14.Diagnostic Procedure with Diagnostic Trouble Code (DTC)

A: DTC U0073 CONTROL MODULE COMMUNICATION BUS OFF

Detected when CAN line abnormality is detected.

NOTE:
Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

B: DTC U0100 LOST COMMUNICATION WITH ECM/PCM “A”

Detected when CAN data from the engine control module (ECM) does not arrive.

NOTE:
Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

C: DTC U0101 LOST COMMUNICATION WITH TCM

Detected when CAN data from TCM does not arrive.

NOTE:
Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

D: DTC U0122 LOST COMMUNICATION WITH VEHICLE DYNAMICS CONTROL MODULE

Detected when CAN data from VDC does not arrive.

NOTE:
Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

E: DTC U0140 LOST COMMUNICATION WITH BODY CONTROL MODULE

Detected when CAN data from BIU does not arrive.

NOTE:
Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

F: DTC U0155 LOST COMMUNICATION WITH INSTRUMENT PANEL CLUSTER (IPC) CONTROL MODULE

Detected when CAN data from meter does not arrive.

NOTE:
Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

G: DTC U0401 INVALID DATA RECEIVED FROM ECM/PCM “A”

Detected when there is malfunction in CAN data from the engine control module (ECM).

NOTE:
Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

H: DTC U0422 INVALID DATA RECEIVED FROM BODY CONTROL MODULE

Detected when CAN data from BIU is abnormal.

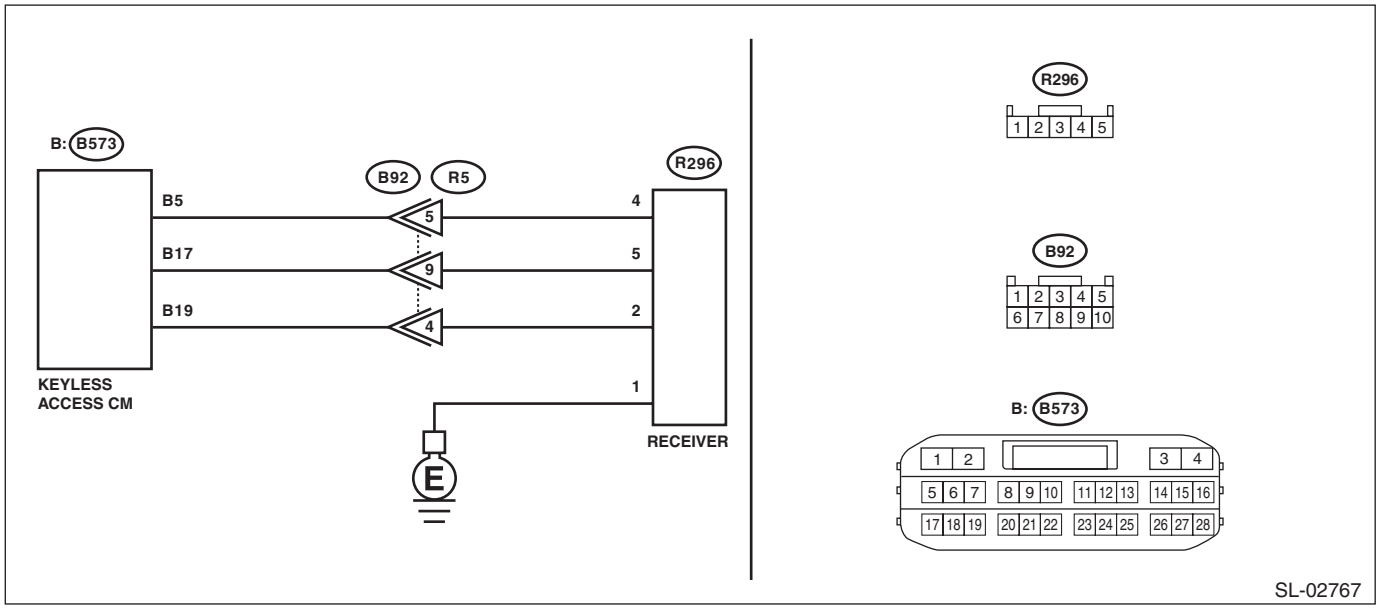
NOTE:
Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

I: DTC B1242 WIRELESS TUNER ABNORMAL

DTC DETECTING CONDITION:
When short circuit occurs in harness between keyless access CM and receiver.
TROUBLE SYMPTOM:
- The keyless access with push button start function (except for emergency function) does not operate properly.
- Operation by the access key button does not function.

CAUTION:
- **For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".**
- **When the harness comes close to the receiver, the performance of keyless access system operation and wireless operation may reduce. So, when replacing or inspecting the receiver and harness, do not change the route and length of the surrounding harnesses.**

WIRING DIAGRAM:
Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>



Step		Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Disconnect the receiver connector. 3) Using the tester, measure the resistance between terminals of keyless access CM connector and receiver connector, and keyless access CM and chassis ground. ***Connector & terminal*** ***(B573) No. 19 — (R296) No. 2:*** ***(B573) No. 17 — (R296) No. 5:*** ***(B573) No. 5 — (R296) No. 4:*** ***(R296) No. 1 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **3**.	Repair or replace the open circuit of harness.

	Step	Check	Yes	No
3	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B573) No. 19 — Chassis ground:*** ***(B573) No. 17 — Chassis ground:*** ***(B573) No. 5 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **4**.	Repair or replace the short circuit of the harness.
4	**CHECK RECEIVER.** 1) Replace the receiver, and then connect it. <Ref. to SL-98, Receiver.> 2) Using the Subaru Select Monitor, clear the memory. 3) Use the Subaru Select Monitor and read DTCs.	Is B1242 displayed?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Receiver has a malfunction.

J: DTC B2271 IGN FUSE BLOWN OR IGN CIRCUIT ABNORMAL

DTC DETECTING CONDITION:

- When malfunction is detected in IG1 and IG2 drive circuits in the keyless access CM.
- When malfunction is detected in IG hold circuit in the keyless access CM.

TROUBLE SYMPTOM:

Not all functions operate at IGN ON.

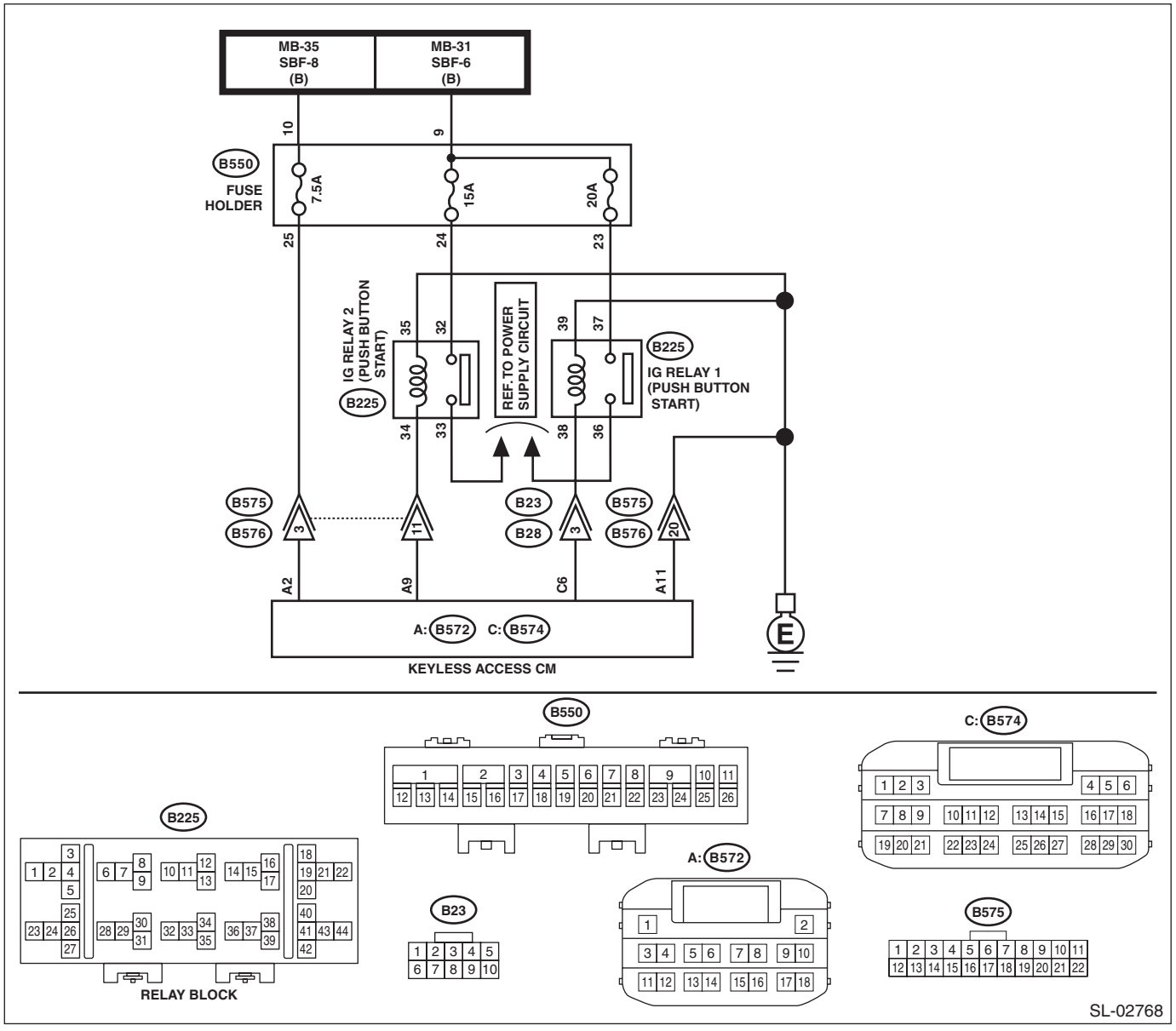
CAUTION:

For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

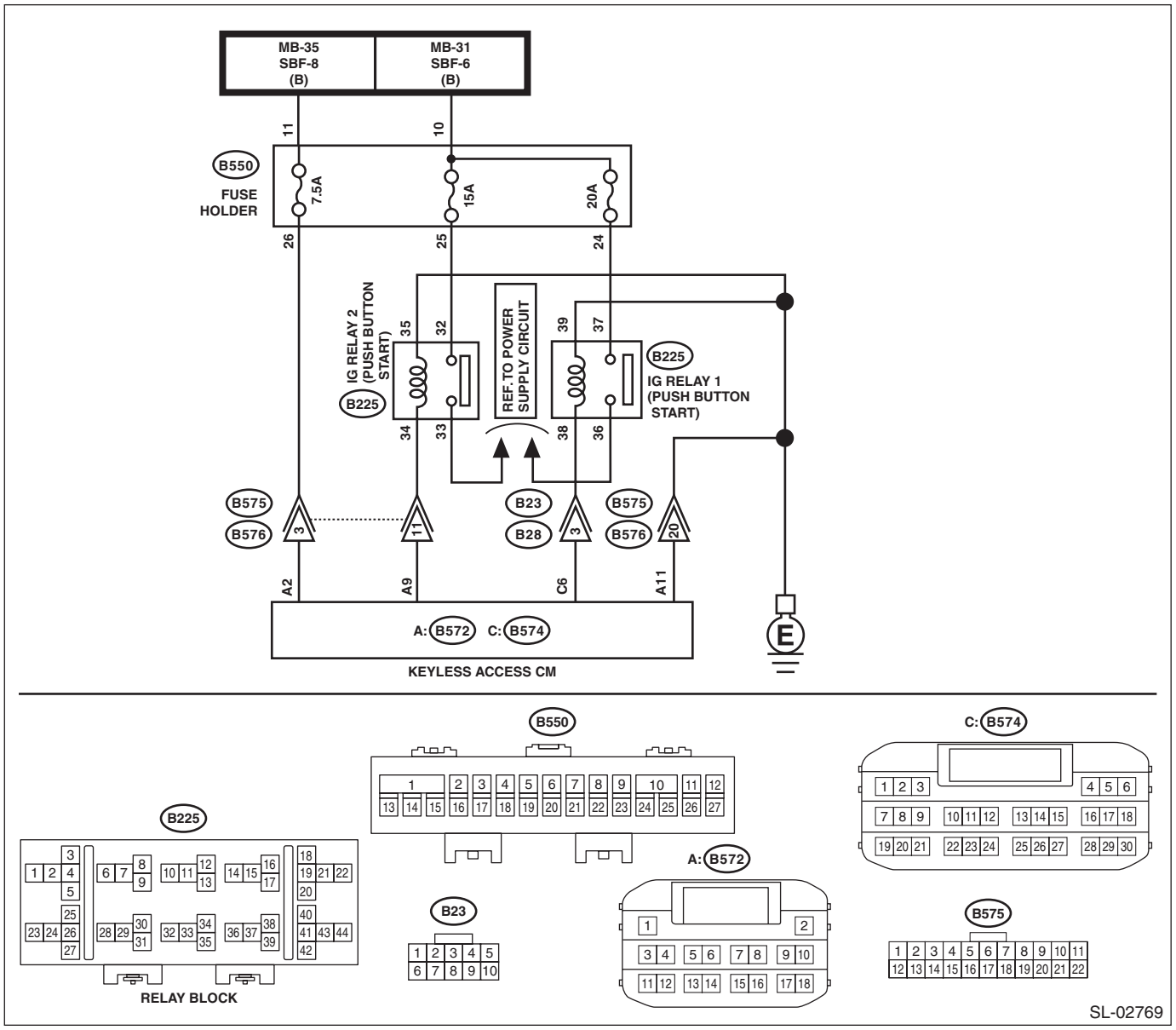
WIRING DIAGRAM:

Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>

- Engine type: FA



- Engine type: EJ



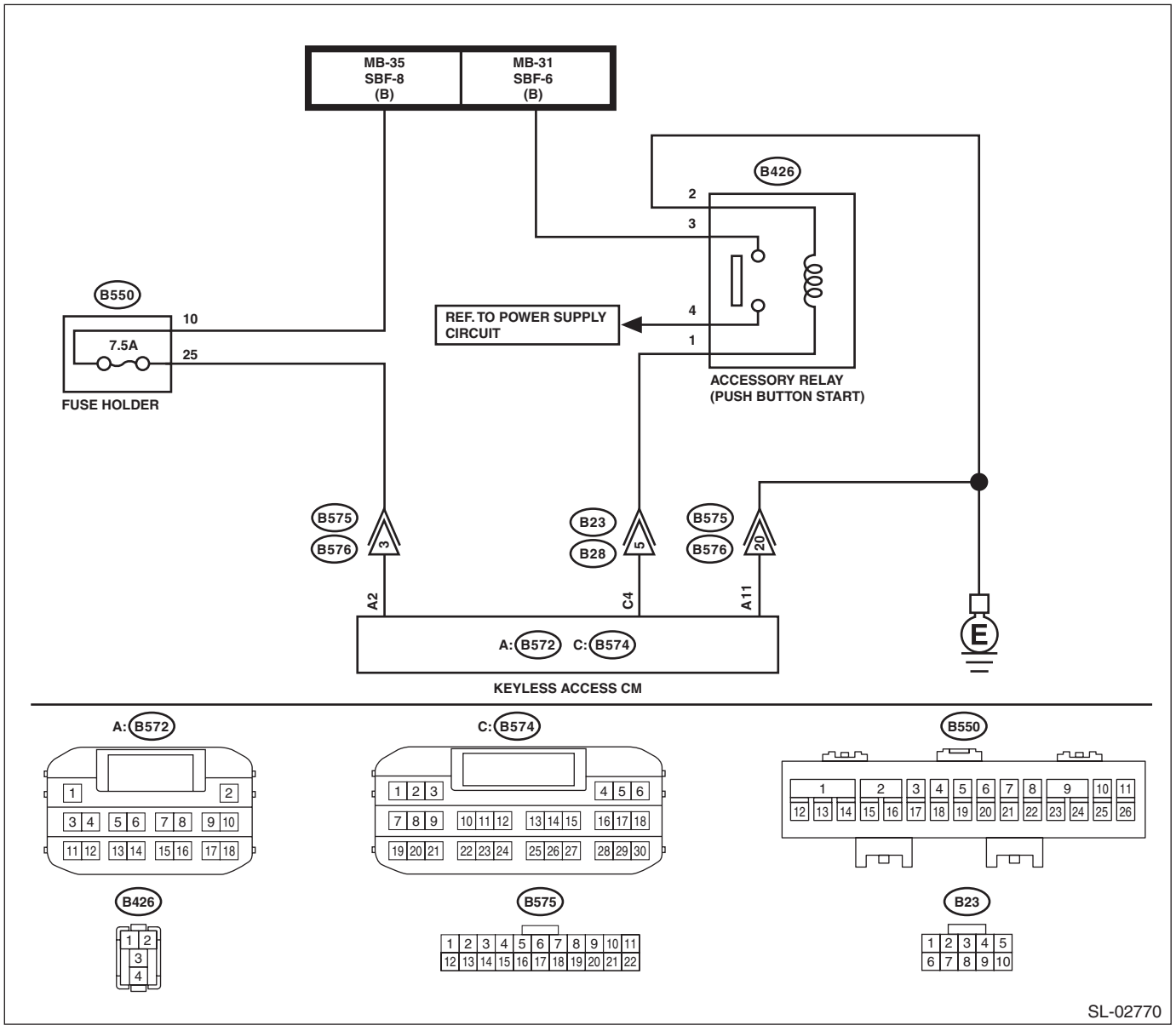
Step		Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK FUSE.** Check the fuse.	Is the fuse OK?	Go to step **3**.	Replace the fuse. When the replaced fuse is blown immediately, check the power supply circuit for short-circuited.

	Step	Check	Yes	No
3	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Using a tester, measure the voltage between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 2 (+) — Chassis ground (–):***	Is the voltage 9.5 — 16 V?	Go to step **4**.	Check the power supply circuit.
4	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **5**.	Repair or replace the open circuit of harness.
5	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 9 — Chassis ground:***	Is resistance 74.15 — 460.88 Ω? (20°C)	Go to step **6**.	Check IG relay 2. Go to step **7**.
6	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B574) No. 6 — Chassis ground:***	Is resistance 50.87 — 72.17 Ω? (20°C)	Go to step **8**.	Check IG relay 1. Go to step **7**.
7	**CHECK RELAY.** Perform unit inspection of IG relay 1 and IG relay 2. <Ref. to SL-9, CHECK RELAY, INSPECTION, Relay and Fuse.>	Is the relay OK?	Go to step **8**.	Replace the relay. <Ref. to SL-110, REMOVAL, IG Relay1 (Push Button Start).> <Ref. to SL-112, REMOVAL, IG Relay2 (Push Button Start).>
8	**CHECK KEYLESS ACCESS CM.** 1) Connect the keyless access CM connector. 2) Using a tester, measure the voltage between the terminals of keyless access CM connector. ***Connector & terminal*** ***(B574) No. 6 (+) — Chassis ground (–):*** ***(B572) No. 9 (+) — Chassis ground (–):***	Is the voltage 1 V or less → 9.5 — 16 V when ACC → IGN ON?	System is normal. It is possible that temporary poor contact occurs.	Replace the keyless access CM. <Ref. to SL-100, REMOVAL, Keyless Access CM.>

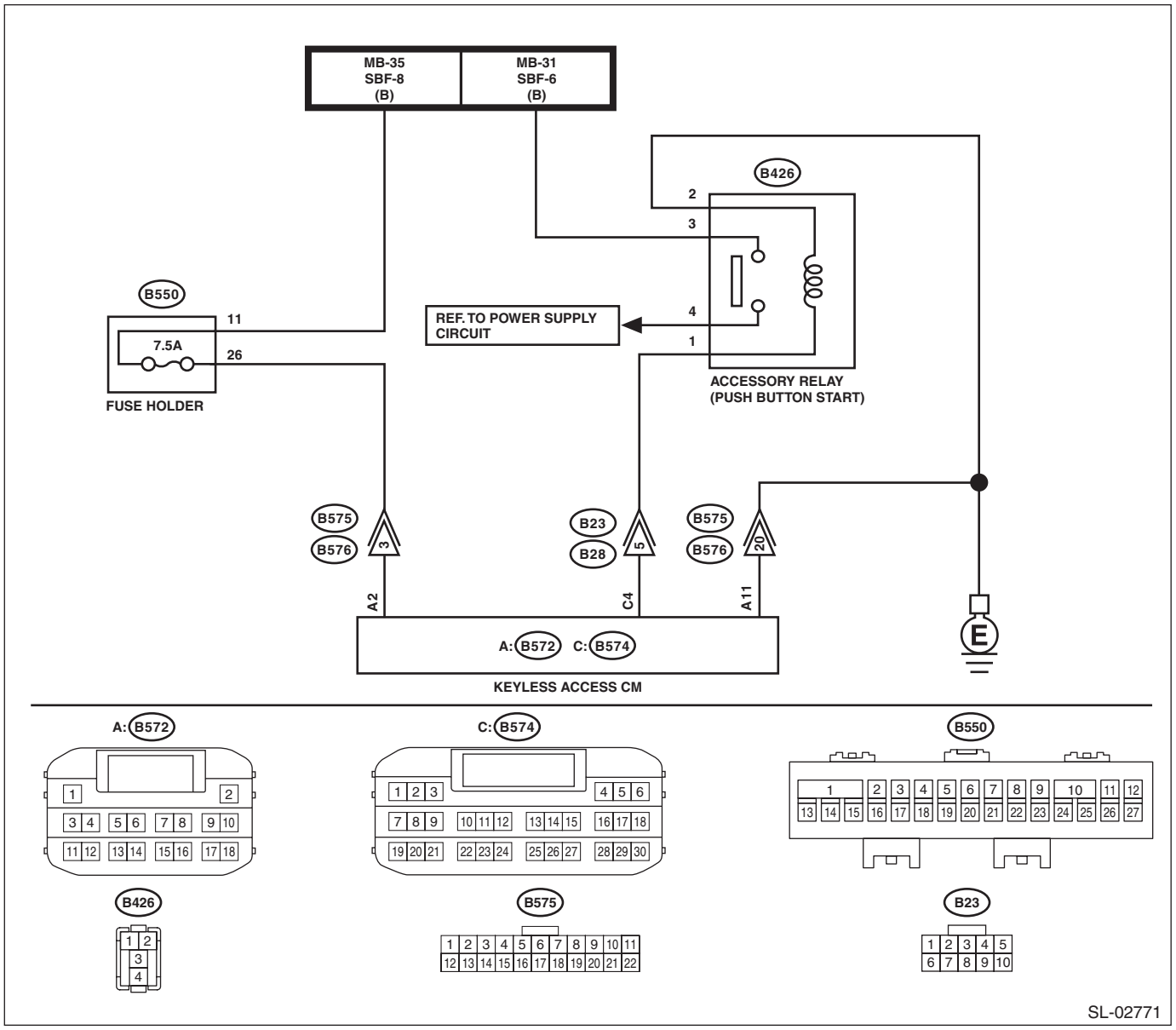
K: DTC B2274 ACC MONITOR

DTC DETECTING CONDITION:
When malfunction is detected in ACC relay drive circuit in the keyless access CM or external circuit.
TROUBLE SYMPTOM:
Each function does not operate at the ACC position.

CAUTION:
For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".
WIRING DIAGRAM:
Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>
- Engine type: FA



- Engine type: EJ



Step		Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK FUSE.** Remove the fuse.	Is the fuse OK?	Go to step **3**.	Replace the fuse. When the replaced fuse is blown immediately, check the power supply circuit for short-circuited.

	Step	Check	Yes	No
3	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 2 (+) — Chassis ground (–):***	Is the voltage 9.5 — 16 V?	Go to step **4**.	Check the power supply circuit.
4	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **5**.	Repair or replace the open circuit of harness.
5	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B574) No. 4 — Chassis ground:***	Is resistance 128 — 157 Ω? (20°C)	Go to step **7**.	Go to step **6**.
6	**CHECK RELAY.** Perform inspection of ACC relay unit. <Ref. to SL-114, Accessory Relay (Push Button Start).>	Is the relay OK?	Go to step **7**.	Replace the relay.
7	**CHECK HARNESS.** Using a tester, measure the resistance between keyless access CM connectors. ***Connector & terminal*** ***(B574) No. 4 — (B426) No. 1:*** ***(B426) No. 2 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **8**.	Repair or replace the open circuit of harness.
8	**CHECK KEYLESS ACCESS CM.** 1) Connect the keyless access CM connector. 2) Using a tester, measure the voltage between keyless access CM connectors. ***Connector & terminal*** ***(B574) No. 4 (+) — Chassis ground (–):***	Is the voltage 1 V or less → 9.5 — 16 V when OFF → ACC ON?	System is normal. It is possible that temporary poor contact occurs.	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>

L: DTC B2275 STSW CIRCUIT ABNORMAL

DTC DETECTING CONDITION:

- When malfunction is detected in engine start permission signal output circuit in the keyless access CM.
- When malfunction is detected in external engine start permission signal circuit.

TROUBLE SYMPTOM:

Engine will not start.

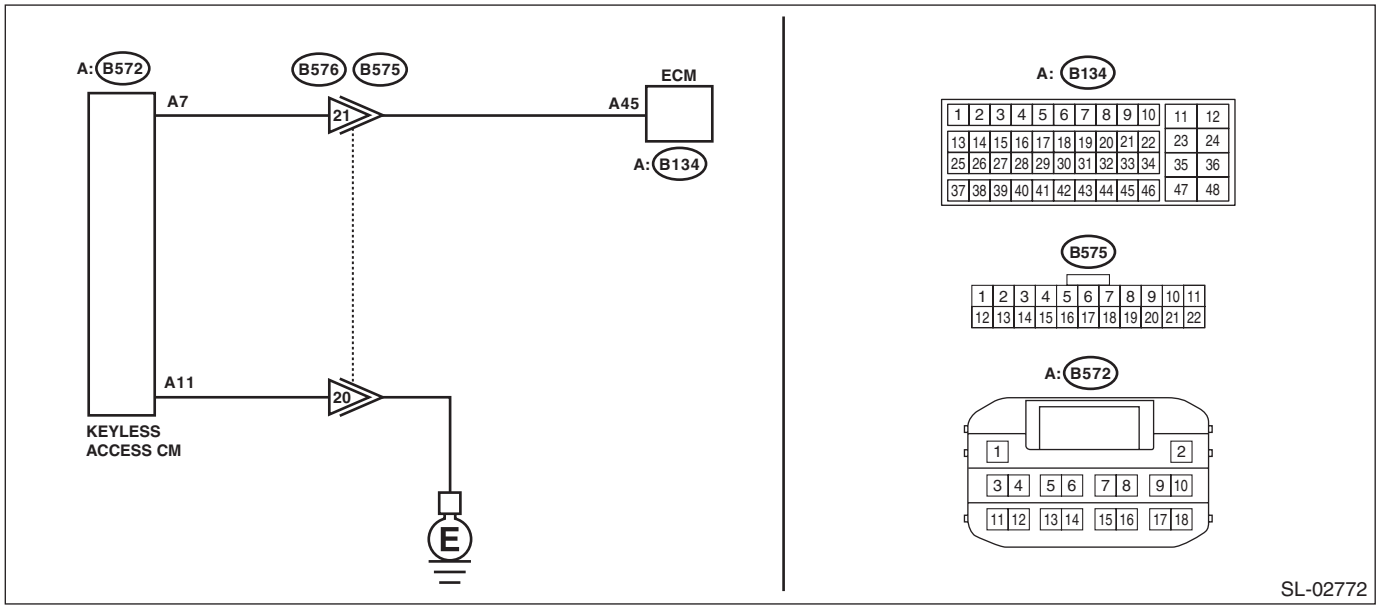
CAUTION:

For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

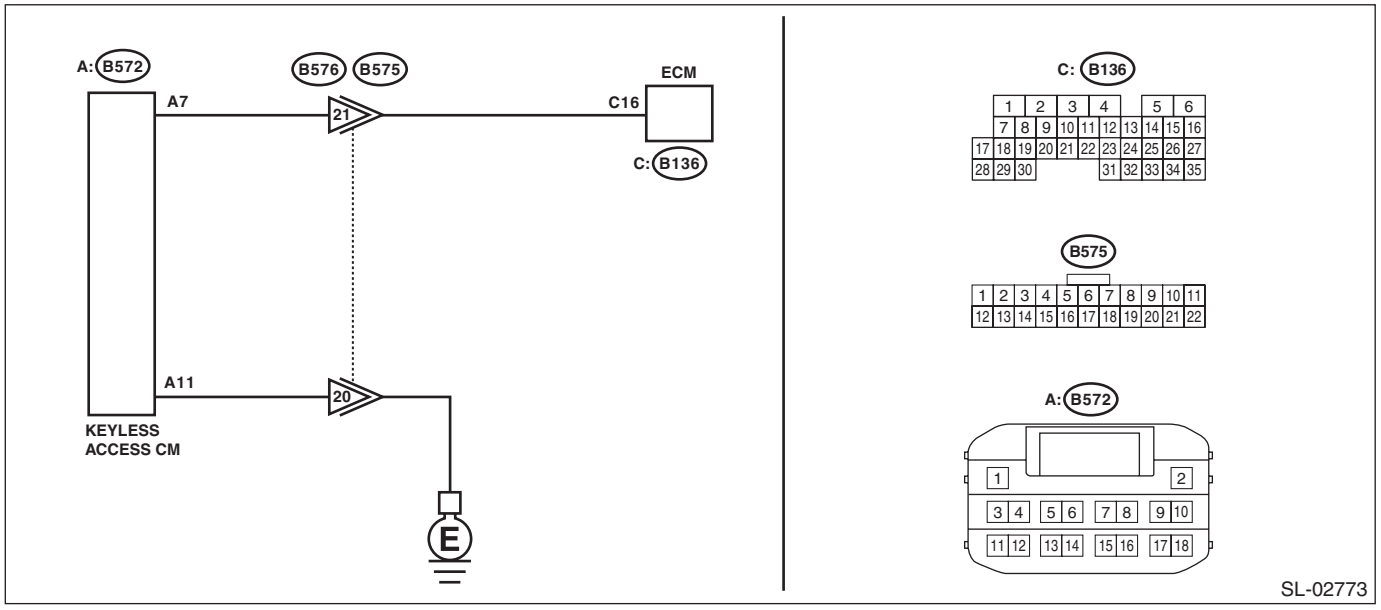
WIRING DIAGRAM:

Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>

- Engine type: FA



- Engine type: EJ



	Step	Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK FUSE.** Remove the fuse.	Is the fuse OK?	Go to step **3**.	Replace the fuse. When the replaced fuse is blown immediately, check the power supply circuit for short-circuited.
3	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector and ECM connector. 2) Using a tester, measure the resistance between the keyless access CM connector and ECM. ***Connector & terminal*** ***Engine type: FA*** ***(B572) No. 7 — (B134) No. 45:*** ***Engine type: EJ*** ***(B572) No. 7 — (B136) No. 16:***	Is the resistance less than 1 Ω?	Go to step **4**.	Repair or replace the open circuit of harness.
4	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **5**.	Repair or replace the open circuit of harness.
5	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 7 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **6**.	Repair or replace the short circuit of the harness.
6	**CHECK KEYLESS ACCESS CM.** 1) Connect the keyless access CM connector and ECM connector. 2) Using a tester, measure the voltage between the terminals of keyless access CM connector. ***Connector & terminal*** ***(B572) No. 7 (+) — (B572) No. 11 (–):***	Does the voltage change as 2 V or less → 9 V or more when the push button ignition switch is turned on while depressing the brake pedal with the shift position in P or N (AT model) or while depressing clutch pedal (MT model)?	Perform inspection according to the diagnosis of engine. <Ref. to EN(w/o STI)(diag)-66, Diagnostics for Engine Starting Failure.> <Ref. to EN(STI)(diag)-67, PROCEDURE, Diagnostics for Engine Starting Failure.>	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>

M: DTC B2276 ACCR SIGNAL ABNORMAL

DTC DETECTING CONDITION:

When input error occurs in accessory relay cut input signal of keyless access CM.

TROUBLE SYMPTOM:

- The accessory power supply is not cut during engine start.
- Starter rotation is slow.

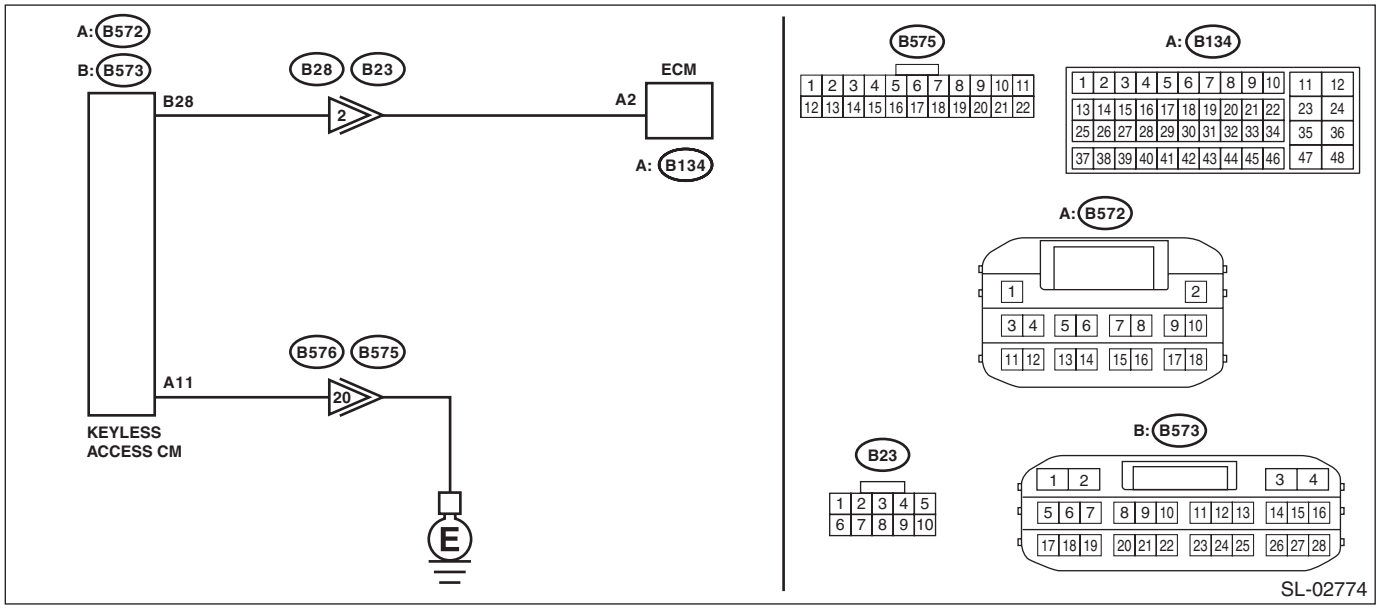
CAUTION:

For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

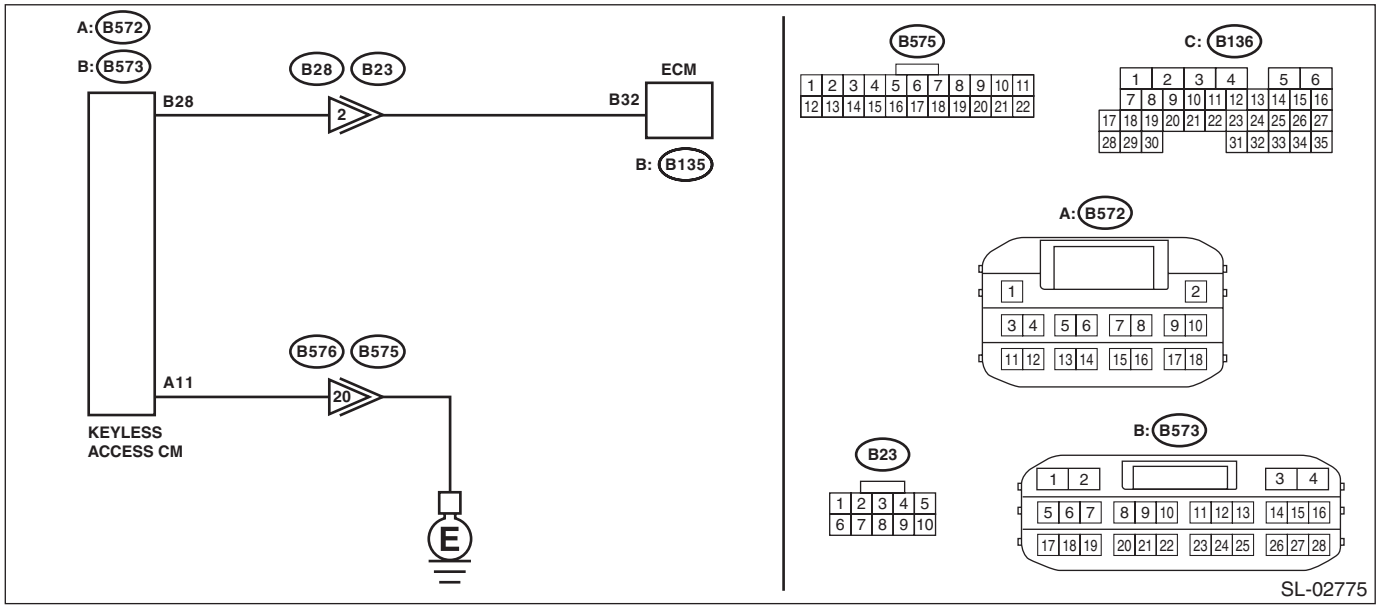
WIRING DIAGRAM:

Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>

- Engine type: FA



- Engine type: EJ



	Step	Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector and ECM connector. 2) Using a tester, measure the resistance between the keyless access CM connector and ECM. ***Connector & terminal*** ***Engine type: FA*** ***(B573) No. 28 — (B134) No. 2:*** ***Engine type: EJ*** ***(B573) No. 28 — (B135) No. 32:***	Is the resistance less than 1 Ω?	Go to step **3**.	Repair or replace the open circuit of harness.
3	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B573) No. 28 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **4**.	Repair or replace the short circuit of the harness.
4	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **5**.	Repair or replace the open circuit of harness.
5	**CHECK KEYLESS ACCESS CM.** 1) Connect the keyless access CM connector and ECM connector. 2) Using a tester, measure the voltage between terminals of the keyless access CM connector when the push button ignition switch is pressed while depressing the brake pedal, with the shift lever in the P range for model except for MT or while depressing the clutch pedal for MT model. ***Connector & terminal*** ***(B573) No. 28 (+) — (B572) No. 11 (–):***	Is the voltage 9.5 — 16 V → 1 V or less?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Replace the ECM. <Ref. to FU(w/o STI)-132, REMOVAL, Engine Control Module (ECM).> <Ref. to FU(STI)-56, REMOVAL, Engine Control Module (ECM).>

N: DTC B2277 SUBMERGING CIRCUIT ABNORMAL

DTC DETECTING CONDITION:

When the water-submersion detection circuit integrated into the keyless access CM detects the water submersion.

TROUBLE SYMPTOM:

- The ignition can be turned ON, but cannot be turned OFF.
- Engine will not start.

CAUTION:

For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

	Step	Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK SUBMERSION CONDITION.** Check the keyless access CM and environment of equipment, and check the harness for any trace of water submersion.	Is there any trace of water submersion?	Take necessary measures against water submersion and replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>

O: DTC B2282 VEHICLE SPEED SIGNAL ABNORMAL

DTC DETECTING CONDITION:

When the vehicle speed signal transmitted from VDC via solid line and the vehicle speed signal transmitted from VDC via CAN communication line do not match.

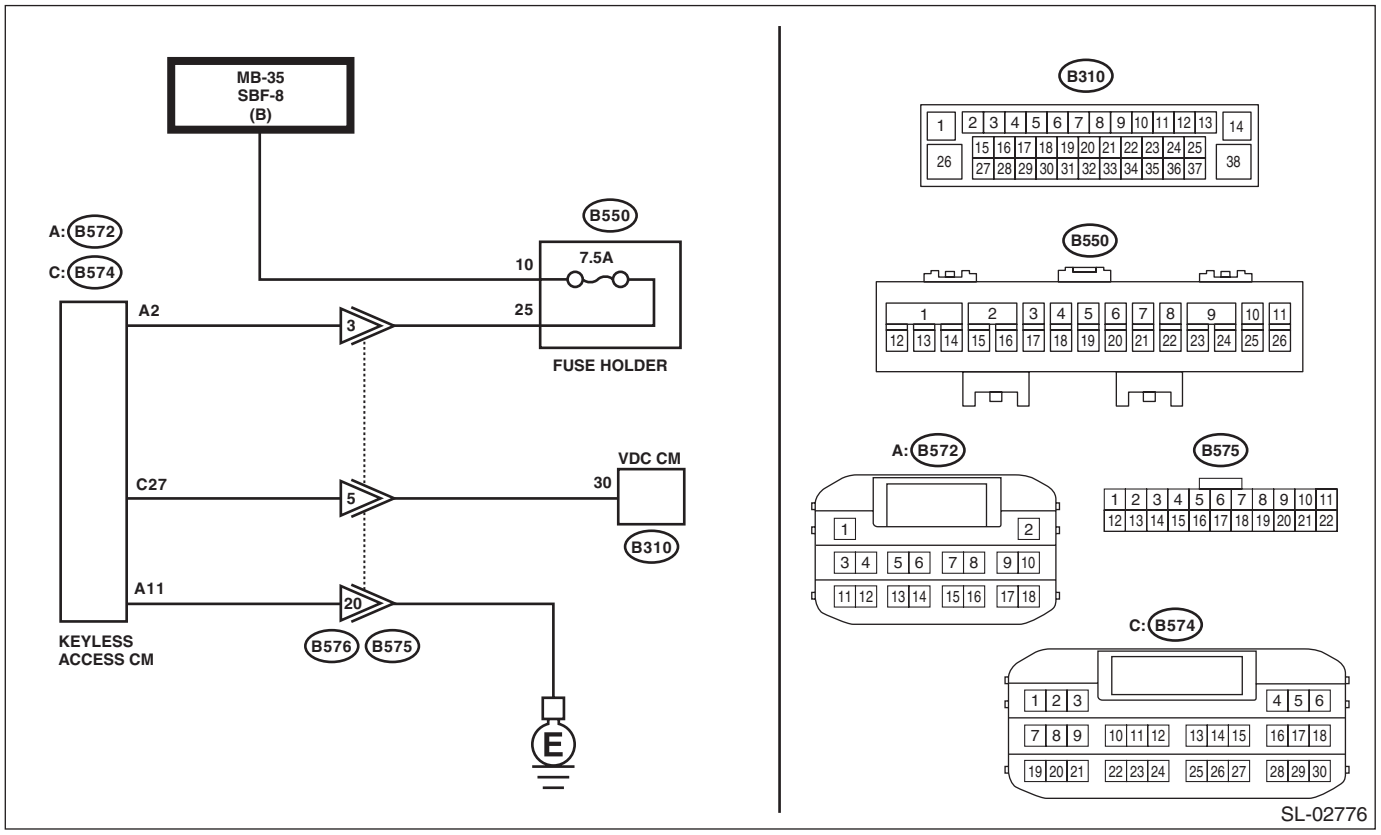
CAUTION:

For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

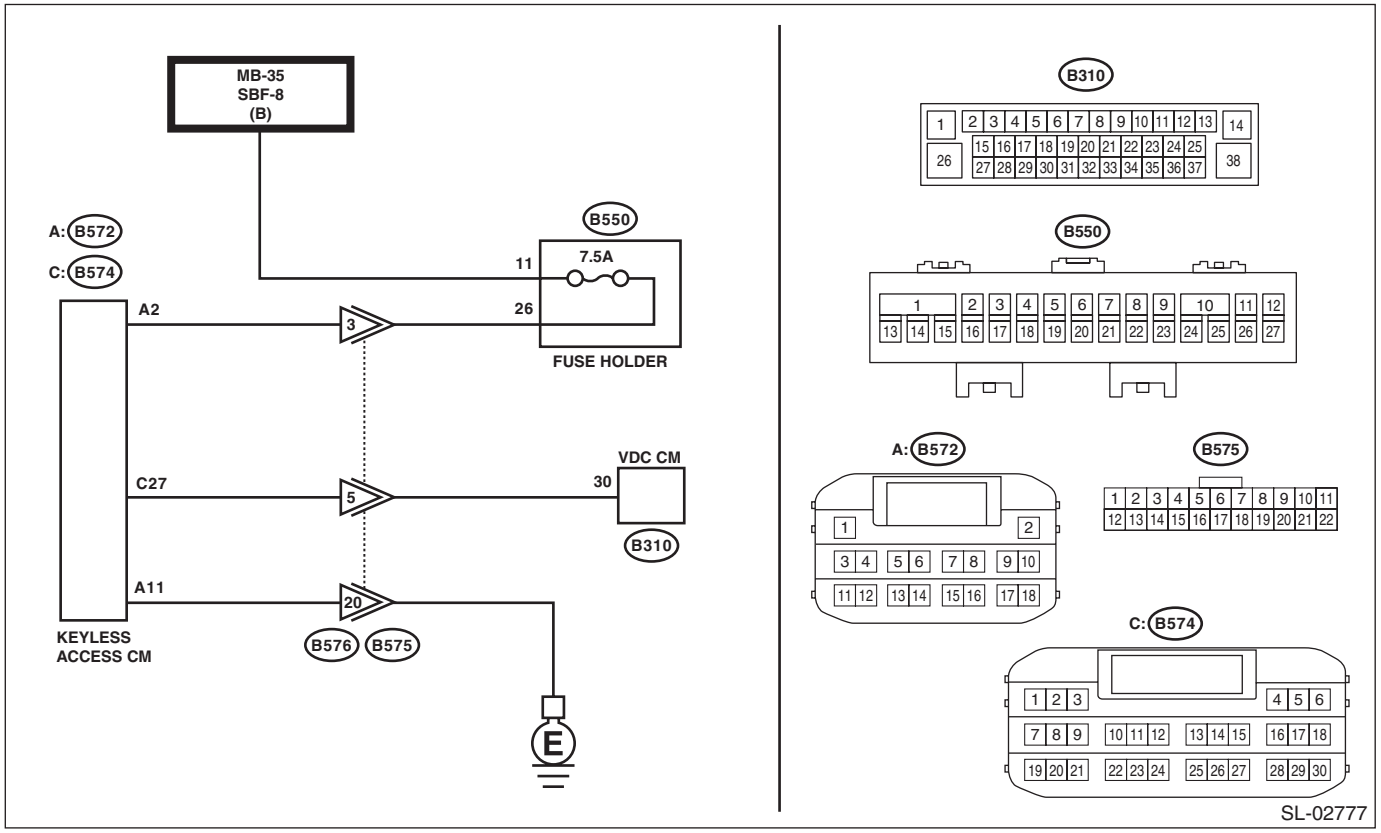
WIRING DIAGRAM:

Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>

- Engine type: FA



- Engine type: EJ



Step		Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK COMBINATION METER.** Check that the speedometer is displayed normally.	Is the meter display normal?	Go to step **3**.	Check the VDC. <Ref. to VDC(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>
3	**CHECK CURRENT DATA.** Confirm the current data display of keyless access system using Subaru Select Monitor. • Vehicle speed signal	Is the parked state or driving state displayed normally?	Go to step **4**.	Check the VDC. <Ref. to VDC(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>
4	**CHECK FUSE.** Remove the fuse.	Is the fuse OK?	Go to step **5**.	Replace the fuse. When the replaced fuse is blown immediately, check the power supply circuit for short-circuited.
5	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Using a tester, measure the voltage between keyless access CM connectors. ***Connector & terminal*** ***(B572) No. 2 (+) — Chassis ground (–):***	Is the voltage 9.5 — 16 V?	Go to step **6**.	Check the power supply circuit.

	Step	Check	Yes	No
6	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **7**.	Repair or replace the open circuit of harness.
7	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Disconnect the combination meter connector. 3) Using a tester, measure the resistance between the keyless access CM connector and VDC CM connector. ***Connector & terminal*** ***(B574) No. 27 — (B310) No. 30:***	Is the resistance less than 1 Ω?	Go to step **8**.	Repair or replace the open circuit of harness.
8	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B574) No. 27 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **9**.	Repair or replace the short circuit of the harness.
9	**CHECK KEYLESS ACCESS CM.** 1) Connect each connector. 2) Using the Subaru Select Monitor, measure the waveform between the terminals of keyless access CM. ***Connector & terminal*** ***(B574) No. 27 — Chassis ground:***	Is 3.54 Hz displayed when the vehicle is driven approx. at 5 km/h?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Check the VDC. <Ref. to VDC(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

P: DTC B2283 VEHICLE SPEED SENSOR FAULT DETECTION

DTC DETECTING CONDITION:

Either of the following malfunctions is detected. (Vehicle speed sensor failure is detected.)

- Vehicle speed signal failure detection 1: Excessive deceleration detection
- Vehicle speed signal failure detection 2: Engine speed interlock detection

TROUBLE SYMPTOM:

The steering lock cannot be released.

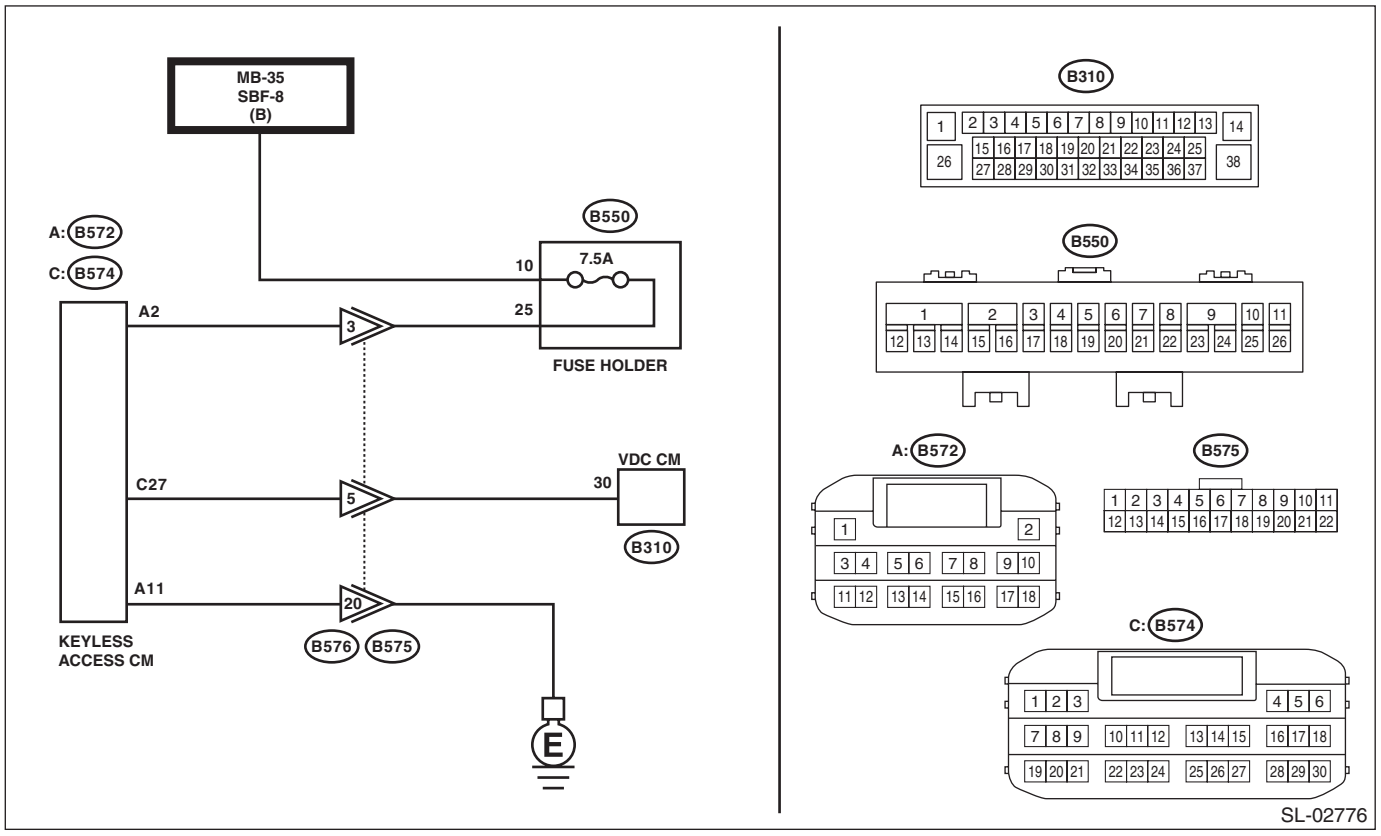
CAUTION:

For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

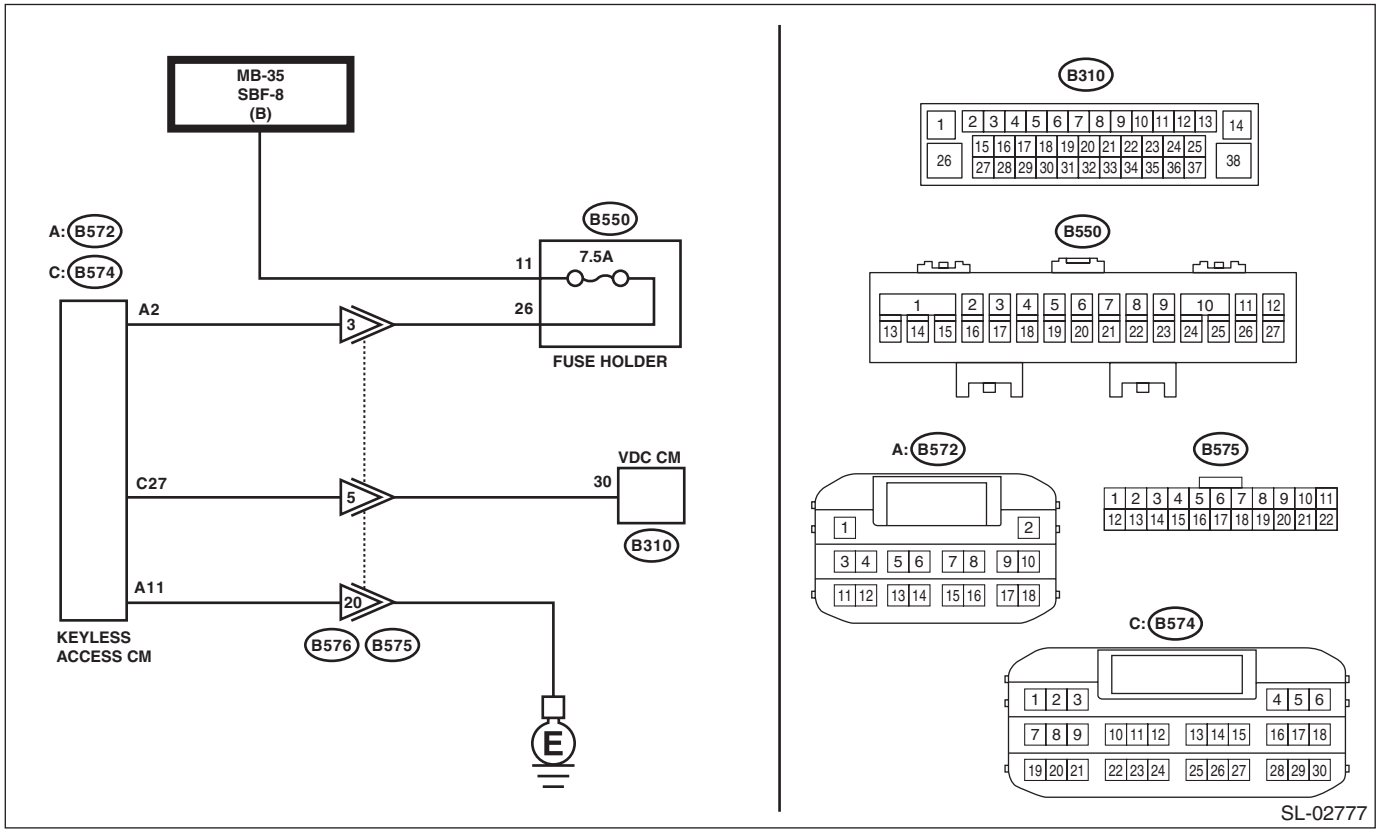
WIRING DIAGRAM:

Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>

- Engine type: FA



- Engine type: EJ



	Step	Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK COMBINATION METER.** Check that the speedometer is displayed normally. • Vehicle speed signal	Is the meter display normal?	Go to step **3**.	Check the VDC. <Ref. to VDC(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>
3	**CHECK CURRENT DATA.** Confirm the current data display of keyless access system using Subaru Select Monitor. • Vehicle speed signal	Is the parked state or driving state displayed normally?	Go to step **4**.	Check the VDC. <Ref. to VDC(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>
4	**CHECK FUSE.** Remove the fuse.	Is the fuse OK?	Go to step **5**.	Replace the fuse. When the replaced fuse is blown immediately, check the power supply circuit for short-circuited.
5	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Using a tester, measure the voltage between keyless access CM connectors. ***Connector & terminal*** ***(B572) No. 2 (+) — Chassis ground (–):***	Is the voltage 9.5 — 16 V?	Go to step **6**.	Check the power supply circuit.

	Step	Check	Yes	No
6	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **7**.	Repair or replace the open circuit of harness.
7	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Disconnect the combination meter connector. 3) Using a tester, measure the resistance between the keyless access CM connector and VDC CM connector. ***Connector & terminal*** ***(B574) No. 27 — (B310) No. 30:***	Is the resistance less than 1 Ω?	Go to step **8**.	Repair or replace the open circuit of harness.
8	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B574) No. 27 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **9**.	Repair or replace the short circuit of the harness.
9	**CHECK KEYLESS ACCESS CM.** 1) Connect each connector. 2) Using the Subaru Select Monitor, measure the waveform between the terminals of keyless access CM. ***Connector & terminal*** ***(B574) No. 27 — Chassis ground:***	Is 3.54 Hz displayed when the vehicle is driven approx. at 5 km/h?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Check the VDC. <Ref. to VDC(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

Q: DTC B2284 BRAKE SIGNAL (CABLE-INFORMATION DOES NOT MATCH TO BEAN-INFORMATION)

DTC DETECTING CONDITION:

When the brake signal transmitted via solid line and the brake signal transmitted via CAN communication line do not match.

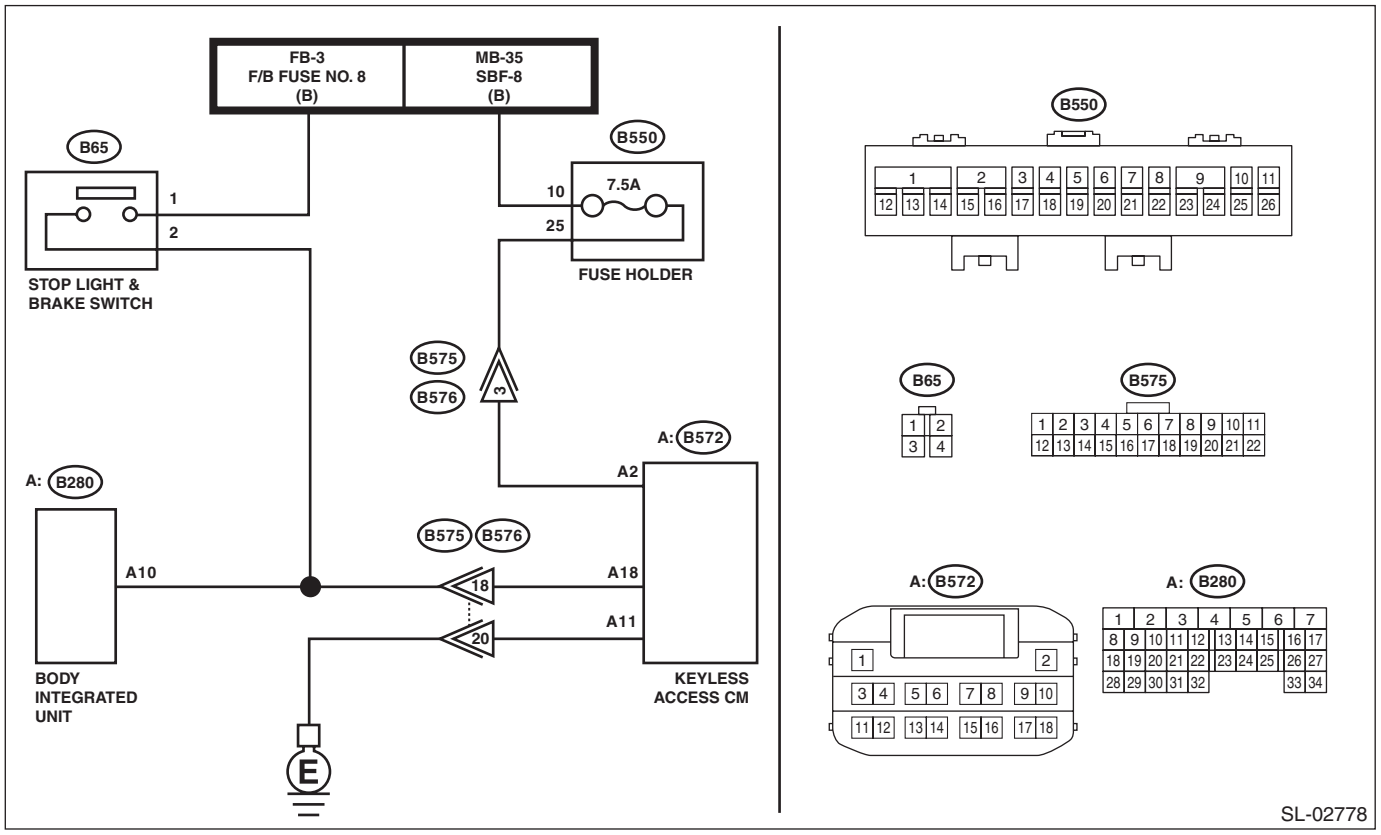
TROUBLE SYMPTOM:

CAUTION:

For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

WIRING DIAGRAM:

Stop light system <Ref. to WI-397, WIRING DIAGRAM, Stop Light System.>



Step		Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK CURRENT DATA.** Confirm the current data display of keyless access system using Subaru Select Monitor. • Stop light SW	Is DTC displayed normally according to the brake pedal operation?	Go to step **3**.	Check the stop light system.
3	**CHECK CURRENT DATA.** Check the current data display of body integrated unit using Subaru Select Monitor. • Stop light SW	Is DTC displayed normally according to the brake pedal operation?	Go to step **4**.	Check body integrated unit <Ref. to BC(diag)-2, PROCEDURE, Basic Diagnostic Procedure.> and the stop light switch circuit.

	Step	Check	Yes	No
4	**CHECK FUSE.** Check the fuse.	Is the fuse OK?	Go to step **5**.	Replace the fuse. When the replaced fuse is blown immediately, check the power supply circuit for short-circuited.
5	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Using a tester, measure the voltage between keyless access CM connectors. ***Connector & terminal*** ***(B572) No. 2 (+) — Chassis ground (–):***	Is the voltage 9.5 — 16 V?	Go to step **6**.	Check the power supply circuit.
6	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **7**.	Repair or replace the open circuit of harness.
7	**CHECK HARNESS.** 1) Disconnect the stop light switch connector. 2) Using a tester, measure the resistance between the keyless access CM connector and stop light switch connector. ***Connector & terminal*** ***(B572) No. 18 — (B65) No. 2:***	Is the resistance less than 1 Ω?	Go to step **8**.	Repair or replace the open circuit of harness.
8	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 18 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **9**.	Repair or replace the short circuit of the harness.
9	**CHECK HARNESS.** Using a tester, measure the voltage between the keyless access CM connector and chassis ground when the brake pedal is depressed. ***Connector & terminal*** ***(B572) No. 18 (+) — Chassis ground (–):***	Does the voltage change as follows? Brake pedal not depressed: 1 V or less → Brake pedal depressed: 11 — 14 V	Replace the keyless access CM. <Ref. to SL-100, REMOVAL, Keyless Access CM.>	Check the power supply circuit of stop light switch.

R: DTC B2285 STEERING LOCK POSITION SIGNAL ABNORMAL

DTC DETECTING CONDITION:

When the steering lock position signal transmitted from the steering lock CM via solid line and the steering lock position signal transmitted via LIN communication system do not match.

TROUBLE SYMPTOM:

- There are conditions when the steering lock is not released.
- Engine will not start.

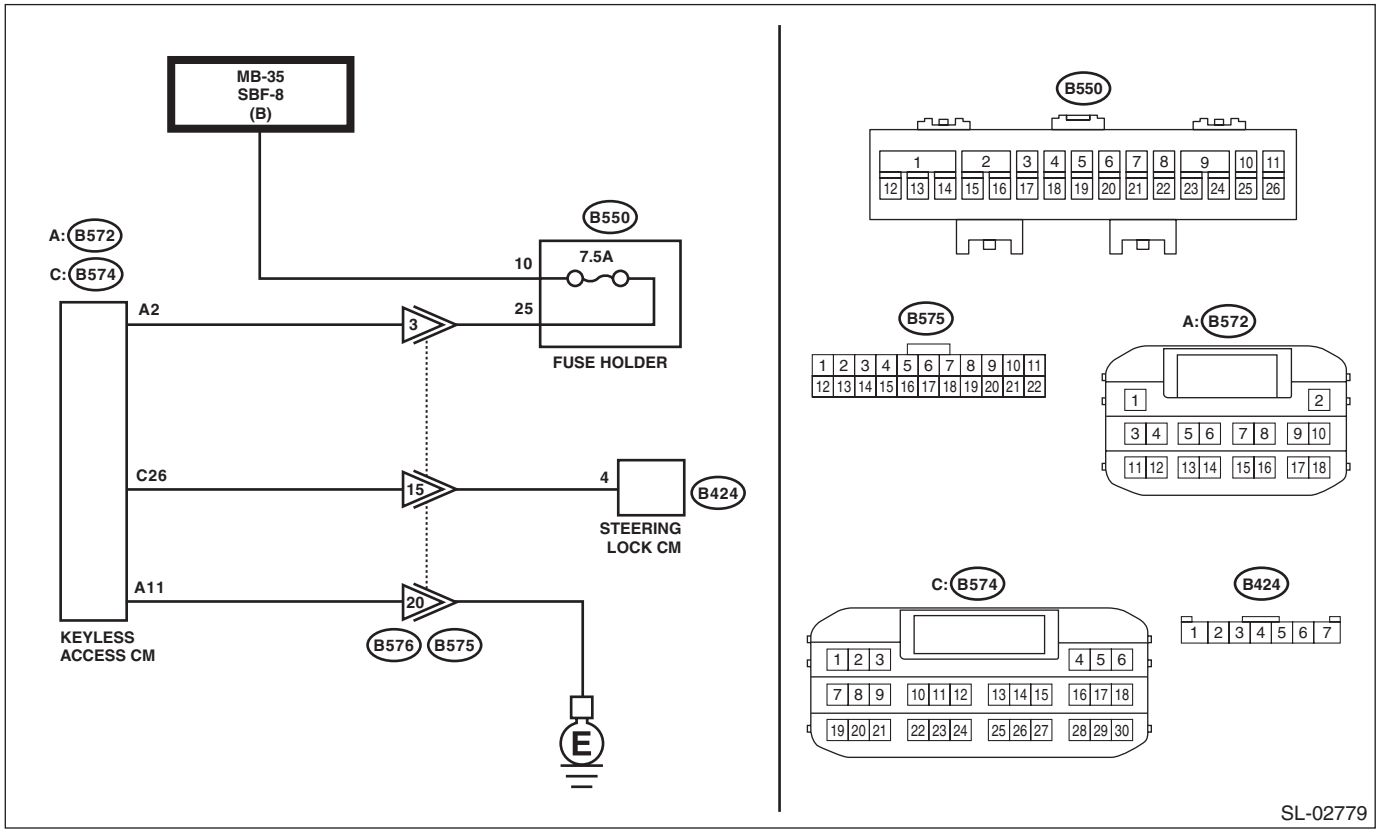
CAUTION:

For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

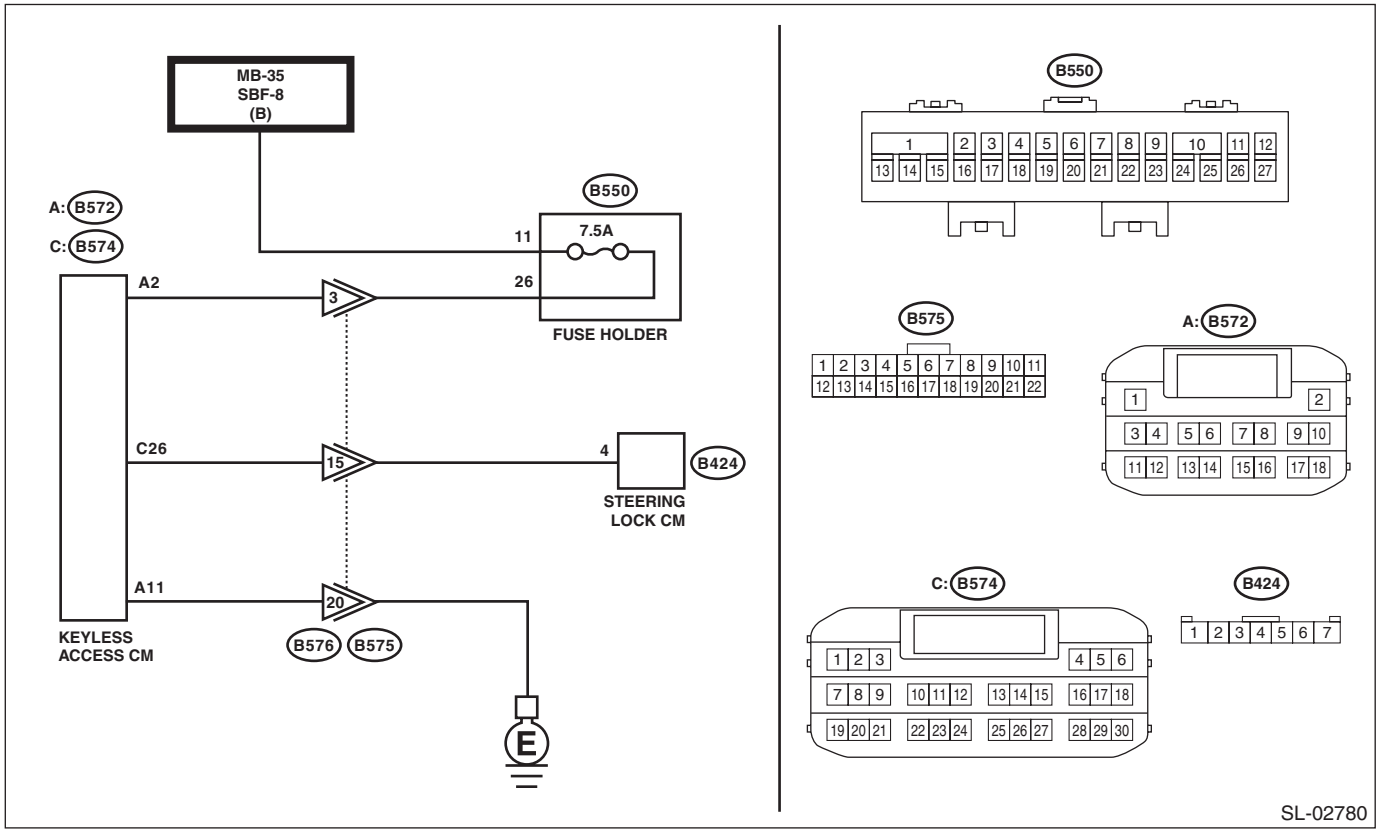
WIRING DIAGRAM:

Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>

- Engine type: FA



- Engine type: FA



Step		Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK DTC.** Use the Subaru Select Monitor and read DTCs.	Is B2785 displayed?	Perform the inspection according to B2785. <Ref. to KPS(diag)-77, DTC B2785 LIN COMMUNICATION ERROR, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Go to step **3**.

	Step	Check	Yes	No
3	**CHECK CURRENT DATA.** Confirm the current data display of keyless access system using Subaru Select Monitor. When locked: • Lock side sensor status: ON • Unlock side sensor status: OFF • Lock confirmation: Confirmed • Unlock confirmation: Not confirmed When unlocked: • Lock side sensor status: OFF • Unlock side sensor status: ON • Lock confirmation: Not confirmed • Unlock confirmation: Confirmed NOTE: To lock the steering lock, turn off the power, and open → close, or close → open the driver's door. To unlock the steering lock, turn the ignition switch to ACC ON or IGN ON.	Are the readings as shown on the left according to the steering lock status?	Go to step **4**.	Replace the steering lock CM. <Ref. to SL-104, REMOVAL, Steering Lock CM.>
4	**CHECK CURRENT DATA.** Confirm the current data display of keyless access system using Subaru Select Monitor. When locked: • Steering unlock switch: OFF When unlocked: • Steering unlock switch: ON NOTE: To lock the steering lock, turn off the power, and open → close, or close → open the driver's door. To unlock the steering lock, turn the ignition switch to ACC ON or IGN ON.	Are the readings as shown on the left according to the steering lock status?	Replace the keyless access CM. <Ref. to SL-100, REMOVAL, Keyless Access CM.>	Go to step **5**.
5	**CHECK FUSE.** Check the fuse.	Is the fuse OK?	Go to step **6**.	Replace the fuse. When the replaced fuse is blown immediately, check the power supply circuit for short-circuited.
6	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Using a tester, measure the voltage between keyless access CM connectors. ***Connector & terminal*** ***(B572) No. 2 (+) — Chassis ground (–):***	Is the voltage 9.5 — 16 V?	Go to step **7**.	Check the power supply circuit.
7	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **8**.	Repair or replace the open circuit of harness.
8	**CHECK HARNESS.** Using a tester, measure the resistance between the steering lock CM connector and chassis ground. ***Connector & terminal*** ***(B424) No. 4 — Chassis ground:***	Does the following occur? Steering lock: 10 kΩ or more → Steering unlock: less than 1 Ω	Go to step **9**.	Replace the steering lock CM. <Ref. to SL-104, REMOVAL, Steering Lock CM.>

	Step	Check	Yes	No
9	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Disconnect the steering lock CM connector. 3) Using a tester, measure the resistance between the keyless access CM connector and steering lock CM. ***Connector & terminal*** ***(B574) No. 26 — (B424) No. 4:***	Is the resistance less than 1 Ω?	Go to step **10**.	Repair or replace the open circuit of harness.
10	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B574) No. 26 — Chassis ground:***	Is the resistance 10 kΩ or more?	Replace the keyless access CM. <Ref. to SL-100, REMOVAL, Keyless Access CM.>	Repair or replace the short circuit of the harness.

S: DTC B2286 DRIVING POSSIBLE SIGNAL ABNORMAL

DTC DETECTING CONDITION:

When the engine speed signal transmitted from the ECM via solid line and the engine speed signal transmitted from the ECM via CAN communication line do not match.

TROUBLE SYMPTOM:

Cannot start the engine, or the engine stops after starting.

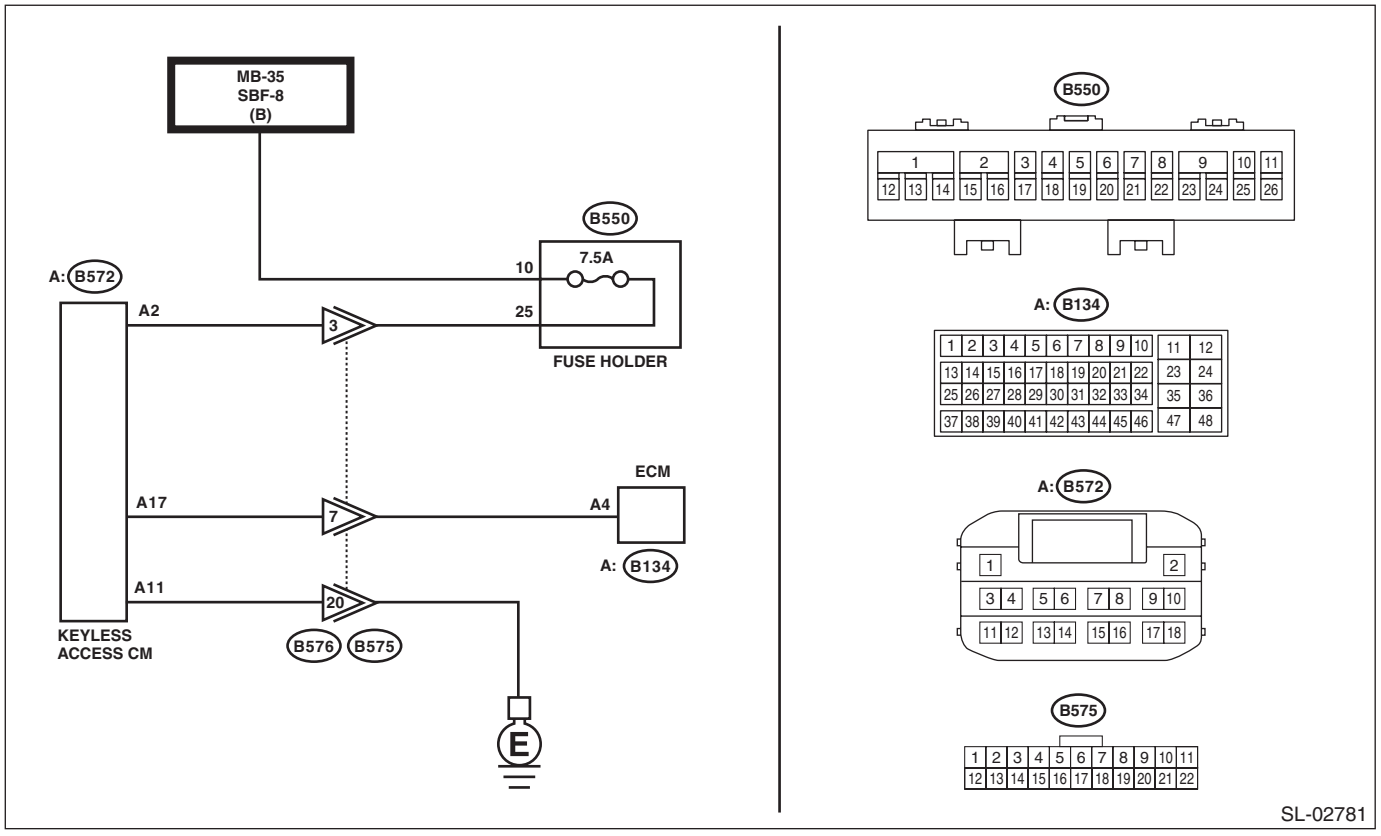
CAUTION:

For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

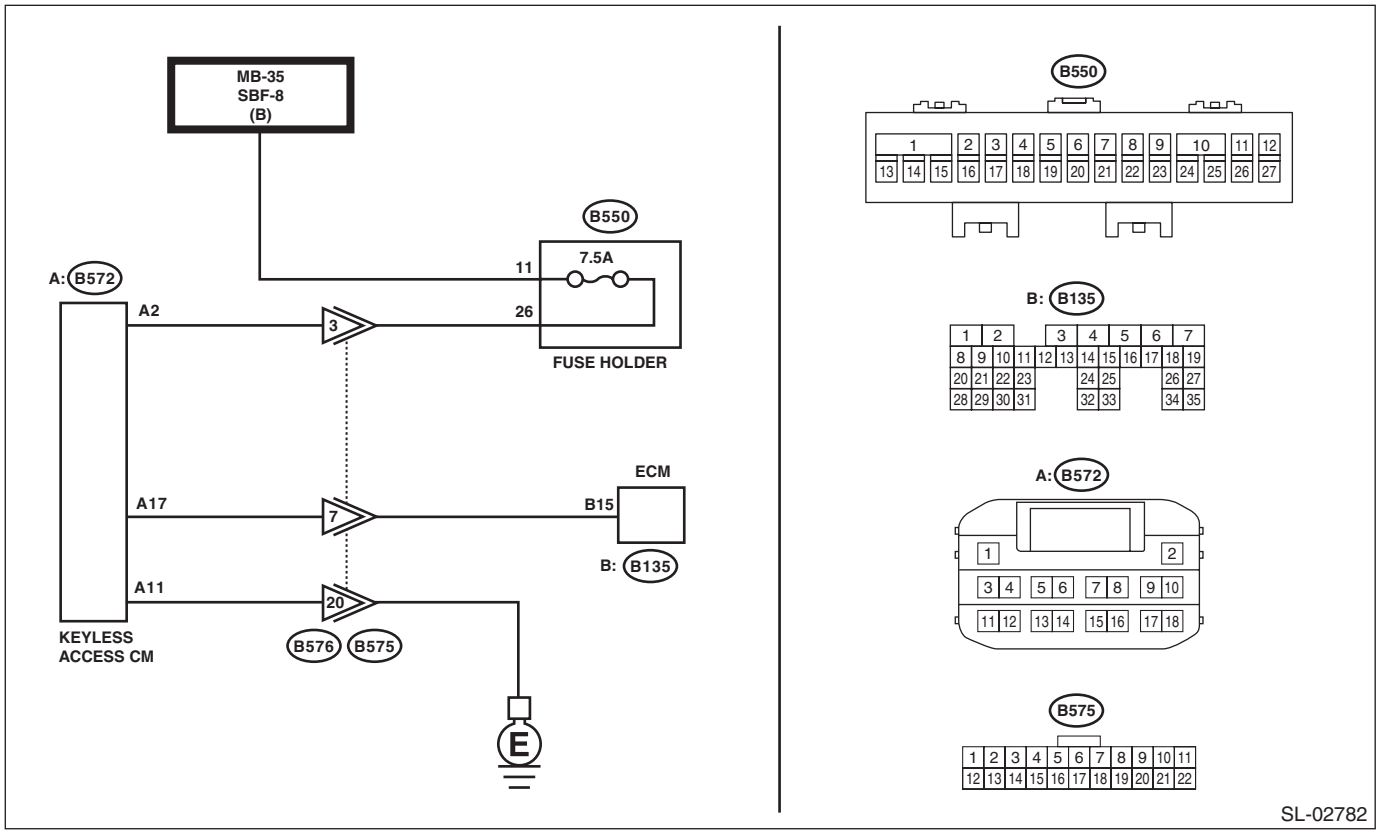
WIRING DIAGRAM:

Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>

- Engine type: FA



- Engine type: EJ



Step		Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK CURRENT DATA.** Confirm the current data display of keyless access system using Subaru Select Monitor. • Engine speed	Can the data be read normally?	Perform the diagnosis for the engine. <Ref. to EN(w/o STI)(diag)-66, Diagnostics for Engine Starting Failure.> <Ref. to EN(STI)(diag)-67, PROCEDURE, Diagnostics for Engine Starting Failure.>	Go to step **3**.
3	**CHECK FUSE.** Remove the fuse.	Is the fuse OK?	Go to step **4**.	Replace the fuse. When the replaced fuse is blown immediately, check the power supply circuit for short-circuited.
4	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Using a tester, measure the voltage between keyless access CM connectors. ***Connector & terminal*** ***(B572) No. 2 (+) — Chassis ground (–):***	Is the voltage 9.5 — 16 V?	Go to step **5**.	Check the power supply circuit.

	Step	Check	Yes	No
5	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **6**.	Repair or replace the open circuit of harness.
6	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Disconnect the ECM connector. 3) Using a tester, measure the resistance between the keyless access CM connector and ECM connector. ***Connector & terminal*** ***Engine type: FA*** ***(B572) No. 17 — (B134) No. 4:*** ***Engine type: EJ*** ***(B572) No. 17 — (B135) No. 15:***	Is the resistance less than 1 Ω?	Go to step **7**.	Repair or replace the open circuit of harness.
7	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 17 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **8**.	Repair or replace the open circuit of harness.
8	**CHECK HARNESS.** 1) Connect the keyless access CM connector and ECM connector. 2) Using the Subaru Select Monitor, measure the waveform between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 17 — Chassis ground:***	Does the pulse stop when the engine is stopped, and does the pulse generate when the engine is started?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Perform the diagnosis for the engine. <Ref. to EN(w/o STI)(diag)-66, Diagnostics for Engine Starting Failure.> <Ref. to EN(STI)(diag)-67, PROCEDURE, Diagnostics for Engine Starting Failure.>

T: DTC B2779 REMOTE CONTROL ENGINE STARTER COMMUNICATION COLLATION NG

DTC DETECTING CONDITION:
When the keyless access CM does not respond to engine start even when the remote control engine starter is ON, or when there is a code mismatch.
TROUBLE SYMPTOM:
Remote engine starter does not function.

	Step	Check	Yes	No
1	**REGISTER THE REMOTE ENGINE STARTER.** 1) Clear the DTC. 2) Register the remote engine starter using the Subaru Select Monitor. (Refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".) 3) Read the DTC again.	Is DTC B2779 detected?	Replace the remote engine starter.	System is normal. It is possible that temporary poor contact occurs.

U: DTC B2781 STEERING LOCK ECU OPEN/SHORT

DTC DETECTING CONDITION:
- When malfunction is detected in lock/unlock position detection sensor.
- When the open or short circuit in the steering lock motor drive circuit is detected.

TROUBLE SYMPTOM:
- The steering lock cannot be released.
- Engine will not start.

CAUTION:
For replacement procedure of steering lock CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

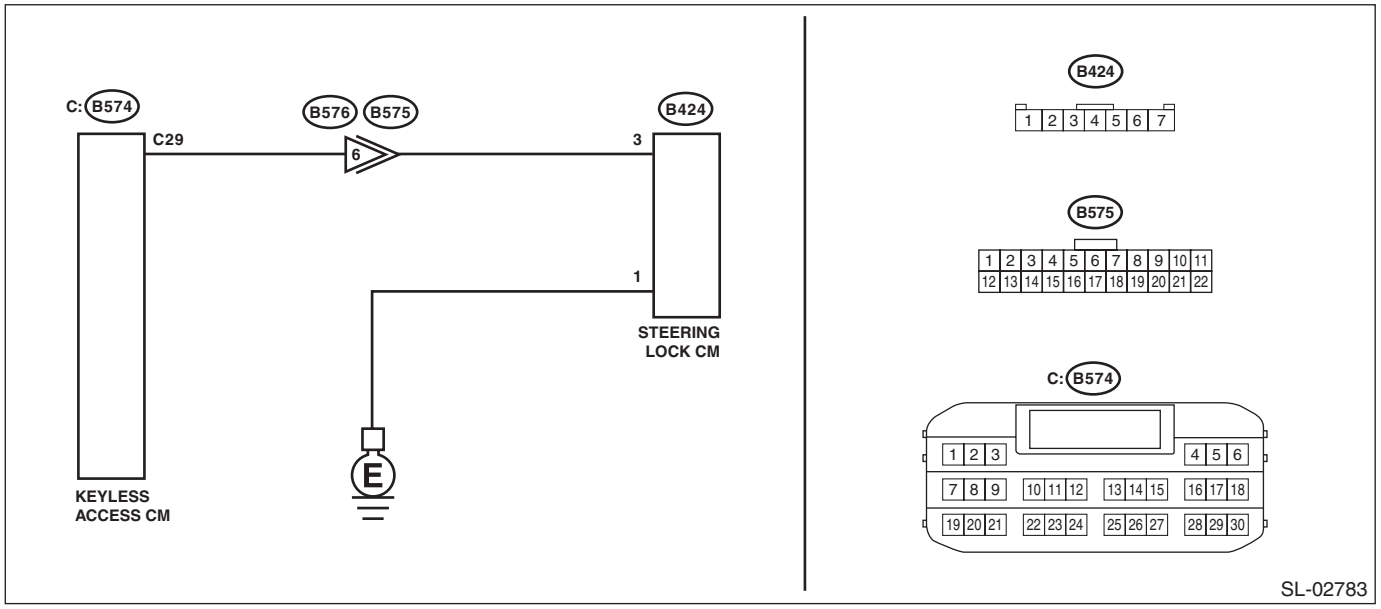
NOTE:
When all ECMs connected to collation system LIN bus cannot communicate with the keyless access CM, DTC B2785 is output.

	Step	Check	Yes	No
1	**CHECK DTC.** Use the Subaru Select Monitor and read DTCs.	Is B2785 displayed?	Perform the diagnosis according to DTC.	Replace the steering lock CM. <Ref. to SL-104, Steering Lock CM.>

V: DTC B2782 STEERING LOCK POWER SUPPLY CIRCUIT ABNORMAL (SMART ECU-SIDE ABNORMAL)

DTC DETECTING CONDITION:
When the open or short circuit in the steering lock motor power supply circuit is detected.
TROUBLE SYMPTOM:
- The steering lock cannot be released.
- Engine will not start.

CAUTION:
For replacement procedure of keyless access CM and steering lock CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".
WIRING DIAGRAM:
Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>



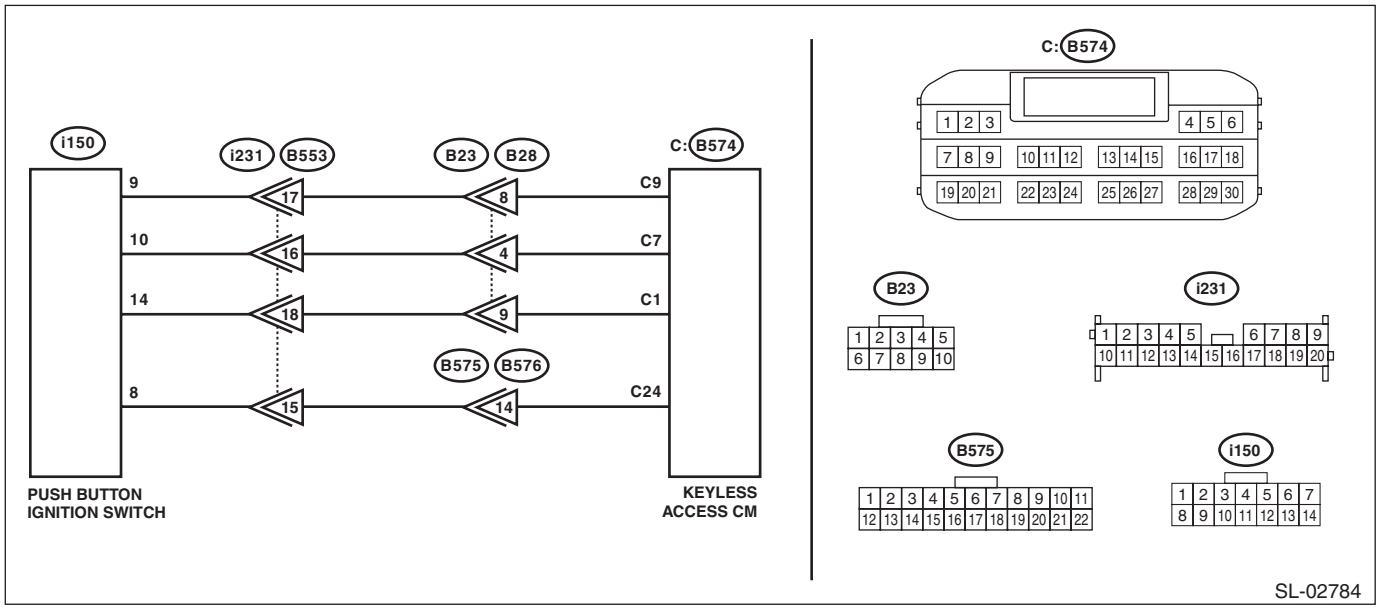
Step		Check	Yes	No
1	**CHECK STEERING LOCK CM.** 1) Disconnect the steering lock CM connector. 2) Using a tester, measure the resistance between the steering lock CM connector and chassis ground. ***Connector & terminal*** ***(B424) No. 1 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **2**.	Repair or replace the open circuit of harness.
2	**CHECK CURRENT DATA.** 1) Connect the steering lock CM connector. 2) ACC OFF, IGN OFF, shift position in P 3) Using a tester, open the door, and measure the voltage between terminals of steering CM connector when the steering lock motor is driven. ***Connector & terminal*** ***(B424) No. 3 (+) — (B424) No. 1 (–):***	Does the voltage change as follows? Steering lock motor in operation: 1 V or less → Steering lock motor is stopped: 11 — 14 V	Go to step **3**.	Go to step **4**.

	Step	Check	Yes	No
3	**CHECK DTC.** 1) Turn the ignition switch to ON. 2) Using the Subaru Select Monitor, clear the memory. 3) Turn the ignition switch to OFF. 4) Disconnect the battery ground cable and reconnect it, and then clear the abnormal information displayed on the data monitor. 5) Turn the ignition switch to ON. 6) Use the Subaru Select Monitor and read DTCs.	Is B2782 displayed?	Replace the steering lock CM. <Ref. to SL-104, Steering Lock CM.>	System is normal. It is possible that temporary poor contact occurs.
4	**CHECK CONNECTOR.** 1) Disconnect the steering lock CM connector. 2) Disconnect the keyless access CM connector.	Are connectors normal?	Go to step **5**.	Repair or replace the connector.
5	**CHECK HARNESS.** Using a tester, measure the resistance between steering lock CM connector and keyless access CM connector. ***Connector & terminal*** ***(B574) No. 29 — (B424) No. 3:***	Is the resistance less than 1 Ω?	Go to step **6**.	Repair or replace the open circuit of harness.
6	**CHECK HARNESS.** Using a tester, measure the resistance between steering lock CM connector and chassis ground, and between keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B424) No. 3 — Chassis ground:*** ***(B574) No. 29 — Chassis ground:***	Is the resistance 10 kΩ or more?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Repair or replace the short circuit of the harness.

W: DTC B2784 ANTENNA COIL FAULT

DTC DETECTING CONDITION:
When open or short circuit occurs in the antenna coil.
TROUBLE SYMPTOM:
The keyless access function may not be operable.

CAUTION:
For replacement procedure of keyless access CM and steering lock CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".
WIRING DIAGRAM:
Immobilizer system <Ref. to WI-259, WIRING DIAGRAM, Immobilizer System.>



Step		Check	Yes	No
1	**CHECK STEERING LOCK CM.** 1) Disconnect the push button ignition switch connector. 2) Disconnect the keyless access CM connector. 3) Using the tester, measure the resistance between terminals. ***Connector & terminal*** ***(i150) No. 14 — (B574) No. 1:*** ***(i150) No. 9 — (B574) No. 9:*** ***(i150) No. 10 — (B574) No. 7:*** ***(i150) No. 8 — (B574) No. 24:***	Is the resistance less than 1 Ω?	Go to step **2**.	Repair or replace the open circuit of harness.
2	**CHECK HARNESS.** Using the tester, measure the resistance between terminals. ***Connector & terminal*** ***(i150) No. 14 — Chassis ground:*** ***(i150) No. 9 — Chassis ground:*** ***(i150) No. 10 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **3**.	Repair or replace the short circuit of the harness.
3	**CHECK PUSH BUTTON IGNITION SWITCH.** 1) Replace the push button ignition switch. <Ref. to SL-106, Push Button Ignition Switch.> 2) Using the Subaru Select Monitor, clear the memory. 3) Use the Subaru Select Monitor and read DTCs.	Is B2784 displayed?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Malfunction occurred in the push button ignition switch.

X: DTC B2785 LIN COMMUNICATION ERROR

DTC DETECTING CONDITION:

When the keyless access CM detected the collation system LIN bus communication error three times in a row.

TROUBLE SYMPTOM:

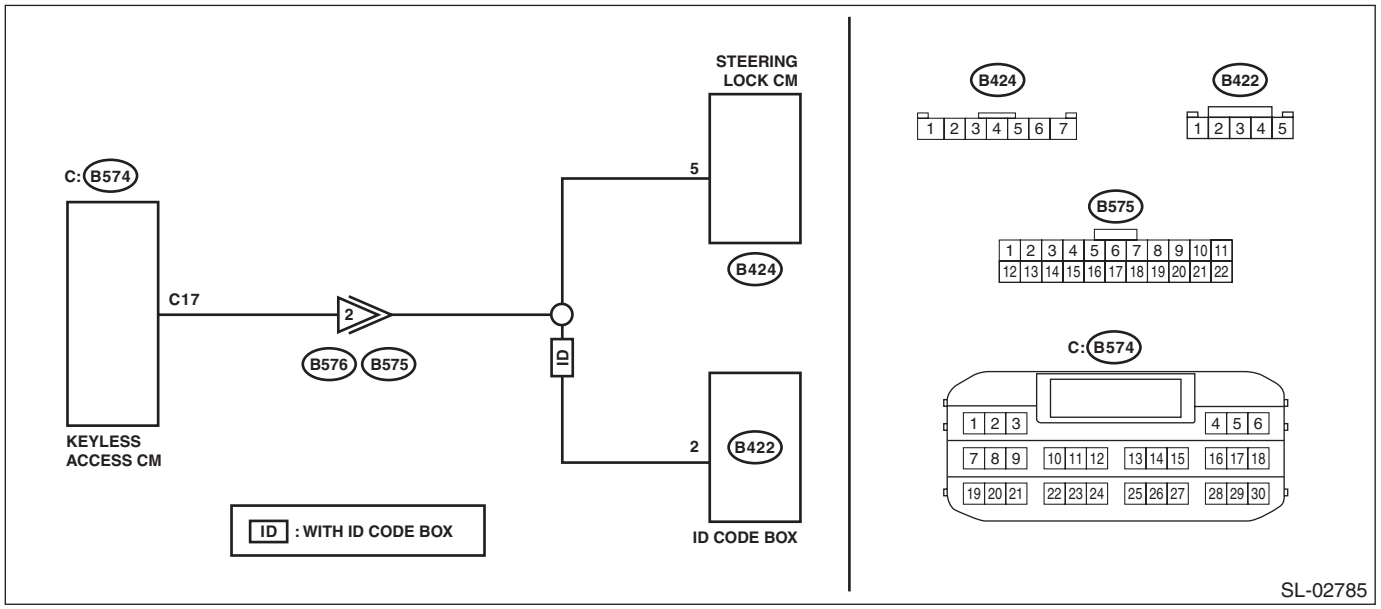
The keyless access function may not be operable.

CAUTION:

For replacement procedure of keyless access CM and steering lock CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

WIRING DIAGRAM:

Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>



Step		Check	Yes	No
1	**CHECK DTC.** Use the Subaru Select Monitor and read DTCs.	Is B2785 displayed?	Go to step **2**.	Check the connector.
2	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Disconnect the steering lock CM connector. 3) Disconnect the ID code box connector. (with ID code box) 4) Using the tester, measure the resistance between terminals. ***Connector & terminal*** ***(B574) No. 17 — (B424) No. 5:*** ***(B574) No. 17 — (B422) No. 2: (With ID code box)***	Is the resistance less than 1 Ω?	Go to step **3**.	Repair or replace the open circuit of harness.
3	**CHECK HARNESS.** Using the tester, measure the resistance between terminals. ***Connector & terminal*** ***(B424) No. 5 — Chassis ground:*** ***(B574) No. 17 — Chassis ground:*** ***(B422) No. 5 — Chassis ground: (with ID code box)***	Is the resistance 10 kΩ or more?	Go to step **4**.	Repair or replace the short circuit of the harness.

	Step	Check	Yes	No
4	**CHECK HARNESS.** 1) Connect the keyless access CM connector only. 2) Use the Subaru Select Monitor and read DTCs.	Is B2785 displayed?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Go to step **5**.
5	**CHECK ID CODE BOX.** NOTE: For model without ID code box, go to the next step. 1) Connect only the ID code box. 2) Use the Subaru Select Monitor and read DTCs.	Is B2785 displayed?	Replace the ID code box.	Go to step **6**.
6	**CHECK STEERING LOCK CM.** 1) Replace the steering lock CM, and then connect it. <Ref. to SL-104, Steering Lock CM.> 2) Using the Subaru Select Monitor, clear the memory. 3) Use the Subaru Select Monitor and read DTCs.	Is B2785 displayed?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Malfunction occurred in the steering lock CM.

Y: DTC B2786 NO RESPONSE FROM STEERING LOCK ECU

DTC DETECTING CONDITION:

When communication between keyless access CM and steering lock CM is interrupted for a set amount of time.

TROUBLE SYMPTOM:

The steering lock cannot be released.

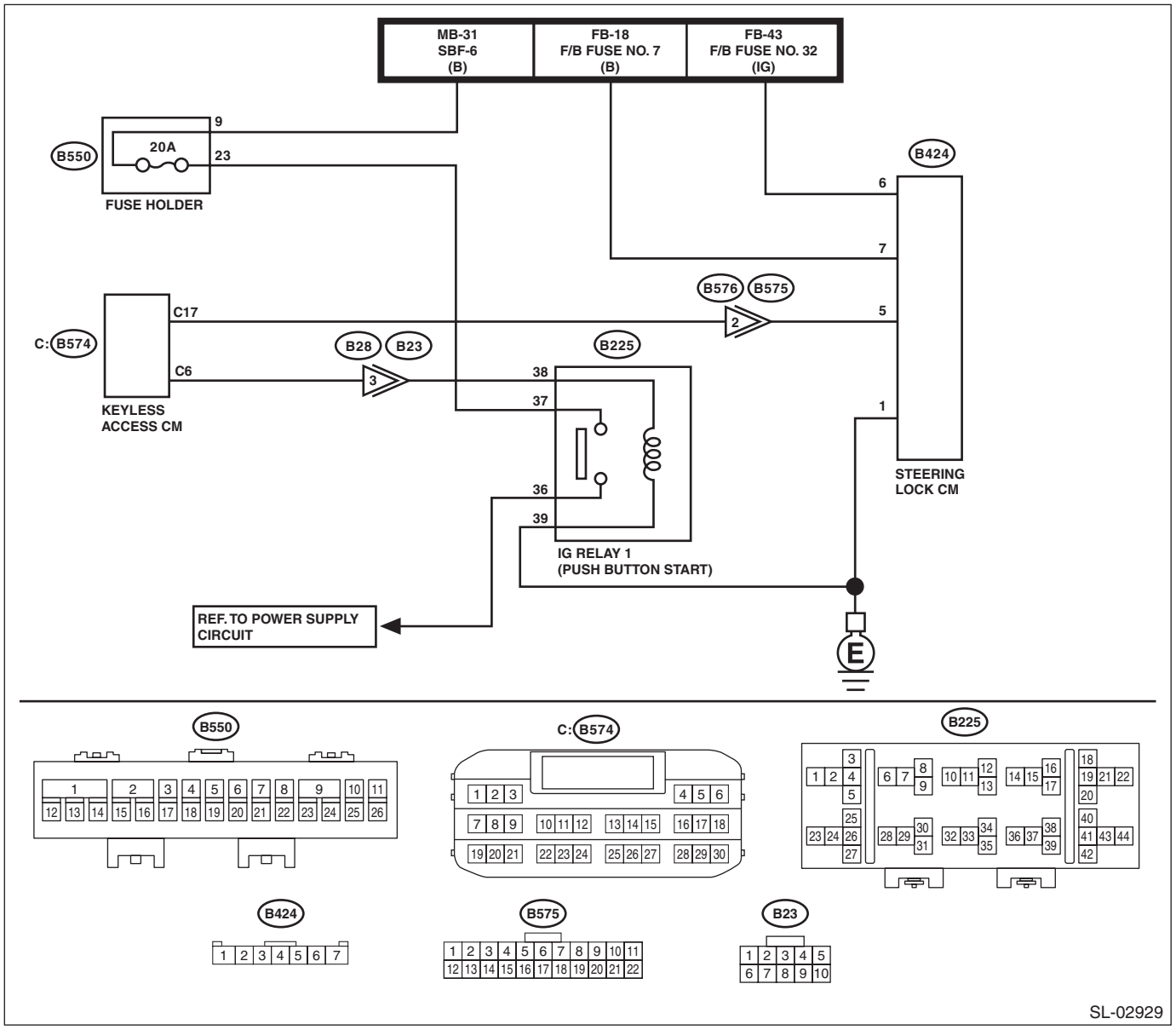
CAUTION:

For replacement procedure of keyless access CM and steering lock CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

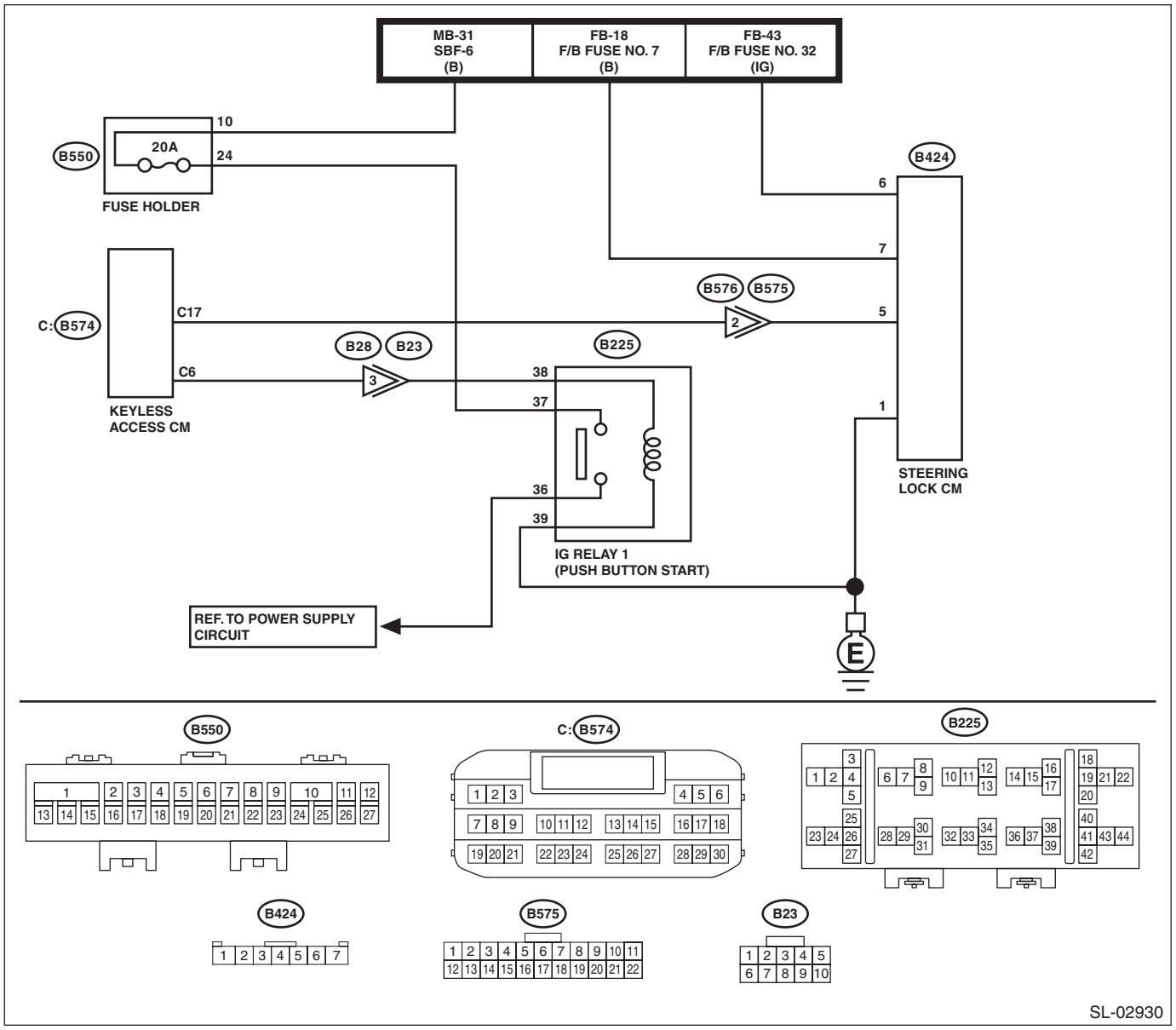
WIRING DIAGRAM:

Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>

- Engine type: FA



- Engine type: EJ



Step		Check	Yes	No
1	**CHECK DTC.** Use the Subaru Select Monitor and read DTCs.	Is a DTC other than B2786 displayed?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Disconnect the steering lock CM connector. 3) Using the tester, measure the resistance between terminals. ***Connector & terminal*** ***(B574) No. 17 — (B424) No. 5:***	Is the resistance less than 1 Ω?	Go to step **3**.	Repair or replace the open circuit of harness.
3	**CHECK HARNESS.** Using the tester, measure the resistance between terminals. ***Connector & terminal*** ***(B424) No. 5 — Chassis ground:*** ***(B574) No. 17 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **4**.	Repair or replace the short circuit of the harness.

	Step	Check	Yes	No
4	**CHECK HARNESS.** Using a tester, measure the resistance between the steering lock CM connector and chassis ground. ***Connector & terminal*** ***(B424) No. 1 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **5**.	Repair or replace the open circuit of harness.
5	**CHECK HARNESS.** 1) Turn the ignition switch to ON. 2) Using a tester, measure the voltage between the steering lock CM connector and chassis ground. ***Connector & terminal*** ***(B424) No. 6 (+) — Chassis ground (–):*** ***(B424) No. 7 (+) — Chassis ground (–):***	Is the voltage 11 — 14 V?	Go to step **6**.	Repair or replace the open circuit of harness.
6	**CHECK STEERING LOCK CM.** 1) Turn the ignition switch to ON. 2) Replace the steering lock CM. <Ref. to SL-104, Steering Lock CM.> 3) Using the Subaru Select Monitor, clear the memory. 4) Use the Subaru Select Monitor and read DTCs.	Is B2786 displayed?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Malfunction occurred in the steering lock CM.

Z: DTC B2788 IGN1 INPUT ABNORMAL

DTC DETECTING CONDITION:

When mismatch occurs in the IG1 input of the steering lock CM for both LIN communication line input (IG1 input value of keyless access CM) and solid line input.

TROUBLE SYMPTOM:

The steering lock cannot be released.

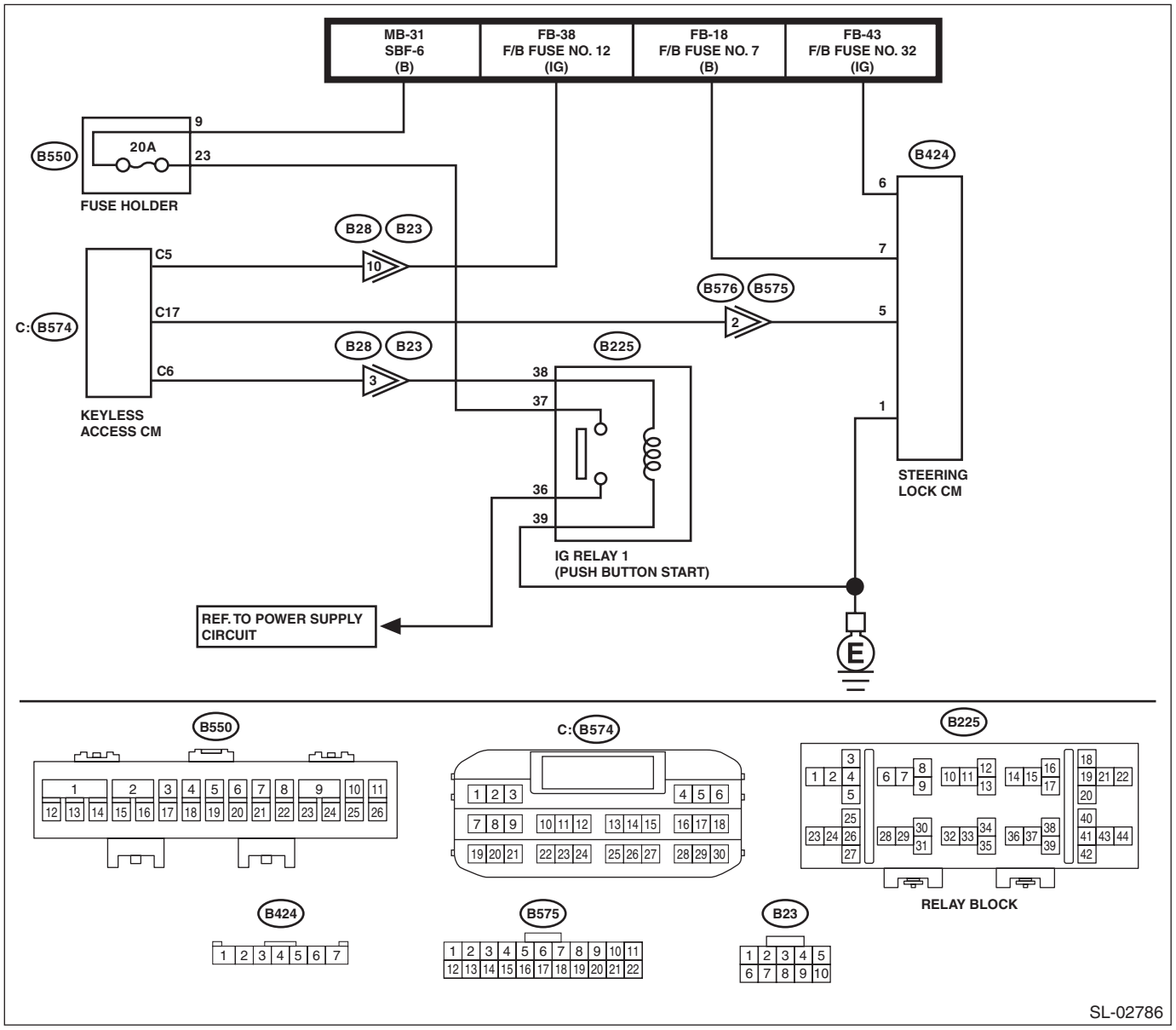
CAUTION:

For replacement procedure of steering lock CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

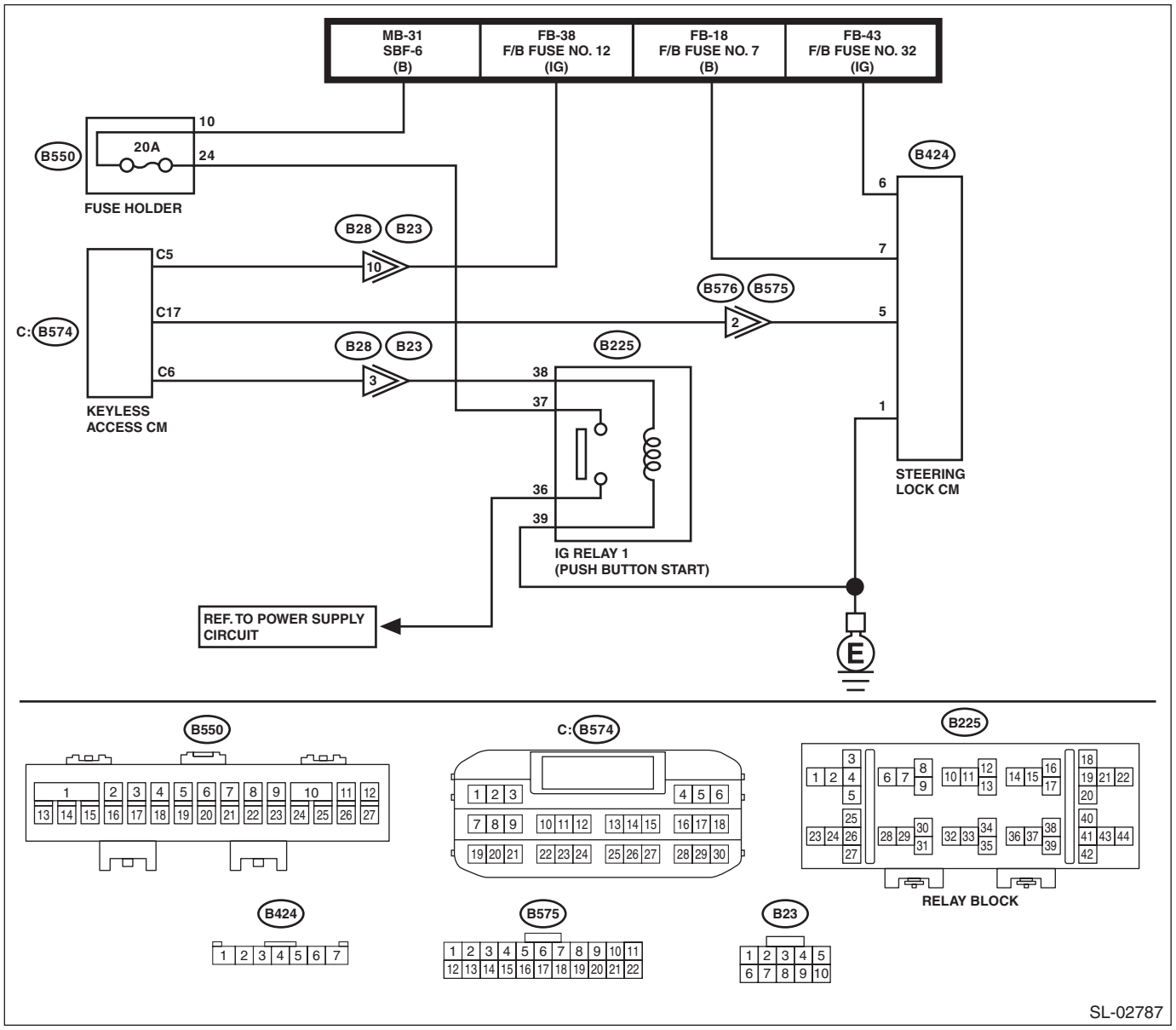
WIRING DIAGRAM:

Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>

- Engine type: FA



- Engine type: EJ



Step		Check	Yes	No
1	**CHECK FUSE.** Check the fuse.	Is the fuse OK?	Go to step **2**.	Replace the fuse. When the replaced fuse is blown immediately, check the power supply circuit for short-circuited.
2	**CHECK CURRENT DATA.** Check the current data display of keyless access CM using the Subaru Select Monitor. • IGN SW	Is the display normal according to the ignition switch operation?	Go to step **3**.	Go to step **5**.

	Step	Check	Yes	No
3	**CHECK HARNESS.** 1) Disconnect the steering lock CM connector. 2) Using a tester, measure the resistance between the steering lock CM connector and chassis ground. ***Connector & terminal*** ***(B424) No. 1 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **4**.	Repair or replace the open circuit of harness.
4	**CHECK HARNESS.** 1) Connect the steering lock CM connector. 2) Using the tester, measure the voltage between terminals. ***Connector & terminal*** ***(B424) No. 6 (+) — (B424) No. 1 (–):***	Is the voltage 11 — 14 V with IG ON? Is the voltage less than 1 V with IG OFF?	Replace the steering lock CM. <Ref. to SL-104, REMOVAL, Steering Lock CM.>	Check the DC power supply circuit.
5	**CHECK HARNESS.** Using a tester, measure the voltage between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B574) No. 5 (+) — Chassis ground (–):***	Is the voltage 11 — 14 V with IG ON? Is the voltage less than 1 V with IG OFF?	Replace the keyless access CM. <Ref. to SL-100, REMOVAL, Keyless Access CM.>	Check the DC power supply circuit.

AA:DTC B2789 ID CODE BOX NO RESPONSE

DTC DETECTING CONDITION:

- When communication between keyless access CM and ID code box is interrupted for a set amount of time.
- Open or short circuit in the wiring harness between keyless access CM and ID code box

TROUBLE SYMPTOM:

Engine will not start.

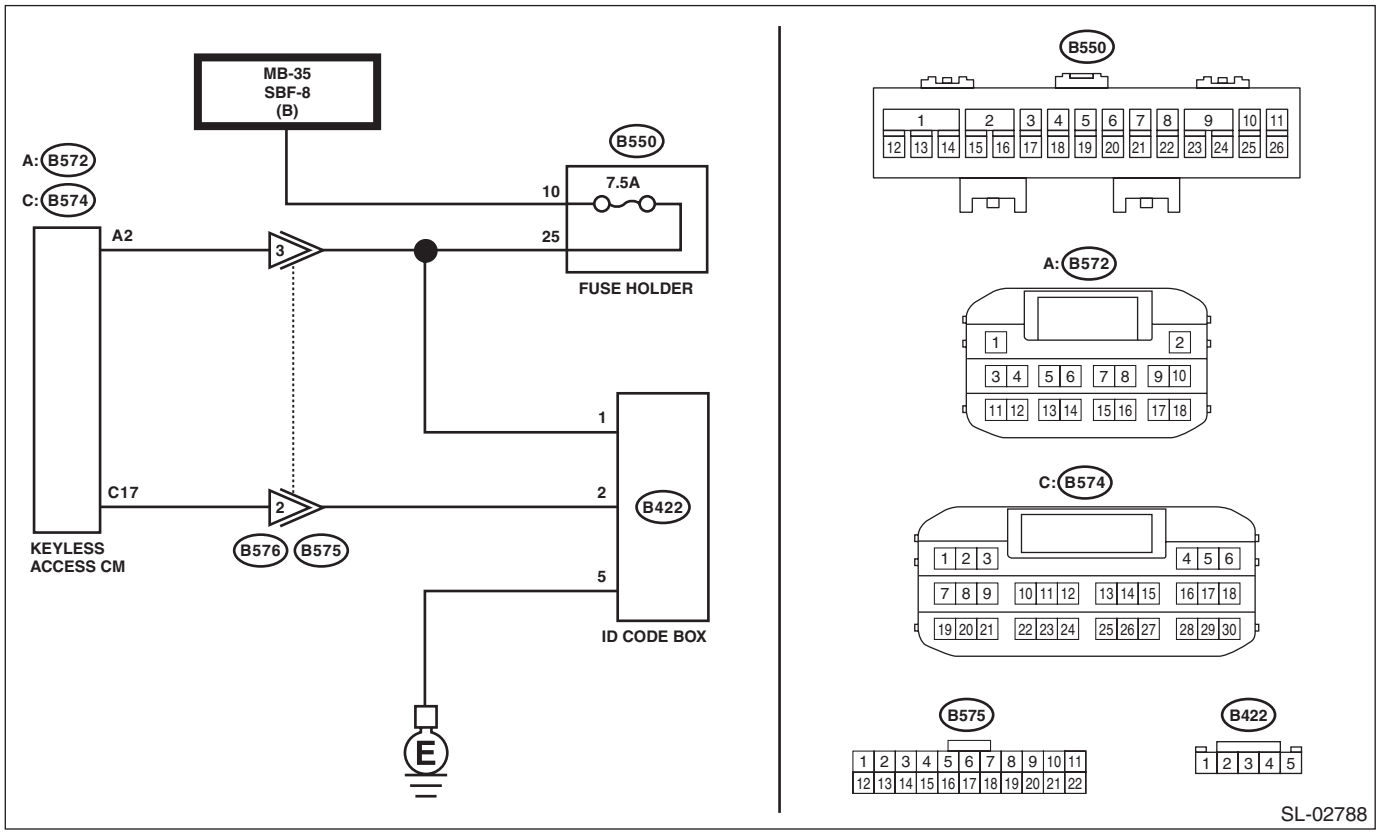
CAUTION:

For replacement procedure of keyless access CM and ID code box, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

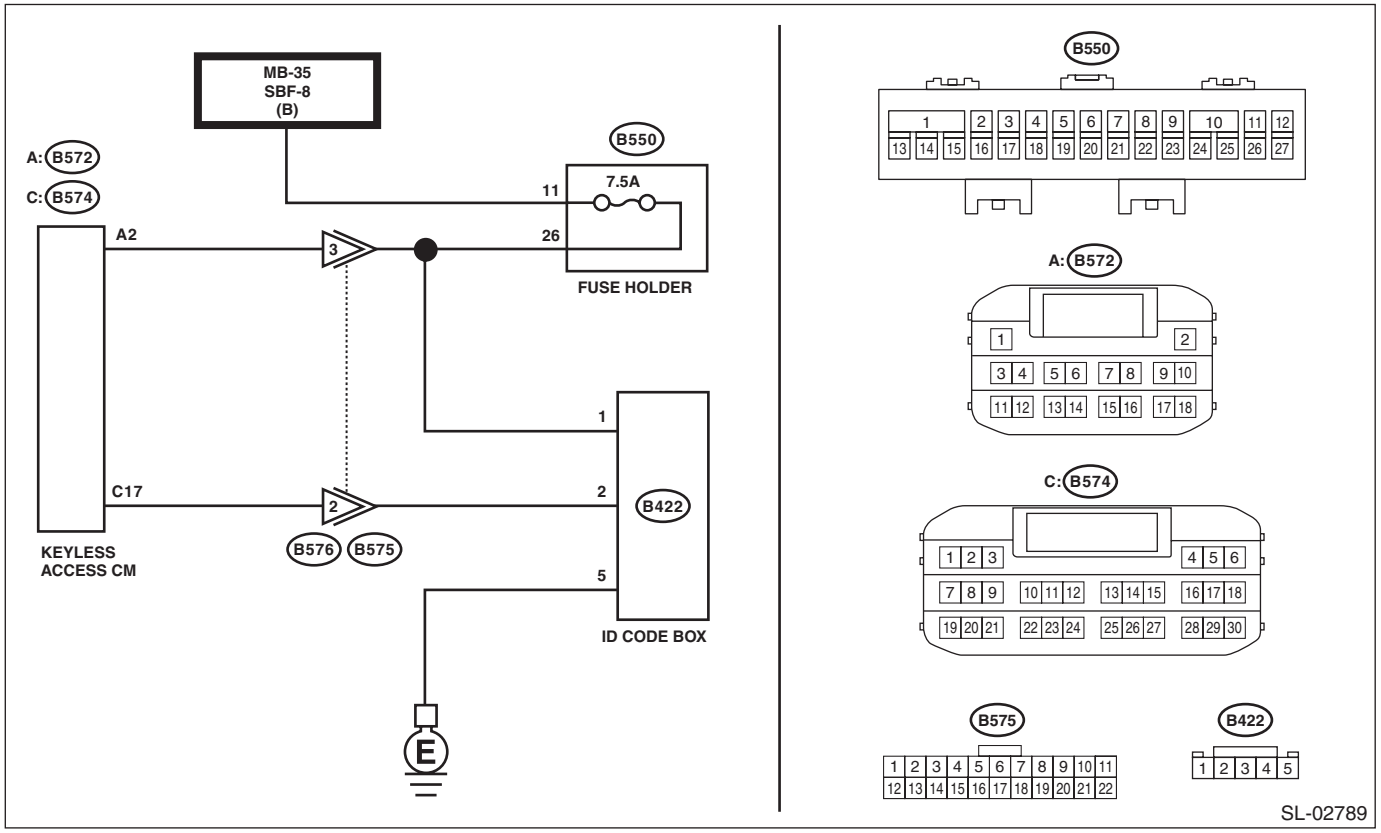
WIRING DIAGRAM:

Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>

- Engine type: FA



- Engine type: EJ



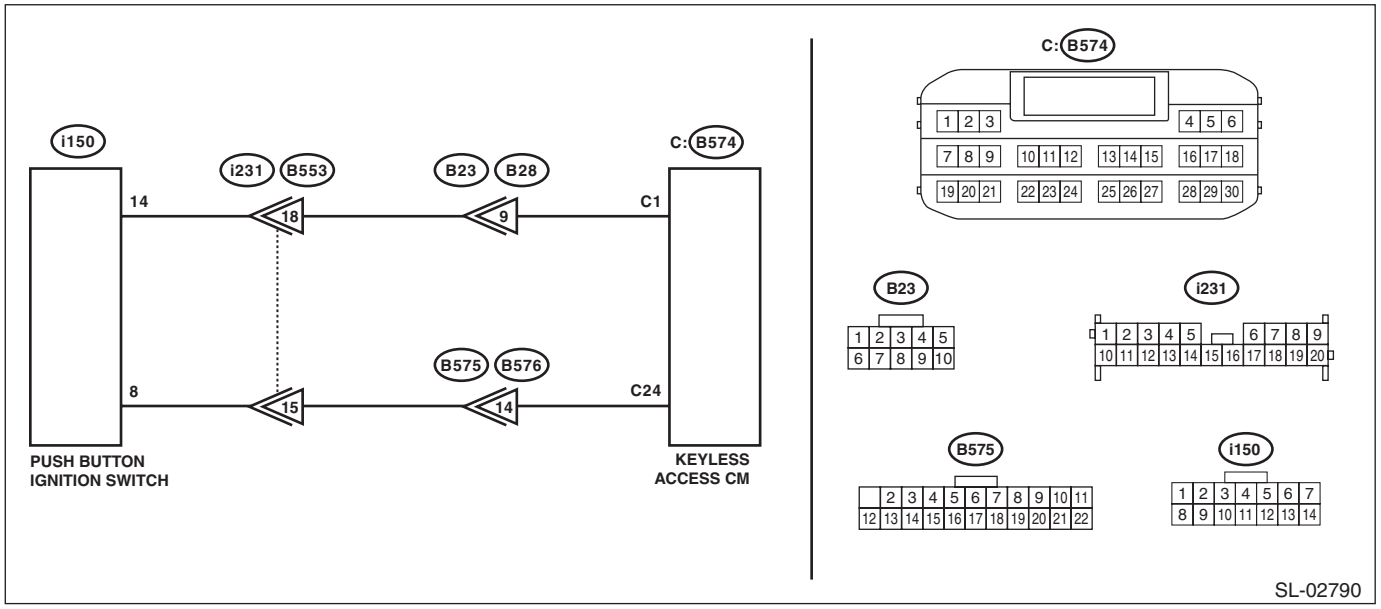
Step		Check	Yes	No
1	**CHECK DTC.** Use the Subaru Select Monitor and read DTCs.	Is B2789 displayed?	Go to step **2**.	Check the connector.
2	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Disconnect the ID code box connector. 3) Using the tester, measure the resistance between terminals. ***Connector & terminal*** ***(B574) No. 17 — (B422) No. 2:***	Is the resistance less than 1 Ω?	Go to step **3**.	Repair or replace the open circuit of harness.
3	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground, and between ID code box connector and chassis ground. ***Connector & terminal*** ***(B574) No. 17 — Chassis ground:*** ***(B422) No. 2 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **4**.	Repair or replace the short circuit of the harness.
4	**CHECK HARNESS.** Using a tester, measure the resistance between ID code box connector and chassis ground. ***Connector & terminal*** ***(B422) No. 5 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **5**.	Repair or replace the open circuit of harness.
5	**CHECK HARNESS.** Using a tester, measure the voltage between ID code box connector and chassis ground. ***Connector & terminal*** ***(B422) No. 1 (+) — Chassis ground (–):***	Is the voltage 11 — 14 V?	Go to step **6**.	Repair or replace the open circuit of harness.

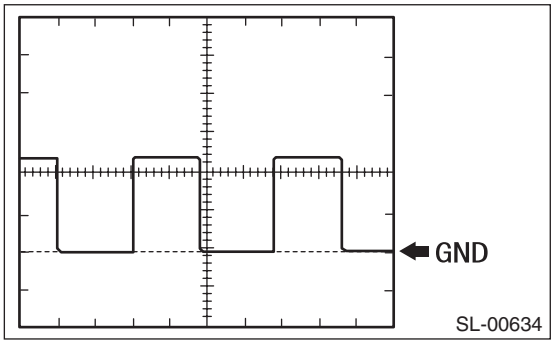
	Step	Check	Yes	No
6	**CHECK ID CODE BOX.** 1) Replace the ID code box. <Ref. to SL-103, ID Code Box.> 2) Using the Subaru Select Monitor, clear the memory. 3) Use the Subaru Select Monitor and read DTCs.	Is B2789 displayed?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	ID code box has an error.

AB:DTC B278A ABNORMAL IMMOBILIZER POWER SUPPLY

DTC DETECTING CONDITION:
When the power supply circuit of the push button ignition switch is shorted to ground.
TROUBLE SYMPTOM:
- Engine will not start.
- The keyless access system function does not operate.

CAUTION:
For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".
WIRING DIAGRAM:
Immobilizer system <Ref. to WI-259, WIRING DIAGRAM, Immobilizer System.>



Step		Check	Yes	No
1	**CHECK KEYLESS ACCESS CM.** 1) Turn the ignition switch to OFF. 2) Take the access key out of the passenger room. 3) Push the push button ignition switch. Within 30 seconds, use oscilloscope to measure the waveform between connectors. ***Connector & terminal*** ***(i150) No. 14 — (i150) No. 8:*** 	Is the waveform shown in the left column displayed?	Replace the push button ignition switch. <Ref. to SL-106, Push Button Ignition Switch.>	Go to step **2**.

	Step	Check	Yes	No
2	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Disconnect the push button ignition switch connector. 3) Using the tester, measure the resistance between terminals. ***Connector & terminal*** ***(i150) No. 14 — (B574) No. 1:*** ***(i150) No. 8 — (B574) No. 24:***	Is the resistance less than 1 Ω?	Go to step **3**.	Repair or replace the open circuit of harness.
3	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B574) No. 1 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **4**.	Repair or replace the short circuit of the harness.
4	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B574) No. 24 — Chassis ground:***	Is the resistance 1 Ω or less?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Repair or replace the harness.

AC:DTC B278D ID CODE BOX RECOGNITION JUDGMENT ABNORMAL

DTC DETECTING CONDITION:

- When ID code box setting is set to OFF, ID code box ON input is detected.
- When ID code box setting is set to OFF, ID code box LIN signal is received.

TROUBLE SYMPTOM:

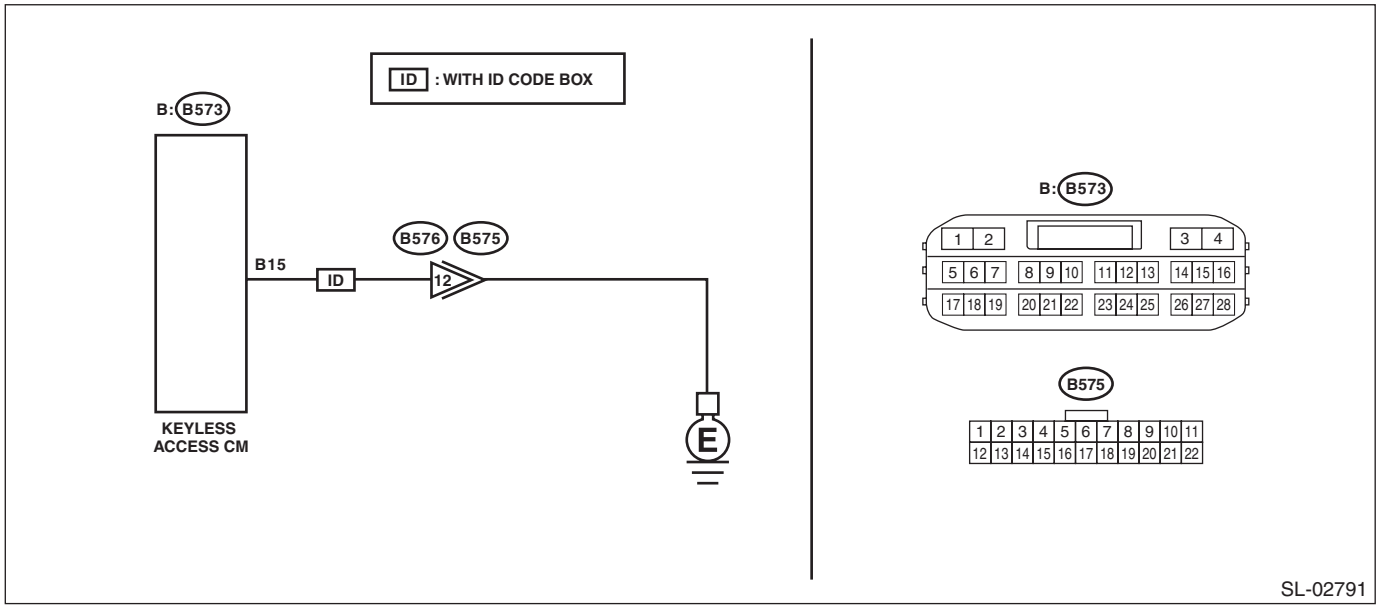
Engine will not start.

CAUTION:

For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

WIRING DIAGRAM:

Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>



	Step	Check	Yes	No
1	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Using the Subaru Select Monitor, clear the keyless access system memory. 3) Turn the ignition switch to OFF → ON. 4) Use the Subaru Select Monitor and read DTCs.	Is B278D displayed?	Go to step **2**.	System is normal. It is possible that temporary poor contact occurs.
2	**CHECK HARNESS.** 1) Disconnect the keyless access CM connector. 2) Measure the resistance between keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B573) No. 15 — Chassis ground:***	Is the resistance 10 kΩ or more?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Repair or replace the short circuit of the harness.

AD:DTC B2790 ID CODE BOX ABNORMAL (EEPROM ABNORMAL)

DTC DETECTING CONDITION:
An error has occurred inside the ID code box.
TROUBLE SYMPTOM:
Engine will not start.

CAUTION:
For replacement procedure of ID code box, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

	Step	Check	Yes	No
1	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Using the Subaru Select Monitor, clear the keyless access system memory. 3) Turn the ignition switch to OFF → ON. 4) Register the ID code box. 5) Use the Subaru Select Monitor and read DTCs.	Is B2790 displayed?	Replace the ID code box. <Ref. to SL-103, ID Code Box.>	System is normal. It is possible that temporary poor contact occurs.

AE:DTC B27A1 DRIVER SIDE EXTERNAL ANTENNA OUTPUT STAGE OPEN

DTC DETECTING CONDITION:

When open circuit occurs in the harness between keyless access CM and driver's side front door outer handle.

TROUBLE SYMPTOM:

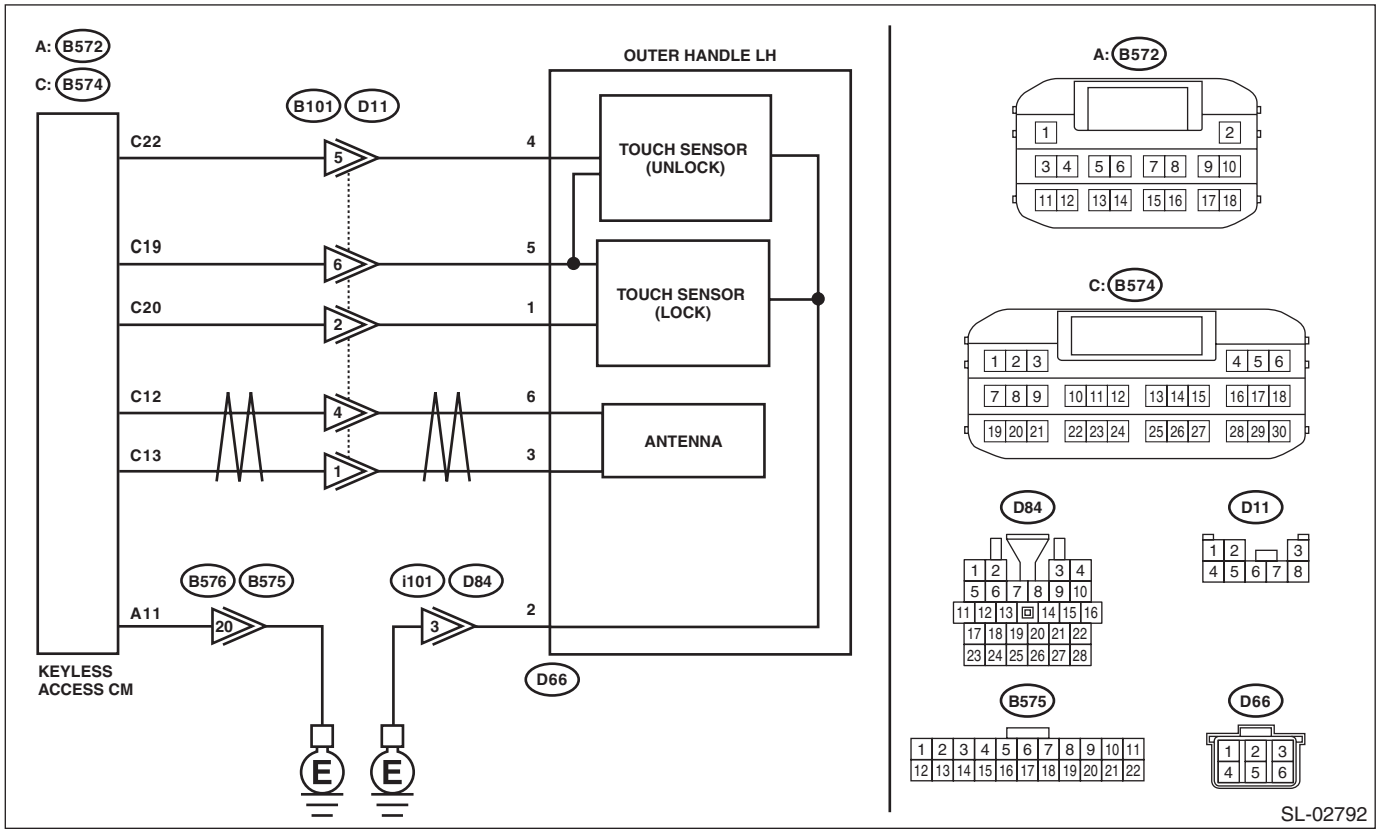
Keyless access system does not function.

CAUTION:

For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

WIRING DIAGRAM:

Keyless access system <Ref. to WI-275, WIRING DIAGRAM, Keyless Access System.>



Step		Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK CONNECTOR.** 1) Disconnect the keyless access CM connector. 2) Disconnect the front door outer handle connector.	Is the connector OK?	Go to step **3**.	Repair or replace the connector.

	Step	Check	Yes	No
3	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and front door outer handle connector, and between front door outer handle connector and chassis ground. ***Connector & terminal*** ***(B574) No. 12 — (D66) No. 6:*** ***(B574) No. 13 — (D66) No. 3:*** ***(D66) No. 2 — Chassis ground:*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **4**.	Repair or replace the open circuit of harness.
4	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground, and between front door outer handle connector and chassis ground. ***Connector & terminal*** ***(B574) No. 12 — Chassis ground:*** ***(B574) No. 13 — Chassis ground:*** ***(D66) No. 6 — Chassis ground:*** ***(D66) No. 3 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **5**.	Repair or replace the short circuit of the harness.
5	**CHECK KEYLESS ACCESS CM.** 1) Connect the keyless access CM connector. 2) Use an oscilloscope, measure the waveform between terminals with ignition switch OFF, all doors closed and access key not in passenger room. ***Connector & terminal*** ***(B574) No. 12 — (B572) No. 11:*** ***(B574) No. 13 — (B572) No. 11:***	Does pulse output change from pulse output OFF → pulse output ON by the lock operation using access key?	Go to step **6**.	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>
6	**CHECK FRONT DOOR OUTER HANDLE.** 1) Replace the driver's front door outer handle with the passenger's front door outer handle. 2) Read DTC using the Subaru Select Monitor.	Is B27A1 displayed?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Replace the driver's front door outer handle. <Ref. to SL-33, Front Outer Handle.>

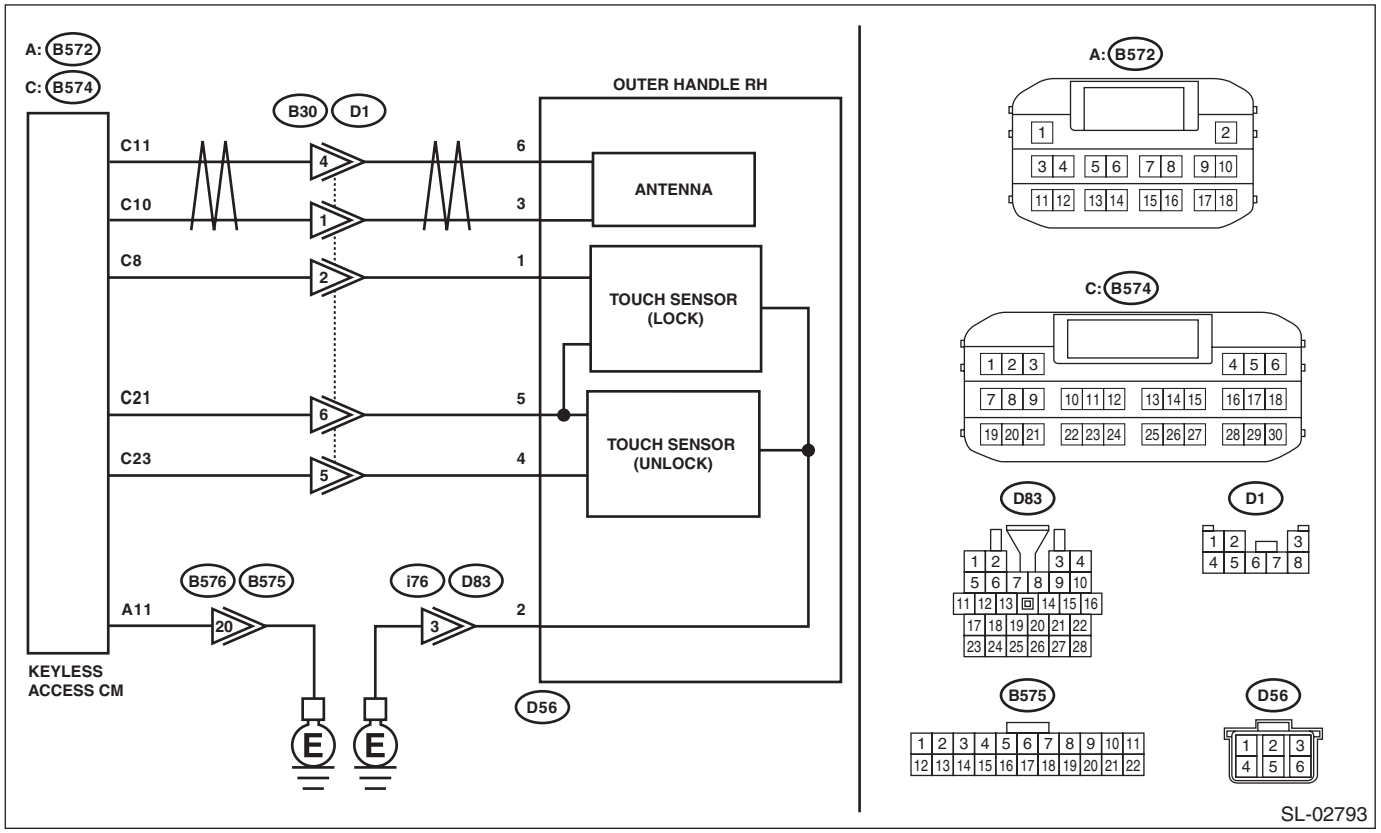
AF:DTC B27A2 PASSENGER SIDE EXTERNAL ANTENNA OUTPUT STAGE OPEN

DTC DETECTING CONDITION:
When open circuit occurs in the harness between keyless access CM and passenger's side front door outer handle.

TROUBLE SYMPTOM:
Keyless access system does not function.

CAUTION:
For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

WIRING DIAGRAM:
Keyless access system <Ref. to WI-275, WIRING DIAGRAM, Keyless Access System.>



Step		Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK CONNECTOR.** 1) Disconnect the keyless access CM connector. 2) Disconnect the front door outer handle connector.	Is the connector OK?	Go to step **3**.	Repair or replace the connector.

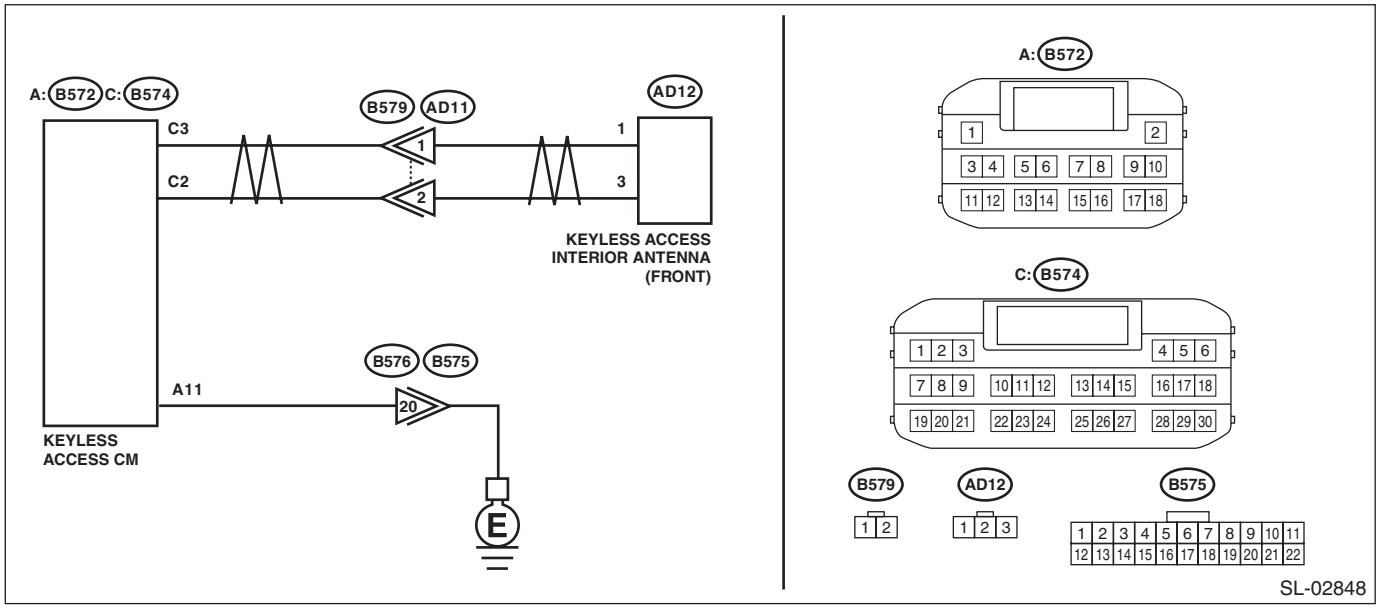
	Step	Check	Yes	No
3	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and front door outer handle connector, and between front door outer handle connector and chassis ground. ***Connector & terminal*** ***(B574) No. 11 — (D56) No. 6:*** ***(B574) No. 10 — (D56) No. 3:*** ***(D56) No. 2 — Chassis ground:*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **4**.	Repair or replace the open circuit of harness.
4	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground, and between front door outer handle connector and chassis ground. ***Connector & terminal*** ***(B574) No. 11 — Chassis ground:*** ***(B574) No. 10 — Chassis ground:*** ***(D56) No. 6 — Chassis ground:*** ***(D56) No. 3 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **5**.	Repair or replace the short circuit of the harness.
5	**CHECK KEYLESS ACCESS CM.** 1) Connect the keyless access CM connector. 2) Use an oscilloscope, measure the waveform between terminals with ignition switch OFF, all doors closed and access key not in passenger room. ***Connector & terminal*** ***(B574) No. 12 — (B572) No. 11:*** ***(B574) No. 13 — (B572) No. 11:***	Does pulse output change from pulse output OFF → pulse output ON by the lock operation using access key?	Go to step **6**.	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>
6	**CHECK FRONT DOOR OUTER HANDLE.** 1) Replace the passenger's front door outer handle with the driver's front door outer handle. 2) Read DTC using the Subaru Select Monitor.	Is B27A2 displayed?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Replace the passenger's front door outer handle. <Ref. to SL-33, Front Outer Handle.>

AG:DTC B27A5 FRONT INTERNAL ANTENNA OUTPUT STAGE OPEN

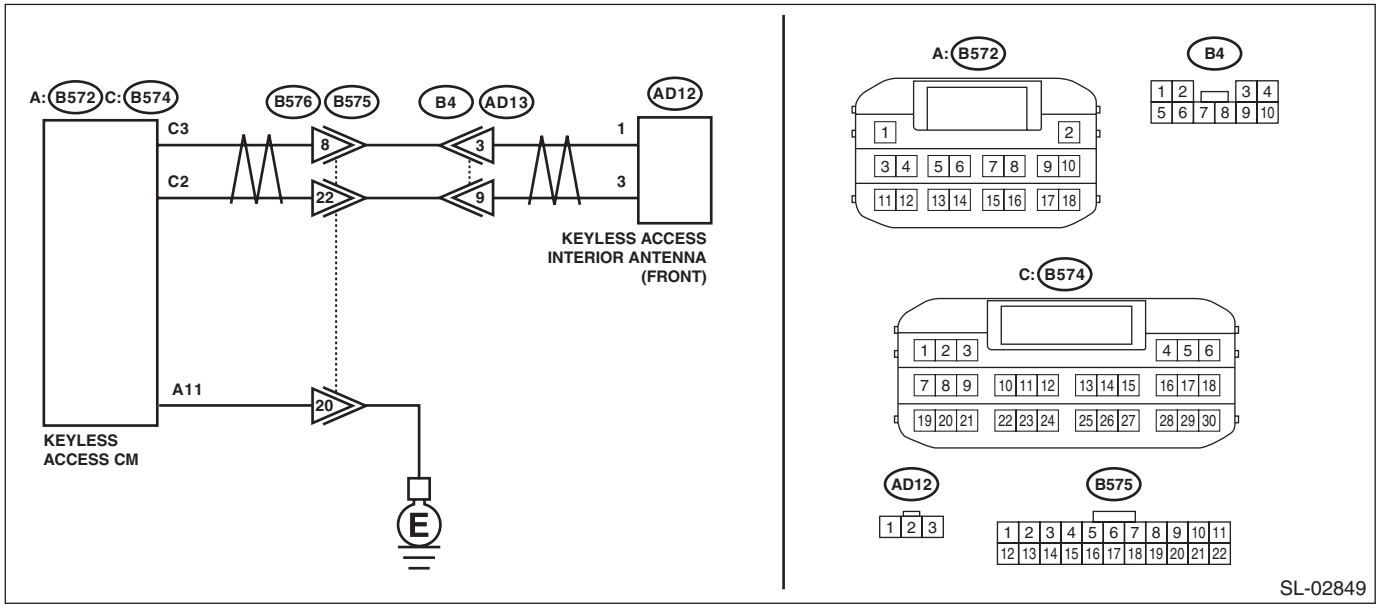
DTC DETECTING CONDITION:
When open circuit occurs in the harness between keyless access CM and front interior antenna.
TROUBLE SYMPTOM:
Keyless access system does not function. (when the access key is in the front area of the passenger room)

CAUTION:
For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".
WIRING DIAGRAM:
Keyless access system <Ref. to WI-275, WIRING DIAGRAM, Keyless Access System.>

- Engine type: FA



- Engine type: EJ



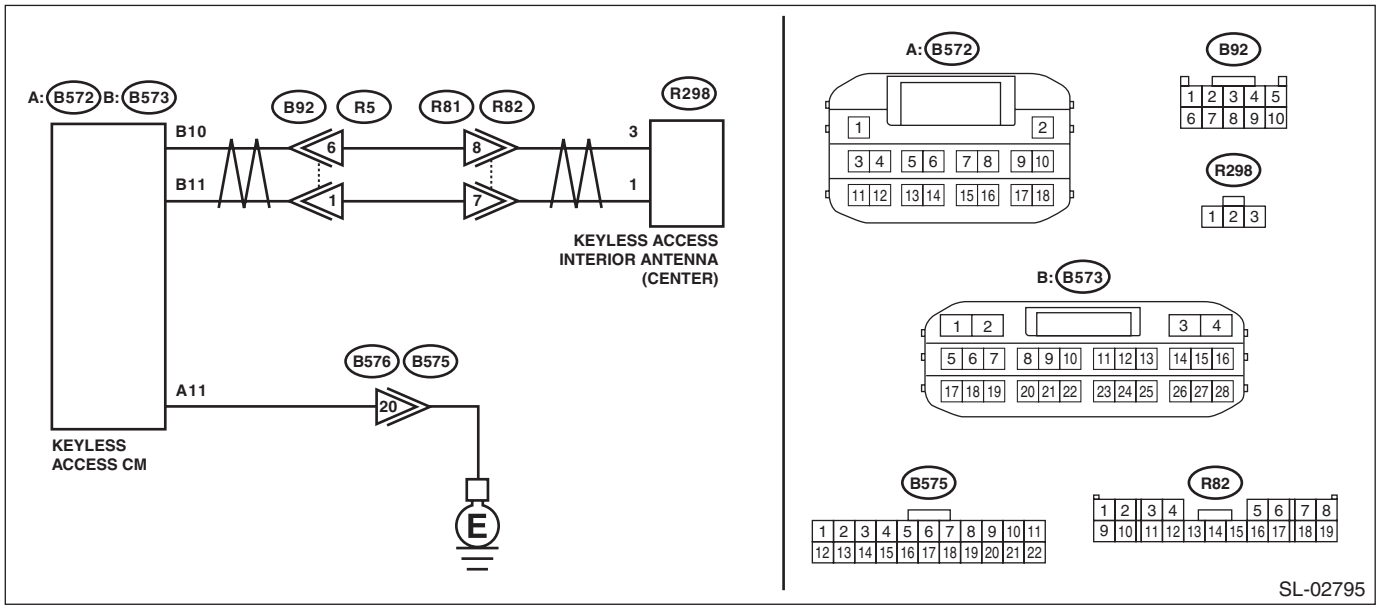
Step		Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.

	Step	Check	Yes	No
2	**CHECK CONNECTOR.** 1) Disconnect the keyless access CM connector. 2) Disconnect the front interior antenna connector.	Is the connector OK?	Go to step **3**.	Repair or replace the connector.
3	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and front interior antenna connector, and between front interior antenna connector and chassis ground. ***Connector & terminal*** ***(B574) No. 3 — (AD12) No. 1:*** ***(B574) No. 2 — (AD12) No. 3:*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **4**.	Repair or replace the open circuit of harness.
4	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground, and between front interior antenna connector and chassis ground. ***Connector & terminal*** ***(B574) No. 3 — Chassis ground:*** ***(AD12) No. 1 — Chassis ground:*** ***(B574) No. 2 — Chassis ground:*** ***(AD12) No. 3 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **5**.	Repair or replace the short circuit of the harness.
5	**CHECK KEYLESS ACCESS CM.** 1) Connect the keyless access CM connector. 2) Use an oscilloscope, measure the waveform between terminals with ignition switch OFF, all doors closed and access key not in passenger room. ***Connector & terminal*** ***(B574) No. 3 — (B572) No. 11:*** ***(B574) No. 2 — (B572) No. 11:***	Does pulse output change from pulse output OFF → pulse output ON by operating the touch sensor (lock)?	Go to step **6**.	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>
6	**CHECK FRONT INTERIOR ANTENNA.** 1) Replace the front interior antenna. <Ref. to SL-92, Keyless Access Indoor Antenna.> 2) Read DTC using the Subaru Select Monitor.	Is B27A5 displayed?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Malfunction occurred in the front interior antenna.

AH:DTC B27A6 REAR INTERNAL ANTENNA OUTPUT STAGE OPEN

DTC DETECTING CONDITION:
When open circuit occurs in the harness between keyless access CM and center interior antenna.
TROUBLE SYMPTOM:
Keyless access system does not function. (when the access key is in the rear area of the passenger room (near the seat))

CAUTION:
For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".
WIRING DIAGRAM:
Keyless access system <Ref. to WI-275, WIRING DIAGRAM, Keyless Access System.>



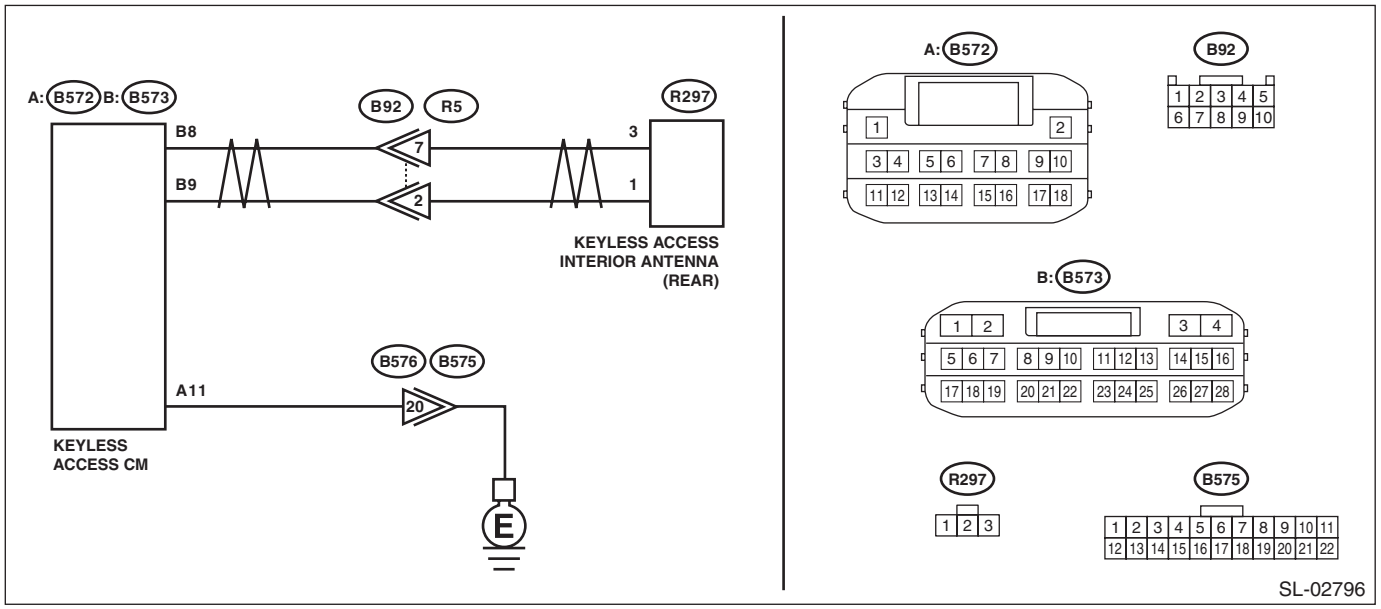
Step		Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK CONNECTOR.** 1) Disconnect the keyless access CM connector. 2) Disconnect the center interior antenna connector.	Is the connector OK?	Go to step **3**.	Repair or replace the connector.
3	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and center interior antenna connector, and between center interior antenna connector and chassis ground. ***Connector & terminal*** ***(B573) No. 10 — (R298) No. 3:*** ***(B573) No. 11 — (R298) No. 1:*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **4**.	Repair or replace the open circuit of harness.

	Step	Check	Yes	No
4	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground, and between center interior antenna connector and chassis ground. ***Connector & terminal*** ***(B573) No. 10 — Chassis ground:*** ***(B573) No. 11 — Chassis ground:*** ***(R298) No. 1 — Chassis ground:*** ***(R298) No. 3 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **5**.	Repair or replace the short circuit of the harness.
5	**CHECK KEYLESS ACCESS CM.** 1) Connect the keyless access CM connector. 2) Use an oscilloscope, measure the waveform between terminals with ignition switch OFF, all doors closed and access key not in passenger room. ***Connector & terminal*** ***(B573) No. 10 — (B572) No. 11:*** ***(B573) No. 11 — (B572) No. 11:***	Does pulse output change from pulse output OFF → pulse output ON by operating the touch sensor (lock)?	Go to step **6**.	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>
6	**CHECK CENTER INTERIOR ANTENNA.** 1) Replace the center interior antenna. <Ref. to SL-92, Keyless Access Indoor Antenna.> 2) Read DTC using the Subaru Select Monitor.	Is B27A6 displayed?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Malfunction occurred in the center interior antenna.

AI: DTC B27A7 TRUNK/REAR GATE INTERNAL ANTENNA OUTPUT STAGE OPEN

DTC DETECTING CONDITION:
When open circuit occurs in the harness between keyless access CM and rear interior antenna.
TROUBLE SYMPTOM:
Keyless access system does not function. (when the access key is in the rear area of the passenger room (in the luggage room or trunk))

CAUTION:
For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".
WIRING DIAGRAM:
Keyless access system <Ref. to WI-275, WIRING DIAGRAM, Keyless Access System.>



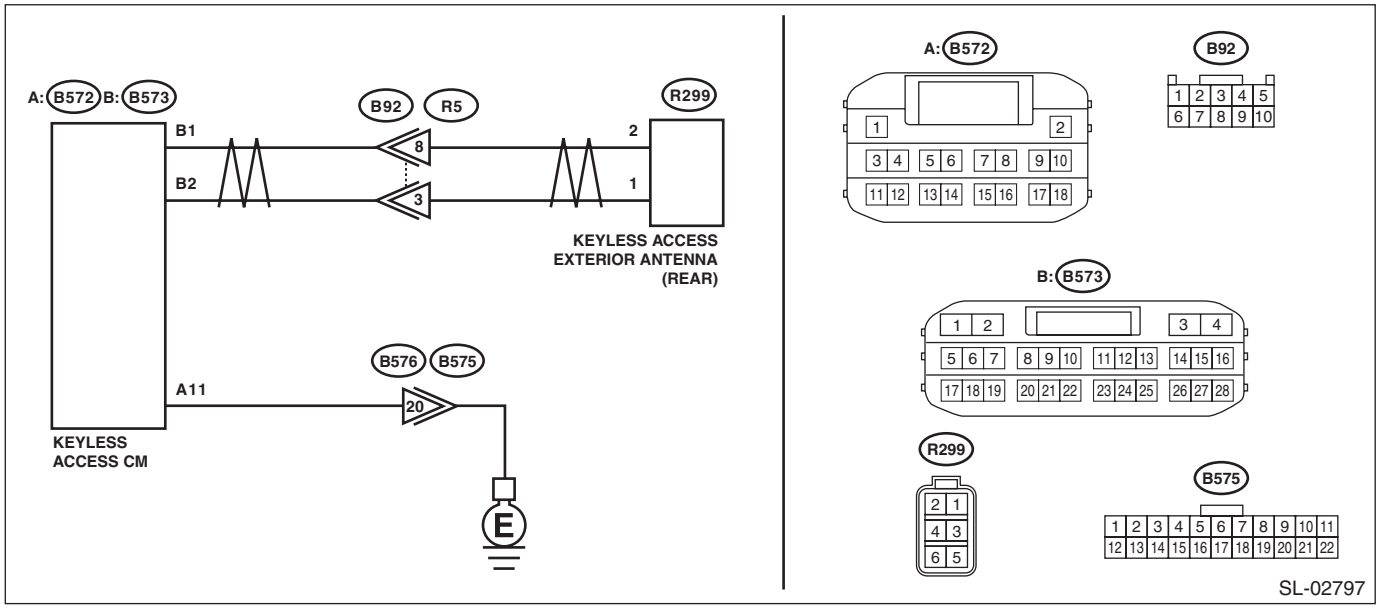
Step		Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK CONNECTOR.** 1) Disconnect the keyless access CM connector. 2) Disconnect the rear interior antenna connector.	Is the connector OK?	Go to step **3**.	Repair or replace the connector.
3	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and rear interior antenna connector, and between rear interior antenna connector and chassis ground. ***Connector & terminal*** ***(B573) No. 9 — (R297) No. 1:*** ***(B573) No. 8 — (R297) No. 3:*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **4**.	Repair or replace the open circuit of harness.

	Step	Check	Yes	No
4	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground, and between rear interior antenna connector and chassis ground. ***Connector & terminal*** ***(B573) No. 9 — Chassis ground:*** ***(B573) No. 8 — Chassis ground:*** ***(R297) No. 1 — Chassis ground:*** ***(R297) No. 3 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **5**.	Repair or replace the short circuit of the harness.
5	**CHECK KEYLESS ACCESS CM.** 1) Connect the keyless access CM connector. 2) Use an oscilloscope, measure the waveform between terminals with ignition switch OFF, all doors closed and access key not in passenger room. ***Connector & terminal*** ***(B573) No. 9 — (B572) No. 11:*** ***(B573) No. 8 — (B572) No. 11:***	Does pulse output change from pulse output OFF → pulse output ON by operating the touch sensor (lock)?	Go to step **6**.	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>
6	**CHECK REAR INTERIOR ANTENNA.** 1) Replace the rear interior antenna. <Ref. to SL-92, Keyless Access Indoor Antenna.> 2) Read DTC using the Subaru Select Monitor.	Is B27A7 displayed?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	Malfunction occurred in the rear interior antenna.

AJ:DTC B27A8 TRUNK/REAR GATE EXTERNAL ANTENNA OUTPUT STAGE OPEN

DTC DETECTING CONDITION:
When open circuit occurs in the harness between keyless access CM and rear exterior antenna.
TROUBLE SYMPTOM:
Keyless access system does not function.
(Unable to unlock with the rear gate opener button, or unable to lock with the rear lock button.)

CAUTION:
For replacement procedure of keyless access CM, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".
WIRING DIAGRAM:
Keyless access system <Ref. to WI-275, WIRING DIAGRAM, Keyless Access System.>



Step		Check	Yes	No
1	**CHECK LAN SYSTEM.** Inspect LAN system. <Ref. to LAN(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>	Is LAN system normal?	Go to step **2**.	Perform the inspection according to the diagnosis for LAN system.
2	**CHECK CONNECTOR.** 1) Disconnect the keyless access CM connector. 2) Disconnect the rear exterior antenna connector.	Is the connector OK?	Go to step **3**.	Repair or replace the connector.
3	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and rear exterior antenna connector, and between rear exterior antenna connector and chassis ground. ***Connector & terminal*** ***(B573) No. 2 — (R299) No. 1:*** ***(B573) No. 1 — (R299) No. 2:***	Is the resistance less than 1 Ω?	Go to step **4**.	Repair or replace the open circuit of harness.

	Step	Check	Yes	No
4	**CHECK HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground, and between rear exterior antenna connector and chassis ground. ***Connector & terminal*** ***(B573) No. 2 — Chassis ground:*** ***(B573) No. 1 — Chassis ground:*** ***(R299) No. 1 — Chassis ground:*** ***(R299) No. 2 — Chassis ground:***	Is the resistance 10 kΩ or more?	Go to step **5**.	Repair or replace the short circuit of the harness.
5	**CHECK REAR EXTERIOR ANTENNA.** 1) Remove the rear exterior antenna. 2) Using a tester, measure the resistance between rear exterior antenna connectors. ***Connector & terminal*** ***(R299) No. 1 — No. 2:***	Is the resistance less than 1 Ω?	Go to step **6**.	Replace the rear exterior antenna. <Ref. to SL-95, Keyless Access Outdoor Antenna.>
6	**CHECK KEYLESS ACCESS CM.** 1) Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.> 2) Read DTC using the Subaru Select Monitor.	Is B27A8 displayed?	Replace the rear exterior antenna. <Ref. to SL-95, Keyless Access Outdoor Antenna.>	Malfunction occurred in the keyless access CM.

AK:DTC B1571 REFERENCE CODE INCOMPATIBILITY

DTC DETECTING CONDITION:

Incompatibility of reference code between keyless access CM (model without ID code box) or ID code box (model with ID code box) and ECM occurs.

TROUBLE SYMPTOM:

Engine will not start.

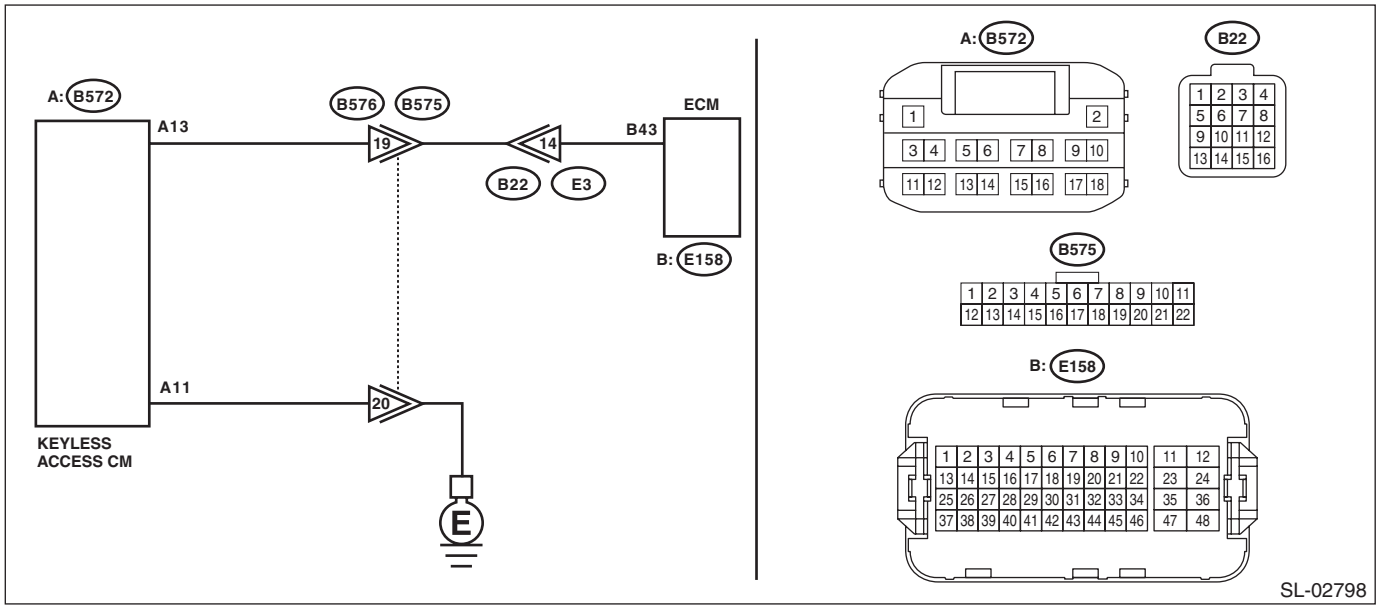
	Step	Check	Yes	No
1	**CHECK ECM.** Perform ECM registration. Refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".	Is ECM registration finished? And does the engine start?	System is normal.	Go to step **2**.
2	**REPLACE ECM.** 1) Install the ECM from other normal operating vehicle (with push button start) which use same ECM to the vehicle to be diagnosed. 2) Perform ECM registration. Refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".	Is ECM registration finished? And does the engine start?	Replace the ECM. <Ref. to FU(w/o STI)-132, REMOVAL, Engine Control Module (ECM).> <Ref. to FU(STI)-56, REMOVAL, Engine Control Module (ECM).> Install the ECM from other vehicle to the original vehicle.	Replace Keyless access CM (model without ID code box), <Ref. to SL-100, Keyless Access CM.> or replace ID code box (model with ID code box). <Ref. to SL-103, NOTE, ID Code Box.>

AL:DTC B1572 IMM CIRCUIT FAILURE (EXCEPT ANTENNA CIRCUIT)

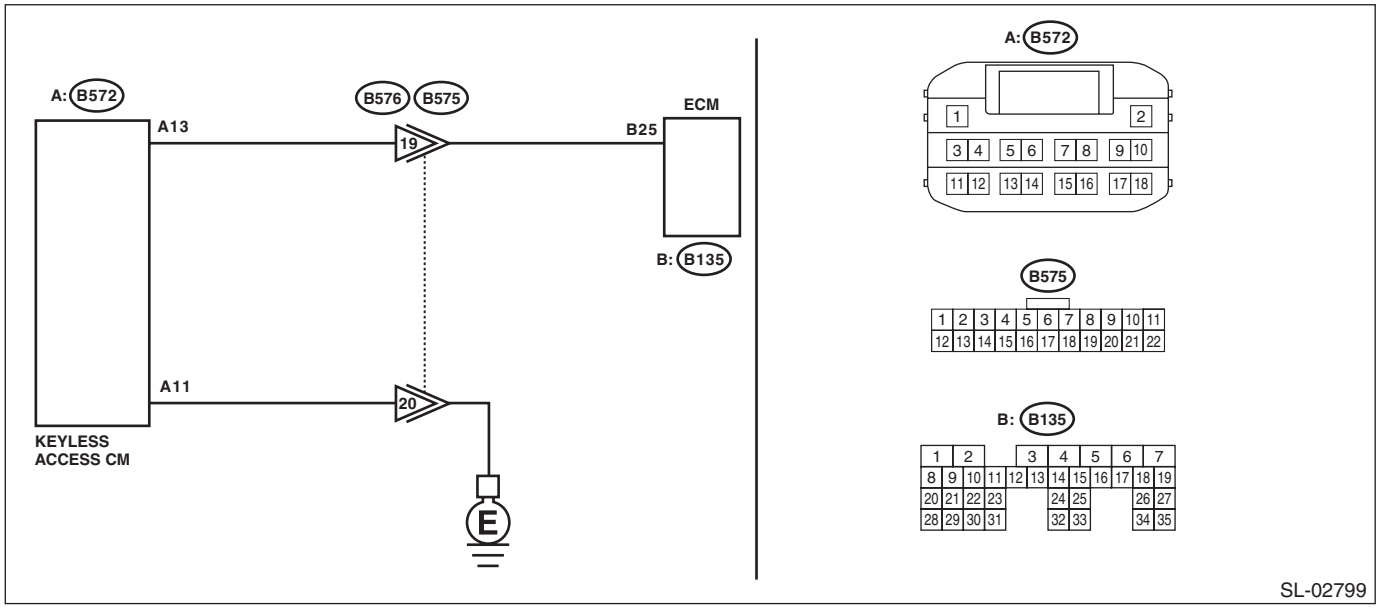
1. EXCEPT FOR C0 MODEL

DTC DETECTING CONDITION:
Communication error between keyless access CM and ECM
TROUBLE SYMPTOM:
Engine will not start.
WIRING DIAGRAM:
Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>

- Engine type: FA



- Engine type: EJ

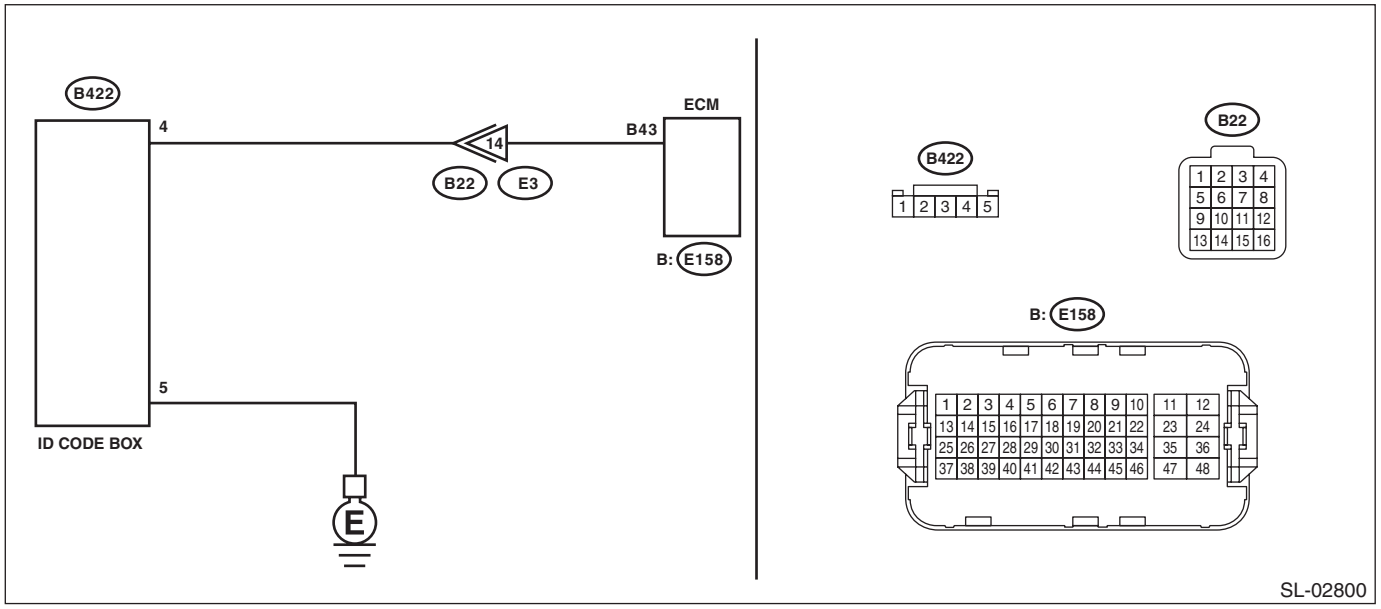


	Step	Check	Yes	No
1	**CHECK CURRENT DATA.** 1) Turn the ignition switch to ON. 2) Check the keyless access CM data using the Subaru Select Monitor. 3) Display the next data. “Immobilizer” “Engine start” “Unlock confirmation” ***Data*** ***Immobilizer = Unset:*** ***Engine start = Engine start permission:*** ***Unlock confirmation = Confirmed:***	Is the data displayed as described above?	Go to step **2**.	Perform diagnostics with phenomenon. <Ref. to KPS(diag)-141, ENGINE DOES NOT START, INSPECTION, Diagnostics with Phenomenon.>
2	**CHECK CURRENT DATA.** Use the Subaru Select Monitor to check the keyless access CM data when holding down the push button ignition switch while depressing the brake pedal (except for MT model) or the clutch pedal (MT model). ***Data*** ***EGI code reception status = Reception:*** NOTE: If “Reception” is displayed, the status changes to “Not yet received” in 10 seconds. When performing the check again, perform the check after turning the ignition to OFF.	Is the data displayed as described above?	Go to step **3**.	Repair or replace the harness between keyless access CM and ECM.
3	**CHECK WIRING HARNESS.** 1) Turn the ignition switch to OFF. 2) Disconnect the keyless access CM connector and ECM connector. 3) Using a tester, measure the resistance between the keyless access CM connector and ECM. ***Connector & terminal*** ***Engine type: FA*** ***(B572) No. 13 — (E158) No. 43:*** ***Engine type: EJ*** ***(B572) No. 13 — (B135) No. 25:***	Is the resistance less than 10 Ω?	Go to step **4**.	Repair or replace the open circuit of harness.
4	**CHECK WIRING HARNESS.** Using a tester, measure the resistance between the keyless access CM connector and chassis ground. ***Connector & terminal*** ***(B572) No. 11 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair or replace the open circuit of harness.
5	**CHECK ECM.** 1) Install the ECM from other normal operating vehicle (with push button start) which use same ECM to the vehicle to be diagnosed. 2) Perform ECM registration. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.	Is ECM registration finished? And does the engine start?	Replace the ECM. <Ref. to FU(w/o STI)-132, REMOVAL, Engine Control Module (ECM).> <Ref. to FU(STI)-56, REMOVAL, Engine Control Module (ECM).> Install the ECM from other vehicle to the original vehicle.	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>

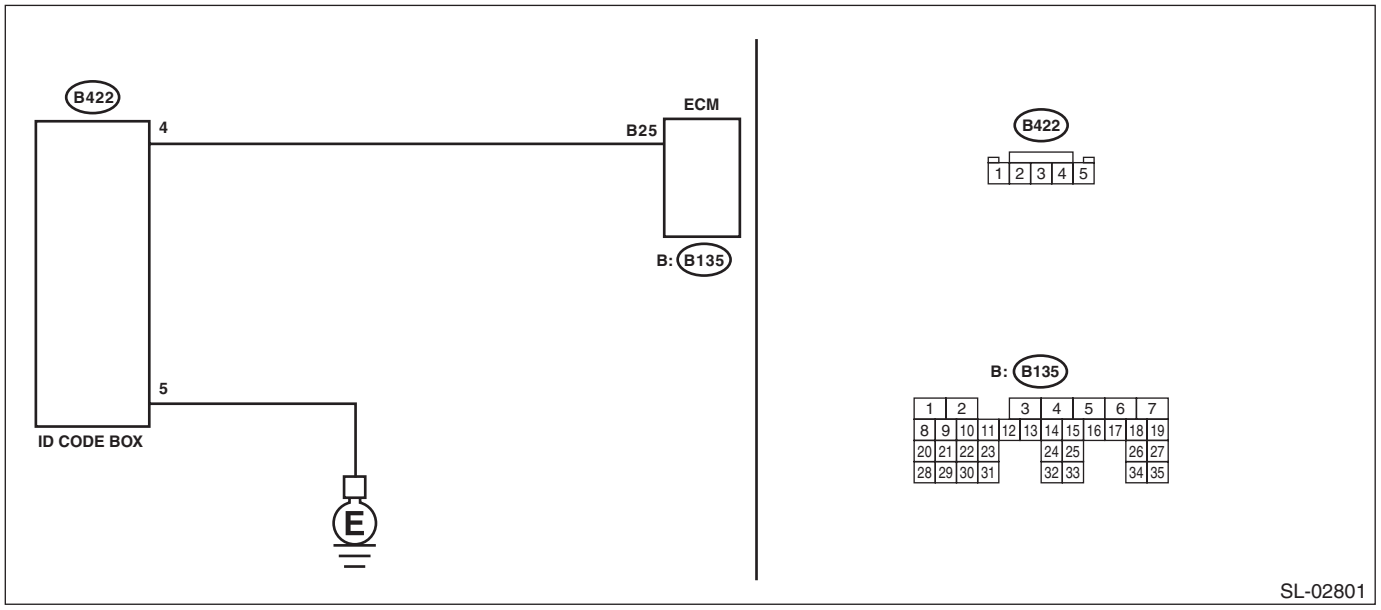
2. C0 MODEL

DTC DETECTING CONDITION:
Communication error between ID code box and ECM
TROUBLE SYMPTOM:
Engine will not start.
WIRING DIAGRAM:
Push button start system <Ref. to WI-329, WIRING DIAGRAM, Push Button Start System.>

- Engine type: FA



- Engine type: EJ



	Step	Check	Yes	No
1	**CHECK CURRENT DATA.** 1) Turn the ignition switch to ON. 2) Check the keyless access CM data using the Subaru Select Monitor. 3) Display the next data. “Immobilizer” “Engine start” “Unlock confirmation” ***Data*** ***Immobilizer = Unset:*** ***Engine start = Engine start permission:*** ***Unlock confirmation = Confirmed:***	Is the data displayed as described above?	Go to step **2**.	Perform diagnostics with phenomenon. <Ref. to KPS(diag)-141, ENGINE DOES NOT START, INSPECTION, Diagnostics with Phenomenon.>
2	**CHECK CURRENT DATA.** Use the Subaru Select Monitor to check the keyless access CM data when holding down the push button ignition switch while depressing the brake pedal (except for MT model) or the clutch pedal (MT model). ***Data*** ***EGI code reception status = Reception:*** NOTE: If “Reception” is displayed, the status changes to “Not yet received” in 10 seconds. When performing the check again, perform the check after turning the ignition to OFF.	Is the data displayed as described above?	Go to step **3**.	Repair or replace the harness between ID code box and ECM.
3	**CHECK WIRING HARNESS.** 1) Turn the ignition switch to OFF. 2) Disconnect the ID code box connector and the ECM connector. 3) Using a tester, measure the resistance between ID code box connector and ECM. ***Connector & terminal*** ***Engine type: FA*** ***(B422) No. 4 — (E158) No. 43:*** ***Engine type: EJ*** ***(B422) No. 4 — (B135) No. 25:***	Is the resistance less than 10 Ω?	Go to step **4**.	Repair or replace the open circuit of harness.
4	**CHECK WIRING HARNESS.** Using a tester, measure the resistance between ID code box connector and chassis ground. ***Connector & terminal*** ***(B422) No. 5 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair or replace the open circuit of harness.
5	**CHECK ECM.** 1) Install the ECM from other normal operating vehicle (with push button start) which use same ECM to the vehicle to be diagnosed. 2) Perform ECM registration. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.	Is ECM registration finished? And does the engine start?	Replace the ECM. <Ref. to FU(w/o STI)-132, REMOVAL, Engine Control Module (ECM).> <Ref. to FU(STI)-56, REMOVAL, Engine Control Module (ECM).> Install the ECM from other vehicle to the original vehicle.	Replace the ID code box. <Ref. to SL-103, NOTE, ID Code Box.>

AM:DTC B1576 EGI CONTROL MODULE EEPROM

DTC DETECTING CONDITION:

- ECM malfunctioning
- When the ROM in ECM was inaccessible during registration.

	Step	Check	Yes	No
1	**PERFORM ECM REGISTRATION.** Perform ECM registration. Refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".	Is ECM registration complete?	Make sure that the engine can start. This completes the work.	Go to step **2**.
2	**PERFORM ECM REGISTRATION.** Perform ECM registration. Refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".	Is ECM registration complete?	Make sure that the engine can start. This completes the work.	Go to step **3**.
3	**PERFORM ECM REGISTRATION.** Perform ECM registration. Refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".	Is ECM registration complete?	Make sure that the engine can start. This completes the work.	Replace the ECM. <Ref. to FU(w/o STI)-132, REMOVAL, Engine Control Module (ECM).> <Ref. to FU(STI)-56, REMOVAL, Engine Control Module (ECM).>

AN:DTC B1577 IMM CONTROL MODULE EEPROM

1. EXCEPT FOR C0 MODEL

DTC DETECTING CONDITION:

- Defective keyless access CM
- When inaccessible to ROM in keyless access CM.

	Step	Check	Yes	No
1	**CHECK DTC.** 1) Turn the ignition switch to ON. 2) Perform the clear memory operation of ECM. 3) Turn the ignition switch to OFF. 4) Remove and install the battery. 5) Turn the ignition switch to ON. 6) After 5 seconds or more, read DTC.	Is B1577 displayed?	Replace the keyless access CM. <Ref. to SL-100, Keyless Access CM.>	System is normal.

2. C0 MODEL

DTC DETECTING CONDITION:

- ID code box malfunction
- When inaccessible to ROM in ID code box.

	Step	Check	Yes	No
1	**CHECK DTC.** 1) Turn the ignition switch to ON. 2) Perform the clear memory operation of ECM. 3) Turn the ignition switch to OFF. 4) Register the ID code box. 5) Read the DTC again.	Is B1577 displayed?	Replace the ID code box. <Ref. to SL-103, ID Code Box.>	System is normal.