11.Diagnostic Procedure with Diagnostic Trouble Code (DTC)

A: DTC B2500 BATT P/SUPPLY FAILURE

DTC DETECTING CONDITION:

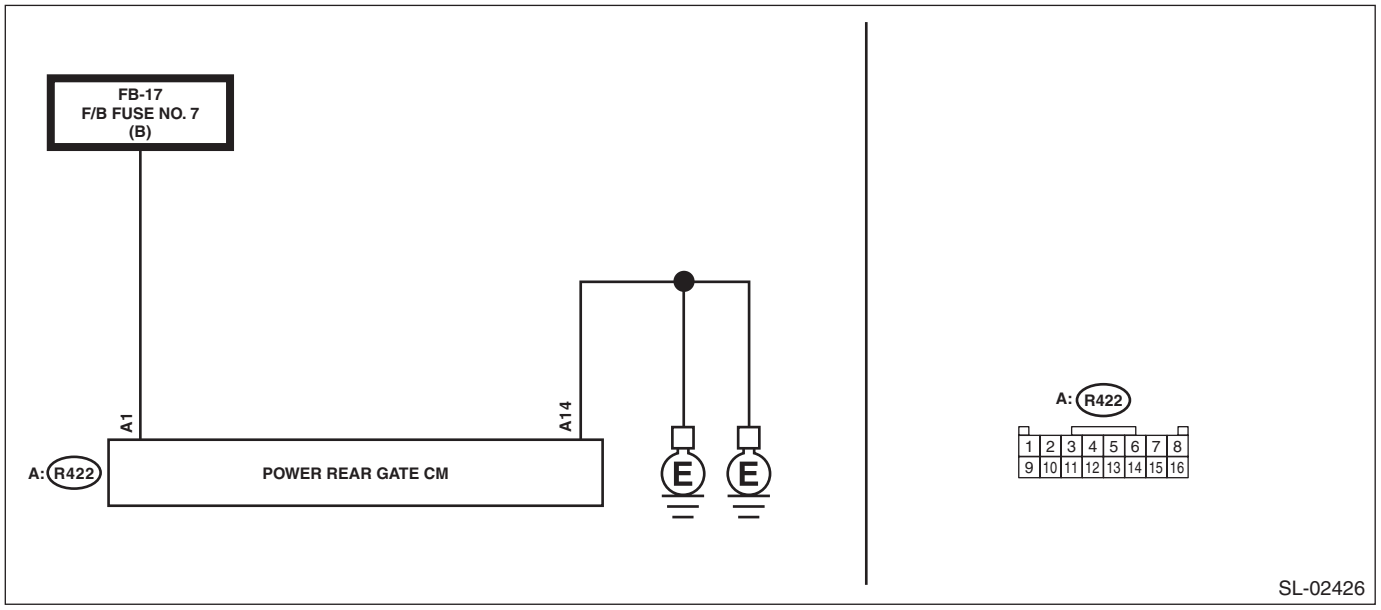
Detected when the power supply voltage is less than 10.5 V or 16 V or more at starting PRG operation (when SW is operated).

TROUBLE SYMPTOM:

The power rear gate does not operate.

WIRING DIAGRAM:

Power rear gate system <Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>

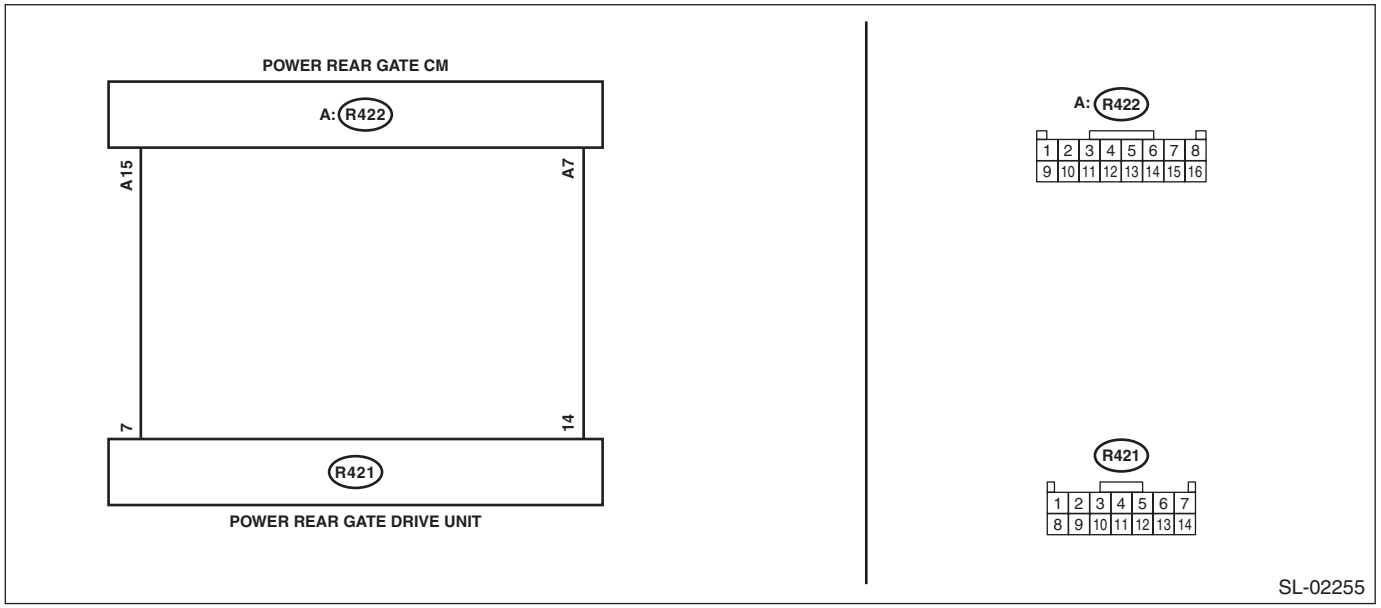


Step		Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2500 current malfunction?	Go to step **2**.	Go to step **3**.
2	**CHECK DTC.** 1) Turn IGN SW to OFF. 2) Disconnect the PRG CM connector and reconnect it. 3) Manually close the rear gate to the partially latched position, and operate the power rear gate auto closer to fully close. (PRG initialization) 4) Press the operation SW to perform auto-open/close of PRG, and then return to the full-close position. 5) Turn the ignition switch to ON. 6) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2500 current malfunction?	Go to step **4**.	Go to step **3**.
3	**CHECK CURRENT DATA.** Check «+B» using the Subaru Select Monitor.	Is the value less than 10.5 V or 16 V or more?	Go to step **4**.	Currently, system is normal. A temporary poor contact may be a possible cause. Therefore, check the harness connector.

	Step	Check	Yes	No
4	**CHECK FUSE.** 1) Turn the ignition switch to OFF. 2) Check the fuse.	Is the fuse OK?	Go to step **5**.	Replace the defective fuse. When the fuse is blown immediately, repair the short circuit.
5	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Using a tester, measure the voltage between the PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 1 (+) — Chassis ground (–):***	Is the voltage 10.5 V or more and less than 16 V?	Go to step **6**.	Repair or replace the open circuit of harness.
6	**CHECK HARNESS.** Using a tester, measure the resistance between the PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 14 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **7**.	Repair or replace the open circuit of harness.
7	**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.>

B: DTC B2501 PRG ECU MALFUNCTION

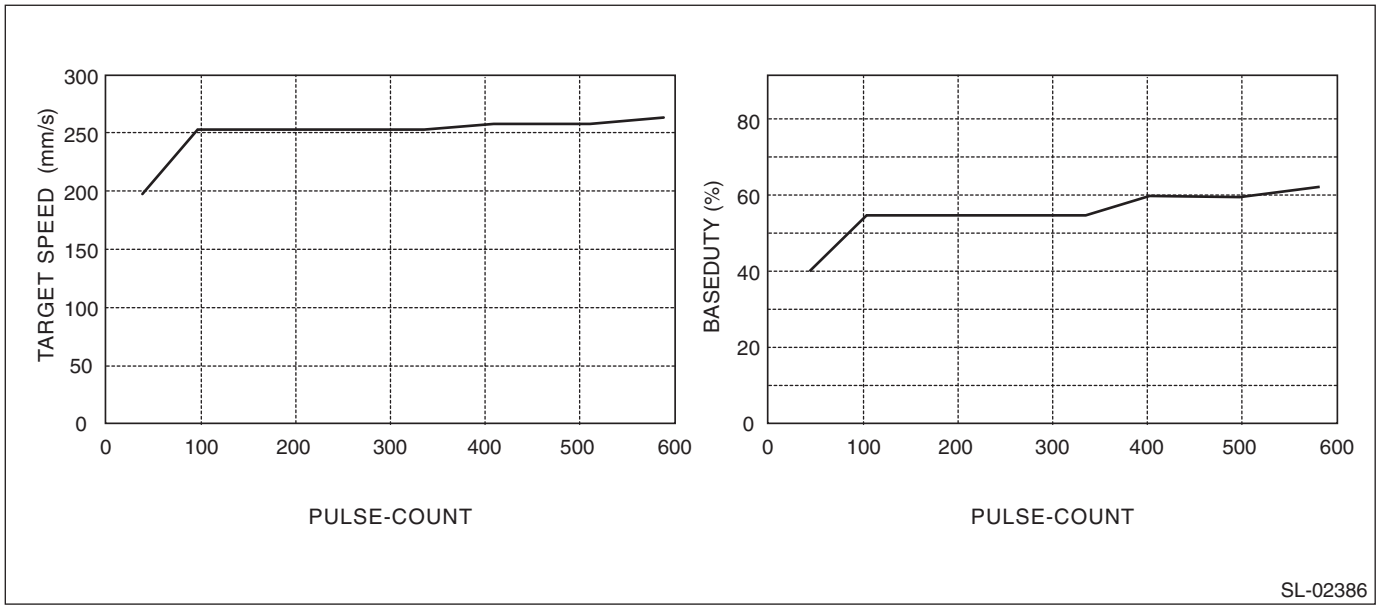
DTC DETECTING CONDITION:
When improper operation of motor is detected.
TROUBLE SYMPTOM:
The open/close speed of power rear gate is too fast.
WIRING DIAGRAM:
Power rear gate system <Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2501 current malfunction?	Go to step **2**.	Go to step **3**.
2	**CHECK DTC.** 1) Turn IGN SW to OFF. 2) Disconnect the PRG CM connector and reconnect it. 3) Manually close the rear gate to the partially latched position, and operate the power rear gate auto closer to fully close. (PRG initialization) 4) Press the operation SW to perform auto-open/close of PRG, and then return to the full-close position. 5) Turn the ignition switch to ON. 6) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2501 current malfunction?	Go to step **4**.	Go to step **3**.
3	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector. 3) Disconnect the PRG DU connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.
4	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector. 3) Disconnect the PRG DU connector. 4) Measure the resistance between ECM connector and PRG DU connector. ***Connector & terminal*** ***(R422) No. 7 — (R421) No. 14:*** ***(R422) No. 15 — (R421) No. 7:***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair or replace the open circuit of harness.

	Step	Check	Yes	No
5	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector. 3) Disconnect the PRG DU connector. 4) Measure the resistance between ECM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 7 — Chassis ground:*** ***(R422) No. 15 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **6**.	Repair or replace the short circuit of harness.
6	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector. 3) Disconnect the PRG DU connector. 4) Measure the voltage between ECM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 7 (+) — Chassis ground (–):*** ***(R422) No. 15 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **7**.	Repair or replace the short circuit of harness.
7	**CHECK PRG DU.** Measure the resistance between PRG DU connectors. ***Connector & terminal*** ***(R421) No. 7 — (R421) No. 14:***	Is the resistance 0.3 Ω?	Go to step **8**.	Replace the PRG DU. <Ref. to PRG-9, Power Rear Gate Control Module.>
8	**CHECK PRG CM.** 1) Perform auto-open/close of the power rear gate. 2) Check the waveform using an oscilloscope. ***Connector & terminal*** ***(R422) No. 7 — (R422) No. 15:***	Is waveform normal? At open: DUTY 40 — 70% At close: DUTY 60 — 80% (However, the value decreases to 30% at the moment of closing) For the waveform, refer to Note in the margin.	A temporary change of voltage occurred.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

NOTE:
• Target speed at PRG open operation (left) DUTY (right)



• This malfunction code may be sensitively detected depending on the way users manually open or close the gate. If this malfunction code is stored in the memory as a past trouble but not as a present trouble, the system is normal. If this malfunction code is stored in the memory as a present trouble, perform the following procedures.

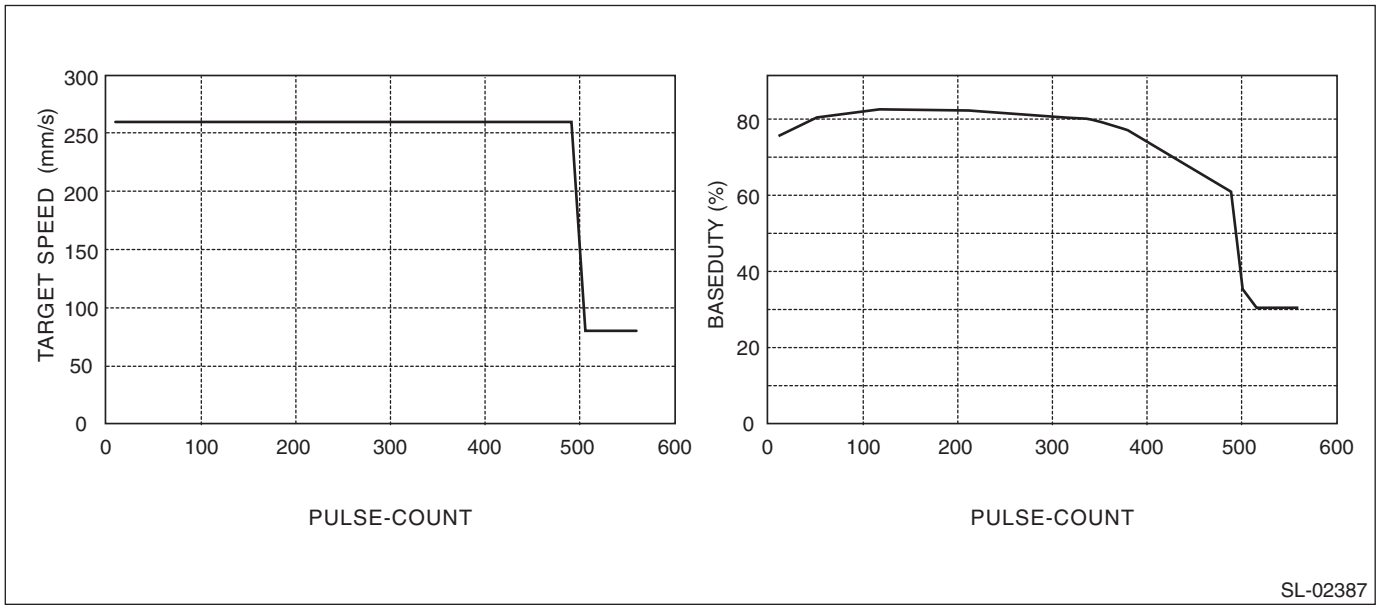
[Procedure]

1. Clear the memory of PRG CM malfunction code using the Subaru Select Monitor.
2. Perform auto-open/close of PRG by using either one of the following operation switches.

	Switch	Operation
Open	Power rear gate driver's switch	Press and hold
	Rear gate/trunk SW	Press and hold
	Power rear gate opener button	Tap
Close	Power rear gate driver's switch	Press and hold
	Rear gate/trunk SW	Press and hold
	Power rear gate inner switch	Tap

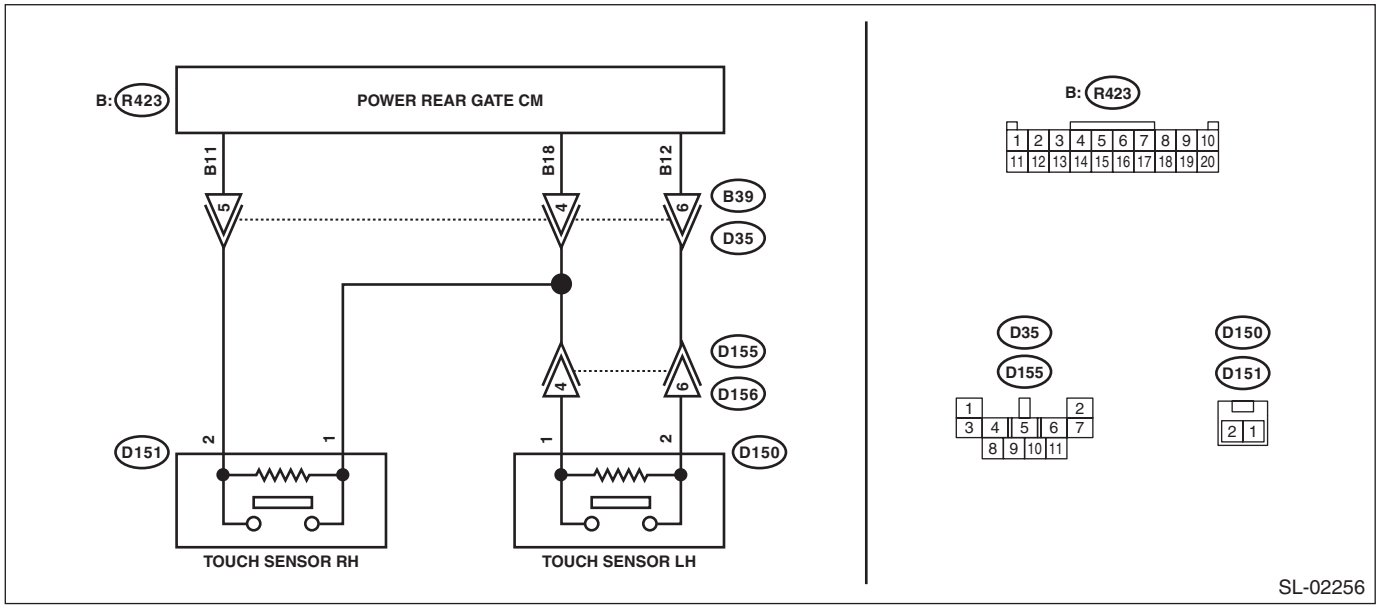
3. Using the Subaru Select Monitor, read DTC of PRG CM.
   If any present trouble is not stored in the memory after performing above procedures, the system is normal.

• Target speed at PRG close operation (left) DUTY (right)



C: DTC B2502 TOUCH SENSORS (L) FAILURE

DTC DETECTING CONDITION:
When malfunction in the touch sensor L is detected.
TROUBLE SYMPTOM:
The touch sensor L does not respond, and auto-operation does not function.
WIRING DIAGRAM:
Power rear gate system <Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>

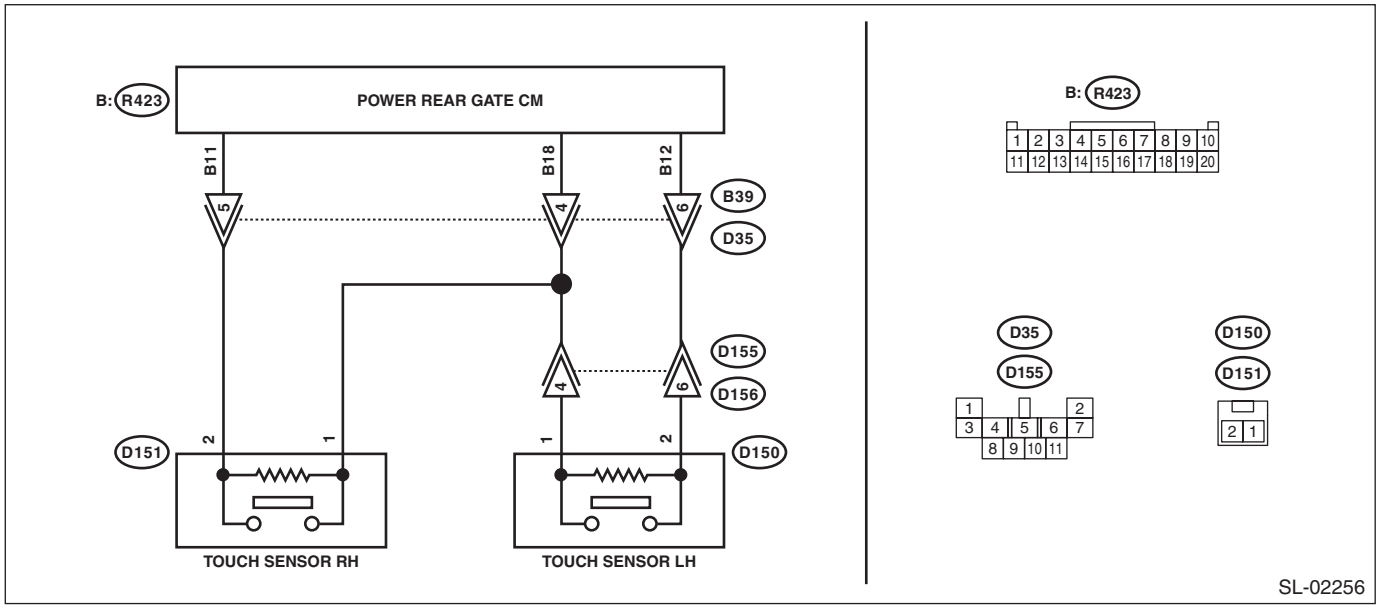


Step		Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2502 current malfunction?	Go to step **2**.	Go to step **3**.
2	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector and reconnect it. 3) Turn the ignition switch to ON. 4) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2502 current malfunction?	Go to step **4**.	Go to step **3**.
3	**CHECK CURRENT DATA.** Check «TOUCH SENSOR L» using the Subaru Select Monitor.	Does the data change (ON ←→ OFF), when the touch sensor is pressed with fingers?	Currently, system is normal. A temporary poor contact may be a possible cause. Therefore, check the harness connector.	Go to step **4**.
4	**CHECK SENSORS.** 1) Disconnect the touch sensor connector. 2) Measure the resistance between the touch sensor connectors. ***Connector & terminal*** ***(D150) No. 2 — (D150) No. 1:***	Is the resistance 100 Ω or less when the touch sensor is pressed with fingers, and 1 kΩ or more when not pressed?	Go to step **5**.	Replace the touch sensor. <Ref. to PRG-21, Power Rear Gate Touch Sensor.>

	Step	Check	Yes	No
5	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Measure the resistance between PRG CM connector and touch sensor connector. ***Connector & terminal*** ***(D150) No. 2 — (R423) No. 12:*** ***(D150) No. 1 — (R423) No. 18:***	Is the resistance 10 Ω or less?	Go to step **6**.	Repair or replace the open circuit of harness.
6	**CHECK HARNESS.** Measure the resistance between the touch sensor connector and chassis ground. ***Connector & terminal*** ***(R150) No. 2 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **7**.	Repair or replace the short circuit of the harness.
7	**CHECK HARNESS.** Measure the voltage between the touch sensor connector and chassis ground. ***Connector & terminal*** ***(R150) No. 1 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **8**.	Repair or replace the short circuit of the harness.
8	**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 CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

D: DTC B2503 TOUCH SENSORS (R) FAILURE

DTC DETECTING CONDITION:
When malfunction in the touch sensor R is detected.
TROUBLE SYMPTOM:
The touch sensor R does not respond, and auto-operation does not function.
WIRING DIAGRAM:
Power rear gate system <Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>



Step		Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2503 current malfunction?	Go to step **2**.	Go to step **3**.
2	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector and reconnect it. 3) Turn the ignition switch to ON. 4) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2503 current malfunction?	Go to step **4**.	Go to step **3**.
3	**CHECK CURRENT DATA.** Check «TOUCH SENSOR R» using the Subaru Select Monitor.	Does the data change (ON ←→ OFF), when the touch sensor is pressed with fingers?	Currently, system is normal. A temporary poor contact may be a possible cause. Therefore, check the harness connector.	Go to step **4**.
4	**CHECK SENSORS.** 1) Disconnect the touch sensor connector. 2) Measure the resistance between the touch sensor connectors. ***Connector & terminal*** ***(D151) No. 2 — (D151) No. 1:***	Is the resistance 100 Ω or less when the touch sensor is pressed with fingers, and 1 kΩ or more when not pressed?	Go to step **5**.	Replace the touch sensor. <Ref. to PRG-21, Power Rear Gate Touch Sensor.>
5	**CHECK HARNESS.** Measure the resistance between PRG CM connector and touch sensor connector. ***Connector & terminal*** ***(D151) No. 2 — (R423) No. 11:*** ***(D151) No. 1 — (R423) No. 18:***	Is the resistance 10 Ω or less?	Go to step **6**.	Repair or replace the open circuit of harness.

	Step	Check	Yes	No
6	**CHECK HARNESS.** Measure the resistance between the touch sensor connector and chassis ground. ***Connector & terminal*** ***(D151) No. 2 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **7**.	Repair or replace the short circuit of the harness.
7	**CHECK HARNESS.** Measure the voltage between the touch sensor connector and chassis ground. ***Connector & terminal*** ***(D151) No. 1 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **8**.	Repair or replace the short circuit of the harness.
8	**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 CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

E: DTC B2504 TOUCH SENSORS (L) ON FIXATION

NOTE:
For the diagnostic procedure, refer to DTC B2502. <Ref. to PRG(diag)-22, DTC B2502 TOUCH SENSORS (L) FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

F: DTC B2505 TOUCH SENSORS (R) ON FIXATION

NOTE:
For the diagnostic procedure, refer to DTC B2503. <Ref. to PRG(diag)-24, DTC B2503 TOUCH SENSORS (R) FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

G: DTC B2506 PRG MOTOR CURRENT SURGE

DTC DETECTING CONDITION:
When excessive load is applied to the PRG motor, and overcurrent is detected.
TROUBLE SYMPTOM:
The PRG auto-operation does not function, operation speed is slow, and incorrect reverse operation occurs.

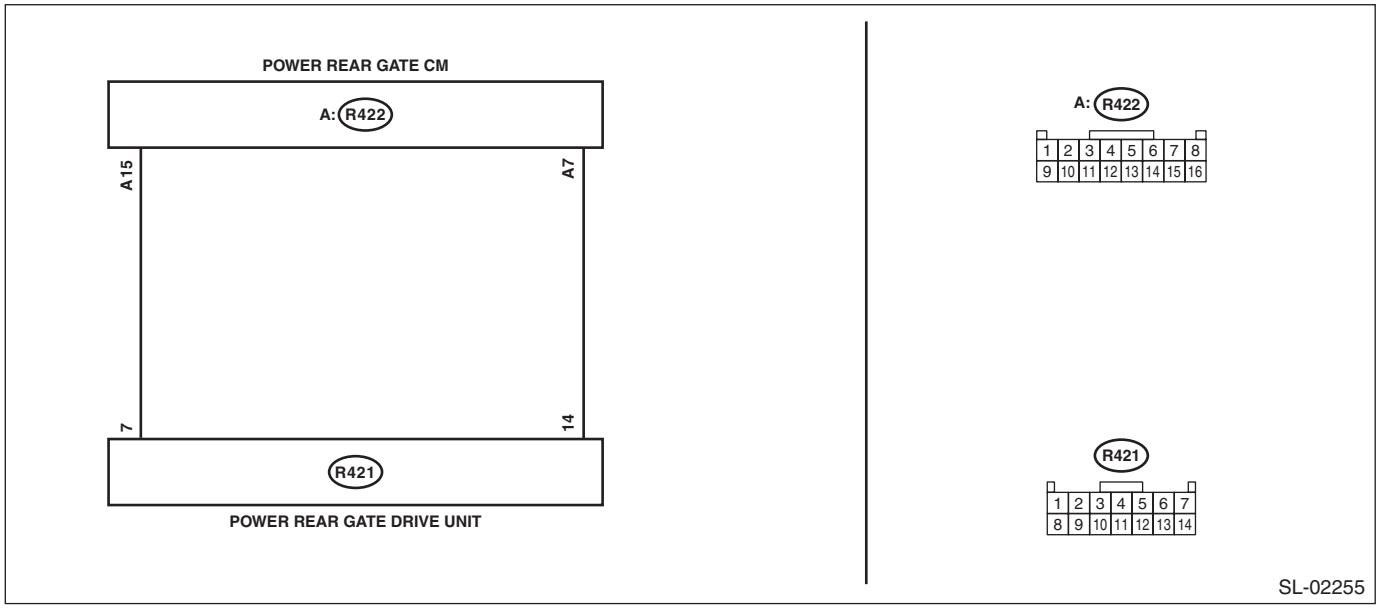
	Step	Check	Yes	No
1	**CHECK FOR OBSTACLES.**	Is the peripheral area of the rear gate free from snow or any object that blocks open/close operation?	Go to step **2**.	Remove the obstacles, and Go to step **2**.
2	**CHECK POWER REAR GATE OPERATION.** 1) Turn the ignition switch to OFF. 2) Fully close the rear gate. 3) Turn the memory height switch to OFF. 4) Press and hold the PRG driver's SW to perform the auto-open operation. 5) With the gate at the full-open position, press and hold the PRG driver's SW to perform the auto-close operation.	Is it operating normally?	Go to step **4**.	Go to step **3**.
3	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2506 current malfunction?	Go to step **4**.	Go to step **5**.
4	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector and reconnect it. 3) Perform auto-operation with the procedure in step 2. 4) Turn the ignition switch to ON. 5) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2506 current malfunction?	Go to step **5**.	Currently, system is normal. A temporary poor contact may be a possible cause. Therefore, check the harness connector. Or temporarily excess load was applied.
5	**CHECK PRG DU WITH MANUAL OPERATION.** 1) Turn the ignition switch to OFF. 2) Fully close the rear gate. 3) Press and hold the PRG opener button to perform the manual operation.	Is the operation possible without abnormal weight?	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>	Replace the PRG DU.

H: DTC B2507 PRG MOTOR OPEN

DTC DETECTING CONDITION:
When the open circuit in motor circuit is detected.

TROUBLE SYMPTOM:
During the auto-operation, the operation stop, half-stop state cannot be cancelled, and auto-operation is not possible.

WIRING DIAGRAM:
Power rear gate system <Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>

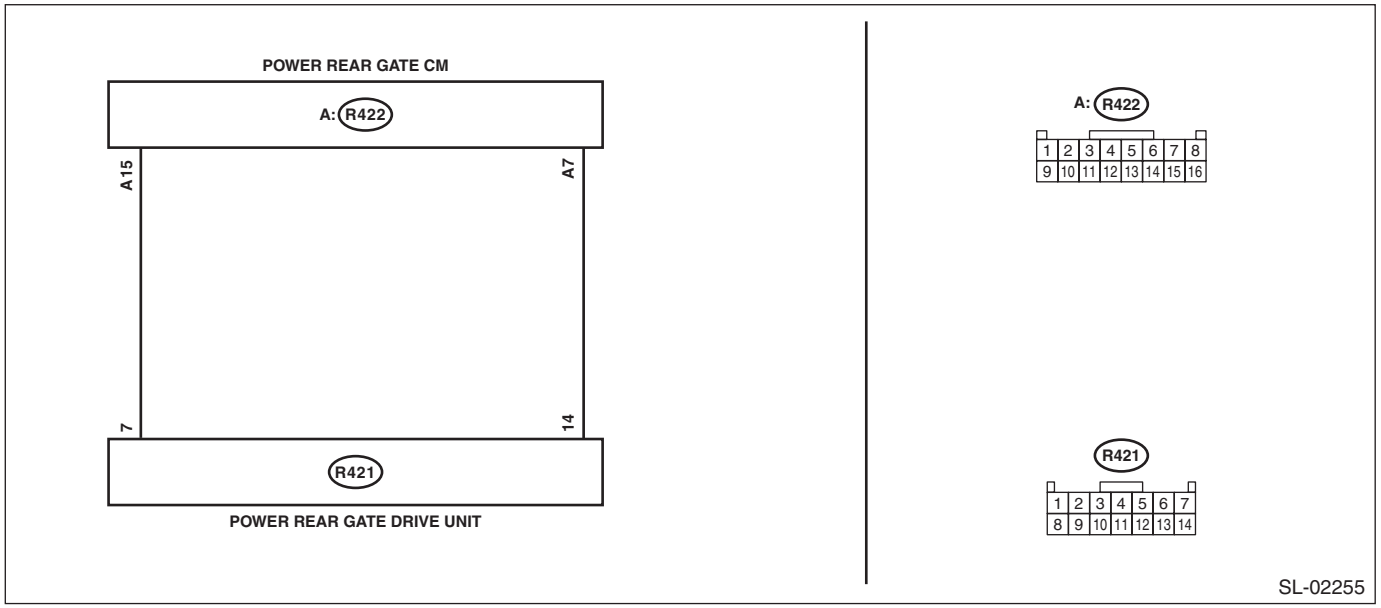


	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2507 current malfunction?	Go to step **2**.	Go to step **3**.
2	**CHECK DTC.** 1) Turn IGN SW to OFF. 2) Disconnect the PRG CM connector and reconnect it. 3) Manually close the rear gate to the partially latched position, and operate the power rear gate auto closer to fully close. (PRG initialization) 4) Press the operation SW to perform auto-open/close of PRG, and then return to the full-close position. 5) Turn the ignition switch to ON. 6) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2507 current malfunction?	Go to step **4**.	Go to step **3**.
3	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector. 3) Disconnect the PRG DU connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.
4	**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. 15 — (R421) No. 7:*** ***(R422) No. 7 — (R421) No. 14:***	Is the resistance 10 Ω or less?	Go to step **5**.	Repair or replace the open circuit of harness.

	Step	Check	Yes	No
5	**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. 15 — Chassis ground:*** ***(R422) No. 7 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **6**.	Repair or replace the short circuit of the harness.
6	**CHECK PRG DU.** Measure the resistance between PRG DU connectors. ***Connector & terminal*** ***(R421) No. 7 — (R421) No. 14:***	Is the resistance 0.3 Ω?	Go to step **7**.	Replace the PRG DU. <Ref. to PRG-9, Power Rear Gate Control Module.>
7	**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.>

I: DTC B2508 PRG MOTOR GND SHORT OUT

DTC DETECTING CONDITION:
When the GND-output short in motor circuit is detected.
TROUBLE SYMPTOM:
Auto-operation speed is too fast.
WIRING DIAGRAM:
Power rear gate system <Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>

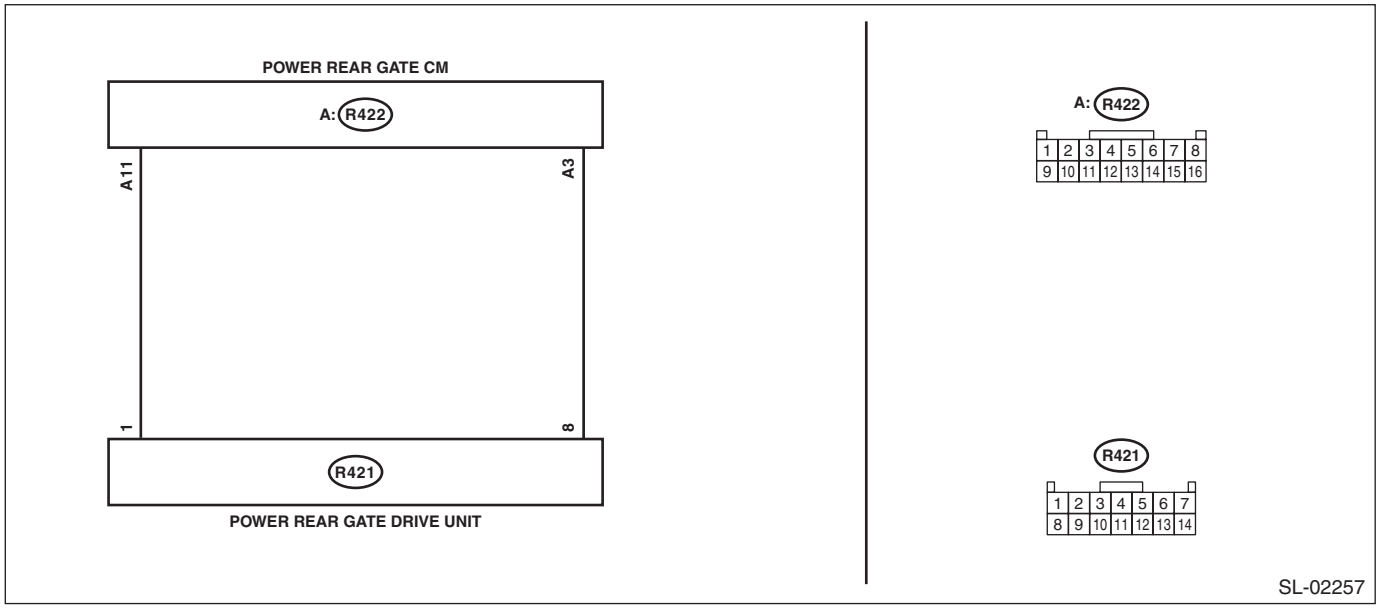


	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2508 current malfunction?	Go to step **2**.	Go to step **3**.
2	**CHECK DTC.** 1) Turn IGN SW to OFF. 2) Disconnect the PRG CM connector and reconnect it. 3) Manually close the rear gate to the partially latched position, and operate the power rear gate auto closer to fully close. (PRG initialization) 4) Press the operation SW to perform auto-open/close of PRG, and then return to the full-close position. 5) Turn the ignition switch to ON. 6) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2508 current malfunction?	Go to step **4**.	Go to step **3**.
3	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector. 3) Disconnect the PRG DU connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.
4	**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. 15 — Chassis ground:*** ***(R422) No. 7 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **5**.	Repair or replace the short circuit of the harness.

	Step	Check	Yes	No
5	**CHECK PRG DU.** Measure the resistance between PRG DU connectors. ***Connector & terminal*** ***(R421) No. 7 — (R421) No. 14:***	Is the resistance 0.3 Ω?	Go to step **6**.	Replace the PRG DU. <Ref. to PRG-9, Power Rear Gate Control Module.>
6	**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.>

J: DTC B2509 CLUTCH OPEN

DTC DETECTING CONDITION:
When the open circuit or short circuit in CLUTCH circuit is detected.
TROUBLE SYMPTOM:
During the auto-operation, door free, auto-operation do not function.
WIRING DIAGRAM:
Power rear gate system <Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>

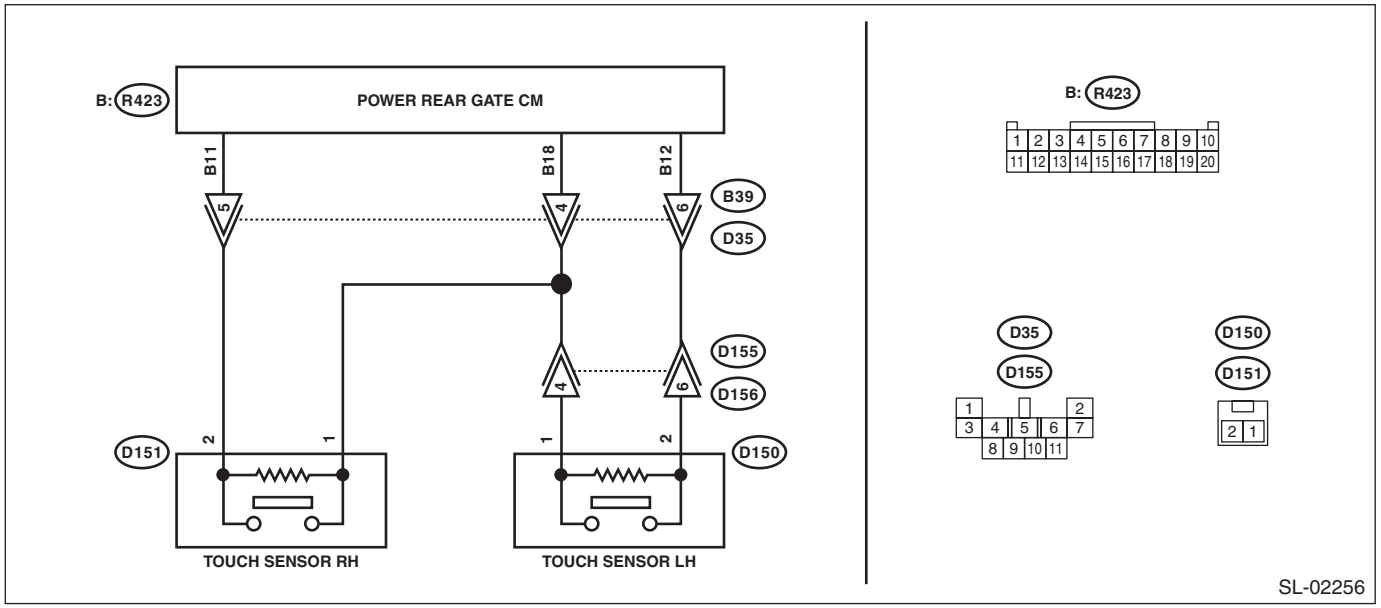


	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2509 current malfunction?	Go to step **2**.	Go to step **3**.
2	**CHECK DTC.** 1) Turn IGN SW to OFF. 2) Disconnect the PRG CM connector and reconnect it. 3) Manually close the rear gate to the partially latched position, and operate the power rear gate auto closer to fully close. (PRG initialization) 4) Press the operation SW to perform auto-open/close of PRG, and then return to the full-close position. 5) Turn the ignition switch to ON. 6) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2509 current malfunction?	Go to step **4**.	Go to step **3**.
3	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector. 3) Disconnect the PRG DU connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.
4	**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. 11 — (R421) No. 1:*** ***(R422) No. 3 — (R421) No. 8:***	Is the resistance 10 Ω or less?	Go to step **5**.	Repair or replace the open circuit of harness.

	Step	Check	Yes	No
5	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 3 — Chassis ground:*** ***(R422) No. 11 — Chassis ground:***	Is the resistance 1 MΩ or more?	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. 3 (+) — Chassis ground (–):*** ***(R422) No. 11 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **7**.	Repair or replace the short circuit of the harness.
7	**CHECK PRG DU.** Measure the resistance between PRG DU connectors. ***Connector & terminal*** ***(R422) No. 1 — (R421) No. 8:***	Is the resistance 9.6 Ω±10%?	Go to step **8**.	Replace the PRG DU. <Ref. to PRG-9, Power Rear Gate Control Module.>
8	**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 CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

K: DTC B250A TOUCH SENSORS BATT. GND SHORT OUT

DTC DETECTING CONDITION:
When malfunction in the touch sensor is detected.
TROUBLE SYMPTOM:
The touch sensor does not respond, and auto-operation does not function.
WIRING DIAGRAM:
Power rear gate system <Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>

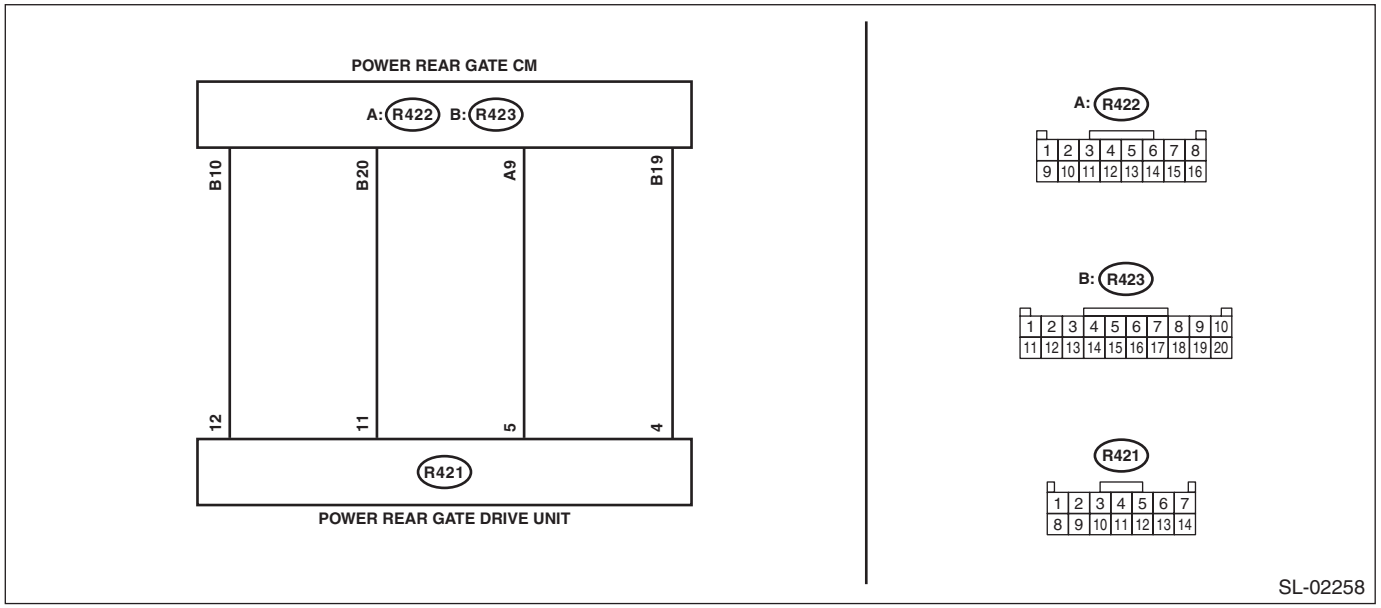


Step		Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B250A current malfunction?	Go to step **2**.	Go to step **3**.
2	**CHECK DTC.** 1) Turn IGN SW to ON. 2) Disconnect the PRG CM connector and reconnect it. 3) Turn the ignition switch to ON. 4) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B250A current malfunction?	Go to step **3**.	Go to step **3**.
3	**CHECK CURRENT DATA.** Check «TOUCH SENSOR L» and «TOUCH SENSOR R» using the Subaru Select Monitor.	Does the data change (ON ←→ OFF), when the touch sensor is pressed with fingers?	Currently, system is normal. A temporary poor contact may be a possible cause. Therefore, check the harness connector.	Go to step **4**.
4	**CHECK HARNESS AND SENSOR.** 1) Disconnect the touch sensor connector. 2) Measure the resistance between the touch sensor connectors. ***Connector & terminal*** ***(D150) No. 1 — (D150) No. 2:*** ***(D151) No. 1 — (D151) No. 2:***	Is the resistance 100 Ω or less when the touch sensor is ON, and 1 kΩ or more when OFF?	Go to step **5**.	Replace the touch sensor. <Ref. to PRG-21, Power Rear Gate Touch Sensor.>

	Step	Check	Yes	No
5	**CHECK HARNESS.** Measure the resistance between PRG CM connector and touch sensor connector. ***Connector & terminal*** ***(R423) No. 12 — (D150) No. 2:*** ***(R423) No. 11 — (D151) No. 2:*** ***(R423) No. 18 — (D150) No. 1:*** ***(R423) No. 18 — (D151) No. 1:***	Is the resistance 10 Ω or less?	Go to step **6**.	Repair or replace the open circuit of harness.
6	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 12 — Chassis ground:*** ***(R423) No. 11 — Chassis ground:*** ***(R423) No. 18 — Chassis ground:*** ***(R423) No. 18 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **7**.	Repair or replace the short circuit of the harness.
7	**CHECK HARNESS.** Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 12 (+) — Chassis ground (–):*** ***(R423) No. 11 (+) — Chassis ground (–):*** ***(R423) No. 18 (+) — Chassis ground (–):*** ***(R423) No. 18 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **8**.	Repair or replace the short circuit of the harness.
8	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM 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.>

L: DTC B250B ROTATION SENSOR FAILURE (A OUTPUT FIXATION)

DTC DETECTING CONDITION:
When malfunction in the rotation sensor is detected.
TROUBLE SYMPTOM:
The R/G opens or closes by itself, while pausing intermittently in between. (intermittent clutch mode)
WIRING DIAGRAM:
Power rear gate system<Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>



Step		Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B250B, B250D, B250F or B2511 current malfunction?	Go to step **2**.	Go to step **3**.
2	**CHECK DTC.** 1) Turn IGN SW to OFF. 2) Disconnect the PRG CM connector and reconnect it. 3) Manually close the rear gate to the partially latched position, and operate the power rear gate auto closer to fully close. (PRG initialization) 4) Press the operation SW to perform auto-open/close of PRG, and then return to the full-close position. 5) Turn the ignition switch to ON. 6) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B250B, B250D, B250F or B2511 current malfunction?	Go to step **4**.	Go to step **3**.
3	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.
4	**CHECK PRG CM.** 1) Turn the ignition switch to ON. 2) Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 9 (+) — Chassis ground (–):***	Is the voltage 4 — 6 V?	Go to step **5**.	Check the PRG CM power supply circuit.

	Step	Check	Yes	No
5	**CHECK CURRENT DATA.** Check «Pulse-count» using the Subaru Select Monitor.	When the PRG driver's SW is pressed and held to perform the auto-operation, is the value of «Pulse-count» change?	Currently, system is normal. A temporary poor contact may be a possible cause. Therefore, check the harness connector.	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*** ***(R423) No. 10 — (R421) No. 12:*** ***(R423) No. 20 — (R421) No. 11:*** ***(R423) No. 19 — (R421) No. 4:*** ***(R422) No. 9 — (R421) No. 5:***	Is the resistance 10 Ω or less?	Go to step **7**.	Repair or replace the open circuit of harness.
7	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 10 — Chassis ground:*** ***(R423) No. 20 — Chassis ground:*** ***(R423) No. 19 — Chassis ground:*** ***(R422) No. 9 — 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.** Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 10 (+) — Chassis ground (–):*** ***(R423) No. 20 (+) — Chassis ground (–):*** ***(R423) No. 19 (+) — Chassis ground (–):*** ***(R422) No. 9 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **9**.	Repair or replace the short circuit of the harness.
9	**CHECK ROTATION SENSOR SIGNAL.** 1) Connect the disconnected connectors. 2) Using an oscilloscope, measure the voltage of rotation sensor. ***Connector & terminal*** ***(R423) No. 10 (+) — (R423) No. 19 (–):*** ***(R423) No. 20 (+) — (R423) No. 19 (–):***	Does the voltage change (0 V ←→ 5 V), when PRG is manually opened/closed?	Go to step **10**.	Replace the PRG DU.<Ref. to PRG-9, Power Rear Gate Control Module.>
10	**CHECK CONNECTOR.** Disconnect the PRG CM 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.>

M: DTC B250D ROTATION SENSOR FAILURE (B OUTPUT FIXATION)

NOTE:
For the diagnostic procedure, refer to DTC B250B. <Ref. to PRG(diag)-35, DTC B250B ROTATION SENSOR FAILURE (A OUTPUT FIXATION), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

N: DTC B250F ROTATION SENSOR FAILURE (PULSE-COUNT FAILURE)

NOTE:
For the diagnostic procedure, refer to DTC B250B. <Ref. to PRG(diag)-35, DTC B250B ROTATION SENSOR FAILURE (A OUTPUT FIXATION), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

O: DTC B2511 ROTATION SENSOR FAILURE (REVERSE DIRECTION PULSE FAILURE)

NOTE:
For the diagnostic procedure, refer to DTC B250B. <Ref. to PRG(diag)-35, DTC B250B ROTATION SENSOR FAILURE (A OUTPUT FIXATION), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

P: DTC B2512 DAMPER BREAKAGE FAILURE

DTC DETECTING CONDITION:
When malfunction in the gas damper is detected.
TROUBLE SYMPTOM:
After the auto-open operation, auto-close operation occurs by itself. When PRG is open in manual operation, the gate is not held at the full-open position.

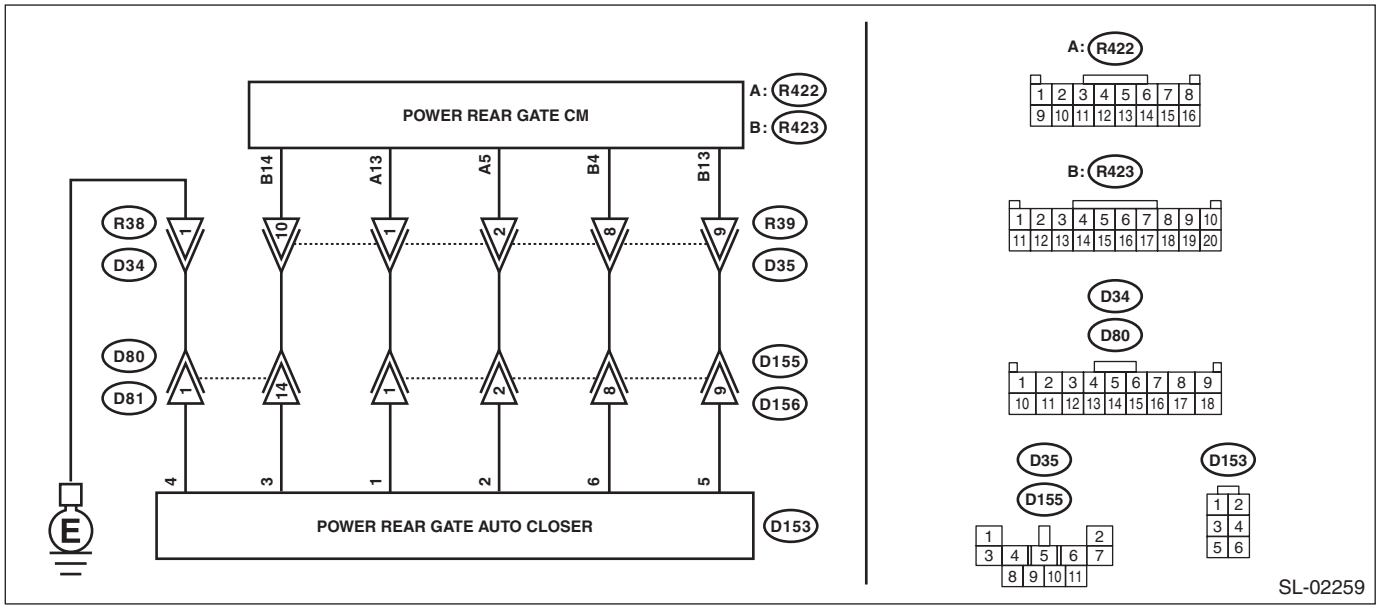
	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2512 current malfunction?	Go to step **2**.	PRG moved to the close-direction immediately after the auto-open operation due to temporary external force.
2	**CHECK DAMPER.** 1) Fully open PRG in manual operation. 2) Check the door behavior at the full-open position.	Is PRG held at the full-open position?	PRG moved to the close-direction immediately after the auto-open operation due to temporary external force.	Replace the damper. <Ref. to EB-59, REAR GATE DAMPER STAY, REMOVAL, Rear Gate.>

Q: DTC B2513 LATCH CONDITION FAILURE

DTC DETECTING CONDITION:
When malfunction in SW within the power rear gate auto closer is detected.

TROUBLE SYMPTOM:
- The PRG opens or closes by itself, while pausing intermittently in between during the auto-operation. (intermittent clutch mode)
- Auto-operation does not function.

WIRING DIAGRAM:
Power rear gate system<Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>



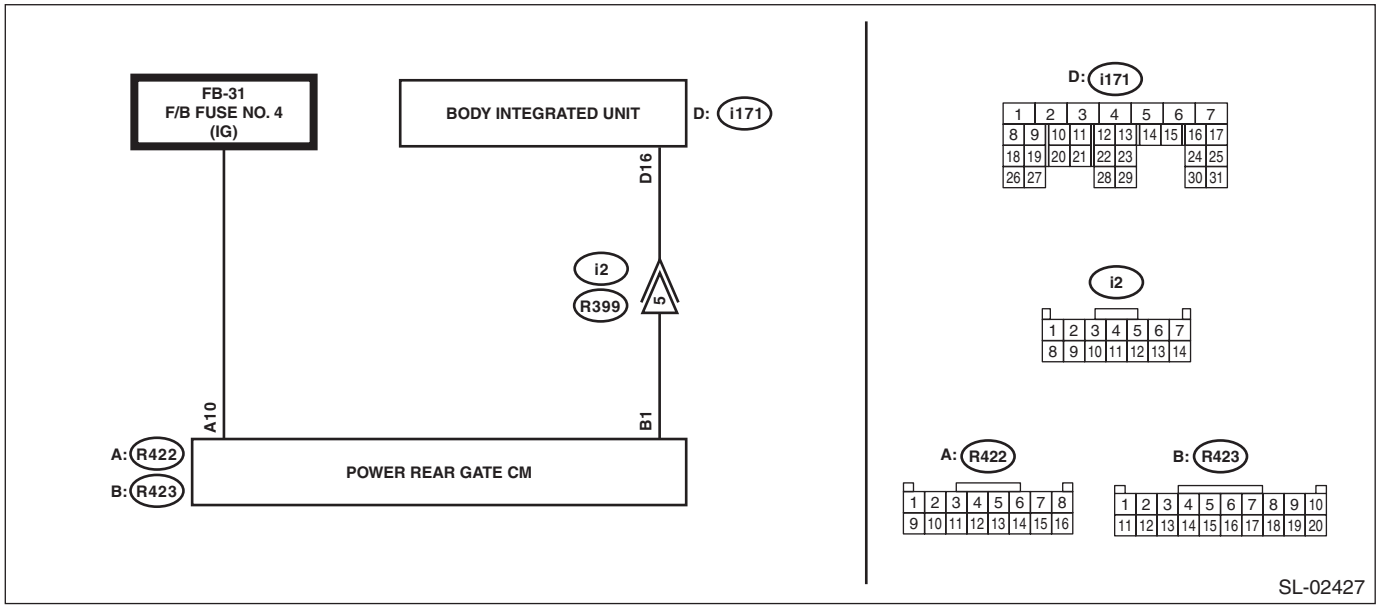
Step		Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2513, B2515, B2516 or B2517 a current malfunction?	Go to step **2**.	Go to step **6**.
2	**CHECK DTC.** 1) Turn IGN SW to OFF. 2) Disconnect the PRG CM connector and reconnect it. 3) Manually close PRG to the partially latched position, and operate the power rear gate auto closer to fully close. (PRG initialization) 4) Press the operation SW to perform auto-open/close of PRG, and then return to the full-close position. 5) Turn the ignition switch to ON. 6) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2513, B2515, B2516 or B2517 a current malfunction?	Go to step **3**.	Go to step **6**.
3	**CHECK CURRENT DATA.** Check «SECTOR SW», «COURTESY SW», and «LATCH SW», using the Subaru Select Monitor.	Is each data displayed as follows, when PRG is at the full-close position? • LATCH SW: OFF • COURTESY SW: OFF • SECTOR SW: ON	Go to step **4**.	Go to step **5**.
4	**CHECK CURRENT DATA.** Check «CLOSER (OPEN)», «CLOSER (CLOSE)» using the Subaru Select Monitor.	Does each data change (ON ←→ OFF), when the auto-open/close operation is performed?	Go to step **6**.	Go to step **5**.

	Step	Check	Yes	No
5	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector. 3) Disconnect the power rear gate auto closer connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	Go to step **7**.
6	**CHECK POWER REAR GATE AUTO CLOSER.** 1) Disconnect the PRG CM connector. 2) Manually close the rear gate from the full-open position to the partially latched position. 3) Check the power rear gate auto closer operation.	Does the pull-in operation occur from the partially latched position?	Currently, system is normal. A temporary poor contact may be a possible cause. Therefore, check the harness connector.	Go to step **7**.
7	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the power rear gate auto closer connector. 3) Measure the resistance between PRG CM connector and power rear gate auto closer connector. ***Connector & terminal*** ***(R422) No. 13 — (R153) No. 1:*** ***(R422) No. 5 — (R153) No. 2:*** ***(R423) No. 4 — (R153) No. 6:*** ***(R423) No. 13 — (R153) No. 5:*** ***(R423) No. 14 — (R153) No. 3:***	Is the resistance 10 Ω or less?	Go to step **8**.	Repair or replace the open circuit of harness.
8	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground, and between power rear gate auto closer connector and chassis ground. ***Connector & terminal*** ***(R422) No. 13 — Chassis ground:*** ***(R422) No. 5 — Chassis ground:*** ***(R423) No. 4 — Chassis ground:*** ***(R423) No. 13 — Chassis ground:*** ***(R423) No. 14 — Chassis ground:*** ***(D153) No. 4 — 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 voltage between PRG CM connector and chassis ground, and between power rear gate auto closer connector and chassis ground. ***Connector & terminal*** ***(R422) No. 13 (+) — Chassis ground (–):*** ***(R422) No. 5 (+) — Chassis ground (–):*** ***(R423) No. 4 (+) — Chassis ground (–):*** ***(R423) No. 13 (+) — Chassis ground (–):*** ***(R423) No. 14 (+) — Chassis ground (–):*** ***(D153) No. 4 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **10**.	Repair or replace the short circuit of the harness.
10	**CHECK HARNESS.** Measure the resistance between power rear gate auto closer connector and chassis ground. ***Connector & terminal*** ***(D153) No. 4 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **11**.	Repair or replace the short circuit of the harness.

	Step	Check	Yes	No
11	**CHECK POWER REAR GATE AUTO CLOSER.** 1) Connect the PRG CM connector and PRG DU connector. 2) Check «SECTOR SW», «COURTESY SW», and «LATCH SW», using the Subaru Select Monitor. 3) Fully open the rear gate, and operate each switch manually.	Does each data change (ON ⟷ OFF), when the switch is operated?	Go to step **12**.	Replace the power rear gate auto closer.
12	**CHECK POWER REAR GATE AUTO CLOSER.** Check the power rear gate auto closer operation, when battery voltage is applied directly to the power rear gate auto closer connector. ***Terminals*** ***(D422) No. 13 — positive terminal:*** ***(D422) No. 5 — ground terminal:***	Does the power rear gate auto closer operate?	Replace the PRG CM.<Ref. to PRG-9, Power Rear Gate Control Module.>	Replace the power rear gate auto closer.

R: DTC B2514 IG FAILURE

DTC DETECTING CONDITION:
When the LIN communication signal and direct line signal do not match.
TROUBLE SYMPTOM:
PRG does not operate.
WIRING DIAGRAM:
Power rear gate system <Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>



Step		Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2514 current malfunction?	Go to step **2**.	Go to step **4**.
2	**CHECK DTC.** 1) Turn IGN SW to ON. 2) Disconnect the PRG CM connector and reconnect it. 3) Turn the ignition switch to ON. 4) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2514 current malfunction?	Go to step **3**.	Go to step **4**.
3	**CHECK CURRENT DATA.** Check «Ignition Signal», «IGN SW» using the Subaru Select Monitor.	When the ignition switch is turned to ON/OFF, are these two data synchronized?	Go to step **4**.	When «Ignition Signal» is not synchronized: Go to step **5**. When «IGN SW» is not synchronized: Go to step **9**.
4	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.
5	**CHECK CURRENT DATA.** Check the current data «Voltage of IGN» of body integrated unit using Subaru Select Monitor.	When the ignition switch is turned to ON/OFF, does the value change? (At ON: 10 — 15 V)	Go to step **6**.	Check the body control system. <Ref. to BC(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

	Step	Check	Yes	No
6	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the body integrated unit connector. 3) Measure the resistance between PRG CM connector and body integrated unit. ***Connector & terminal*** ***(R423) No. 1 — (i171) No. 16:***	Is the resistance less than 10 Ω?	Go to step **7**.	Repair or replace the open circuit of harness.
7	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 1 — 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.** Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 1 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **9**.	Repair or replace the short circuit of the harness.
9	**CHECK HARNESS.** 1) Turn the ignition switch to ON. 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 and less than 16 V?	Go to step **10**.	Repair or replace the open circuit of harness.
10	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM 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.>

S: DTC B2515 LATCH SW FAILURE

NOTE:
For the diagnostic procedure, refer to DTC B2513. <Ref. to PRG(diag)-39, DTC B2513 LATCH CONDITION FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

T: DTC B2516 SECTOR SW FAILURE

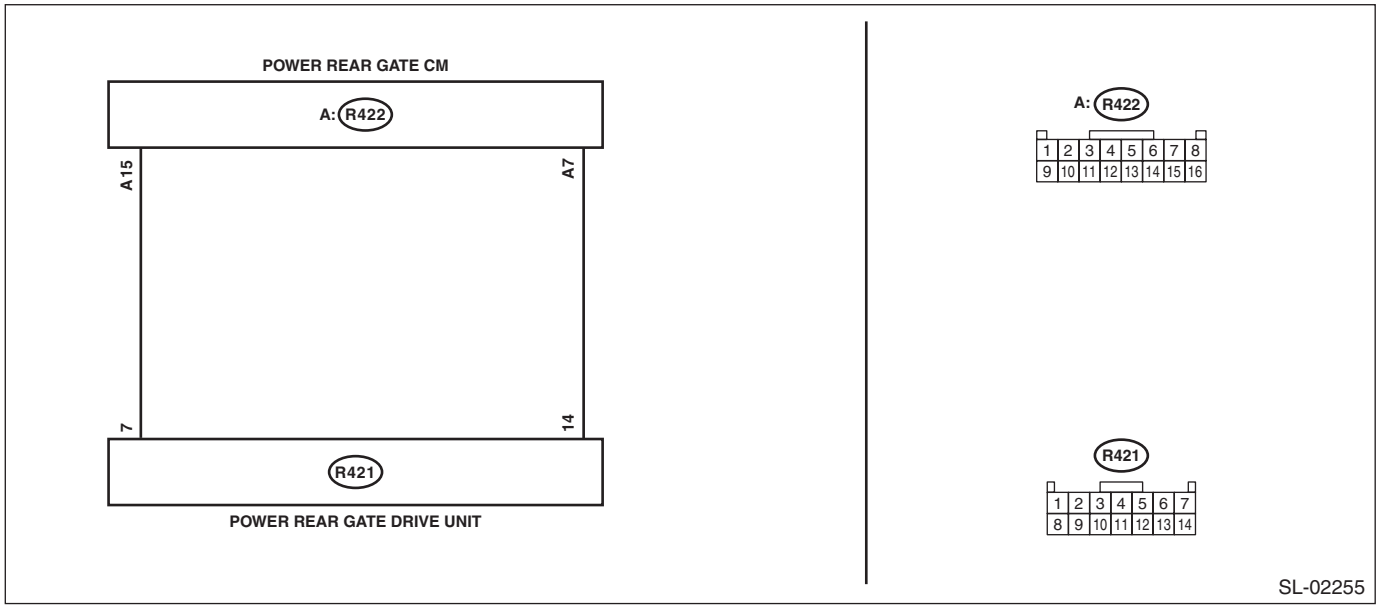
NOTE:
For the diagnostic procedure, refer to DTC B2513. <Ref. to PRG(diag)-39, DTC B2513 LATCH CONDITION FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

U: DTC B2517 COURTESY SW FAILURE

NOTE:
For the diagnostic procedure, refer to DTC B2513. <Ref. to PRG(diag)-39, DTC B2513 LATCH CONDITION FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

V: DTC B2518 PRG CONTINUOUSLY-WORKING FAILURE

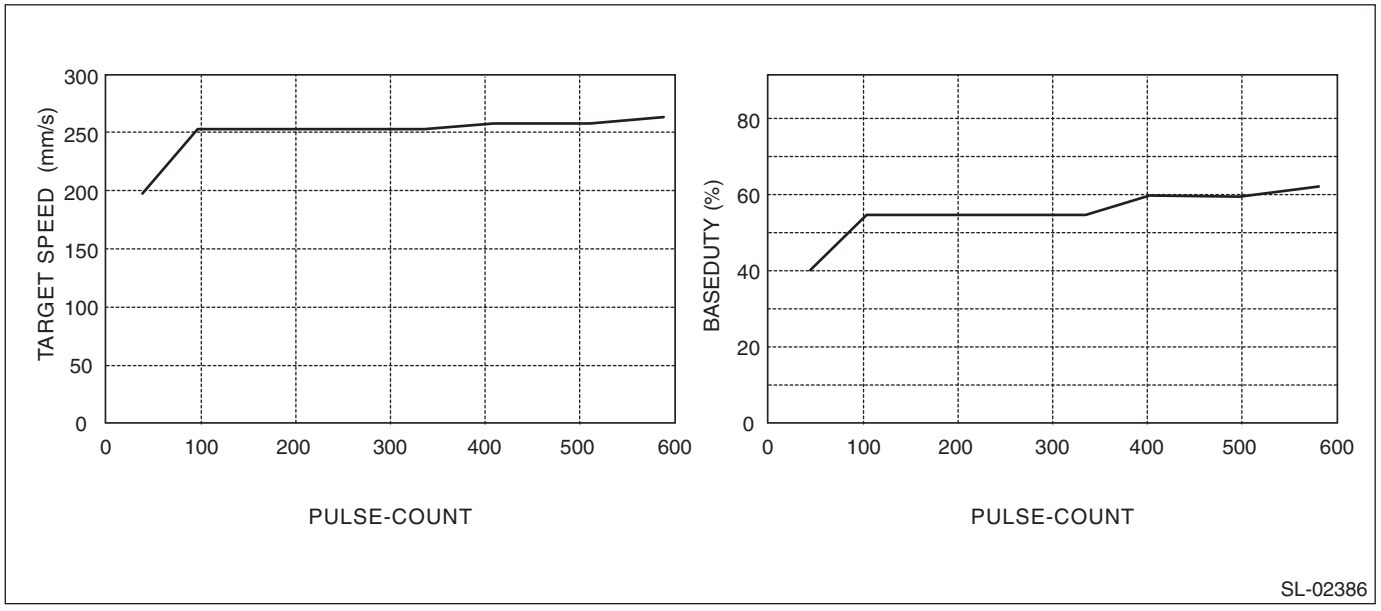
DTC DETECTING CONDITION:
When the motor operation continued for 30 seconds or more.
TROUBLE SYMPTOM:
During the auto-operation, the door free condition occurs.
WIRING DIAGRAM:
Power rear gate system <Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>



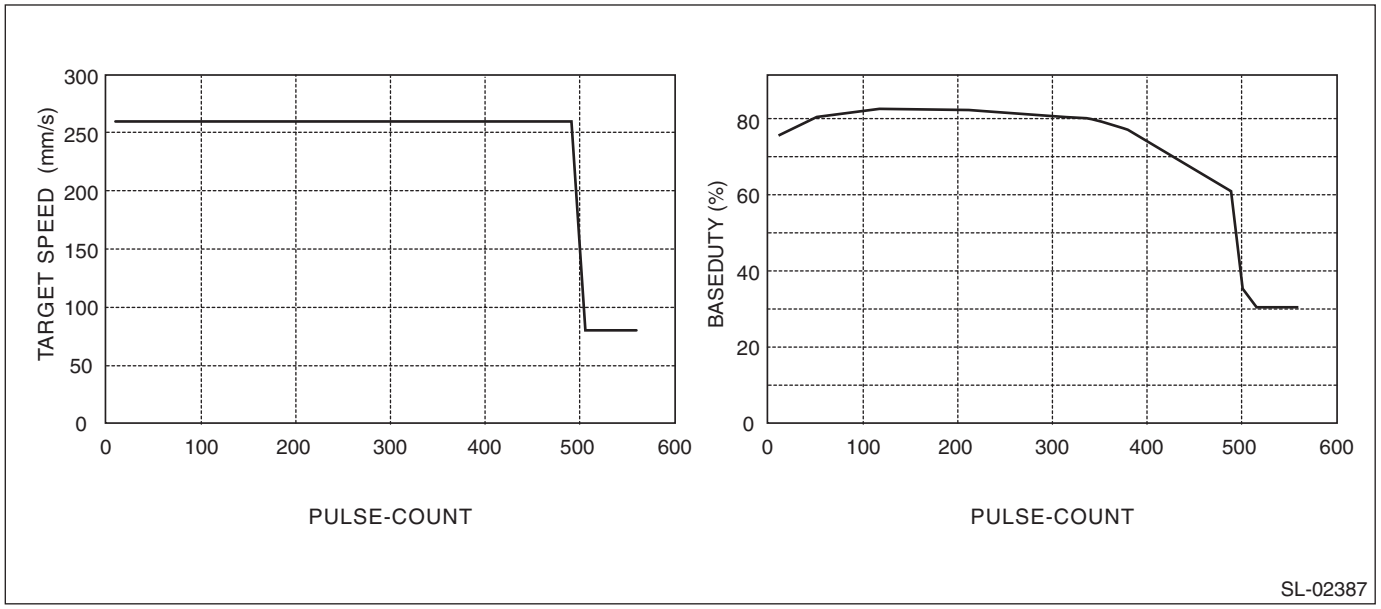
	Step	Check	Yes	No
1	**CHECK REAR GATE.**	Is there any snow, ice or installed parts other than genuine parts on the rear gate?	Remove any snow, ice or installed parts other than genuine parts.	Go to step **2**.
2	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2518 current malfunction?	Go to step **4**.	Go to step **3**.
3	**CHECK DTC.** 1) Turn IGN SW to OFF. 2) Disconnect the PRG CM connector and reconnect it. 3) Fully close the rear gate. 4) Press the operation SW to perform auto-open/close of PRG, and then return to the full-close position. 5) Turn the ignition switch to ON. 6) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2518 current malfunction?	Go to step **4**.	Currently, system is normal. A temporary poor contact may be a possible cause. Therefore, check the harness connector.
4	**CHECK REAR GATE.** Press and hold the opener button, and perform open/close operation manually.	Is abnormal weight detected compared to equivalent vehicles?	Go to step **5**.	Go to step **6**.
5	**CHECK REAR GATE.**	Is there distortion or rust on the hinge? (Is there any history of accidents?)	Repair the rear gate hinge.	Replace the damper. <Ref. to EB-59, REAR GATE DAMPER STAY, REMOVAL, Rear Gate.>

	Step	Check	Yes	No
6	**CHECK PRG CM.** 1) Perform auto-open/close of PRG. 2) Check the waveform using an oscilloscope. ***Connector & terminal*** ***(R422) No. 7 — (R422) No. 15:***	Is waveform normal? At open: DUTY 40 — 70% At close: DUTY 60 — 80% (However, the value decreases to 30% at the moment of closing) For the waveform, refer to Note in the margin.	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 and PRG DU connector. 2) Using a tester, measure the resistance between the PRG CM connector and PRG DU connector. ***Connector & terminal*** ***(R422) No. 7 — (R421) No. 14:*** ***(R422) No. 15 — (R421) No. 7:***	Is the resistance less than 10 Ω?	Replace the PRG DU. <Ref. to PRG-9, Power Rear Gate Control Module.>	Repair or replace the open circuit of harness.

NOTE:
- Target speed at PRG open operation (left) DUTY (right)

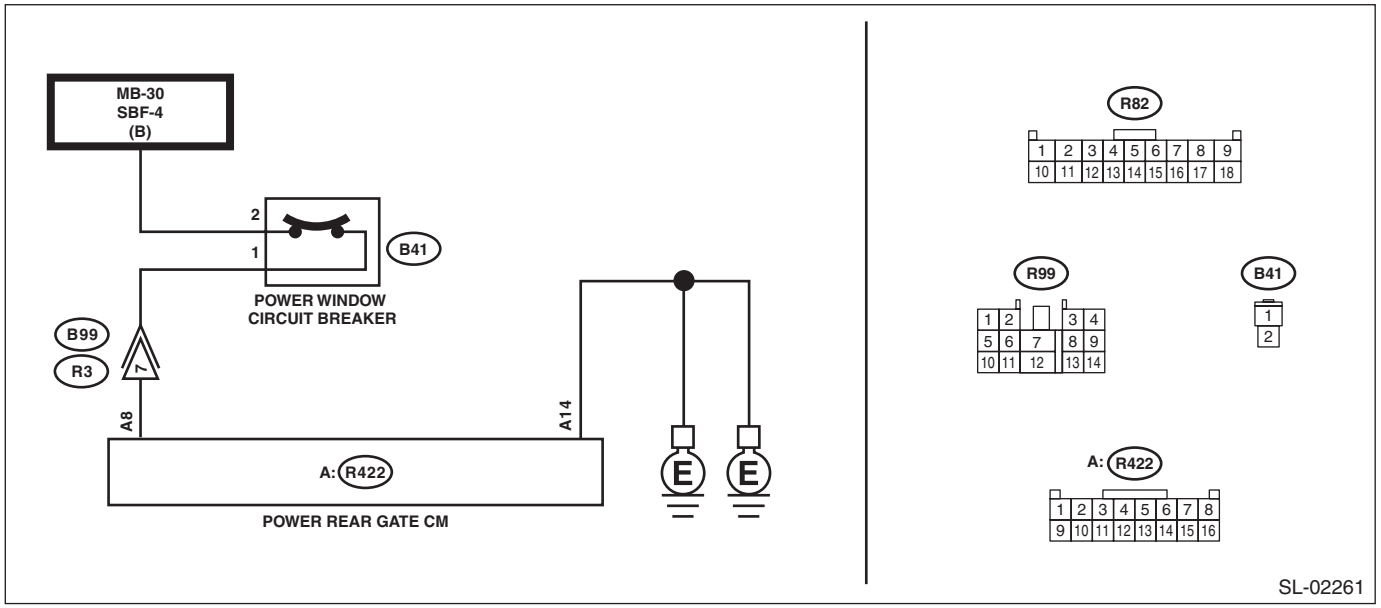


- Target speed at PRG close operation (left) DUTY (right)



W: DTC B2519 POWER +B OPEN

DTC DETECTING CONDITION:
When power supply failure related to PRG CM power is detected.
TROUBLE SYMPTOM:
During the auto-operation, the door free, the auto-operation do not function.
WIRING DIAGRAM:
Power rear gate system <Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>



Step		Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2519 current malfunction?	Go to step **2**.	Go to step **4**.
2	**CHECK DTC.** 1) Turn IGN SW to ON. 2) Disconnect the PRG CM connector and reconnect it. 3) Turn the ignition switch to ON. 4) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2519 current malfunction?	Go to step **3**.	Go to step **4**.
3	**CHECK CURRENT DATA.** Check «+POWER B» using the Subaru Select Monitor.	Is the voltage less than 10.5 V or 16 V or more?	Go to step **5**.	Go to step **4**.
4	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.
5	**CHECK FUSE.** 1) Turn the ignition switch to OFF. 2) Check the fuse.	Is the fuse OK?	Go to step **6**.	Replace the defective fuse. When the fuse is blown immediately, repair the short circuit.
6	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Using a tester, measure the voltage between the PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 8 (+) — Chassis ground (–):***	Is the voltage less than 10.5 V or 16 V or more?	Go to step **7**.	Repair or replace the open circuit of harness.

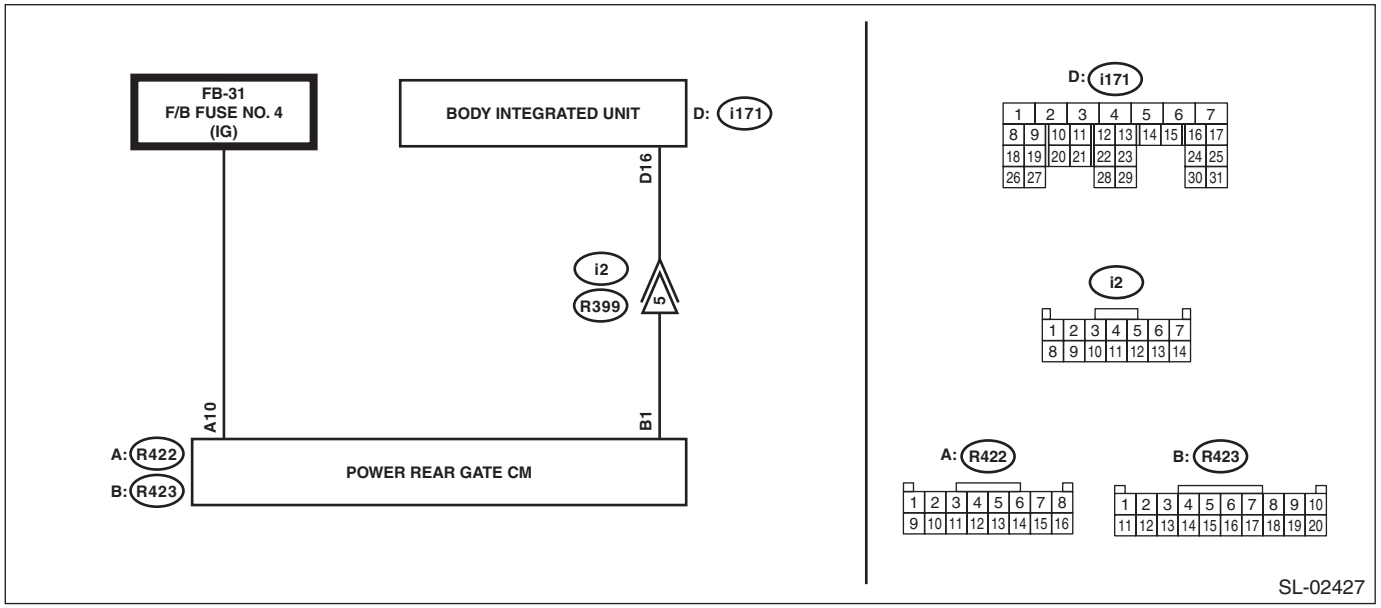
Step		Check	Yes	No
7	**CHECK HARNESS.** Using a tester, measure the resistance between the PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 14 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **8**.	Repair or replace the open circuit of harness.
8	**CHECK CONNECTOR.** Turn the ignition switch to OFF.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>

X: DTC B251A LIN CONNECTION FAILURE (NO-RECEIVE DATA FAILURE)

DTC DETECTING CONDITION:
When LIN communication failure is detected.

TROUBLE SYMPTOM:
The auto-operation does not function, and reverse operation occurs during the auto-open operation.

WIRING DIAGRAM:
Power rear gate system <Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>



Step		Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B251A, B251B, B251D current malfunction?	Go to step **2**.	Go to step **3**.
2	**CHECK DTC.** 1) Turn IGN SW to ON. 2) Disconnect the PRG CM connector and reconnect it. 3) Turn the ignition switch to ON. 4) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B251A, B251B, B251D current malfunction?	Go to step **4**.	Go to step **3**.
3	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	Temporary communication failure occurred.
4	**CHECK INTEGRATED UNIT.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is DTC detected?	Perform the diagnosis according to DTC for the body integrated unit.	Go to step **5**.
5	**CHECK HARNESS.** 1) Disconnect the PRG CM connector. 2) Disconnect the body integrated unit connector. 3) Measure the resistance between PRG CM connector and body integrated unit. ***Connector & terminal*** ***(R423) No. 1 — (i171) No. 16:***	Is the resistance less than 10 Ω?	Go to step **6**.	Repair or replace the open circuit of harness.
6	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 1 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **7**.	Repair or replace the short circuit of the harness.

	Step	Check	Yes	No
7	**CHECK HARNESS.** Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R423) No. 1 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **8**.	Repair or replace the short circuit of the harness.
8	**CHECK HARNESS.** 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 and less than 16 V?	Go to step **9**.	Repair or replace the open circuit of harness.
9	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM 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.>

Y: DTC B251B LIN CONNECTION FAILURE (BUS PHYSICAL FAILURE)

NOTE:
For the diagnostic procedure, refer to DTC B251A. <Ref. to PRG(diag)-49, DTC B251A LIN CONNECTION FAILURE (NO-RECEIVE DATA FAILURE), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

Z: DTC B251D AT/MT JUDGMENT FAILURE

NOTE:
For the diagnostic procedure, refer to DTC B251A. <Ref. to PRG(diag)-49, DTC B251A LIN CONNECTION FAILURE (NO-RECEIVE DATA FAILURE), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

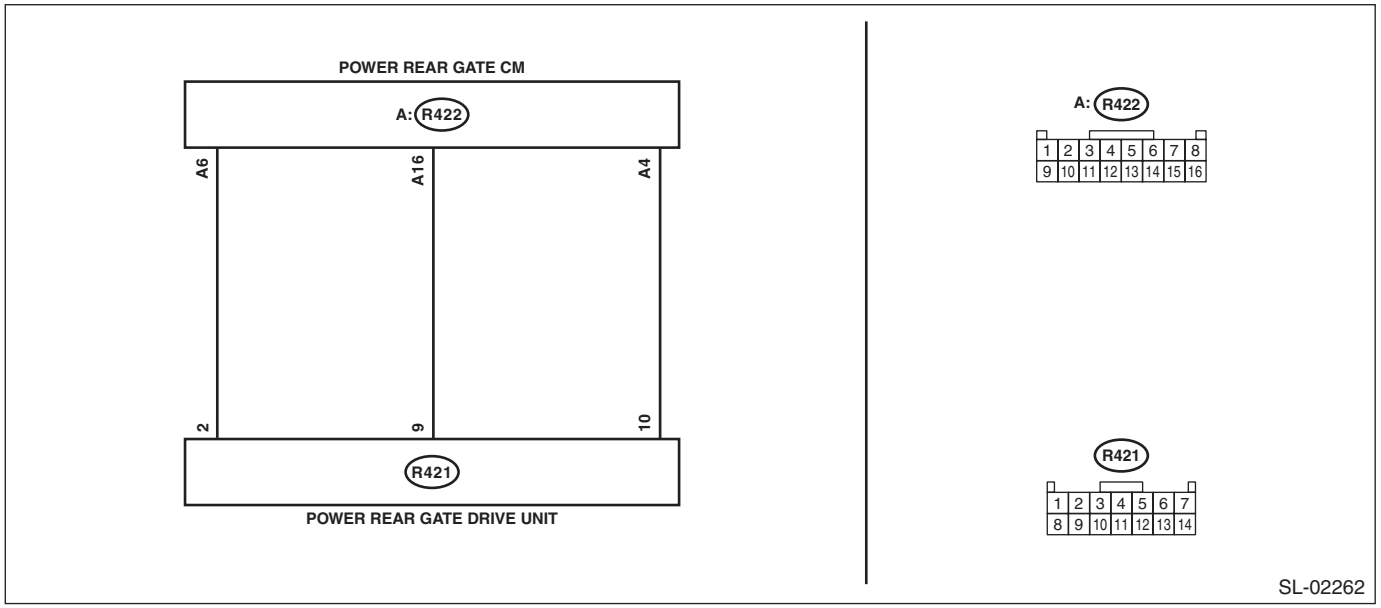
AA:DTC B2522 EEPROM FAILURE

DTC DETECTING CONDITION:
When failure in PRG CM is detected.
TROUBLE SYMPTOM:
The memorized half-stop position is reset, and returned to the default setting.

	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2522 current malfunction?	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>	Go to step **2**.
2	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector and reconnect it. 3) Turn the ignition switch to ON. 4) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2522 current malfunction?	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>	Currently, system is normal. A temporary poor contact may be a possible cause. Therefore, check the harness connector.

AB:DTC B2523 HALF STOP SOLENOID FAILURE

DTC DETECTING CONDITION:
When malfunction in the keep solenoid is detected.
TROUBLE SYMPTOM:
Half-stop is not possible.
WIRING DIAGRAM:
Power rear gate system <Ref. to WI-308, WIRING DIAGRAM, Power Rear Gate System.>



Step		Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2523 current malfunction?	Go to step **2**.	Go to step **3**.
2	**CHECK DTC.** 1) Turn IGN SW to ON. 2) Disconnect the PRG CM connector and reconnect it. 3) Turn the ignition switch to ON. 4) Using the Subaru Select Monitor, read DTC of PRG CM.	Is B2523 current malfunction?	Go to step **4**.	Go to step **3**.
3	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.
4	**CHECK HARNESS.** 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 **5**.	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).>

	Step	Check	Yes	No
5	**CHECK CURRENT DATA.** 1) Check «HALF STOP SOL (Lock)», «HALF STOP SOL (Cancel)», and «HALF STOP SOL POS SW», using the Subaru Select Monitor. 2) During the auto-open operation, tap any of the keyless rear gate SW, PRG driver's SW, PRG opener button, or PRG inner SW to stop the operation in a half-way position. Tap SW again to operate the auto-close, and then check the current data. **CAUTION:** **ON output for lock and 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.**	Are the following changes detected? • At R/G stop HALF STOP SOL (Lock), OFF → ON → OFF HALF STOP SOL POS SW, OFF → ON • At R/G re-operation HALF STOP SOL (Cancel), OFF → ON → OFF HALF STOP SOL POS SW, ON → OFF	Go to step **6**.	Replace the PRG CM. <Ref. to PRG-9, Power Rear Gate Control Module.>
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 & terminal*** ***(R422) No. 16 — (R421) No. 9:*** ***(R422) No. 4 — (R421) No. 10:*** ***(R422) No. 6 — (R421) No. 2:***	Is the resistance less than 10 Ω?	Go to step **7**.	Repair or replace the open circuit of harness.
7	**CHECK HARNESS.** Measure the resistance between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 16 — Chassis ground:*** ***(R422) No. 4 — Chassis ground:*** ***(R422) No. 6 — 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.** Measure the voltage between PRG CM connector and chassis ground. ***Connector & terminal*** ***(R422) No. 16 (+) — Chassis ground (–):*** ***(R422) No. 4 (+) — Chassis ground (–):*** ***(R422) No. 6 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **9**.	Repair or replace the short circuit of the harness.
9	**CHECK PRG DU.** 1) Connect the PRG DU connector only. 2) Measure the resistance between PRG CM connectors. ***Connector & terminal*** ***(R422) No. 16 — (R422) No. 6:*** ***(R422) No. 4 — (R422) No. 6:***	Is the resistance less than 10 Ω?	Go to step **10**.	Replace the PRG DU. <Ref. to PRG-9, Power Rear Gate Control Module.>
10	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the PRG CM connector. 3) Disconnect the PRG DU 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.>