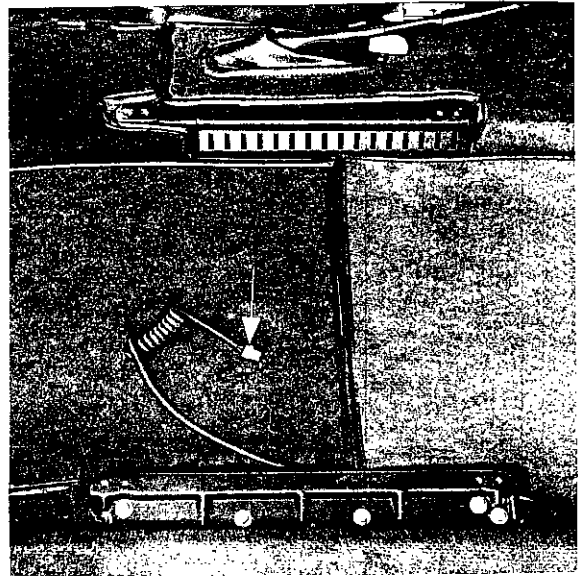
Removing and Installing Seat

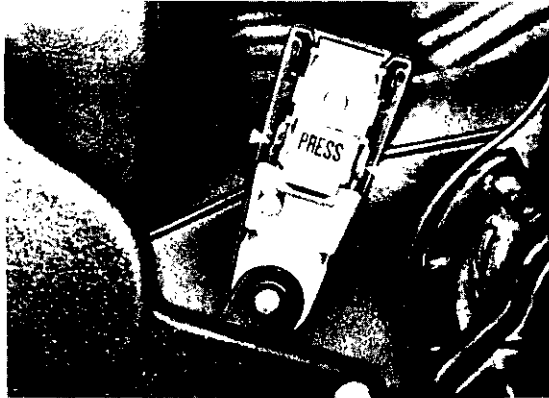
(Also see Group 8)

A two-pole connector is located under the seat. In the driver's seat the connector wire leads into the seat interior and is connected directly to the safety belt buckle. In the passenger's seat an additional seat contact is wired inbetween.



Prior to seat removal, the wire must be disconnected at the connector and also detached from its retainer on seat underside. The wire must be reconnected upon installation of the seat; the polarity makes no difference.





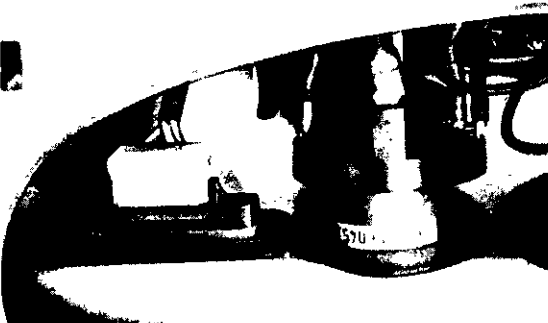
Removing and Installing Safety Belt Buckle

(Also see Group 8)

The front plastic cover of the buckle can be removed upon removal of both countersunk screws. Push rear cover to the side and remove buckle retaining screws.

When detaching both wires, hold terminal tabs with needle pliers since otherwise the tabs can break off when the wires are being pulled off.

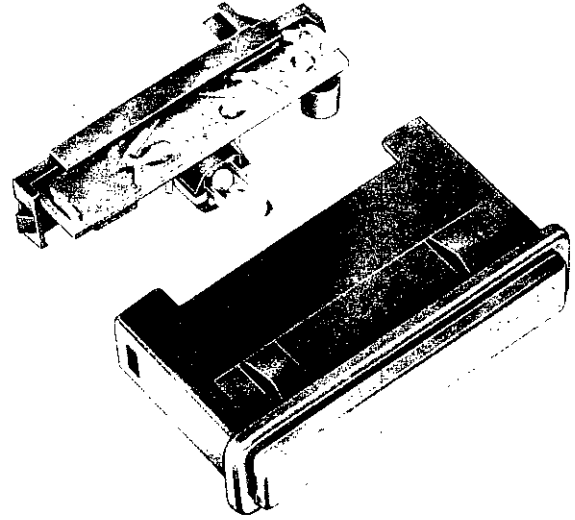
The belt buckle should not be disassembled unless it does not function properly.



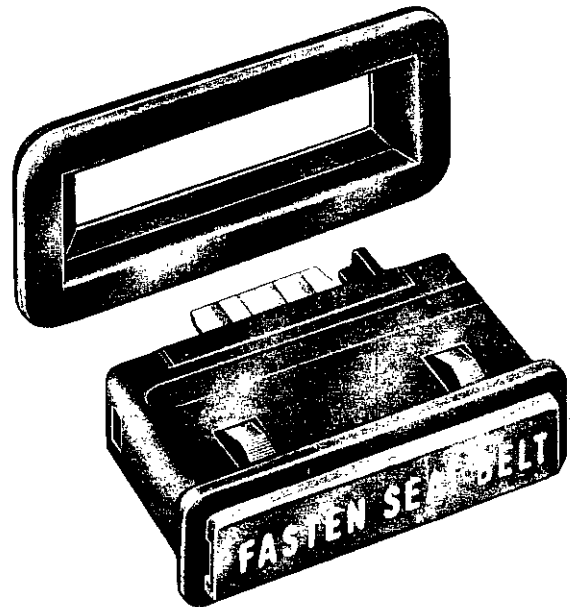
Removing and Installing "Fasten Seat Belt" Control Lamp

Pry loudspeaker cover off and pull off glued in plastic foil or remove loudspeaker, respectively. Detach connector from the back side of the control lamp and press the lamp forward out of the instrument panel.

When replacing the wedge-base bulb (12V, 1.2W), it is necessary to open the control lamp for access.



When installing the lamp, make sure that the rubber gasket is properly seated.



Removing and Installing Seat Contact in Passenger Seat

Remove seat (see Group 8, page SB 21 and 22).

Remove seat recliner retaining screws and remove back rest. Remove seat cover to gain access to the seat contact.

Make sure during installation that the seat contact is located in its original position in the seat. Reconnect both wires; polarity makes no difference.

