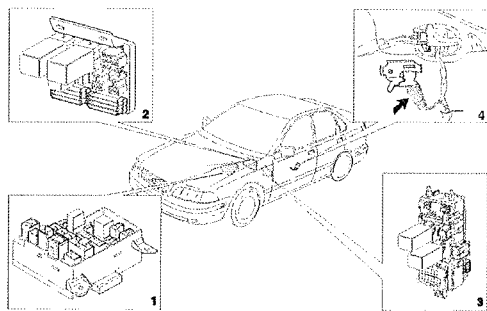


Introduction

The electrical system in this vehicle is of conventional type. Despite the complexity of the vehicle, a logical layout has been used. There are three possible locations for relays and fuses. Many wiring connections are also located at these sites. The wiring follows a "tree" format to clearly show the component groups. Every attempt has also been made to as far as possible fuse the components separately.

Relays



In the vehicle there are three main relay boxes. Two of them, (1) and (2), also incorporate fuses.

One fuse-/relay box is located in the engine compartment (1), the second under the dashboard (2) near the A post, and the third (3) is mounted on the cross-member under the dashboard. The last two are always located at the driver's side.

There are also some individual relays located at various points, e.g. the window auto-down relay (4) in the driver's door.

In the fuse-/relay box (1) in the engine compartment are

- engine management system relay
- air-conditioning compressor relay
- relay for engine coolant fan controlled by engine management system
- relay for engine coolant fan controlled via air-conditioning system
- condenser cooling fan motor relay
- headlamp relay

In the fuse-/relay box (2) in the dashboard are

- rear screen heater relay
- blower fan motor relay
- turn indicator relays
- timer for interior lighting (on rear of box)

Several relays are in a separate relay holder (3) under the dashboard next to the fuse-/relay box (2)

- central locking relay
- rear-door central locking relay
- starter relay
- tailgate wash/wipe relay

- power window relays

There are also several individual relays

- relay in driver's door for "auto-down" window function (4).
- intermittent relay in wiper switch
- air pump relay (under air pump)

Fuses

In order to protect all components, several types of fuses are used.

Four different types of fuses are used in the vehicle

- Large fuse with screw connection (120A)
- Large fuses with blade contacts
- Normal fuses
- Mini fuses (only in-car)

In the fuse-/relay box in the engine compartment (1) are

- starter motor and generator main fuse (120 A)
- several higher rated fuses for subsystems
- normal fuses for components

In the fuse-/relay box under the dashboard near the A post (2) are

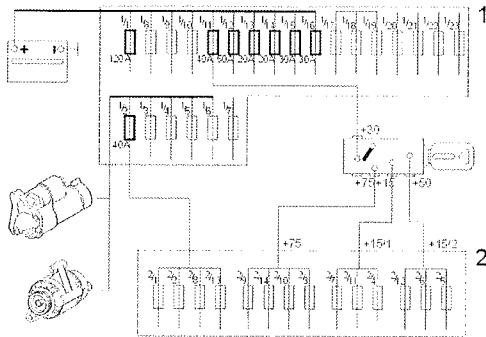
- All fuses **after** the ignition switch
- Several fuses directly in the +30 V supply

Some components are protected by several fuses in sequence.

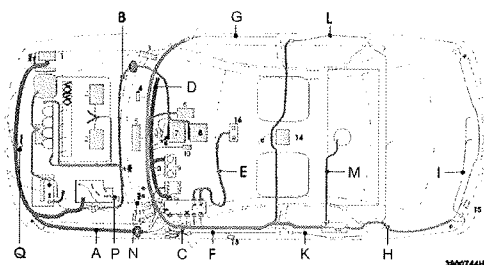
Example: cigar lighter:

Main fuse (1/1), followed by fuse (1/2) supplying fuse-/ relay box under the dashboard, and fuse (2/13) in the interior relay box.

"Transport fuses " should be connected at the delivery service. Fuses 1/5, 1/6 and 1/7 can be simply disconnected. This is an emergency measure, allowing systems such as interior lighting, radio, clock, etc. to be isolated while allowing starting and driving.



Cable harnesses and control modules



- (A) cable harness, engine compartment
- (B) cable harness, engine management
- (C) cable harness, interior (body)
- (D) cable harness, instrument panel
- (E) cable harness, roof
- (F) cable harness, driver's door
- (G) cable harness, passenger door

- (H) cable harness, rear lamps
- (J) cable harness, tailgate V44
- (J) cable harness, boot V41
- (K) cable harness, left rear door
- (L) cable harness, right rear door
- (M) cable harness, fuel tank
- (N) cable harness, cruise control
- (P) cable harness, automatic transmission
- *ABS system
- *Cruise Control
- *Central locking system with remote control
- *Immobilizer
- *Electronic climate control
- *Engine management system petrol engine
- *Transmission control module
- *Engine management system diesel engine
- *Speedometer(combined instrument panel)
- *Trip computer
- *SRS system
- *DSA control
- Sunroof
- Foglamps

Cable harnesses and connectors

The electrical installation has a number of separate cable harnesses. These cable harnesses are interconnected via connectors or are connected in one of the two fuse/relay boxes.

For some accessories the wiring is prefitted. Connectors and branching points are then taped to the cable harness.

All connectors have a double interlock for plug pins, one for each plug pin, separately and one for all plug pins together.

Connectors are also interlocked together or to the fuse/relay box.

Only the larger connectors between cable harnesses are shown in the diagram.

Control modules

The vehicle is equipped with several control modules.

Some of these control modules are connected to the data link connector (DLC) for diagnostics or programming. See * in table above.

There are also several electronic switches supporting switching software.

There is an electronic control module for the foglamps, which are now controlled by touch switches. When the ignition is switched off, the system resets itself and the lamps revert to the start position.