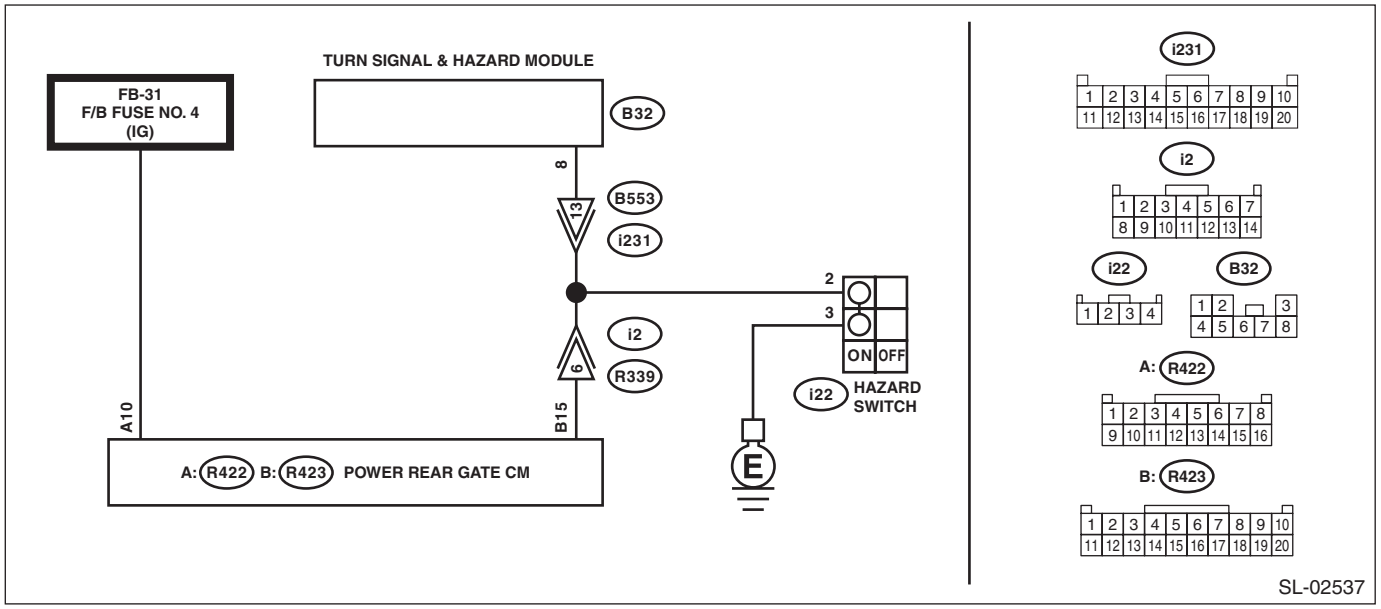
13.Diagnostics with Phenomenon

A: INSPECTION

1. TURN HAZARD LIGHTS DO NOT ILLUMINATE

WIRING DIAGRAM:

Power rear gate system <Ref. to WI-314, WIRING DIAGRAM, Power Rear Gate System.>



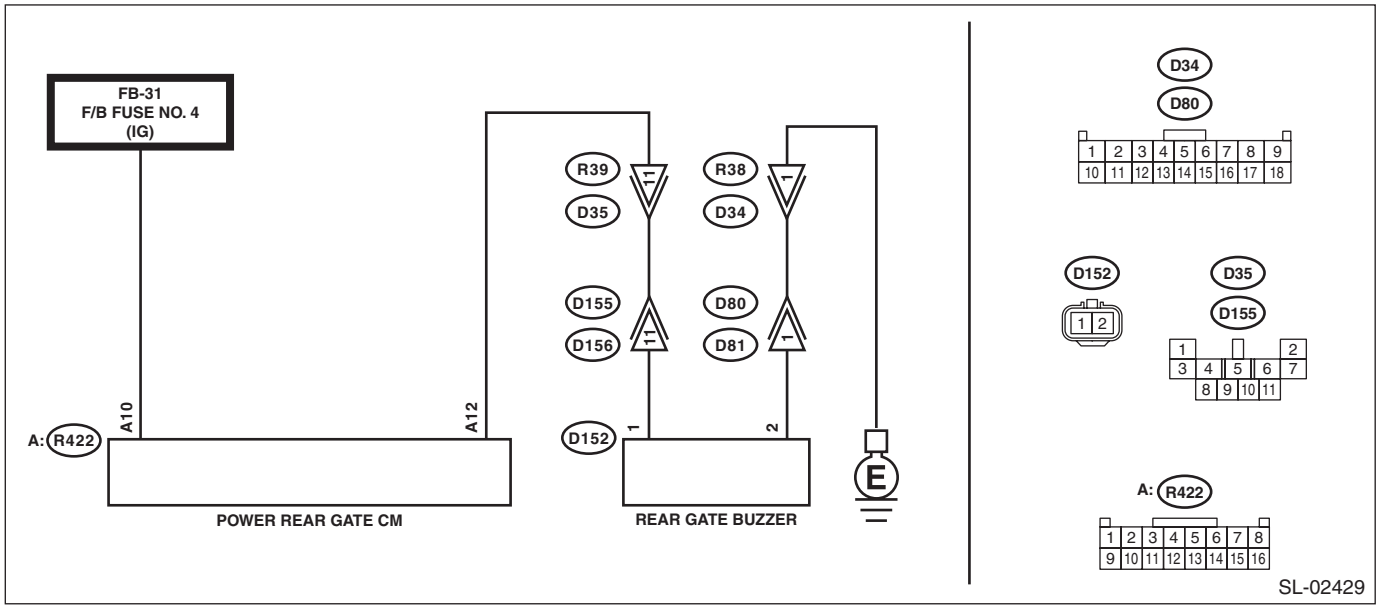
	Step	Check	Yes	No
1	**CHECK CURRENT DATA.** Check «IGN SW» using the Subaru Select Monitor.	Does the data value change according to the ignition switch ON/OFF? (ON ←→ OFF)	Go to step **4**.	Go to step **2**.
2	**CHECK FUSE.** 1) Turn the ignition switch to OFF. 2) Check the fuse.	Is the fuse OK?	Go to step **3**.	Replace the defective fuse. When the fuse is blown immediately, repair the short circuit.
3	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 10 (+) — Chassis ground (–):***	Is the voltage 10.5 V or more when the ignition switch is ON?	Go to step **4**.	Repair or replace the open circuit of harness.
4	**CHECK CURRENT DATA.** 1) Check «HAZARD» using the Subaru Select Monitor. 2) Operate the power rear gate to open.	Is the change of ON ←→ OFF detected?	Go to step **5**.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>
5	**CHECK HAZARD SWITCH.** Turn the hazard switch to ON.	Does the hazard light blink?	Go to step **6**.	Replace the turn hazard CM. <Ref. to LI-41, REMOVAL, Turn Signal Light & Hazard Light Unit.>

	Step	Check	Yes	No
6	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the turn hazard CM connector. 3) Disconnect the hazard switch connector. 4) Measure the resistance between PRG CM connector and turn hazard CM and hazard switch connector. ***Connector & terminal*** ***(R423) No. 15 — (B32) No. 8:*** ***(B32) No. 8 — (i22) No. 2:***	Is the resistance less than 10 Ω?	Go to step **7**.	Repair or replace the open circuit of harness.
7	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the turn hazard CM connector. 3) Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 15 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **8**.	Repair or replace the short circuit of the harness.
8	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the turn hazard CM connector. 3) Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 15 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **9**.	Repair or replace the short circuit of the harness.
9	**CHECK CONNECTOR.** Check each connector.	Is there poor contact of connector?	Repair or replace the connector.	A temporary change of voltage occurred.

2. THE BUZZER DOES NOT SOUND

WIRING DIAGRAM:

Power rear gate system <Ref. to WI-314, WIRING DIAGRAM, Power Rear Gate System.>



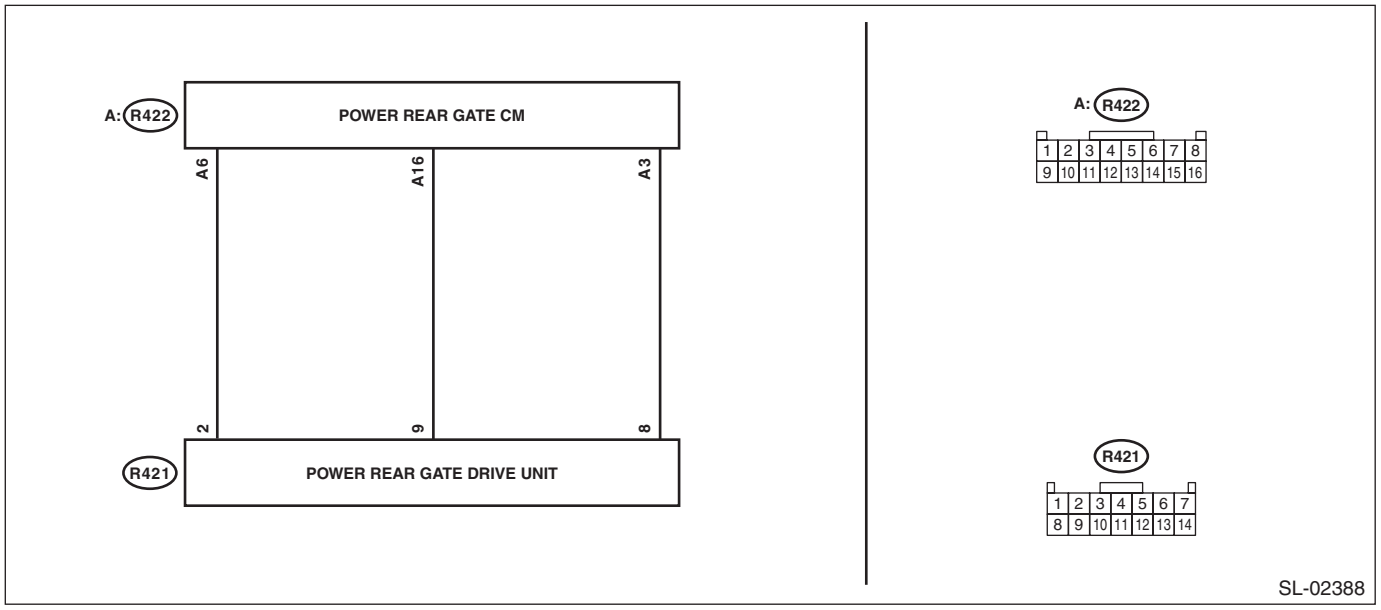
	Step	Check	Yes	No
1	**CHECK CURRENT DATA.** Check «IGN SW» using the Subaru Select Monitor.	Does the data value change according to the ignition switch ON/OFF? (ON ←→ OFF)	Go to step **4**.	Go to step **2**.

	Step	Check	Yes	No
2	**CHECK FUSE.** 1) Turn the ignition switch to OFF. 2) Check the fuse.	Is the fuse OK?	Go to step **3**.	Replace the defective fuse. When the fuse is blown immediately, repair the short circuit.
3	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 10 (+) — Chassis ground (–):***	Is the voltage 10 V or more and less than 16 V, when the ignition switch is ON?	Go to step **4**.	Repair or replace the open circuit of harness.
4	**CHECK FUNCTION.** 1) Turn the ignition switch to OFF. 2) Fully close PRG. 3) Turn the memory height SW to OFF. 4) Press and hold the PRG driver's SW to open PRG. 5) Repeat tapping the PRG driver's SW to reverse PRG three times so that the door free condition can be achieved.	Does the buzzer sound, when PRG operation starts, or when the door free condition is achieved?	If the buzzer sounds when operation starts, the system is normal. If the buzzer sounds when the door free condition is achieved, Go to step **5**.	Go to step **6**.
5	**CHECK CURRENT DATA.** Check «Answer-Back Buzzer Information» using the Subaru Select Monitor.	Is the data value displayed as OFF?	Currently, system is normal. A temporary poor contact may be a possible cause. Therefore, check the harness connector.	Go to step **6**.
6	**CHECK CURRENT DATA.** 1) Check «BUZZER» using the Subaru Select Monitor. 2) Operate PRG to open.	Is the change of ON ←→ OFF detected during the auto-open operation?	Go to step **7**.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>
7	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the buzzer connector. 3) Measure the resistance between PRG CM connector and buzzer connector. ***Connector & terminal*** ***(R422) No. 12 — (D152) No. 1:***	Is the resistance less than 10 Ω?	Go to step **8**.	Repair or replace the open circuit of harness.
8	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the buzzer connector. 3) Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 12 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **9**.	Repair or replace the short circuit of the harness.
9	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(D152) No. 2 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **10**.	Repair or replace the open circuit of harness.
10	**CHECK HARNESS.** 1) Connect the PRG CM connector only. 2) Perform step 4 operations. 3) Measure the voltage between the buzzer connector and chassis ground. ***Connector & terminal*** ***(D152) No. 1 (+) — Chassis ground (–):***	Is the following change measured, when PRG operation starts, or when the door free condition is achieved? Voltage: 10.5 V or more, less than 16 V DUTY: 50%	Replace the buzzer. <Ref. to PRG-22, Power Rear Gate Buzzer.>	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

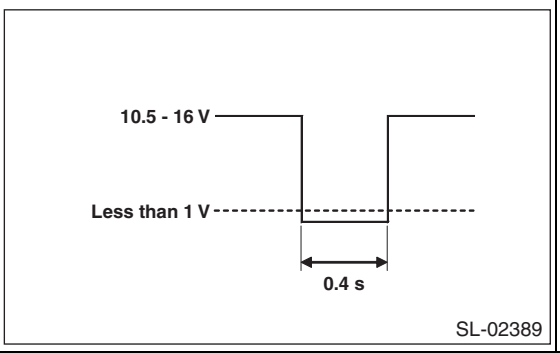
3. HALF-STOP CANNOT BE CANCELLED

WIRING DIAGRAM:

Power rear gate system <Ref. to WI-314, WIRING DIAGRAM, Power Rear Gate System.>



Step		Check	Yes	No
1	**CHECK OPERATION SW.** Refer to "CHECK PRG DRIVER'S SW INPUT CIRCUIT", "CHECK PRG INNER SW INPUT CIRCUIT", "OPERATION FROM KEYLESS/ KEYLESS ACCESS MOBILE KEY IS NOT POSSIBLE" in "Diagnostics with Phenomenon", and check each operation SW. <Ref. to PRG(diag)-69, CHECK PRG DRIVER'S SW INPUT CIRCUIT, INSPECTION, Diagnostics with Phenomenon.> <Ref. to PRG(diag)-70, CHECK PRG INNER SW INPUT CIRCUIT, INSPECTION, Diagnostics with Phenomenon.> <Ref. to PRG(diag)-67, OPERATION FROM KEYLESS/KEYLESS ACCESS MOBILE KEY IS NOT POSSIBLE, INSPECTION, Diagnostics with Phenomenon.>	Is there any fault?	Perform the repair according to each diagnosis.	Go to step **2**.
2	**CHECK CURRENT DATA.** Check «HALF STOP SOL (Cancel)» using the Subaru Select Monitor. **CAUTION:** **ON output for solenoid cancellation requires extremely short time (approx. 0.4 seconds). To check, limit the number of the display items on the Subaru Select Monitor to three. When the display items are too many, changes in the output signals will not be reflected.**	Is the following output displayed, when PRG close-operation is performed with the operation SW? "OFF → ON → OFF"	Go to step **3**.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

	Step	Check	Yes	No
3	**CHECK PRG CM.** Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 6 (+) — Chassis ground (–):***	Is the voltage 10.5 V or more and less than 16 V?	Go to step **4**.	Refer to step 4 and subsequent procedures for DTC B2500 diagnosis, and check the power supply circuit. <Ref. to PRG(diag)-17, DTC B2500 BATT P/SUPPLY FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>
4	**CHECK PRG CM.** Measure the voltage between PRG CM connector and chassis ground, using an oscilloscope. ***Connector & terminal*** ***(R422) No. 4 (+) — Chassis ground (–):***  	Is the voltage less than 1 V for 0.4 seconds, when PRG close-operation is performed with the operation SW? (Reference: Waveform shown on the left)	Go to step **5**.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>
5	**CHECK PRG CM.** Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 16 — Chassis ground:***	Is it less than 1 V?	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>	Go to step **6**.
6	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the PRG DU connector. 3) Measure the resistance between PRG CM connector and PRG DU connector. ***Connector & terminal*** ***(R422) No. 6 — (R421) No. 2:*** ***(R422) No. 4 — (R421) No. 8:***	Is the resistance less than 10 Ω?	Go to step **7**.	Repair or replace the open circuit of harness.
7	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the PRG DU connector. 3) Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 6 — Chassis ground:*** ***(R422) No. 16 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **8**.	Repair or replace the short circuit of the harness.
8	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the PRG DU connector. 3) Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 4 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **9**.	Repair or replace the short circuit of the harness.

	Step	Check	Yes	No
9	**CHECK CONNECTOR.** Turn the ignition switch to OFF.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	Replace the PRG DU. <Ref. to PRG-9, Power Rear Gate Control Module.>

4. OPERATION BY THE PRG DRIVER'S SW IS NOT POSSIBLE

NOTE:
Before performing diagnosis, initialize PRG SYS by opening PRG in manual operation, and then operating the power rear gate auto closer from the partially latched state.

	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is DTC stored in current malfunction?	Refer to each DTC diagnosis.	Go to step **2**.
2	**CHECK CURRENT DATA.** Check «D SW» using the Subaru Select Monitor.	Does the display switch between OFF ←→ ON according to PRG driver's SW operation?	Go to step **4**.	Go to step **3**.
3	**CHECK PRG DRIVER'S SW INPUT CIRCUIT.** Refer to "CHECK PRG DRIVER'S SW INPUT CIRCUIT", and check the PRG driver's SW. <Ref. to PRG(diag)-69, CHECK PRG DRIVER'S SW INPUT CIRCUIT, INSPECTION, Diagnostics with Phenomenon.>	Is there any fault?	Repair according to "CHECK PRG DRIVER'S SW INPUT CIRCUIT".	Go to step **4**.
4	**CHECK POWER REAR GATE AUTO CLOSER.** Refer to step 3 and subsequent procedures for DTC B2513, and check the power rear gate auto closer. <Ref. to PRG(diag)-39, DTC B2513 LATCH CONDITION FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2513 diagnosis.	Go to step **5**.
5	**CHECK SOLENOID.** Refer to step 4 and subsequent procedures for DTC B2523, and check the solenoid. <Ref. to PRG(diag)-52, DTC B2523 HALF STOP SOLENOID FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2523 diagnosis.	Go to step **6**.
6	**CHECK CLUTCH.** Refer to step 4 and subsequent procedures for DTC B2509, and check the clutch. <Ref. to PRG(diag)-31, DTC B2509 CLUTCH OPEN, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2509 diagnosis.	Go to step **7**.
7	**CHECK PRG MOTOR OPEN CIRCUIT.** Perform step 4 and subsequent procedures for DTC B2507, and check the PRG motor open circuit. <Ref. to PRG(diag)-27, DTC B2507 PRG MOTOR OPEN, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2507 diagnosis.	Go to step **8**.
8	**CHECK PRG MOTOR SHORT.** Perform step 4 and subsequent procedures for DTC B2508, and check the PRG motor short. <Ref. to PRG(diag)-29, DTC B2508 PRG MOTOR GND SHORT OUT, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2508 diagnosis.	Go to step **9**.

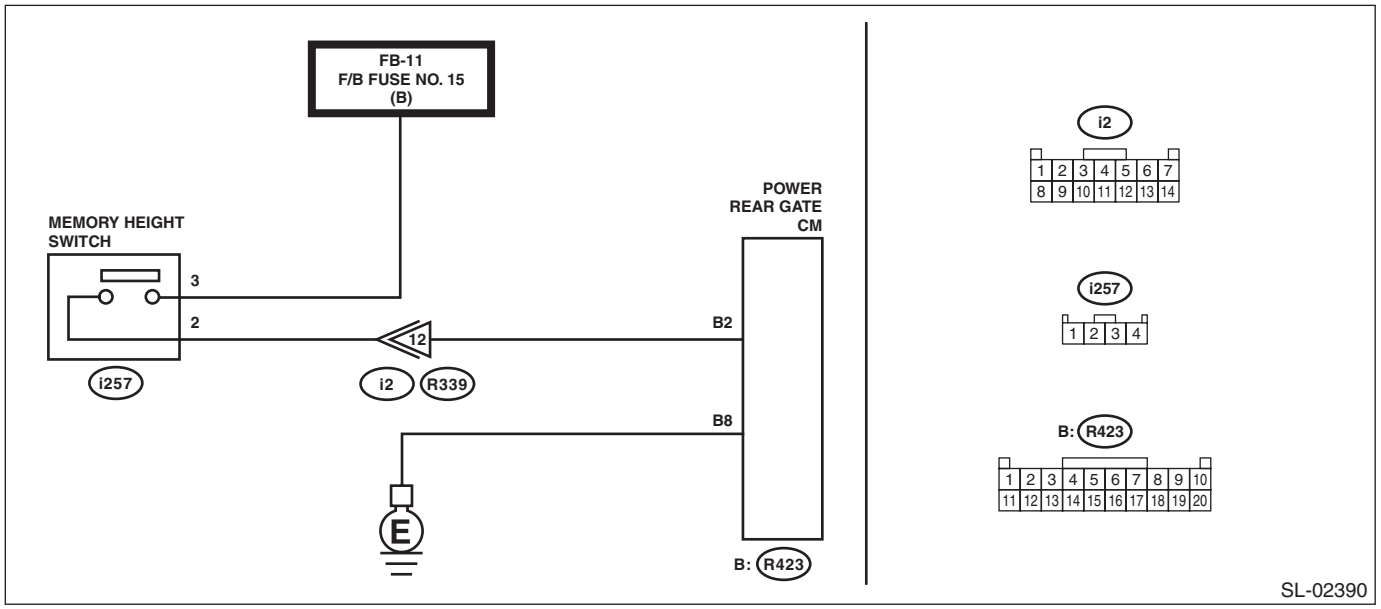
Step		Check	Yes	No
9	**CHECK ROTATION SENSOR.** Perform step 4 and subsequent procedures for DTC B250B, and check the rotation sensor. <Ref. to PRG(diag)-35, DTC B250B ROTATION SENSOR FAILURE (A OUTPUT FIXATION), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B250B diagnosis.	Go to step **10**.
10	**CHECK TOUCH SENSOR.** Perform step 3 and subsequent procedures for DTC B250A, and check the touch sensor. <Ref. to PRG(diag)-33, DTC B250A TOUCH SENSORS BATT. GND SHORT OUT, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B250A diagnosis.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

5. CHECK MEMORY HEIGHT SW INPUT CIRCUIT

NOTE:
Before performing diagnosis, initialize PRG SYS by opening PRG in manual operation, and then operating the power rear gate auto closer from the partially latched state.

WIRING DIAGRAM:

Power rear gate system <Ref. to WI-314, WIRING DIAGRAM, Power Rear Gate System.>



	Step	Check	Yes	No
1	**CHECK BACK-UP FUSE.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is the fuse normal without brown-out?	Go to step **2**.	Replace the fuse.
2	**CHECK CURRENT DATA.** Check «Memory stop SW» using the Subaru Select Monitor.	Does the display switch between OFF ←→ ON according to memory height SW operation?	Input circuit is normal.	Go to step **3**.
3	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the memory height SW connector. 3) Measure the resistance between PRG CM connector and memory height SW connector. ***Connector & terminal*** ***(R423) No. 2 — (i257) No. 2:***	Is the resistance less than 10 Ω?	Go to step **4**.	Repair or replace the open circuit of harness.
4	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 2 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **5**.	Repair or replace the short circuit of the harness.
5	**CHECK HARNESS.** Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 2 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **6**.	Repair or replace the short circuit of the harness.
6	**CHECK HARNESS.** Measure the voltage between memory height SW connector and chassis ground. ***Connector & terminal*** ***(i257) No. 3 (+) — Chassis ground (–):***	Is the voltage 10.5 V or more and less than 16 V?	Go to step **7**.	Repair or replace the open circuit of harness.

	Step	Check	Yes	No
7	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 8 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **8**.	Repair or replace the open circuit of harness.
8	**CHECK MEMORY HEIGHT SW.** Measure the resistance between switch terminals. ***Connector & terminal*** ***(i257) No. 2 — (i257) No. 3:***	Is the resistance 1 MΩ or more at OFF, and less than 1 Ω at ON?	Go to step **9**.	Replace the memory height SW. <Ref. to PRG-25, Memory Height Switch.>
9	**CHECK CONNECTOR.**	Is there poor contact of connector?	Repair or replace the poor contact of connector.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

6. PRG INNER SW DOES NOT FUNCTION

NOTE:
Before performing diagnosis, initialize PRG SYS by opening PRG in manual operation, and then operating the power rear gate auto closer from the partially latched state.

	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is DTC stored in current malfunction?	Refer to the DTC diagnosis.	Go to step **2**.
2	**CHECK CURRENT DATA.** Check «R/G inner SW» using the Subaru Select Monitor.	Does the display switch between OFF ←→ ON according to PRG inner SW operation?	Go to step **4**.	Go to step **3**.
3	**CHECK PRG INNER SW INPUT CIRCUIT.** Refer to "CHECK PRG INNER SW INPUT CIRCUIT", and check the PRG inner SW. <Ref. to PRG(diag)-70, CHECK PRG INNER SW INPUT CIRCUIT, INSPECTION, Diagnostics with Phenomenon.>	Is there any fault?	Repair according to "CHECK PRG INNER SW INPUT CIRCUIT".	Go to step **4**.
4	**CHECK POWER REAR GATE AUTO CLOSER.** Refer to step 3 and subsequent procedures for DTC B2513, and check the power rear gate auto closer. <Ref. to PRG(diag)-39, DTC B2513 LATCH CONDITION FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2513 diagnosis.	Go to step **5**.
5	**CHECK SOLENOID.** Refer to step 4 and subsequent procedures for DTC B2523, and check the solenoid. <Ref. to PRG(diag)-52, DTC B2523 HALF STOP SOLENOID FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2523 diagnosis.	Go to step **6**.
6	**CHECK CLUTCH.** Refer to step 4 and subsequent procedures for DTC B2509, and check the clutch. <Ref. to PRG(diag)-31, DTC B2509 CLUTCH OPEN, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2509 diagnosis.	Go to step **7**.
7	**CHECK PRG MOTOR OPEN CIRCUIT.** Perform step 4 and subsequent procedures for DTC B2507, and check the PRG motor open circuit. <Ref. to PRG(diag)-27, DTC B2507 PRG MOTOR OPEN, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2507 diagnosis.	Go to step **8**.
8	**CHECK PRG MOTOR SHORT.** Perform step 4 and subsequent procedures for DTC B2508, and check the PRG motor short. <Ref. to PRG(diag)-29, DTC B2508 PRG MOTOR GND SHORT OUT, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2508 diagnosis.	Go to step **9**.
9	**CHECK ROTATION SENSOR.** Perform step 4 and subsequent procedures for DTC B250B, and check the rotation sensor. <Ref. to PRG(diag)-35, DTC B250B ROTATION SENSOR FAILURE (A OUTPUT FIXATION), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B250B diagnosis.	Go to step **10**.

	Step	Check	Yes	No
10	**CHECK TOUCH SENSOR.** Perform step 3 and subsequent procedures for DTC B250A, and check the touch sensor. <Ref. to PRG(diag)-33, DTC B250A TOUCH SENSORS BATT. GND SHORT OUT, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B250A diagnosis.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

7. PRG POSITION CANNOT BE MEMORIZED

NOTE:
Before performing diagnosis, initialize PRG SYS by opening PRG in manual operation, and then operating the power rear gate auto closer from the partially latched state.

	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is DTC stored in current malfunction?	Refer to the DTC diagnosis.	Go to step **2**.
2	**CHECK MEMORY HEIGHT SW.**	Is the memory height SW ON?	Go to step **3**.	Set the memory height SW to ON.
3	**CHECK EACH SW.** Perform inspections in "CHECK PRG INNER SW INPUT CIRCUIT", and "CHECK MEMORY HEIGHT SW INPUT CIRCUIT". <Ref. to PRG(diag)-70, CHECK PRG INNER SW INPUT CIRCUIT, INSPECTION, Diagnostics with Phenomenon.> <Ref. to PRG(diag)-62, CHECK MEMORY HEIGHT SW INPUT CIRCUIT, INSPECTION, Diagnostics with Phenomenon.>	Is there any fault?	Repair it according to each inspection.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

8. PRG OPENER BUTTON DOES NOT FUNCTION

NOTE:
Before performing diagnosis, initialize PRG SYS by opening PRG in manual operation, and then operating the power rear gate auto closer from the partially latched state.

Step		Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is DTC stored in current malfunction?	Refer to the DTC diagnosis.	Go to step **2**.
2	**CHECK CURRENT DATA.** Check «R/G Open SW» using the Subaru Select Monitor.	Does the display switch between "OFF" "tap" "press and hold" according to PRG opener button operation?	Go to step **4**.	Go to step **3**.
3	**CHECK BODY INTEGRATED UNIT.** • For models with keyless access Perform step 6 and subsequent procedures in "CANNOT UNLOCK WITH THE REAR GATE OPENER BUTTON" in KPS (DIAGNOSTICS). <Ref. to KPS(diag)-103, REAR GATE CANNOT BE UNLOCKED WITH THE REAR GATE OPENER BUTTON, INSPECTION, Diagnostics with Phenomenon.> • For models without keyless access Perform "CHECK REAR GATE OPENER BUTTON CIRCUIT" in Door Lock Control System. <Ref. to SL-13, CHECK REAR GATE OPENER BUTTON CIRCUIT, INSPECTION, Door Lock Control System.>	Is there any fault?	Repair it according to each inspection.	Go to step **4**.
4	**CHECK POWER REAR GATE AUTO CLOSER.** Refer to step 3 and subsequent procedures for DTC B2513, and check the power rear gate auto closer. <Ref. to PRG(diag)-39, DTC B2513 LATCH CONDITION FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2513 diagnosis.	Go to step **5**.
5	**CHECK SOLENOID.** Refer to step 4 and subsequent procedures for DTC B2523, and check the solenoid. <Ref. to PRG(diag)-52, DTC B2523 HALF STOP SOLENOID FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2523 diagnosis.	Go to step **6**.
6	**CHECK CLUTCH.** Refer to step 4 and subsequent procedures for DTC B2509, and check the clutch. <Ref. to PRG(diag)-31, DTC B2509 CLUTCH OPEN, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2509 diagnosis.	Go to step **7**.
7	**CHECK PRG MOTOR OPEN CIRCUIT.** Perform step 4 and subsequent procedures for DTC B2507, and check the PRG motor open circuit. <Ref. to PRG(diag)-27, DTC B2507 PRG MOTOR OPEN, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2507 diagnosis.	Go to step **8**.
8	**CHECK PRG MOTOR SHORT.** Perform step 4 and subsequent procedures for DTC B2508, and check the PRG motor short. <Ref. to PRG(diag)-29, DTC B2508 PRG MOTOR GND SHORT OUT, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2508 diagnosis.	Go to step **9**.

	Step	Check	Yes	No
9	**CHECK ROTATION SENSOR.** Perform step 4 and subsequent procedures for DTC B250B, and check the rotation sensor. <Ref. to PRG(diag)-35, DTC B250B ROTATION SENSOR FAILURE (A OUTPUT FIXATION), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B250B diagnosis.	Go to step **10**.
10	**CHECK TOUCH SENSOR.** Perform step 3 and subsequent procedures for DTC B250A, and check the touch sensor. <Ref. to PRG(diag)-33, DTC B250A TOUCH SENSORS BATT. GND SHORT OUT, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B250A diagnosis.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

9. OPERATION FROM KEYLESS/KEYLESS ACCESS MOBILE KEY IS NOT POSSIBLE

NOTE:
Before performing diagnosis, initialize PRG SYS by opening PRG in manual operation, and then operating the power rear gate auto closer from the partially latched state.

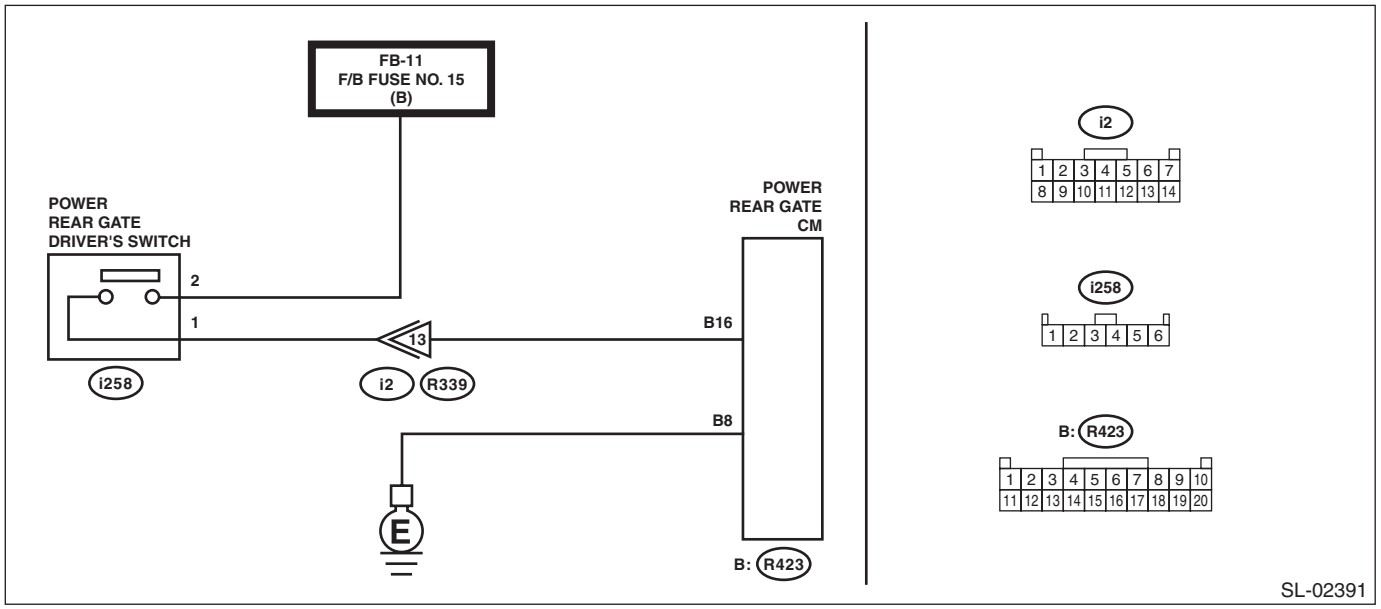
	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is DTC stored in current malfunction?	Refer to the DTC diagnosis.	Go to step **2**.
2	**CHECK CURRENT DATA.** Check «Normal Keyless R/G SW» or «Smart Keyless R/G SW» using the Subaru Select Monitor.	Does the display switch between "OFF" "tap" "press and hold" according to mobile key SW operation?	Go to step **4**.	Go to step **3**.
3	**CHECK BODY INTEGRATED UNIT.** • For models with keyless access Perform “KEYLESS ACCESS LOCK/UNLOCK CANNOT BE PERFORMED FROM ANY OF THE DOORS” in KPS (DIAGNOSTICS). <Ref. to KPS(diag)-90, KEYLESS ACCESS LOCK/UNLOCK CANNOT BE PERFORMED FROM ANY OF THE DOORS, INSPECTION, Diagnostics with Phenomenon.> • For models without keyless access Perform "NONE OF THE FUNCTIONS OF THE KEYLESS ENTRY SYSTEM OPERATE" in Door Lock Control System. <Ref. to SL-18, SYMPTOM CHART, INSPECTION, Keyless Entry System.>	Is there any fault?	Repair it according to each inspection.	Go to step **4**.
4	**CHECK POWER REAR GATE AUTO CLOSER.** Refer to step 3 and subsequent procedures for DTC B2513, and check the power rear gate auto closer. <Ref. to PRG(diag)-39, DTC B2513 LATCH CONDITION FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2513 diagnosis.	Go to step **5**.
5	**CHECK SOLENOID.** Refer to step 4 and subsequent procedures for DTC B2523, and check the solenoid. <Ref. to PRG(diag)-52, DTC B2523 HALF STOP SOLENOID FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2523 diagnosis.	Go to step **6**.

Step		Check	Yes	No
6	**CHECK CLUTCH.** Refer to step 4 and subsequent procedures for DTC B2509, and check the clutch. <Ref. to PRG(diag)-31, DTC B2509 CLUTCH OPEN, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2509 diagnosis.	Go to step **7**.
7	**CHECK PRG MOTOR OPEN CIRCUIT.** Perform step 4 and subsequent procedures for DTC B2507, and check the PRG motor open circuit. <Ref. to PRG(diag)-27, DTC B2507 PRG MOTOR OPEN, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2507 diagnosis.	Go to step **8**.
8	**CHECK PRG MOTOR SHORT.** Perform step 4 and subsequent procedures for DTC B2508, and check the PRG motor short. <Ref. to PRG(diag)-29, DTC B2508 PRG MOTOR GND SHORT OUT, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B2508 diagnosis.	Go to step **9**.
9	**CHECK ROTATION SENSOR.** Perform step 4 and subsequent procedures for DTC B250B, and check the rotation sensor. <Ref. to PRG(diag)-35, DTC B250B ROTATION SENSOR FAILURE (A OUTPUT FIXATION), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B250B diagnosis.	Go to step **10**.
10	**CHECK TOUCH SENSOR.** Perform step 3 and subsequent procedures for DTC B250A, and check the touch sensor. <Ref. to PRG(diag)-33, DTC B250A TOUCH SENSORS BATT. GND SHORT OUT, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is there any fault?	Repair it according to B250A diagnosis.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

10.CHECK PRG DRIVER'S SW INPUT CIRCUIT

NOTE:
Before performing diagnosis, initialize PRG SYS by opening PRG in manual operation, and then operating the power rear gate auto closer from the partially latched state.

WIRING DIAGRAM:
Power rear gate system <Ref. to WI-314, WIRING DIAGRAM, Power Rear Gate System.>



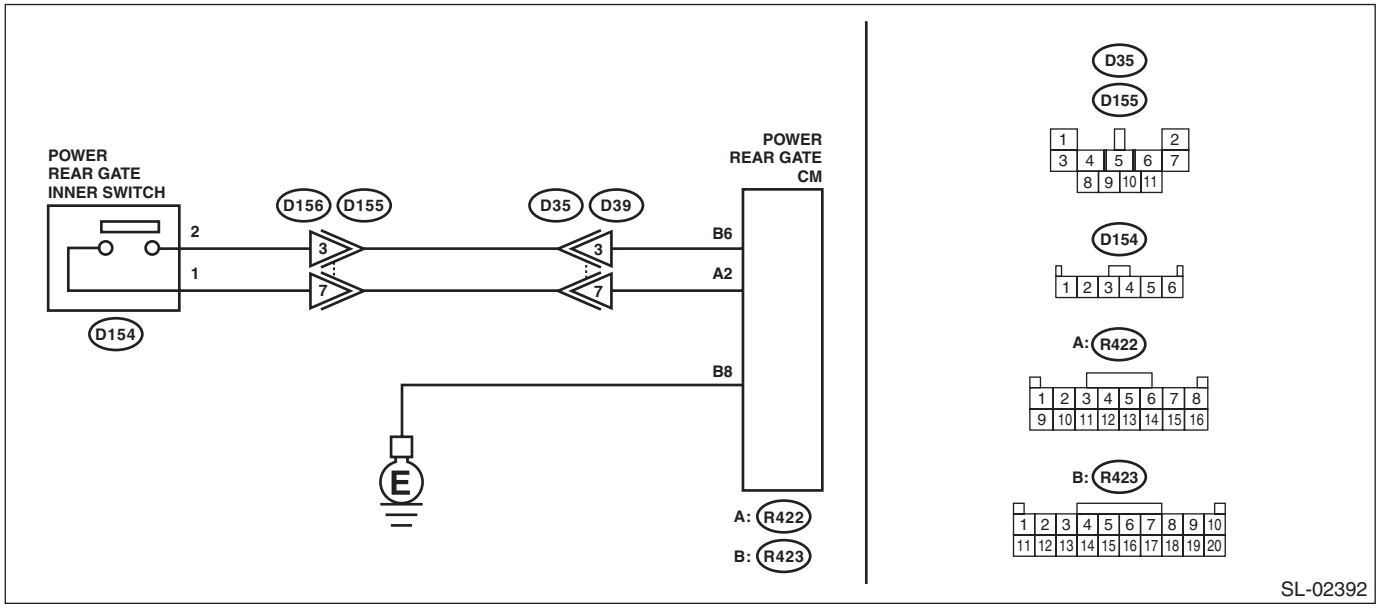
	Step	Check	Yes	No
1	**CHECK BACK-UP FUSE.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is the fuse normal without brown-out?	Go to step **2**.	Replace the fuse.
2	**CHECK CURRENT DATA.** Check «D SW» using the Subaru Select Monitor.	Does the display switch between OFF ←→ ON according to PRG driver's SW operation?	Input circuit is normal.	Go to step **3**.
3	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the memory height SW connector. 3) Measure the resistance between PRG CM connector and PRG driver's SW connector. ***Connector & terminal*** ***(R423) No. 16 — (i258) No. 1:***	Is the resistance less than 10 Ω?	Go to step **4**.	Repair or replace the open circuit of harness.
4	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 16 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **5**.	Repair or replace the short circuit of the harness.
5	**CHECK HARNESS.** Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 16 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **6**.	Repair or replace the short circuit of the harness.
6	**CHECK HARNESS.** Measure the voltage between PRG driver's SW connector and chassis ground. ***Connector & terminal*** ***(i258) No. 2 (+) — Chassis ground (–):***	Is the voltage 10.5 V or more and less than 16 V?	Go to step **7**.	Repair or replace the open circuit of harness.

	Step	Check	Yes	No
7	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 8 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **8**.	Repair or replace the open circuit of harness.
8	**CHECK MEMORY HEIGHT SW.** Measure the resistance between switch terminals. ***Connector & terminal*** ***(i258) No. 1 — (i258) No. 2:***	Is the resistance 1 MΩ or more at OFF, and less than 1 Ω at ON?	Go to step **9**.	Replace the memory height SW. <Ref. to PRG-25, Memory Height Switch.>
9	**CHECK CONNECTOR.**	Is there poor contact of connector?	Repair or replace the poor contact of connector.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

11.CHECK PRG INNER SW INPUT CIRCUIT

NOTE:
Before performing diagnosis, initialize PRG SYS by opening PRG in manual operation, and then operating the power rear gate auto closer from the partially latched state.

WIRING DIAGRAM:
Power rear gate system <Ref. to WI-314, WIRING DIAGRAM, Power Rear Gate System.>



	Step	Check	Yes	No
1	**CHECK CURRENT DATA.** Check «R/G inner SW» using the Subaru Select Monitor.	Does the display switch between OFF ←→ ON according to PRG inner SW operation?	Input circuit is normal.	Go to step **2**.
2	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the PRG inner SW connector. 3) Measure the resistance between PRG CM connector and PRG inner SW connector. ***Connector & terminal*** ***(R422) No. 2 — (D154) No. 1:*** ***(R423) No. 6 — (D154) No. 2:***	Is the resistance less than 10 Ω?	Go to step **3**.	Repair or replace the open circuit of harness.

	Step	Check	Yes	No
3	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 2 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **4**.	Repair or replace the short circuit of the harness.
4	**CHECK HARNESS.** Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 6 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **5**.	Repair or replace the short circuit of the harness.
5	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 8 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **6**.	Repair or replace the short circuit of the harness.
6	**CHECK HARNESS.** Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 2 (+) — Chassis ground (–):***	Is the voltage 10.5 V or more and less than 16 V?	Go to step **7**.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>
7	**CHECK SW.** Measure the resistance between switch terminals. ***Connector & terminal*** ***(D154) No. 1 — (D154) No. 2:***	Is the resistance 1 MΩ or more at OFF, and less than 1 Ω at ON?	Go to step **8**.	Replace the PRG inner SW. <Ref. to PRG-23, Power Rear Gate Inner Switch.>
8	**CHECK CONNECTOR.**	Is there poor contact of connector?	Repair or replace the poor contact of connector.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

CRUISE CONTROL SYSTEM

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