

# Component Procedures: Windows

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# Component Procedures: Windows

## Full-Cut Method (Article 10233)

- If corrosion of the pinch-weld flange is present, or if sheet metal repairs or replacements are required, refinish the pinch-weld flange in order to present a clean, primer-only surface.
- If paint repairs are required, mask the flange bonding area, prior to applying the color coat, in order to provide a clean, primer-only surface.
- Appropriate materials for these primer applications are typically 2 component catalyzed products. Use materials such as BASF DE15®, DuPont 2610®, Sherwin-Williams PSE 4600 and NP70® and Martin-Semour 5120 ,5130® , PPG DP90LF SPIES/HECKER 3688/8590 – 3688/5150 – 4070/5090 STANDOX 11158/13320 – 14653/14980 products are approved for this application. Follow the manufacturer's directions for the mix, the application, and the drying times.
- After repairing the opening as indicated, shake the pinch-weld primer black #3 well. Using a new dauber, apply the primer to the primed surface of the flange in the bonding area. Allow the primer to dry for 10 minutes.

Use only the full cut method, also known in the field as full strip method, when installing windows .

This method includes the following:

- The replacement of a majority of the urethane adhesive bead. Remove all but approximately 2 mm (3/64 in) of the existing bead of urethane adhesive from the pinch-weld flange.
- Apply pinch-weld primer to any exposed painted areas on the pinch-weld flange.

No mounds or loose pieces of urethane adhesive should remain on the pinch-weld flange. Do not remove all traces of urethane adhesive.

## Full-Cut Method Description (Brazil) (Article 10234)

- If corrosion of the pinch-weld flange is present, or if sheet metal repairs or replacements are required, refinish the pinch-weld flange in order to present a clean, primer-only surface.
- If paint repairs are required, mask the flange bonding area, prior to applying the color coat, in order to provide a clean, primer-only surface.
- Use appropriate solvents, approved by GM for this application.
- After repairing the opening as indicated, use adhesive systems.

Use only the full cut method, also known in the field as full strip method, when installing windows .

This method includes the following:

- The replacement of a majority of the adhesive bead. Remove all but approximately 2 mm (3/64 in) of the existing bead of adhesive from the pinch-weld flange.
- Apply pinch-weld primer to any exposed painted areas on the pinch-weld flange.

No mounds or loose pieces of adhesive should remain on the pinch-weld flange. Do not remove all traces of adhesive.

## Power Windows (Article 10235)

Power Windows System Components

The power window system consists of the following components:

- Driver window switch
- Passenger window switch
- Window motor s both doors
- Rear quarter window motors (Convertible)
- Body control module
- 30A Fuse

Figure 1: 14 Power Windows Block Diagram

Driver and Passenger Express Up and Express Down Power Windows

The driver and passenger doors contain smart motors that will detect excessive resistance while performing the express up function and automatically reverse direction to prevent injury to any occupants that may become trapped between the closing window and the door frame. The automatic reverse safety feature can be overridden by pulling and holding the window switch.

The logic circuit within the window motors monitor the up, down and express signal circuits which are normally equal to B+ voltage. When a switch is used on the driver or passenger switch, the contacts close causing a voltage drop within the appropriate signal circuit. The window motor will detect the voltage drop and will command the window to move in the direction requested.

The passenger window motor communicates with the body control module (BCM) by a serial data circuit. When the driver wishes to control the passenger window, the driver will use the appropriate switch on the driver window

switch. When this switch is used, a serial data message is sent to the BCM requesting a window motor command, the BCM will then send a serial data message to the passenger window motor which will then move in the direction requested.

#### Convertible Window Operation

All power windows can be commanded by the driver window switch, the passenger window switch only controls its respective window, the rear power windows do not have local rear window switches. The driver window switch contains the master power window switch es that commands the rear power window operations. When the left rear or right rear switch is activated to a desired position, driver window switch will send a serial data message to the BCM to command the desired rear window. The BCM will then send a serial data message to rear window motor to move the window to the desired position. The all the window motors may also receive a command from the BCM to globally express down while lowering the convertible top.

#### Window Indexing

The window indexing feature is used to lower the driver and passenger power windows approximately 4 mm when the door is opened. This is necessary to allow the top edge of the window to clear the window weatherstrip.

This feature will also raise the window to the fully seated position once the door is closed

The window switch monitors the status of the door ajar switch, when the window switch detects that the door is open, the window switch will command the window motor to lower the window.

The window switch monitors the status of the door ajar switch, when the window switch detects that the door is closed, the window switch will command the window motor to fully close the window.

### **Stationary Window (Article 10237)**

Most stationary windows , specifically windshields, are retained to the body with urethane adhesive which adheres the window to the body, increasing structural integrity. The reinstallation of the windows with urethane adhesive requires complete replacement of the urethane adhesive bead, and is known as the full cut method. All stationary windows must use a urethane adhesive systems which meet GM Specification GM 3651G

### **Stationary Window Description (Brazil) (Article 10238)**

Most stationary windows , specifically windshields, are retained to the body with adhesive which adheres the window to the body, increasing structural integrity. The reinstallation of the windows with adhesive requires complete replacement of the adhesive bead, and is known as the full cut method. All stationary windows must use a adhesive systems.

### **Urethane Adhesive (Article 10239)**

For replacement of any adhesive-installed window use the full cut method only.

In the United States or Canada, you may use adhesive systems which meet GM Specification GM 3651G.

Use these materials based on specific manufacturer. Do NOT intermix primers or adhesives from one manufacturer to another.

Always follow the system manufacturer's instructions for application, handling, and curing.

### **Urethane Adhesive Description (Brazil) (Article 10240)**

For replacement of any adhesive-installed window, the full cut method must be used.

Use these materials based on specific manufacturer. Do NOT intermix primers or adhesives from one manufacturer to another.

Always follow the system manufacturers instructions for application, handling, and curing.

### **Power Windows - Convertible (Article 10190)**

Power Windows - Convertible

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### **Power Windows - Coupe (Article 10177)**

Power Windows - Coupe

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### **Stationary Window Waterleak Repair (Article 12685)**

- Remove all water.
- Repair the water damage.
- Replace the SDM harness connector.
- Replace the SDM.
- If the floor carpet is wet refer to Floor Carpet Drying .

- Remove the trim moldings or the headliner in order to repair the leak, if needed.
- Determine the source of water entry.
- If water is leaking at the edge of the windshield , reseal the windshield using Urethane Adhesive Systems which meet GM Specification GM 3651G.
- If water leaks into the vehicle at the sides of the stationary windows , reseal the window using Urethane Adhesive Systems which meet GM Specification GM 3651G.

## **Fixed and Moveable Windows - Fastener Specifications (Article 10289)**

Application Specification

Metric English

Front Side Door Window Belt Outer Sealing Strip Screws 1 Nm 9 lb in

Front Side Door Window Regulator Upper and Lower Nuts 10 Nm 89 lb in

Front Side Door Window Regulator Motor Bolts 10 Nm 89 lb in

Front Side Door Window Regulator to Window Bolts 10 Nm 89 lb in

## **All New Technical Service Bulletins (itype\_432)**

Tsbs

- Rear and Side Tempered Glass Spots (Quench Marks) (25-NA-311, 2025/09/30)

## **All Technical Service Bulletins (itype\_100)**

Tsbs

- Information on Glass Ultraviolet (UV) Ray Protection and Tint Percentage (21-NA-152, 2021/06/28)
- Body - Broken Rear Window Defogger Grid Detection (04-08-48-001D, 2012/04/17)
- Information on Side Window Glass Not Clearing Molding When Indexing Down During Door Opening (09-08-64-014E, 2023/10/12)
- Rear and Side Tempered Glass Spots (Quench Marks) (25-NA-311, 2025/09/30)
- Information on Side Door Window Glass Chipping Caused by Hanging Vehicle Key Lock Box (06-08-64-001D, 2016/11/10)
- Body - Front/Rear Side Door Windows Bind/Noisy/Move Slowly (PI0018B, 2013/11/08)

## **Customer Interest Bulletins (itype\_109)**

Tsbs

- Body - Broken Rear Window Defogger Grid Detection (04-08-48-001D, 2012/04/17)

## **Repair Tips (itype\_110)**

Tsbs

- Body - Front/Rear Side Door Windows Bind/Noisy/Move Slowly (PI0018B, 2013/11/08)

## **Symptoms - Fixed and Moveable Windows (Article 10256)**

Important Preliminary Checks Before Starting:

- Perform the Diagnostic System Check - Vehicle before using the symptom tables in order to verify that all of the following are true:
- There are no DTCs set.
- The control modules can communicate via the serial data link.
- Review the power window system operation or rear window defogger system operation in order to familiarize yourself with the system functions. Refer to the following:
- Rear Window Defogger Description and Operation
- Power Windows Description and Operation

Visual/Physical Inspection

- Inspect for aftermarket devices which could affect the operation of the rear window defogger .
- Inspect the easily accessible or visible system components for obvious damage or conditions which could cause the symptom.

Intermittent

- Inspect for proper installation of electrical components if an intermittent condition exists. Inspect for aftermarket theft deterrent devices, lights, and cellular phones. Ensure that no aftermarket equipment is connected to the class 2 circuit. If you can not locate an intermittent condition, a cellular phone signal may cause the condition. Faulty electrical connections or wiring may be the cause of intermittent conditions. Refer to Testing for Intermittent Conditions and Poor Connections .
- The problem may or may not turn ON the SERVICE VEHICLE SOON indicator or store a DTC. Do not use the symptom

tables to diagnose intermittent conditions. The malfunction must be present in order to locate the problem. Poor electrical connections or wiring cause most intermittent conditions. Perform a careful visual/physical check for the following conditions:

- Poor mating of the connector halves or a terminal not fully seated in the connector body
- An improperly formed or damaged terminal
- Reform or replace connector terminals in the problem circuit in order to ensure proper contact tension.
- Poor terminal to wire connection requires removing the terminal from the connector body in order to perform the check.

Use a scan tool in order to help detect intermittent conditions. The scan tool has several features that can be used to locate an intermittent condition. The snapshot feature can capture and store data parameters within the scan tool when the malfunction occurs. This information can then be reviewed in order to see what caused the malfunction.

#### Symptom List

Refer to a symptom diagnostic procedure from the following list in order to diagnose the symptom:

- Rear Window Defogger Malfunction
- Power Windows Malfunction

## **Power Windows Malfunction (Front) (Article 10251)**

#### Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

#### Diagnostic Fault Information

Circuit Short to Ground Open/High Resistance Short to Voltage Signal Performance

Driver Window Motor B+ U1530 00, U1534 00 U1534 00 — —

Driver Window Motor Serial Data U1530 00, U1534 00 U1534 00 U1534 00 —

Driver Window Motor Down Signal B316B 02 1 1 —

Driver Window Motor Express Signal B316B 02 1 1 —

Driver Window Motor Up Signal B316B 02 1 1 —

Driver Window Motor Ground — U1534 00 — —

Driver Window Switch Ground — 1, 2 — —

Passenger Window Motor B+ U1530 00, U1534 00 U1530 00 — —

Passenger Window Motor Serial Data U1530 00, U1534 00 U1534 00 U1534 00 —

Passenger Window Motor Down Signal B317A 02 2 1 —

Passenger Window Motor Express Signal B317A 02 2 1 —

Passenger Window Motor Up Signal B317A 02 2 1 —

Passenger Window Motor Ground — U1530 00 — —

Passenger Window Switch Ground — 2 — —

1. Driver Window Malfunction 2. Passenger Window Malfunction

#### Circuit/System Description

The driver and passenger window motors supply 12V signal circuits to their respective window switches, when a window switch has been activated, a switch closes providing a ground to the appropriate signal circuit causing the voltage to drop to 0V. The window motor will detect the voltage drop in the signal circuit and will command the window to move in the desired direction.

The driver window master control switch also contains control switches for the passenger window functions. When a window switch is pressed, a serial data message is sent to the body control module (BCM). The BCM examines the request and checks for messages from other power window motors that may prohibit window movement. If no prohibitive messages have been received, the BCM will send a serial data message to the passenger window motor which will perform the command as requested.

#### Diagnostic Aids

The loss of the express up and express down functions for the driver and passenger windows may have occurred for the following reasons:

- The battery was disconnected
- The battery was replaced
- A door wiring harness was disconnected
- A window motor was disconnected
- If the convertible top has not been completely closed and firmly latched
- The driver and passenger windows express up functions will be disabled if the rear windows are not fully closed

The window motors may need to be normalized in order to restore the express functions, refer to Window Motor

Programming - Express Function for the proper procedure.

Reference Information

Schematic Reference

Moveable Window Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Power Windows Description and Operation

Electrical Information Reference

- Circuit Testing

- Connector Repairs

- Testing for Intermittent Conditions and Poor Connections

- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

- Ignition ON.

- Verify the driver window functions while commanding the Driver Window Motor Up and Down with a scan tool.

- If the driver window does not move UP and DOWN as commanded Refer to Circuit/System Testing —

Driver/Passenger Window Motor Malfunction.

- If the driver window moves UP and DOWN as commanded

- Verify the driver window moves while commanding the window UP, express UP, DOWN and express DOWN with the S79D Window Switch-Driver.

- If the driver window does not move UP or DOWN as commanded Refer to Circuit/System Testing — Driver Window Switch Malfunction.

- If the driver window does not express UP or express DOWN Normalize the driver window motor, refer to Window Motor Programming - Express Function .

- If after normalization, the driver window does not express UP or express DOWN Refer to Circuit/System Testing — Driver Window Switch Malfunction.

- If the driver window moves UP, express UP, DOWN and express DOWN as commanded

- Verify the scan tool parameters listed below change when pressing and pulling the switches for the passenger window on the driver window master control;

- Front Passenger Main Control Down Switch — Inactive and Active

- Front Passenger Main Control Express Switch — Inactive and Active

- Front Passenger Main Control Up Switch — Inactive and Active

- If the parameters do not change Refer to Circuit/System Testing — Driver Window Switch Malfunction.

- If the parameters changes

- Verify the passenger window moves while commanding the Passenger Window Motor Up and Down with a scan tool.

- If the passenger window does not move UP and DOWN as commanded Refer to Circuit/System Testing —

Driver/Passenger Window Motor Malfunction.

- If the passenger window moves UP and DOWN as commanded

- Verify the passenger window moves while commanding the window UP, express UP, DOWN and express DOWN with the S79P Window Switch-Passenger.

- If the passenger window does not move UP or DOWN as commanded Refer to Circuit/System Testing — Passenger Window Switch Malfunction.

- If the passenger window does not express UP or express DOWN Normalize the passenger window motor, refer to Window Motor Programming - Express Function .

- If after normalization, the passenger window does not express UP or express DOWN Refer to Circuit/System Testing — Passenger Window Switch Malfunction.

- If the passenger window moves UP, express UP, DOWN and express DOWN as commanded

- All OK.

Circuit/System Testing

Driver/Passenger Window Motor Malfunction

- Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the appropriate driver or passenger M74 Window Motor. It may take up to 2 minutes for all vehicle systems to power down.

- Test for less than 10  $\Omega$  between the ground circuit terminal 1 and ground.

- If 10  $\Omega$  or greater

- Ignition OFF.

- Test for less than 2  $\Omega$  in the ground circuit end to end.

- If 2  $\Omega$  or greater, repair the open/high resistance in the circuit.

- If less than 2  $\Omega$ , repair the open/high resistance in the ground connection.
- If less than 10  $\Omega$
- Verify a test lamp illuminates between the B+ circuit terminal 2 and ground.
- If the test lamp does not illuminate and the circuit fuse is good
- Test for less than 2  $\Omega$  in the B+ circuit end to end.
- If less than 2  $\Omega$ , verify the fuse is not open and there is voltage at the fuse.
- If the test lamp does not illuminate and the circuit fuse is open
- Test for infinite resistance between the B+ circuit and ground.
- If less than infinite resistance, repair the short to ground on the circuit.
- If infinite resistance, replace the M74 Window Motor.
- If the test lamp illuminates
- Test or replace the M74 Window Motor.

#### Driver Window Switch Malfunction

- Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S79D Window Switch-Driver. It may take up to 2 minutes for all vehicle systems to power down.
- Verify a test lamp illuminates between the B+ circuit terminal 4 and ground.
- If infinite resistance, replace the S79D Window Switch-Driver.
- Verify the scan tool Driver Window Main Control Down Switch parameter is Inactive.
- If not Inactive
- Ignition OFF, disconnect the harness connector at the M74D Window Motor-Driver.
- Test for infinite resistance between the S79D Window Switch-Driver signal circuit terminal 3 and ground.
- If infinite resistance, replace the M74D Window Motor-Driver.
- If Inactive
- Install a 3 A fused jumper wire between the signal circuit terminal 3 and the ground circuit terminal 1.
- Verify the scan tool Driver Window Main Control Down Switch parameter is Active
- If not Active
- Ignition OFF, remove the 3 A fused jumper wire, disconnect the harness connector at the M74D Window Motor-Driver, ignition ON.
- Test for less than 1 V between the S79D Window Switch-Driver signal circuit terminal 3 and ground.
- If 1 V or greater, repair the short to voltage on the circuit.
- If less than 1 V
- Test for less than 2  $\Omega$  in the signal circuit end to end.
- If less than 2  $\Omega$ , replace the M74D Window Motor-Driver.
- If Active
- Verify the scan tool Driver Window Main Control Up Switch parameter is Inactive.
- Test for infinite resistance between the S79D Window Switch-Driver signal circuit terminal 6 and ground.
- Install a 3 A fused jumper wire between the signal circuit terminal 6 and the ground circuit terminal 1.
- Verify the scan tool Driver Window Main Control Up Switch parameter is Active
- Test for less than 1 V between the S79D Window Switch-Driver signal circuit 6 and ground.
- Verify the scan tool Driver Window Main Control Express Switch parameter is Inactive.
- Test for infinite resistance between the S79D Window Switch-Driver signal circuit terminal 2 and ground.
- Install a 3 A fused jumper wire between the signal circuit terminal 2 and the ground circuit terminal 1.
- Verify the scan tool Driver Window Main Control Express Switch parameter is Active
- Test for less than 1 V between the S79D Window Switch-Driver signal circuit 2 and ground.
- Test or replace the S79D Window Switch-Driver.

#### Passenger Window Switch Malfunction

- Ignition OFF, and all vehicle systems OFF, disconnect the harness connector at the S79P Window Switch-Passenger. It may take up to 2 minutes for all vehicle systems to power down
- Verify the scan tool Passenger Window Switch at Door parameter is Inactive.
- Ignition OFF, disconnect the harness connector at the M74P Window Motor-Passenger
- Test for infinite resistance between the signal circuit terminal listed below and ground:
  - S79P Window Switch-Passenger — signal circuit terminal 7
  - S79P Window Switch-Passenger — signal circuit terminal 8
- If infinite resistance, replace the M74P Window Motor-Passenger.
- Install a 3 A fused jumper wire between the signal circuit terminal 8 and ground:
  - Verify the scan tool Passenger Window Switch at Door parameter is Up
  - If not Up
- Ignition OFF, remove the fused jumper wire, disconnect the harness connector at the M74P Window Motor-Passenger, ignition ON.
- Test for less than 1 V between the S79P Window Switch-Passenger signal circuit terminal 8 and ground.

- Ignition OFF, test for less than 2  $\Omega$  in the signal circuit end to end.
- If less than 2  $\Omega$ , replace the M74P Window Motor-Passenger.
- If Up
- Install a 3 A fused jumper wire between the signal circuit terminal 7 and ground.
- Verify the scan tool Passenger Window Switch at Door parameter is Down
- If not Down
- Test for less than 1 V between the S79P Window Switch-Passenger signal circuit terminal 7 and ground.
- If Down
- Test for greater than 10 V between the signal circuit terminal 6 and ground
- If less than 10 V
- Ignition OFF, disconnect the harness connector at the M74P Window Motor-Passenger.
- Test for infinite resistance between the S79P Window Switch-Passenger signal circuit 6 and ground.
- If infinite resistance
- If 2  $\Omega$  or greater, repair the open/high resistance on the circuit.
- If greater than 10 V
- Test or replace the S79P Window Switch-Passenger.

#### Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Front Side Door Window Switch Replacement
- Front Side Door Window Regulator Motor Replacement

## Power Windows Malfunction (Rear) (Article 10252)

#### Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

#### Diagnostic Fault Information

Circuit Short to Ground Open/High Resistance Short to Voltage Signal Performance

Driver Window Switch Ignition 1, 2 1, 2 — —

Left Rear Window Motor B+ U154A 00 U154A 00 — —

Right Rear Window Motor B+ U154A 00 U154A 00 — —

Left Rear Window Motor Serial Data U1530 00, U1534 00 U1534 00 U1534 00 —

Right Rear Window Motor Serial Data U1530 00, U1534 00 U1534 00 U1534 00 —

Left Rear Window Motor Ground — U154A 00 — —

Right Rear Window Motor Ground — U154A 00 — —

1. Left Rear Window Malfunction 2. Right Rear Window Malfunction

#### Circuit/System Description

The front power windows can be controlled by the driver window switch. The driver window switch contains window switches that control all power window operations. When a power window switch is activated to a desired position, power window switch will send a serial data message to the body control module (BCM) which will send the command to the appropriate window motor to move the window to the desired position. The window motors will also receive a signal from the BCM to globally express down while lowering the convertible top.

#### Diagnostic Aids

The loss of the express up and express down functions for the driver, passenger and rear windows may have occurred for the following reasons:

- The battery was disconnected
- The battery was replaced
- A door wiring harness was disconnected
- A window motor was disconnected or replaced

The window motors will need to be normalized in order to restore the express functions, refer to Window Motor Programming - Express Function for the proper procedure.

#### Reference Information

##### Schematic Reference

Moveable Window Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Power Windows Description and Operation

Electrical Information Reference

- Circuit Testing

- Connector Repairs
  - Testing for Intermittent Conditions and Poor Connections
  - Wiring Repairs
- Scan Tool Reference  
Control Module References for scan tool information  
Circuit/System Verification
- Ignition ON.
  - Verify the scan tool Left Rear Main Control Down Switch, Left Rear Main Control Express Switch, Left Rear Main Control Up Switch, Right Rear Main Control Down Switch, Right Rear Main Control Express Switch and Right Rear Main Control Up Switch parameter changes between Inactive and Active when pressing and pulling appropriate switches on the S79D Window Switch-Driver.
  - If any parameter does not change Refer to Circuit/System Testing — Driver Window Switch Malfunction.
  - If all the parameters change
  - Verify the left rear and right rear window moves while commanding the window UP and DOWN with a scan tool.
  - If a rear window does not move UP and DOWN as commanded Refer to Circuit/System Testing — Rear Power Window Inoperative.
  - If the rear window moves UP and DOWN as commanded
  - All OK.

#### Circuit/System Testing

##### Driver Window Switch Malfunction

- Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S79D Window Switch-Driver. It may take up to 2 minutes for all vehicle systems to power down.
- Test for less than 10  $\Omega$  between the ground circuit terminal 1 and ground.
- If 10  $\Omega$  or greater
- Ignition OFF.
- Test for less than 2  $\Omega$  in the ground circuit end to end.
- If 2  $\Omega$  or greater, repair the open/high resistance in the circuit.
- If less than 2  $\Omega$ , repair the open/high resistance in the ground connection.
- If less than 10  $\Omega$
- Verify a test lamp illuminates between the B+ circuit terminal 4 and ground.
- If the test lamp does not illuminate and the circuit fuse is good
- Test for less than 2  $\Omega$  in the B+ circuit end to end.
- If less than 2  $\Omega$ , verify the fuse is not open and there is voltage at the fuse.
- If the test lamp does not illuminate and the circuit fuse is open
- Test for infinite resistance between the B+ circuit and ground.
- If less than infinite resistance, repair the short to ground on the circuit.
- If infinite resistance
- Test for infinite resistance between the signal circuit and ground.
- If infinite resistance, replace the S79D Window Switch-Driver
- If the test lamp illuminates
- Test or replace the S79D Window Switch-Driver.

##### Rear Power Window Inoperative

- Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the appropriate M74 Window Motor-Rear. It may take up to 2 minutes for all vehicle systems to power down.
- Verify a test lamp illuminates between the B+ circuit terminal 2 and ground.
- If infinite resistance, replace the M74 Window Motor-Rear.
- Replace the M74 Window Motor-Rear.

#### Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Front Side Door Window Switch Replacement
- Quarter Window Regulator Motor Replacement

## Side Door Window Mechanical Diagnosis (Article 10254)

#### Cause Correction

DEFINITION: A mechanical condition that requires a correction for proper operation of the side door window.

Refer to Symptoms - Fixed and Moveable Windows prior to beginning this table.

Intermittent Operation Check proper glass alignment/attachment and door seal installation.

Check switch and switch bezel to see if sticking.

Check wire harness for pinched/shorted wire.

THIS STEP APPLIES TO ALL TWO PIN MOTOR CONNECTORS ONLY. Perform electrical diagnostics, by first applying 12

volt power supply to the regulator motor to verify motor function.

Glass Binds Check proper glass alignment/attachment.

Check for defective seal and/or proper seal installation.

Check for debris in glass run channel.

Check for glass run channel position.

Regulator/Glass Rattles Check for loose fasteners and retorque if required.

Check that the glass is in the channel and reinstall if not positioned correctly.

Noisy Operation Check for other components in the glass path such as wire harness, impact foam, lock rods, or cables.

Check for proper glass alignment/attachment and door seal installation.

Windnoise Check seals, mirror patch, and glass alignment.

False glass reversal, the glass goes down unexpectedly. Check seals, reinitialize the glass and/or realign the glass.

Check for debris in the glass run channel.

## **Fixed and Moveable Windows - Special Tools (Article 10287)**

Illustration Tool Number/ Description

Click for full-size image BO-38778-2 J-38778-2 Door Trim Pad Clip Remover

Click for full-size image BO-39032 J-39032 Stationary Glass Removal Tool

Click for full-size image BO-39040 J-39040 Quarter Window Remover

Click for full-size image BO-0201964 S-0201964 Bonded-Glass Removing Device Brazil-Use local equivalent

## **OEM Policies and Procedures (itype\_120)**

Tsbs

- Information on Glass Ultraviolet (UV) Ray Protection and Tint Percentage (21-NA-152, 2021/06/28)

- Information on Side Door Window Glass Chipping Caused by Hanging Vehicle Key Lock Box (06-08-64-001D, 2016/11/10)