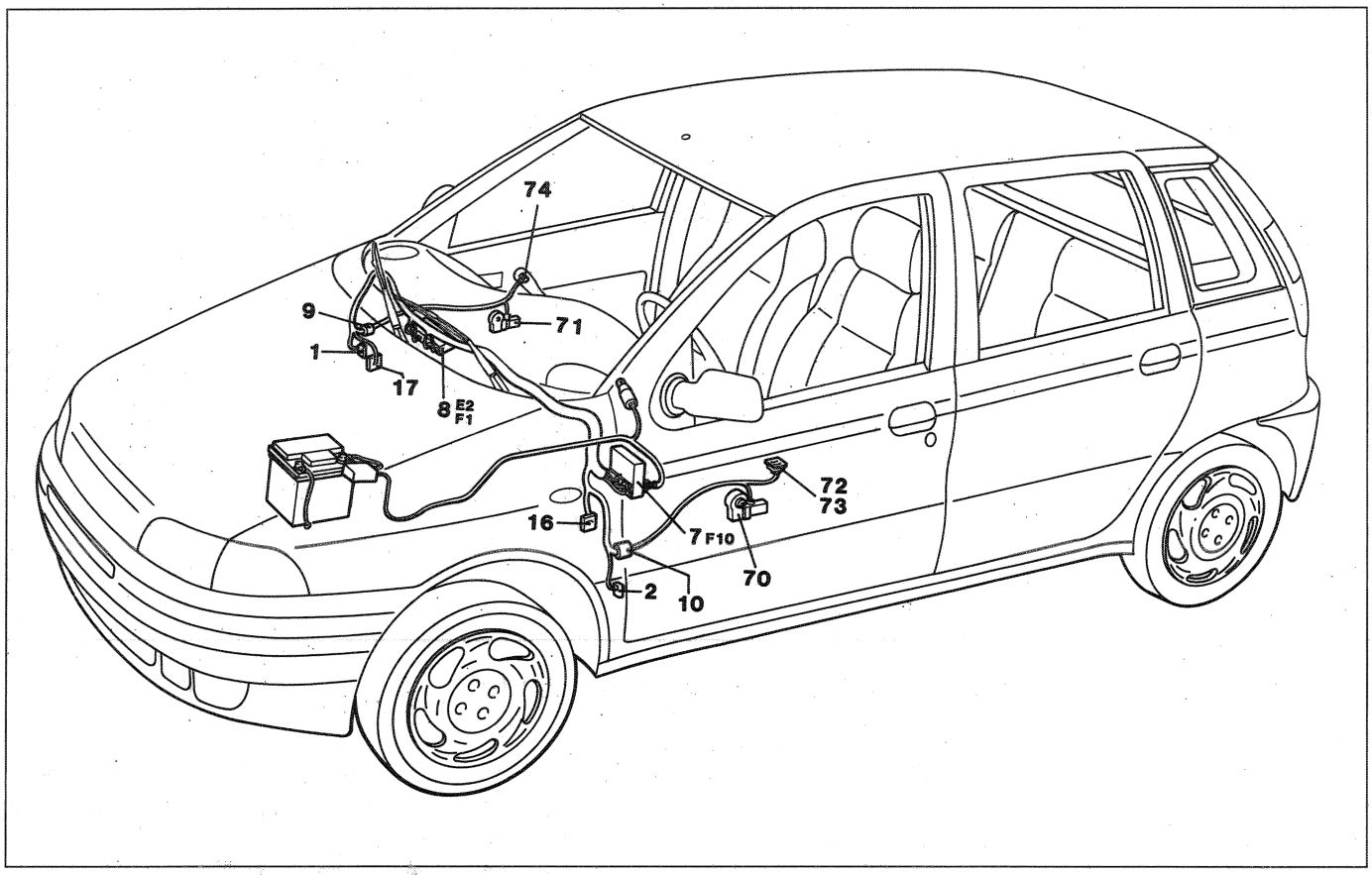
55.

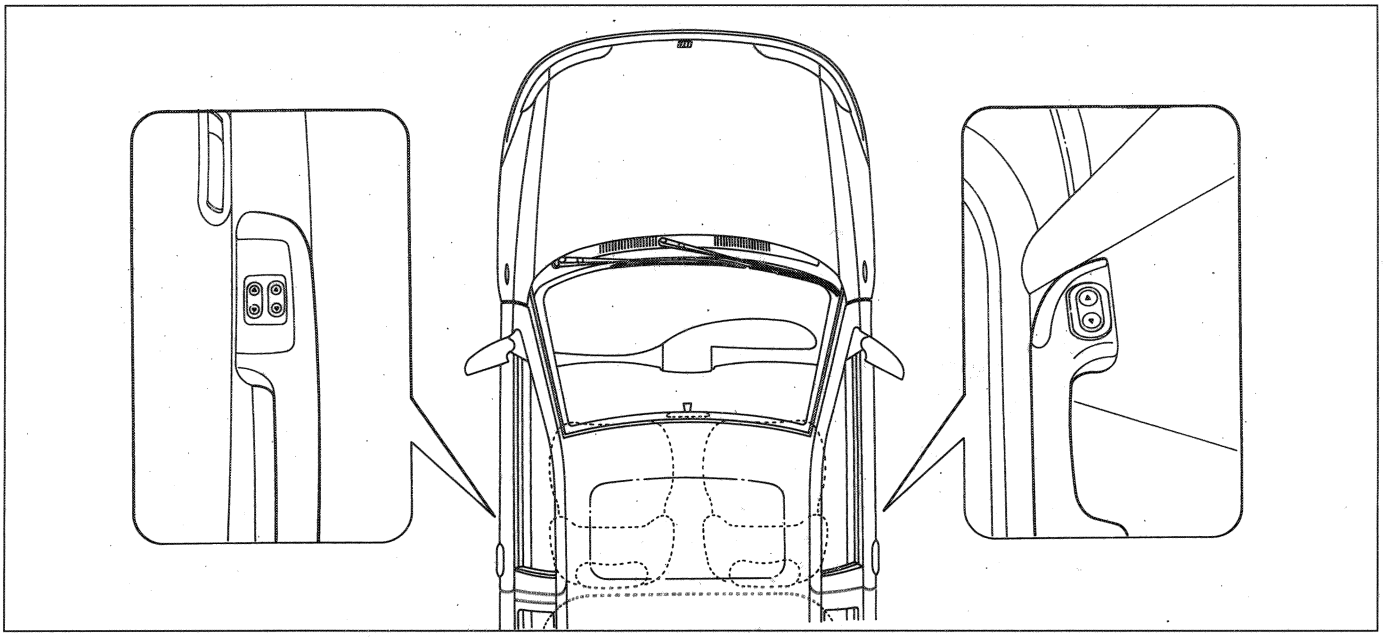
LOCATION OF ELECTRIC FRONT WINDOW COMPONENTS AND CABLE HARNESS



P3M017L01

1 Front right door switch controlling door open warning lamp
2 Front left door switch controlling door open warning lamp
7 Junction unit
F10 Circuit protection fuse
8 Optional devices control unit
E2 Front electric window control unit
F1 Circuit protection fuse
9 Connection
10 Connection
16 Left dashboard earth
17 Right dashboard earth
70 Front electric window motor, driver's side
71 Front electric window motor, passenger's side
72 Front electric window control, driver's side (driver's window)
73 Front electric window control, driver's side (passenger's window)
74 Front electric window control, passenger's side

OPERATION OF THE ELECTRIC FRONT WINDOWS



Location on car of front electric window pushbutton assemblies

On request, the car may have electric front windows.
The electrical system relating to the electrically-operated front windows consists of an electronic control unit (E2) installed on the optional devices control unit (8), which allows the window on the driver's side to be operated both automatically and in the conventional manner.
With the ignition switch at the ON position, if one of the two buttons (72) controlling the electric window on the driver's side is pressed, the window functions AUTOMATICALLY, i.e. it ascends or descends completely even if the button is not held pressed down.
During automatic operation, the window can be stopped by pressing one of the two control buttons.
The window on the passenger's side can only be controlled in the conventional manner, by pressing the control buttons on the pushbutton assembly on the driver's side (73) or on the pushbutton assembly on the passenger side (74).

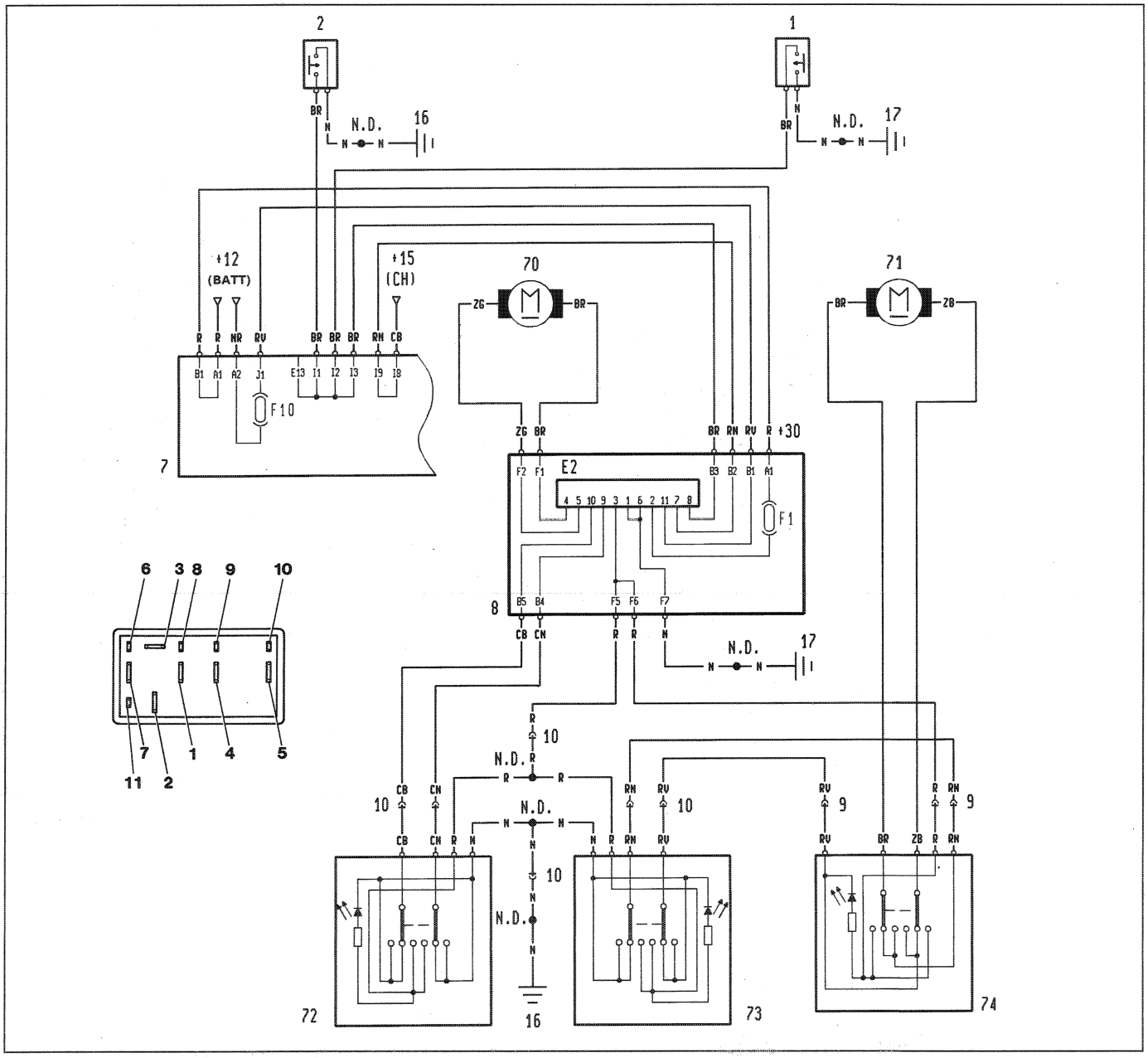
"Noise detector" (frequency detector) safety systems

If the control button is pressed when the window has reached the end-of-travel position, the electronic control unit automatically cuts off the supply to the motor. This condition is recognized through an electronic circuit called "NOISE DETECTOR" (frequency detector) which acts by analysing the frequency of the interference caused by the motor brushes during its rotation.

When the motor is rotating, it generates, by means of the commutation which occurs between the brushes and commutator, an interference signal which is transmitted to the control unit through the supply line, whose frequency is proportional to the engine rpm.
If the frequency of this signal exceeds 15 ± 5 Hz, the control unit recognizes that the motor is turning freely.
When the window reaches the end-of-travel position or tends to jam for mechanical reasons, such as to drastically reduce the normal speed of rotation, the frequency of the interference signal is reduced proportionally. When this frequency falls below the established threshold (15 ± 5 Hz), the "NOISE DETECTOR" (frequency detector) cuts off the supply.

55.

Wiring diagram of electric front windows



P3M019L01

1 Front right door switch controlling door open warning lamp
2 Front left door switch controlling door open warning lamp
7 Junction unit
F10 Circuit protection fuse
8 Optional devices control unit
E2 Front electric window control unit
F1 Circuit protection fuse
9 Connection between dashboard cables and front passenger door cables
10 Connection between dashboard cables and front driver's door cables
16 Left dashboard earth
17 Right dashboard earth
70 Front electric window motor, driver's side
71 Front electric window, passenger's side
72 Front electric window control, driver's side (driver's window)
73 Front electric window control, driver's side (passenger's side)
74 Front electric window control, passenger's side
N.D. Connector blocks