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## Glass, Frames and Mechanisms - Glass, Frames and Mechanisms

Diagnosis and Testing

### Principles of Operation

For a detailed description of the glass, frames and mechanisms systems and operation, refer to the relevant Description and Operation section of the workshop manual. REFER to: (501-11 Glass, Frames and Mechanisms)

[Specifications](#) (Specifications),  
[Glass, Frames and Mechanisms - Armoured](#) (Description and Operation),  
[Glass, Frames and Mechanisms - Armoured](#) (Description and Operation).

### Inspection and Verification



**CAUTION:** Diagnosis by substitution from a donor vehicle is **NOT** acceptable. Substitution of control modules does not guarantee confirmation of a fault and may also cause additional faults in the vehicle being checked and/or the donor vehicle.

1. Verify the customer concern.
2. Visually inspect for obvious signs of damage and system integrity.

#### Visual Inspection

Mechanical	Electrical
<ul style="list-style-type: none"> <li>• Window control switches condition and installation</li> <li>• Window motors/regulators</li> <li>• Window channels/runners</li> <li>• Window cables</li> <li>• Window seals</li> </ul>	<ul style="list-style-type: none"> <li>• Fuses</li> <li>• Harnesses and connectors</li> <li>• Window lift relay</li> <li>• Window control switches</li> <li>• Window motors</li> </ul>

3. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step.
4. If the cause is not visually evident verify the symptom and refer to the Symptom Chart, alternatively check for Diagnostic Trouble Codes (DTCs) and refer to the DTC Index.

### Manual Sunblind Initialization Routine

Where a sunblind module has been replaced, there is an initialization routine available on the diagnostic tool. This requires a new module to be initially installed in the fully down position and running of the "Initialize Specified Function/Feature" diagnostic routine on the manufacturer approved diagnostic tool. Alternatively, the sunblind may be initialized manually by following the procedures described below:

1. Raise the sunblind to top (fully retracted) position
2. Press and hold the window 'down' switch for 15 seconds (the sunblind will go down and will then be in initialization mode)
3. Release window switch and press window 'down' switch again to drive blind fully into lower block
4. Activate window switch 'up' until the sunblind reaches the top (fully retracted) position and release switch
5. The sunblind is now initialized and should have 'one-touch' functionality




### Symptom Chart

Symptom	Possible Cause	Action
Window(s) inoperative	<ul style="list-style-type: none"> <li>• Fuse(s)</li> <li>• Switch fault</li> <li>• Front switch isolator fault</li> <li>• Motor/Regulator fault</li> <li>• Channel/Runner fault</li> <li>• Cable fault</li> <li>• Harness fault</li> </ul>	Check the fuses. Check the suspect window operation from the individual door switch and from the driver door master switch (it is unlikely that both switches would fail at the same time, so if the window is inoperative from either switch, suspect a fault other than a switch). If the inoperative window is a rear unit, check the function of the isolator at the master switch.
Window(s) 'one-shot'		

Symptom	Possible Cause	Action
function inoperative	<ul style="list-style-type: none"> <li>Window motor initialization required</li> <li>Switch fault</li> </ul>	If the battery has been disconnected, carry out the initialization procedure. Refer to the relevant section of the workshop manual. Check the switch function after initialization.
Window(s) noisy	<ul style="list-style-type: none"> <li>Channel/Runner fault</li> <li>Cable fault</li> <li>Motor/Regulator fault</li> </ul>	Check the channels and runners for foreign objects, etc. Check the cable condition and routing. Check the motor and regulator condition.
Rear window does not defrost	<ul style="list-style-type: none"> <li>Fuse</li> <li>Switch fault</li> <li>Relay fault</li> <li>Element fault</li> <li>Circuit fault</li> </ul>	Check fuse. Check the operation of the heated rear window switch and relay. Check the element for continuity. Check the heated rear window circuit. Refer to the electrical guides.

### Window Regulator Diagnostic

This diagnostic procedure is to be carried out if the window glass, - Closes to the top, then reopens **Bounce back** - Does not **fully close** to the top of the door frame - The **One touch** function is disabled

PINPOINT TEST A : DIAGNOSTIC PROCEDURE	
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
<b>A1: DOOR WINDOW GLASS - SEAL CONDITION / FOREIGN MATERIAL</b>	
 NOTE: To check that the door window glass seal is free from foreign material and has no sign of damage and is not worn in the door channels	
	<ol style="list-style-type: none"> <li>Carry out visual inspection for:             <ul style="list-style-type: none"> <li>Foreign material</li> <li>Obstruction</li> <li>Signs of damage or wear to door window glass seal</li> </ul> </li> </ol>
	Is the door window glass seal free from foreign material, damage and wear? <b>Yes</b> <a href="#">GO to A2.</a> <b>No</b> Remove any foreign material or were necessary install new door window glass seal. Test the system for correct operation
<b>A2: DOOR WINDOW GLASS - SEAL INSTALLATION</b>	
 NOTE: To check that the door window glass seal is installed correctly	
	<ol style="list-style-type: none"> <li>Check that the door window glass seal is installed correctly, ensure that it is fully installed into the corner areas</li> </ol>
	Is the door window glass seal installed correctly? <b>Yes</b> <a href="#">GO to A3.</a> <b>No</b> Correctly install the door window glass seal. Test the system for correct operation
<b>A3: DOOR WINDOW GLASS - SECURITY</b>	
 NOTE: To check the door window glass is secure	
	<ol style="list-style-type: none"> <li>Check if the door glass installed correctly and secured to the door window regulator</li> </ol>
	Is the door window glass correctly installed and secure? <b>Yes</b> <a href="#">GO to A4.</a> <b>No</b> Adjust the door window glass referring to the door glass installation process REFER to: (501-11 Glass, Frames and Mechanisms) <a href="#">Front Door Window Glass</a> (Removal and Installation), <a href="#">Rear Door Window Glass</a> (Removal and Installation). Test the system for correct operation
<b>A4: DOOR WINDOW GLASS - RESET PROCEDURE</b>	
	<ol style="list-style-type: none"> <li>Disconnect vehicle battery, wait for a minimum of 2 minutes, then reconnect the battery</li> </ol>

	<p>2 For vehicles between VIN V03480 and V18030, the latest version of the diagnostic software must be loaded. SDD must be loaded with SDD DVD126_V6.03 and Calibration File 77 (or later)</p>
	<p>3 With the vehicle engine running, initialize the window motors, REFER to: <a href="#">Door Window Motor Initialization</a> (501-11 Glass, Frames and Mechanisms, General Procedures).</p>
	<p>4 Cycle the glass 20 times, using the 'one-touch' function to open and close the window</p>
	<p>5 <b>NOTE:</b> The window regulator motor may thermally cut out after too many operations, if this occurs wait 30 seconds before continuing</p>
	<p>Is window closing correctly and the <b>One-touch</b> function operational?</p> <p><b>Yes</b> No further action requires</p> <p><b>No</b> Replace the front door window regulator REFER to: <a href="#">Front Door Window Regulator and Motor</a> (501-11 Glass, Frames and Mechanisms, Removal and Installation). , or rear door window regulator REFER to: <a href="#">Rear Door Window Regulator and Motor</a> (501-11 Glass, Frames and Mechanisms, Removal and Installation). Test the system for correct operation</p>

### DTC Index

For a list of Diagnostic Trouble Codes (DTCs) that could be logged on this vehicle, please refer to Section 100-00. REFER to: [Diagnostic Trouble Code \(DTC\) Index - DTC: Driver Door Module/Passenger Door Module \(DDM/PDM\)](#) (100-00 General Information, Description and Operation).