

ELECTRIC REAR WINDOWS - DESCRIPTION	ELECTRIC REAR WINDOWS - FUNCTIONAL DESCRIPTION	ELECTRIC REAR WINDOWS - WIRING DIAGRAM	REAR ELECTRIC WINDOWS - COMPONENT LOCATION	Packet print
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DESCRIPTION

The electric windows in the rear doors are activated using the switches in the doors themselves and the driver's front door.

The Body Computer controls the operation of the rear window motors.

The window motors are controlled automatically, in accordance with the following logic:

- if the button is pressed for between 60 and 300 milliseconds, operation is manual: the glass goes up/down only with the button pressed;
- if the button is pressed for longer than 300 milliseconds, operation is automatic: even if the button is released, the glass continues to go up/down until the end of travel or the implementation of the anti-crush safety system if fitted;
- pressing the button again whilst the window is moving stops it in the position that it is in;
- if the button is pressed for less than 60 milliseconds, this is ignored (it is treated as an accidental knock).

The electronics inside the motor manage the anti-crush safety function: i.e. it acquires information about the possible presence of an obstacle during window closure (rising); the anti-crush function is performed by a Hall effect sensor that senses overloads on the window motor; the intervention threshold is set when the force of the obstacle encountered along the window travel (e.g. a finger, a hand) exceeds 7/8 kg.

In addition, if a fault is detected, the control unit inhibits the automatic raising operation, only allowing it in steps of 500 ms each time the button is pressed.

The power supply logic of the electric window controls is called "comfort enable":

- the electric window function operates only with the ignition on, with the following exception: after a key-off, the windows can be operated for 3 minutes; when this time period elapses, the system no longer acquires new commands.
- if one of the doors is opened during the timed period, new commands are longer acquired, but any commands received before the opening of the door are brought to a conclusion.
- if one of the doors is already open at the key off, any commands received before the opening of the door are brought to a conclusion.

The rear control lock (protection) is operated by means of the LOCK button among the driver's controls: the locking status is indicated by an LED beside the button lighting up and the rear control buttons are not lit. the electric windows cannot be operated using any of the buttons when the lock function is activated.

Electric window system initialisation

The following electric window system reset procedure must be performed in the event of:

- supply cut-off: battery replacement or disconnection, protective fuse replacement, etc...
- replacement of any component of the system (motors, electric windows, window housing seals, window panes, etc...)

 For each of the fours doors, operate in accordance with the following, ALWAYS USING THE DRIVER'S SIDE FRONT DOOR CONTROLS:

- turn the ignition key to the MAR position;
- press the window closing button in "manual" mode (continuously) until the window is closed and keep it pressed for at least 5 seconds;
- repeat the same procedure for all the other doors. Do not carry out the procedure on more than one door at a time.

The initialisation cycle is complete.

When this procedure has been carried out, the anti-pinch system and the automatic operation of the electric windows are operational.