Technical Service Bulletin

SUBJECT:	No:	**TSB-21-42A-003**
UPDATES TO 2022 OUTLANDER MIRROR MOTOR - SERVICE MANUAL REVISION	DATE:	**July 2021**
	MODEL:	**2022 Outlander**

CIRCULATE TO:	[ ] GENERAL MANAGER	[**X**] PARTS MANAGER	[**X**] TECHNICIAN
[**X**] SERVICE ADVISOR	[**X**] SERVICE MANAGER	[**X**] WARRANTY PROCESSOR	[ ] SALES MANAGER

PURPOSE

This TSB provides content for the Mirror Motor section of the affected Service Manual, to add DTC Circuit Diagnosis and Symptom Diagnosis information.

AFFECTED VEHICLES

- 2022 Outlander

AFFECTED SERVICE MANUAL

- 2022 Outlander Service Manual, Group 42A-Body

Please add the following ten pages to the 2022 Outlander Service Manual, Group 42A-Body –> Mirrors section.

MIRRORS

CONTENTS

DTC/CIRCUIT DIAGNOSIS

MIRROR MOTOR

Component Function Check

1. CHECK DOOR MIRROR OPERATION

1. Ignition switch ON.
2. Check if the mirror surface adjustment of the door mirror works properly when the mirror switch is operated with the right/left changeover switch operated to the right or left.

Is the inspection result normal?

YES >>

INSPECTION END

NO >>

Refer to Diagnosis Procedure.

Diagnosis Procedure

1. CHECK FUSE

1. Ignition switch OFF.
2. Check that the following fuse is not blown (open).

Fuse No.	Capacity
45	5 A

Is the inspection result normal?

YES >>

GO TO 2.

NO >>

Replace the blown (open) fuse after repairing the cause of blown (open).

2. CHECK POWER WINDOW MAIN SWITCH (MIRROR CONTROL SWITCH) POWER SUPPLY CIRCUIT

1. Disconnect power window main switch (mirror control switch) connector.
2. Ignition switch ON.
3. Check voltage between power window main switch (mirror control switch) harness connector and ground.

+		-	Voltage
Power window main switch			
Connector	Terminal		
D27	3	Ground	9 – 16 V

Is the inspection result normal?

YES >>

GO TO 3.

NO >>

Repair or replace harness.

3. CHECK POWER WINDOW MAIN SWITCH (MIRROR CONTROL SWITCH) GROUND CIRCUIT

1. Ignition switch OFF.
2. Check continuity between power window main switch (mirror control switch) harness connector and ground.

+		-	Continuity
Power window main switch			
Connector	Terminal		
D27	22	Ground	Existed

Is the inspection result normal?

YES >>

GO TO 4.

NO >>

Repair or replace harness.

4. CHECK MIRROR MOTOR CIRCUIT

1. Disconnect door mirror assembly (LH) and (RH) connector.
2. Check continuity between door mirror assembly (LH) and (RH) connector and power window main switch (mirror control switch) connector.

Door mirror assembly			Power window main switch		Continuity
Connector		Terminal	Connector	Terminal	
LH	D14	6	D27	6	Existed
		13		10	
		14		21	
RH	D106	6		8	
		13		9	
		14		7	

Is the inspection result normal?

YES >>

GO TO 5.

NO >>

Repair or replace harnesses.

5. CHECK MIRROR MOTOR INPUT SIGNAL

1. Connect power window main switch (mirror control switch) connector.
2. Ignition switch ON.
3. With operating the mirror switch, check the voltage between door mirror assembly harness connector and ground.

+			-	Condition		Voltage
Door mirror assembly				Right/left changeover switch	Mirror switch	
Connector		Terminal				
LH	D14	14	Ground	Right	Operated to DOWN or RIGHT	9 - 16 V
					Other than above	0 - 1 V
		13			Operated to LEFT	9 - 16 V
					Other than above	0 - 1 V
		6			Operated to UP	9 - 16 V
					Other than above	0 - 1 V
RH	D106	14		Left	Operated to DOWN or RIGHT	9 - 16 V
					Other than above	0 - 1 V
		13			Operated to LEFT	9 - 16 V
					Other than above	0 - 1 V
		6			Operated to UP	9 - 16 V
					Other than above	0 - 1 V

Is the inspection result normal?

YES >>

GO TO 6.

NO >>

Replace door mirror assembly.

6. REPLACE POWER WINDOW MAIN SWITCH (MIRROR CONTROL SWITCH)

Replace power window main switch (mirror control switch).

Is the inspection result normal?

YES >>

INSPECTION END

NO >>

Refer to GENERALINFORMATION - BASIC INSPECTION - SERVICE INFORMATION FORELECTRICAL INCIDENT - Intermittent Incident.

RETRACTOR MOTOR

Component Function Check

1. CHECK RETRACTABLE DOOR MIRROR OPERATION

1. Ignition switch ON.
2. When the mirror folding/unfolding switch is operated to open or close, check whether the retracting function of the door mirror operates normally.

Is the inspection result normal?

YES >>

INSPECTION END

NO >>

Refer to Diagnosis Procedure.

Diagnosis Procedure

1. CHECK FUSE

1. Ignition switch OFF.
2. Check that the following fuse is not blown (open).

Fuse No.	Capacity
45	5 A

Is the inspection result normal?

YES >>

GO TO 2.

NO >>

Replace the blown (open) fuse after repairing the cause of blown (open).

2. CHECK POWER WINDOW MAIN SWITCH (MIRROR CONTROL SWITCH) AND REMOTE CONTROLLED MIRROR SWITCH POWER SUPPLY CIRCUIT

1. Disconnect power window main switch (mirror control switch) connector and remote controlled mirror switch connector.
2. Ignition switch ON.
3. Check voltage between power window main switch (mirror control switch) harness connector and ground.

+		-	Voltage
Power window main switch			
Connector	Terminal		
D27	3	Ground	9 – 16 V

4. Check voltage between remote controlled mirror switch harness connector and ground.

+		-	Voltage
Remote controlled mirror switch			
Connector	Terminal		
F-25	4	Ground	9 – 16 V

Is the inspection result normal?

YES >>

GO TO 3.

NO >>

Repair or replace harness.

3. CHECK POWER WINDOW MAIN SWITCH (MIRROR CONTROL SWITCH) AND REMOTE CONTROLLED MIRROR SWITCH GROUND CIRCUIT

1. Ignition switch OFF.
2. Check continuity between power window main switch (mirror control switch) harness connector and ground.

+		-	Continuity
Power window main switch			
Connector	Terminal		
D27	22	Ground	Existed

3. Check continuity between remote controlled mirror switch harness connector and ground.

+		-	Continuity
Remote controlled mirror switch			
Connector	Terminal		
F-25	12	Ground	Existed

Is the inspection result normal?

YES >>

GO TO 4.

NO >>

Repair or replace harness.

4. CHECK RETRACTOR MOTOR INPUT SIGNAL 1

1. Disconnect door mirror assembly (LH) and (RH) connector.
2. Check continuity between door mirror assembly (LH) connector and power window main switch connector.

Door mirror assembly			Power window main switch		Continuity
Connector		Terminal	Connector	Terminal	
LH	D14	3	D27	18	Existed
		11		17	

3. Check continuity between door mirror assembly (RH) connector and remote controlled mirror switch connector.

Door mirror assembly			Remote controlled mirror switch		Continuity
Connector		Terminal	Connector	Terminal	
RH	D106	3	F-25	8	Existed
		11		9	

4. Check continuity between door mirror assembly (LH) and (RH) connector and ground.

Door mirror assembly			-	Continuity
Connector		Terminal		
LH	D14	3	Ground	Not existed
		11		
RH	D106	3		
		11		

Is the inspection result normal?

YES >>

GO TO 5.

NO >>

Repair or replace harnesses.

5. CHECK RETRACTOR MOTOR INPUT SIGNAL 2

1. Connect power window main switch (mirror control switch) connector and remote controlled mirror switch connector.
2. Ignition switch ON.
3. With operating the mirror folding/unfolding switch, check the voltage between door mirror assembly harness connector and ground.

+			-	Condition		Voltage
Door mirror assembly						
Connector		Terminal				
LH	D14	11	Ground	Mirror folding/unfolding switch	Operated to OPEN	9 - 16 V
					Operated to CLOSE	0 - 1 V
		3			Operated to OPEN	0 - 1 V
					Operated to CLOSE	9 - 16 V
RH	D106	11			Operated to OPEN	9 - 16 V
					Operated to CLOSE	0 - 1 V
		3			Operated to OPEN	0 - 1 V
					Operated to CLOSE	9 - 16 V

Is the inspection result normal?

YES >>

GO TO 6.

NO >>

Replace door mirror assembly.

6. REPLACE POWER WINDOW MAIN SWITCH (MIRROR CONTROL SWITCH)

Replace power window main switch (mirror control switch).

Is the inspection result normal?

YES >>

INSPECTION END

NO >>

Refer to GENERALINFORMATION - BASIC INSPECTION - SERVICE INFORMATION FORELECTRICAL INCIDENT - Intermittent Incident.

SYMPTOM DIAGNOSIS

AUTO RETRACTABLE DOOR MIRROR DOES NOT OPERATE

Diagnosis Procedure

1. CHECK POWER WINDOW MAIN SWITCH POWER SUPPLY CIRCUIT AND GROUND CIRCUIT

Check power window main switch (mirror control switch) power supply circuit and ground circuit. Refer to BODY EXTERIOR, DOORS, ROOF & VEHICLE SECURITY - POWER WINDOWCONTROL SYSTEM - DTC/CIRCUIT DIAGNOSIS - POWER SUPPLY AND GROUND CIRCUIT - POWER WINDOW MAIN SWITCH - Diagnosis Procedure.

Is the inspection result normal?

YES >>

GO TO 3.

NO >>

Repair or replace the malfunctioning part.

2. CHECK POWER WINDOW MAIN SWITCH (MIRROR CONTROL SWITCH) LIN COMMUNICATION CIRCUIT

Check power window main switch (mirror control switch) LIN communication circuit. Refer to BODY EXTERIOR, DOORS, ROOF & VEHICLE SECURITY - POWER WINDOWCONTROL SYSTEM - DTC/CIRCUIT DIAGNOSIS - LIN COMMUNICATION CIRCUIT - Diagnosis Procedure.

Is the inspection result normal?

YES >>

GO TO 4.

NO >>

Repair or replace the malfunctioning part.

3. REPLACE POWER WINDOW MAIN SWITCH (MIRROR CONTROL SWITCH)

1. Replace power window main switch (mirror control switch).
2. Check the operation of the trouble spot.

Do they operate normally?

YES >>

INSPECTION END

NO >>

GO TO 5.

4. REPLACE BCM

1. Replace BCM.
2. Check the operation of the trouble spot.

Do they operate normally?

YES >>

INSPECTION END

NO >>

Refer to GENERALINFORMATION - BASIC INSPECTION - SERVICE INFORMATION FORELECTRICAL INCIDENT - Intermittent Incident.

ELECTRIC RETRACTABLE DOOR MIRROR DOES NOT OPERATE

Diagnosis Procedure

1. CHECK THE MECHANISM OF THE DOOR MIRROR

Check the following items.

- Damage, deformation of the door mirror mechanism or foreign matter lodged in the door mirror
- Wiring harness damage because it is rubbed or lodged
- Interacting with other parts
- Inappropriate assembly

Is the inspection result normal?

A >>

GO TO 2.

B >>

Repair or replace the malfunctioning part.

2. CHECK RETRACTOR MOTOR

Check retractor motor circuit. Refer to Attached sheet 8 - RETRACTOR MOTOR - Component Function Check.

Is the inspection result normal?

YES >>

GO TO 3.

NO >>

Repair or replace the malfunctioning part.

3. REPLACE RETRACTOR MOTOR

1. Replace retractor motor.
2. Check the operation of the trouble spot.

Do they operate normally?

YES >>

INSPECTION END

NO >>

Refer to GENERALINFORMATION - BASIC INSPECTION - SERVICE INFORMATION FORELECTRICAL INCIDENT - Intermittent Incident.