



SUPPLY

166

SUPPLY - Description

The entire electrical system has been designed and constructed in accordance with the most up-to-date guidelines concerning safety and protection, especially against fire risks.

There are two main kinds of protection:

- active protection, aimed at reducing possible causes of faults 'at source';
- passive protection, aimed at minimizing the effects of a possible fault.

The first kind involves the thoughtful design of wiring, attentive to location and anchorage, and the careful planning of properly protected cable routes.

Modifications have therefore been made to the alternator and starter motor cables, with the adoption of protective caps, etc.

Passive protection instead includes all the interventions, which have always been adopted on vehicles, to reduce high fault currents (overload and short circuit).

All the fuses included in the system have been rated on the basis of the nominal absorption of the loads which cannot be served simultaneously, and so as to ensure intervention in the case of a definite short circuit.

All the electrical systems are supplied by the battery at a voltage of 12. V.

The battery is in turn recharged by the alternator during engine operation. E5010 STARTING AND RECHARGING

The main supply lines are protected by maxifuses, grouped together in a box directly on the positive battery terminal and connected directly to it.

The box contains the following maxifuses, named according to the circuits protected:

- CVM engine compartment junction unit supply
- CPL main junction unit under dashboard supply
- CVB luggage compartment junction unit supply

The power supply to the terminal board to the starter motor and the alternator is interrupted by the SCB device for the MAXIFUSE box on the battery if the interia switch is operated. E5010 STARTING AND RECHARGING

Some circuits are supplied continuously, even if the vehicle is stopped and the ignition is off, as they are connected directly to the battery.

Other circuits are supplied by turning the ignition key to various different positions:

- when the key is inserted and turned to the first click, the ignition is turned on (MAR position) and several circuits are supplied, which are thus called 'ignition-operated' (lines 'INT' and '15/54');
- the second click - AVV position - instead supplies the starter motor; (line '50')., disconnecting some circuits (those which absorb most power), thus ensuring the maximum flow of current to the starter motor; ('INT/A' line).



The lines through which the supply is distributed to the various electrical devices are shown on the wiring diagrams relating to the various functions and systems.

This general diagram shows all the lines which depart from the battery and the MAXIFUSE boxes; reference should be made to the specific diagrams for greater detail.

The power supplies for all the services and systems are protected by special fuses, in the three junction units:

- one inside the passenger compartment CPL, the main junction unit;
- one in the engine compartment on the left side panel CVM, engine compartment junction unit;
- one in the luggage compartment on the right side panel CVB, luggage compartment junction unit.



The lines through which the supply is distributed to the various electrical devices are shown on the wiring diagrams relating to the various functions and systems.

This diagram shows all the lines which depart from the battery and the MAXIFUSE boxes; reference should be made to the specific diagrams for greater detail.

SUPPLY - Functional description

All the electrical equipment and systems are supplied by the battery A1 .

The main supply lines are protected by the MAXIFUSE box B99 which contains the fuses named according to the circuits protected:

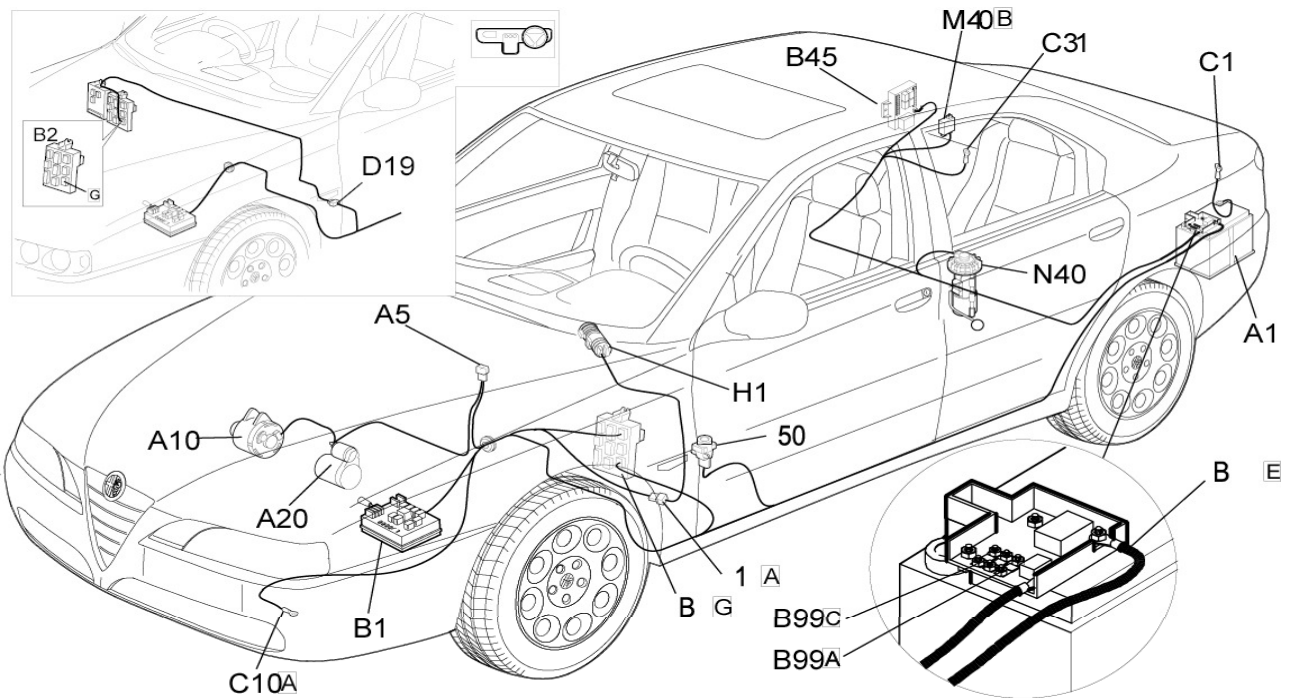
- CVM : engine compartment junction unit supply B1 , at connector X;
- CPL: underdashboard junction unit supply B2, at pin 1 of connector G;
- CVB: luggage compartment junction unit supply B45, to pin 1 of connector B;

Other circuits are supplied by turning ignition key H1 to various different positions:

- in the ON position, numerous circuits and services controlled by the ignition are supplied ('15/54' line): pin 2 of connector B and B2
- in the AVV position - the starter motor is supplied; (line '50')3309762SeeE5010STARTING AND RECHARGING; in this position several circuits are disconnected (line 'INT/A'): pin 9 of connector E of B2

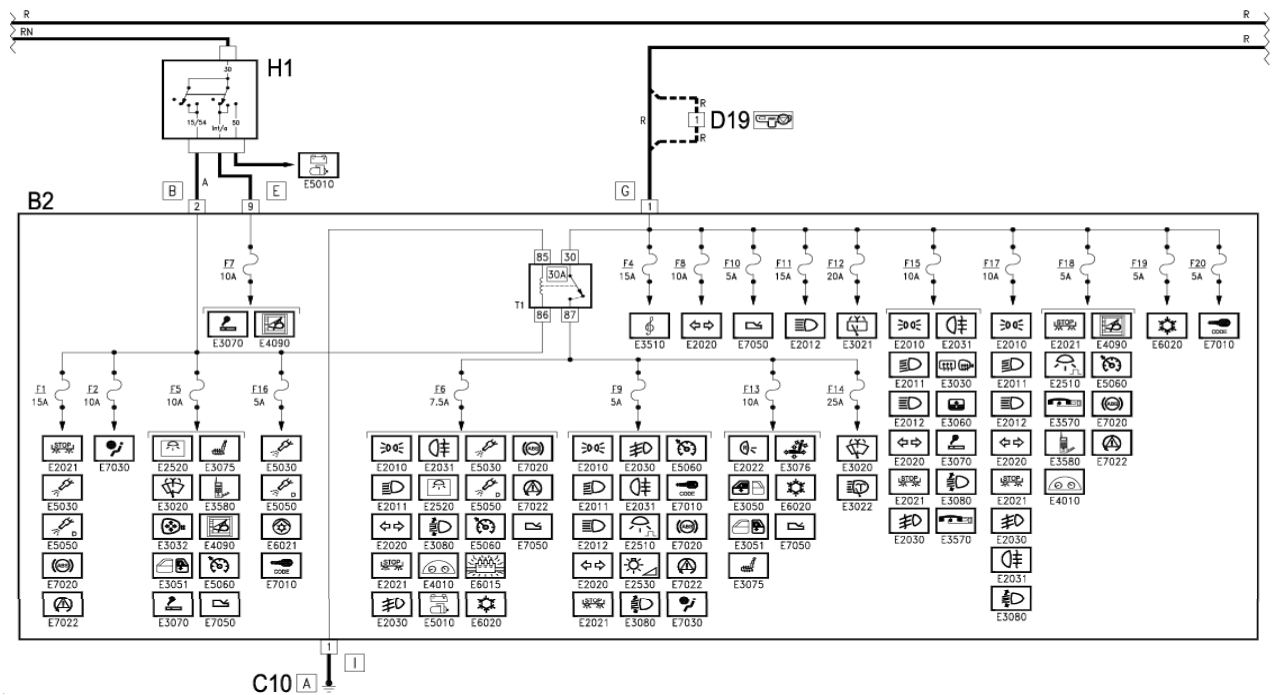
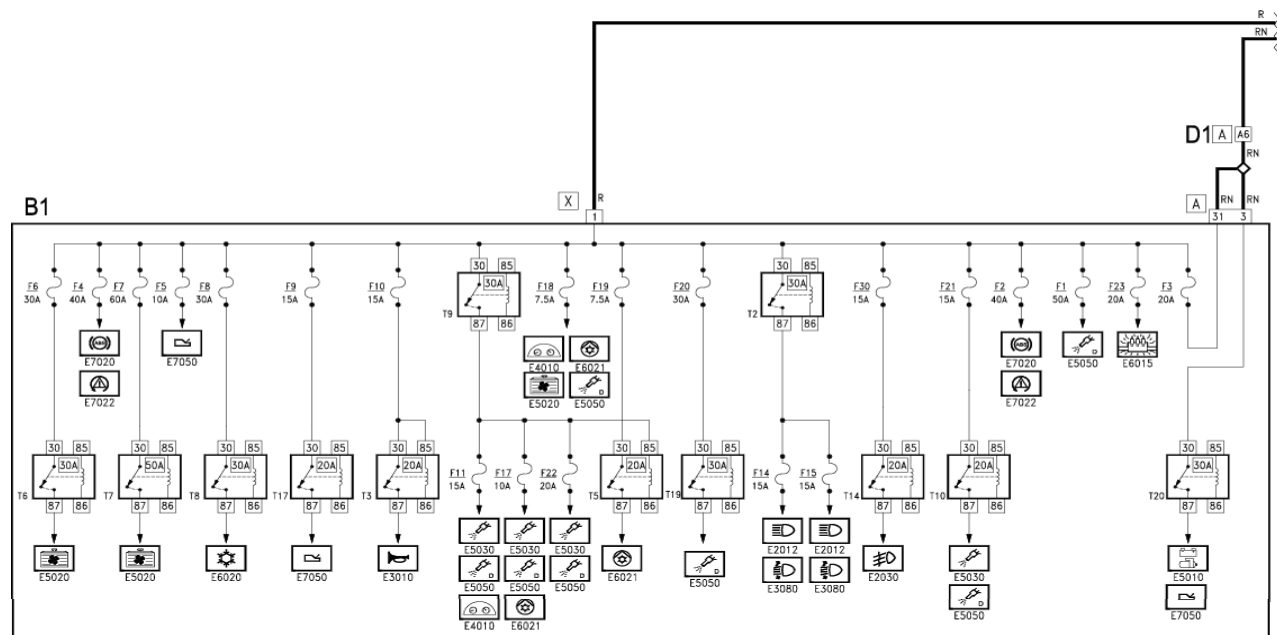
Pin 30 of A20 , the actual starter motor, is supplied with voltage directly from the battery via terminal unit A5 . this supply is interrupted by the SCB device for MAXIFUSE box B99 if the inertia switch I50 is operated.

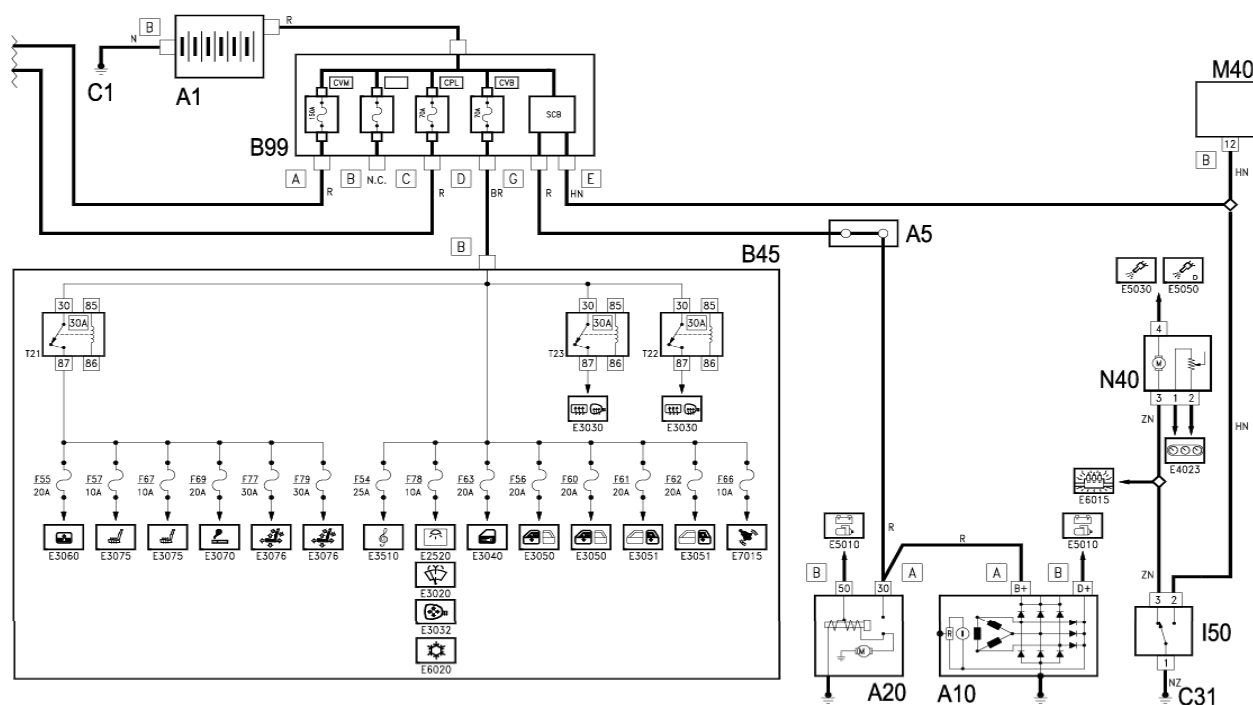
SUPPLY - Location of components



Component code	Name	Assembly reference
A1	Battery	5530B
A5	Terminal board	-
A6	Rear junction node	-
A10	Alternator	-
A10	Alternator	5530A
A20	Starter motor	-
A20	Starter' motor	5520B
B1	Junction unit	-
B1	Junction unit	5505A
B1	Junction unit	5505A
B2	Dashboard junction unit (CPL)	-
B2	General supply MAXI FUSE	-
B2	Junction unit	-
B2	Junction unit	5505A
B3	Relay unit	5505A
B4	Rear services MAXI FUSE	-
B5	MAXI FUSE box	-
B7	-MAXI FUSE) for ABS	-
B8	(MAXI FUSE) for engine fan	-
B9	Starting enablement MAXI FUSE	-
B17	Rear electric windows fuse	-
B20	Seat heating fuse	-
B31	ABS fuse	-
B33	Heated rear window fuse	-
B37	Spark plugs MAXI FUSE	-
B38	Additional heater fuse	-
B39	Diesel pre-heating fuse	-
B42	CAE supply fuse	-
B60	Boot opening fuse	-
B61	Fuel flap opening fuse	-
B62	Left seat adjustment fuse	-
B63	Right seat adjustment fuse	-
B65	Vehicle interior fan fuse	-
B70	Trailer fuse	-
B80	i.e. MAXI FUSE	-
B90	Radio amplifier fuse	-
B99	Battery fuses junction unit (CBA)	5530B

C1	Battery earth	-
C10	Front left earth	-
C31	Rear right earth	-
D1	Front-dashboard coupling	-
D6	Rear - front coupling	-
D19	Dashboard / battery coupling	-
H1	Ignition switch	5520A
I50	Inertial switch	1040A
M40	A.B.I control unit	5505A
N40	Fuel pump and sender unit	-

SUPPLY - Wiring diagram



Component code	Name	Assembly reference
A1	Battery	5530B
A5	Terminal board	-
A6	Rear junction node	-
A10	Alternator	-
A10	Alternator	5530A
A20	Starter motor	-
A20	Starter' motor	5520B
B1	Junction unit	-
B1	Junction unit	5505A
B1	Junction unit	5505A
B2	Dashboard junction unit (CPL)	-
B2	General supply MAXI FUSE	-
B2	Junction unit	-
B2	Junction unit	5505A
B3	Relay unit	5505A
B4	Rear services MAXI FUSE	-
B5	MAXI FUSE box	-
B7	-MAXI FUSE) for ABS	-
B8	(MAXI FUSE) for engine fan	-
B9	Starting enablement MAXI FUSE	-
B17	Rear electric windows fuse	-
B20	Seat heating fuse	-
B31	ABS fuse	-
B33	Heated rear window fuse	-
B37	Spark plugs MAXI FUSE	-
B38	Additional heater fuse	-
B39	Diesel pre-heating fuse	-
B42	CAE supply fuse	-
B60	Boot opening fuse	-
B61	Fuel flap opening fuse	-
B62	Left seat adjustment fuse	-
B63	Right seat adjustment fuse	-
B65	Vehicle interior fan fuse	-
B70	Trailer fuse	-
B80	i.e. MAXI FUSE	-
B90	Radio amplifier fuse	-
B99	Battery fuses junction unit (CBA)	5530B
C1	Battery earth	-
C10	Front left earth	-
C31	Rear right earth	-

D1	Front-dashboard coupling	-
D6	Rear - front coupling	-
D19	Dashboard / battery coupling	-
H1	Ignition switch	5520A
I50	Inertial switch	1040A
M40	A.B.I control unit	5505A
N40	Fuel pump and sender unit	-