



Technical Service Bulletin

SUBJECT:		No: TSB-21-42A-002	
UPDATES TO 2022 OUTLANDER POWER WINDOW CONTROL SYSTEM - SERVICE MANUAL REVISION		DATE: April 2021	
		MODEL: 2022 Outlander	
CIRCULATE TO:	<input type="checkbox"/> GENERAL MANAGER	<input checked="" type="checkbox"/> PARTS MANAGER	<input checked="" type="checkbox"/> TECHNICIAN
<input checked="" type="checkbox"/> SERVICE ADVISOR	<input checked="" type="checkbox"/> SERVICE MANAGER	<input checked="" type="checkbox"/> WARRANTY PROCESSOR	<input type="checkbox"/> SALES MANAGER

PURPOSE

This TSB provides Power Window Control System of the affected Service Manual, to add System and DTC/Circuit Diagnosis for the Front/Rear Power Window Motors.

AFFECTED VEHICLES

- 2022 Outlander

AFFECTED SERVICE MANUAL

- 2022 Outlander Service Manual, Group 42A-Body



Please add the following six pages to the 2022 Outlander Service Manual, Group 42A-Body -> Power Window Control System section.

POWER WINDOW CONTROL SYSTEM

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DTC Description

Diagnosis Procedure

RETAINED POWER FUNCTION

Retained power function is an additional power supply function that enables power window system to operate for 45 seconds after ignition switch turns OFF.

RETAINED POWER FUNCTION CANCEL CONDITIONS

Any of the following condition is satisfied.

- Front door CLOSE → OPEN.
- When ignition switch turns ON again.
- When timer times out. (45 seconds)

LIN COMMUNICATION

Front power window motor (driver side), front power window motor (passenger side), rear power window motor (L/R side), power window main switch and BCM transmit and receive signal by LIN communication.

POWER WINDOW LOCK

Ground circuit inside power window main switch shuts off when power window lock switch is ON. This inhibits rear power window switch operation.

ANTI-PINCH SYSTEM (FRONT DRIVER SIDE)

- Pinch foreign material in the door glass during AUTO-UP operation, and it is the anti-pinch function that lowers the door glass when detected.
- CPU continues detecting the movement of power window motor while power window motor is operating.
- Power window motor controls to lower the door glass for approximately 150 mm (5.91 in) or more after it detects foreign material is trapped in the door glass.

OPERATION CONDITION

- When door glass AUTO-UP operation is performed (anti-pinch function does not operate just before the door glass closes and is fully closed)



NOTE:

Depending on environment and driving conditions, if a similar impact or load is applied to the door glass, it may lower.

Fail-safe

FAIL-SAFE CONTROL BY POWER WINDOW MOTOR

Power window motor switches power window operation to fail-safe control when malfunction is detected.

Detected item	Judgment condition	Fail-safe operation	Recovery condition
Non-Initialized condition	When the motor integrated CPU detect door glass position non-initialized condition	Auto UP operation (Anti-pinch) is forbidden	Initialization completed
Thermal protection	When the motor integrated CPU detect temperature increases and exceeds threshold	Power window operation is forbidden	A period of time passed (Temperature returns to normal)
Consecutive reverse operation malfunction	When the motor integrated CPU has detected consecutively 3 times the reverse operation	Auto UP operation (Anti-pinch) is forbidden	Approximately 10 seconds passed or the motor integrated CPU detect door glass fully close position

FAIL-SAFE CONTROL BY DTC

Power window motor performs fail-safe control when any DTC are detected.

DTC	Fail-safe
B2C41-04	Front power window motor (driver side) operation is stop or inching.

ECU DIAGNOSIS INFORMATION BCM (BODY CONTROL MODULE)

List of ECU Reference

ECU	Reference
BCM	BCM
	Fail-safeBCM
	DTC Inspection Priority ChartBCM
	DTC IndexBCM

B2C42-04	Front power window motor (passenger side) operation is stop or inching.
B2C43-04	Rear power window motor (left side) operation is stop or inching.
B2C44-04	Rear power window motor (right side) operation is stop or inching.

B2C42-04 FRONT POWER WINDOW MOTOR RH

DTC Description

DTC DETECTION LOGIC

DTC No.	M.U.T.-III SE screen terms (Trouble diagnosis content)	DTC detection condition	
		Diagnosis condition	
B2C42-04	Power window motor FR [Power window motor (front right hand)]	Diagnosis condition	When ignition switch ON or power window timer operates.
		Signal (terminal)	—
		Threshold	CPU in power window motor (passenger side) detect internal malfunction.
		Diagnosis delay time	10 seconds

POSSIBLE CAUSE

Front power window motor (passenger side)

FAIL SAFE

Front power window motor (passenger side) operation is stop or inching.

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Ignition switch ON.
2. Keep pulling the power window switch AUTO-UP for 5 seconds or more.
3. Keep pressing the power window switch AUTO-DOWN for 5 seconds or more.
4. Select "Self Diagnostic Result" mode of "BCM" using M.U.T.-III SE.
5. Check DTC.

Is DTC detected?

YES >>

Refer to Diagnosis Procedure.

NO-1 >>

To check malfunction symptom before repair: Refer to GENERALINFORMATION - BASIC INSPECTION - SERVICE INFORMATION FORELECTRICAL INCIDENT - Intermittent Incident.

NO-2 >>

Confirmation after repair: INSPECTION END

Diagnosis Procedure

1. REPLACE FRONT POWER WINDOW MOTOR (PASSENGER SIDE)

Replace front power window motor (passenger side).

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INSPECTION END

B2C43-04 REAR POWER WINDOW MOTOR LH

DTC Description

DTC DETECTION LOGIC

DTC No.	M.U.T.-III SE screen terms (Trouble diagnosis content)	DTC detection condition	
		Diagnosis condition	
B2C43-04	Power window motor RL [Power window motor (rear left hand)]	Diagnosis condition	When ignition switch ON or power window timer operates.
		Signal (terminal)	—
		Threshold	CPU in power window motor (left side) detect internal malfunction.
		Diagnosis delay time	10 seconds

POSSIBLE CAUSE

Rear power window motor (left side)

FAIL SAFE

Rear power window motor (left side) operation is stop or inching.

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Ignition switch ON.
2. Keep pulling the power window switch AUTO-UP for 5 seconds or more.
3. Keep pressing the power window switch AUTO-DOWN for 5 seconds or more.
4. Select "Self Diagnostic Result" mode of "BCM" using M.U.T.-III SE.
5. Check DTC.

Is DTC detected?

YES >>

Refer to Diagnosis Procedure.

NO-1 >>

To check malfunction symptom before repair: Refer to GENERALINFORMATION - BASIC INSPECTION - SERVICE INFORMATION FORELECTRICAL INCIDENT - Intermittent Incident.

NO-2 >>

Confirmation after repair: INSPECTION END

Diagnosis Procedure

1. REPLACE REAR POWER WINDOW MOTOR (LEFT SIDE)

Replace rear power window motor (left side).

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INSPECTION END

B2C44-04 REAR POWER WINDOW MOTOR RH

DTC Description

DTC DETECTION LOGIC

DTC No.	M.U.T.-III SE screen terms (Trouble diagnosis content)	DTC detection condition	
		Diagnosis condition	When ignition switch ON or power window timer operates.
B2C44-04	Power window motor RR [Power window motor (rear right hand)]	Signal (terminal)	—
		Threshold	CPU in power window motor (right side) detect internal malfunction.
		Diagnosis delay time	10 seconds

POSSIBLE CAUSE

Rear power window motor (right side)

FAIL SAFE

Rear power window motor (right side) operation is stop or inching.

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Ignition switch ON.
2. Keep pulling the power window switch AUTO-UP for 5 seconds or more.
3. Keep pressing the power window switch AUTO-DOWN for 5 seconds or more.
4. Select "Self Diagnostic Result" mode of "BCM" using M.U.T.-III SE.
5. Check DTC.

Is DTC detected?

YES >>

Refer to Diagnosis Procedure.

NO-1 >>

To check malfunction symptom before repair: Refer to GENERALINFORMATION - BASIC INSPECTION - SERVICE INFORMATION FORELECTRICAL INCIDENT - Intermittent Incident.

NO-2 >>

Confirmation after repair: INSPECTION END

Diagnosis Procedure

1. REPLACE REAR POWER WINDOW MOTOR (RIGHT SIDE)

Replace rear power window motor (right side).

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INSPECTION END