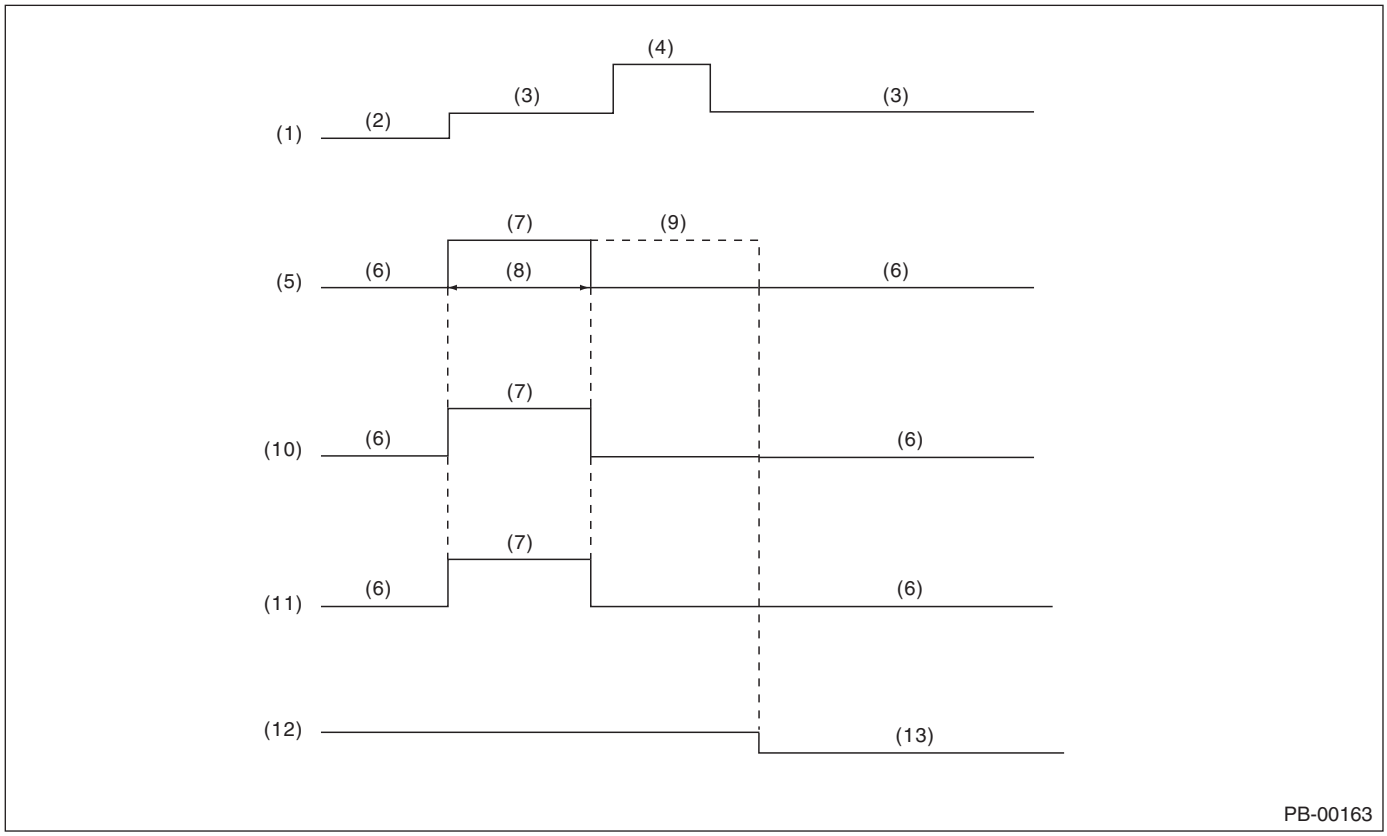
10.Warning Light Illumination Pattern

A: INSPECTION



(1) Ignition switch
(2) OFF
(3) ON
(4) Engine start
(5) Brake warning light (EBD warning light)
(6) Light OFF
(7) Light ON
(8) Approx. 2 sec.
(9) If the parking brake is being operated, illumination continues until the brake is released.
(10) Electronic parking brake warning light (C6 model only)
(11) Hill hold indicator light
(12) Parking brake
(13) Released

1) When warning lights or indicator lights do not illuminate in accordance with this illumination pattern, there must be an electrical malfunction.
2) When warning lights or indicator lights remain constantly OFF, check the combination meter circuit or CAN communication circuit. <Ref. to PB(diag)-28, BRAKE WARNING LIGHT, ELECTRONIC PARKING BRAKE WARNING LIGHT AND HILL HOLD INDICATOR LIGHT DO NOT COME ON, Warning Light Illumination Pattern.>
3) When the electronic parking brake warning light (C6 model only) and hill hold indicator light do not go off, check the combination meter circuit, CAN communication circuit and electronic parking brake CM. <Ref. to PB(diag)-30, ELECTRONIC PARKING BRAKE WARNING LIGHT AND HILL HOLD INDICATOR LIGHT DO NOT GO OFF, Warning Light Illumination Pattern.> <Ref. to PB(diag)-29, HILL HOLD INDICATOR LIGHT DO NOT GO OFF, Warning Light Illumination Pattern.>
4) When the brake warning light does not go off, check the combination meter circuit, CAN communication circuit, electronic parking brake CM, and VDCCM&H/U. <Ref. to PB(diag)-31, BRAKE WARNING LIGHT DOES NOT GO OFF, Warning Light Illumination Pattern.> <Ref. to PB(diag)-33, BRAKE WARNING LIGHT REMAINS BLINKING, Warning Light Illumination Pattern.>
5) After replacing the electronic parking brake CM, the brake warning light blinks. Make sure to perform the Force Sensor Calibration Mode and Clutch Sensor Calibration Mode. <Ref. to PB(diag)-18, FORCE SENSOR CALIBRATION MODE, OPERATION, Subaru Select Monitor.> <Ref. to PB(diag)-20, CLUTCH SENSOR CALIBRATION MODE, OPERATION, Subaru Select Monitor.>
6) When operation and release of the parking brake is repeated excessively, the brake warning light blinks and the parking brake switch operation may not be accepted for several tens of seconds; this is not malfunction, however.

B: BRAKE WARNING LIGHT, ELECTRONIC PARKING BRAKE WARNING LIGHT AND HILL HOLD INDICATOR LIGHT DO NOT COME ON

DETECTING CONDITION:

- Defective combination meter
- Defective CAN communication

TROUBLE SYMPTOM:

When the ignition switch is turned to ON (engine OFF), brake warning light, electronic parking brake warning light (C6 model only) and hill hold indicator light do not come on.

	Step	Check	Yes	No
1	**CHECK OTHER INDICATOR LIGHT.** Turn the ignition switch to ON.	Does other indicator light illuminate soon after “ON”?	Go to step **2**.	Perform the diagnosis for combination meter. <Ref. to IDI-6, SELF-DIAGNOSIS DISPLAY MODE, OPERATION, Combination Meter System.>
2	**CHECK LAN SYSTEM.** Check the DTC in LAN system. <Ref. to LAN(diag)-10, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is DTC of LAN system displayed?	Perform the diagnosis according to DTC. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Replace the combination meter case assembly. <Ref. to IDI-20, REMOVAL, Combination Meter.>

C: HILL HOLD INDICATOR LIGHT DO NOT GO OFF

NOTE:
This diagnosis is applied to models other than C6 model.

DETECTING CONDITION:

- Defective combination meter
- Defective CAN communication

TROUBLE SYMPTOM:

When starting the engine, the hill hold indicator light remains lit.

	Step	Check	Yes	No
1	**READ DTC.** Read the DTC. <Ref. to PB(diag)-23, Read Diagnostic Trouble Code (DTC).>	Is DTC displayed?	Perform the diagnosis according to DTC. <Ref. to PB(diag)-35, List of Diagnostic Trouble Code (DTC).>	Go to step **2**.
2	**CHECK LAN SYSTEM.** Check the DTC in LAN system. <Ref. to LAN(diag)-10, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is DTC of LAN system displayed?	Perform the diagnosis according to DTC. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step **3**.
3	**CHECK ELECTRONIC PARKING BRAKE CM.** With the engine started, display the current data of the electronic parking brake CM using Subaru Select Monitor.	When the hill hold switch is not operated after starting the engine, is the “Hill hold lamp” ON?	Replace the electronic parking brake CM. <Ref. to PB-5, Parking Brake Actuator.>	Go to step **4**.
4	**CHECK COMBINATION METER.** Check the combination meter. <Ref. to IDI-6, SELF-DIAGNOSIS DISPLAY MODE, OPERATION, Combination Meter System.>	Is combination meter OK?	Replace the electronic parking brake CM. <Ref. to PB-5, Parking Brake Actuator.>	Replace the combination meter case assembly. <Ref. to IDI-20, REMOVAL, Combination Meter.>

D: ELECTRONIC PARKING BRAKE WARNING LIGHT AND HILL HOLD INDICATOR LIGHT DO NOT GO OFF

NOTE:
This diagnosis is applied to C6 model.

DETECTING CONDITION:

- Defective combination meter
- Defective CAN communication

TROUBLE SYMPTOM:

When starting the engine, the electronic parking brake warning light and hill hold indicator light remain lit.

	Step	Check	Yes	No
1	**READ DTC.** Read the DTC. <Ref. to PB(diag)-23, Read Diagnostic Trouble Code (DTC).>	Is DTC displayed?	Perform the diagnosis according to DTC. <Ref. to PB(diag)-35, List of Diagnostic Trouble Code (DTC).>	Go to step **2**.
2	**CHECK LAN SYSTEM.** Check the DTC in LAN system. <Ref. to LAN(diag)-10, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is DTC of LAN system displayed?	Perform the diagnosis according to DTC. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step **3**.
3	**CHECK ELECTRONIC PARKING BRAKE CM.** With the engine started, display the current data of the electronic parking brake CM using Subaru Select Monitor.	Is “Parking System Warning Light” ON?	Replace the electronic parking brake CM. <Ref. to PB-5, Parking Brake Actuator.>	Go to step **4**.
4	**CHECK ELECTRONIC PARKING BRAKE CM.** With the engine started, display the current data of the electronic parking brake CM using Subaru Select Monitor.	When the hill hold switch is not operated after starting the engine, is the “Hill hold lamp” ON?	Replace the electronic parking brake CM. <Ref. to PB-5, Parking Brake Actuator.>	Go to step **5**.
5	**CHECK COMBINATION METER.** Check the combination meter. <Ref. to IDI-6, SELF-DIAGNOSIS DISPLAY MODE, OPERATION, Combination Meter System.>	Is combination meter OK?	Replace the electronic parking brake CM. <Ref. to PB-5, Parking Brake Actuator.>	Replace the combination meter case assembly. <Ref. to IDI-20, REMOVAL, Combination Meter.>

E: BRAKE WARNING LIGHT DOES NOT GO OFF

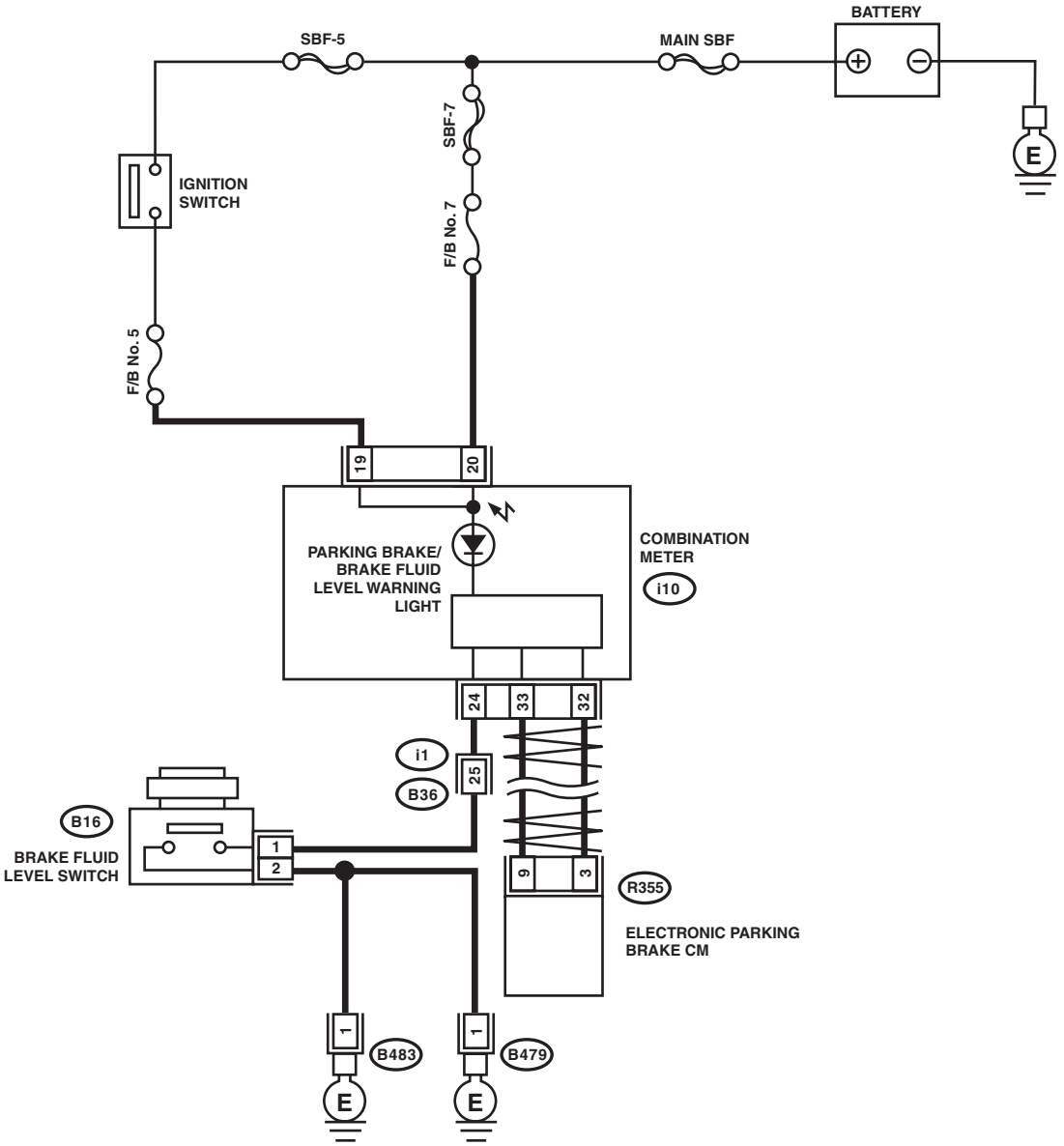
DETECTING CONDITION:

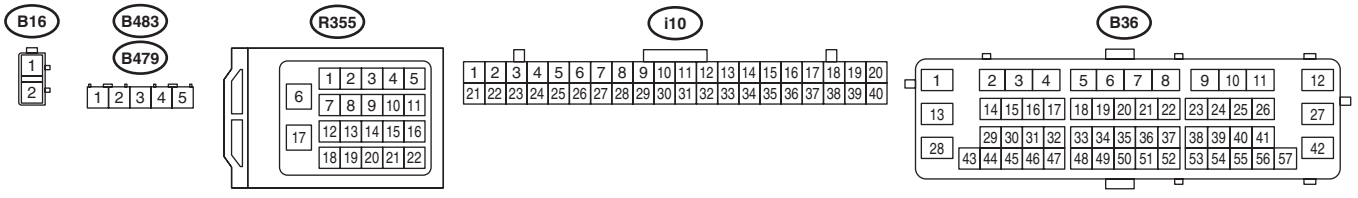
- Brake warning light circuit is shorted.
- Defective sensor/connector

TROUBLE SYMPTOM:

After starting the engine, the brake warning light remains lit or blinking though the parking brake is released.

WIRING DIAGRAM:





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	Step	Check	Yes	No
1	**READ DTC.** Read the DTC. <Ref. to PB(diag)-23, Read Diagnostic Trouble Code (DTC).>	Is DTC displayed?	Perform the diagnosis according to DTC. <Ref. to PB(diag)-35, List of Diagnostic Trouble Code (DTC).>	Go to step **2**.
2	**CHECK BRAKE FLUID AMOUNT.** Check the amount of brake fluid in the reservoir tank of master cylinder.	Is the amount of brake fluid between the lines of “MAX” and “MIN”?	Go to step **3**.	Replenish brake fluid to the specified value.
3	**CHECK BRAKE FLUID LEVEL SWITCH.** 1) Turn the ignition switch to OFF. 2) Disconnect the level switch connector (B16) from master cylinder. 3) Measure the resistance of master cylinder terminals. ***Terminals*** ***No. 1 — No. 2:***	Is the resistance 1 MΩ or more?	Go to step **4**.	Replace the master cylinder. <Ref. to BR-39, Master Cylinder.>
4	**CHECK GROUND SHORT OF HARNESS.** 1) Disconnect the connector (i10) from combination meter. 2) Measure the resistance between combination meter connector and chassis ground. ***Connector & terminal*** ***(i10) No. 24 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **5**.	Repair the harness connector between combination meter and brake fluid level switch.
5	**CHECK LAN SYSTEM.** Check the DTC in LAN system. <Ref. to LAN(diag)-10, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is DTC of LAN system displayed?	Perform the diagnosis according to DTC. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step **6**.
6	**CHECK COMBINATION METER.** Check the combination meter. <Ref. to IDI-6, SELF-DIAGNOSIS DISPLAY MODE, OPERATION, Combination Meter System.>	Is combination meter OK?	Go to step **7**.	Replace the combination meter case assembly. <Ref. to IDI-20, REMOVAL, Combination Meter.>
7	**CHECK VDC SYSTEM.** Check the DTC in VDC system. <Ref. to VDC(diag)-23, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is DTC of VDC system displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-35, List of Diagnostic Trouble Code (DTC).>	Go to step **8**.
8	**CHECK ELECTRONIC PARKING BRAKE CM.** With the parking brake released, display the current data of the electronic parking brake CM using Subaru Select Monitor.	Is “Brake Warning Light” ON?	Replace the electronic parking brake CM. <Ref. to PB-5, Parking Brake Actuator.>	Go to step **9**.
9	**CHECK OTHER DTC DETECTION.**	Is any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary poor contact interference.

F: BRAKE WARNING LIGHT REMAINS BLINKING

NOTE:
This diagnosis is applied to models other than C6 model.

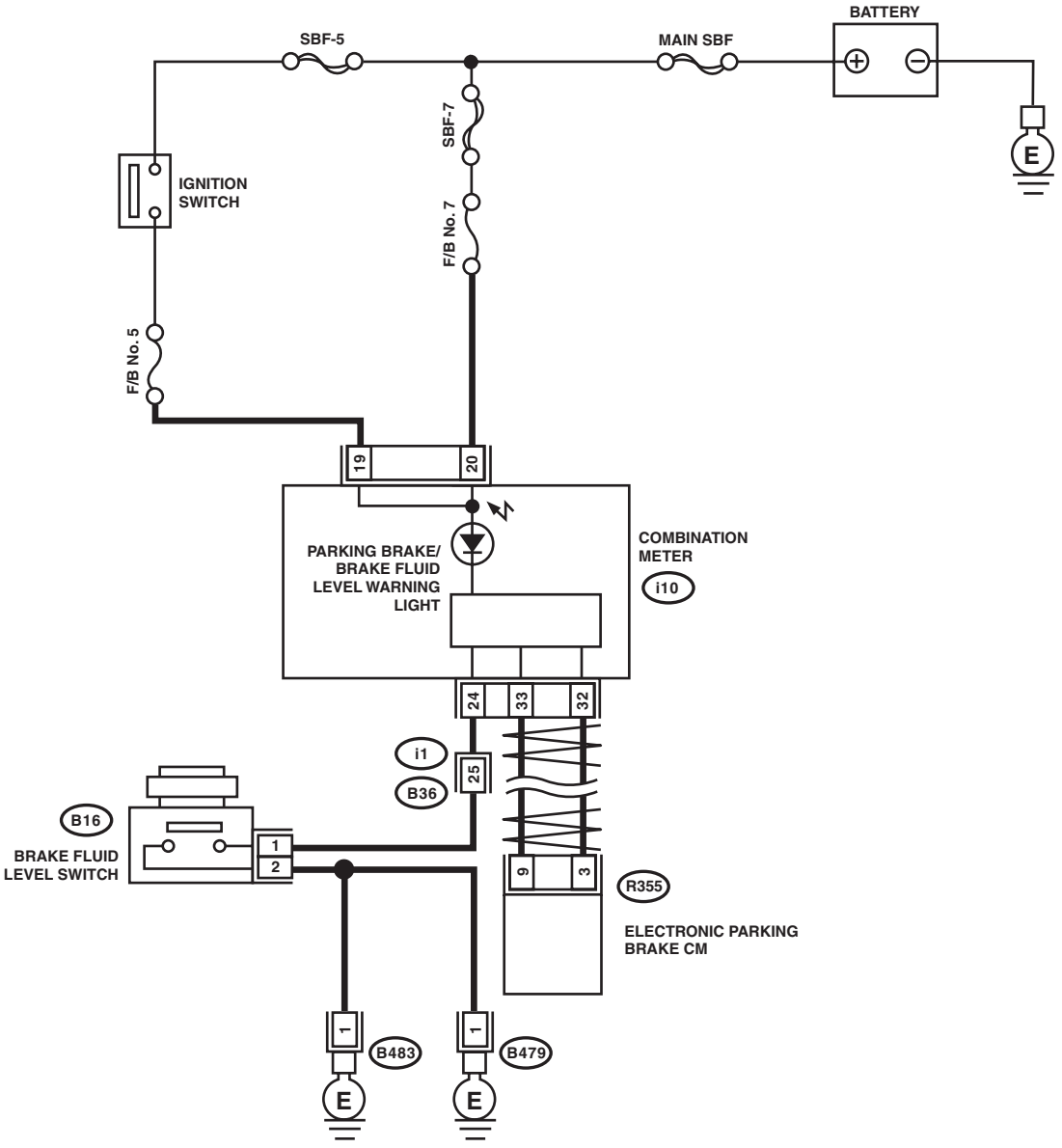
DETECTING CONDITION:

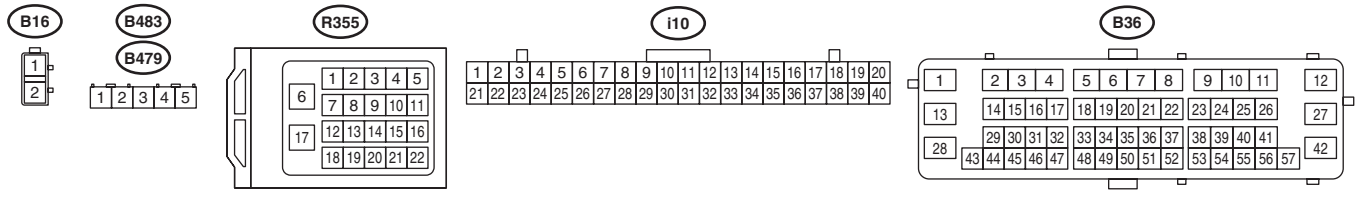
- Brake warning light circuit is shorted.
- Defective sensor/connector

TROUBLE SYMPTOM:

After starting the engine, the brake warning light remains lit or blinking though the parking brake is released.

WIRING DIAGRAM:





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	Step	Check	Yes	No
1	**READ DTC.** Read the DTC. <Ref. to PB(diag)-23, Read Diagnostic Trouble Code (DTC).>	Is DTC displayed?	Perform the diagnosis according to DTC. <Ref. to PB(diag)-35, List of Diagnostic Trouble Code (DTC).>	Go to step **2**.
2	**CHECK BRAKE FLUID AMOUNT.** Check the amount of brake fluid in the reservoir tank of master cylinder.	Is the amount of brake fluid between the lines of “MAX” and “MIN”?	Go to step **3**.	Replenish brake fluid to the specified value.
3	**CHECK BRAKE FLUID LEVEL SWITCH.** 1) Turn the ignition switch to OFF. 2) Disconnect the level switch connector (B16) from master cylinder. 3) Measure the resistance of master cylinder terminals. ***Terminals*** ***No. 1 — No. 2:***	Is the resistance 1 MΩ or more?	Go to step **4**.	Replace the master cylinder. <Ref. to BR-39, Master Cylinder.>
4	**CHECK GROUND SHORT OF HARNESS.** 1) Disconnect the connector (i10) from combination meter. 2) Measure the resistance between combination meter connector and chassis ground. ***Connector & terminal*** ***(i10) No. 24 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **5**.	Repair the harness connector between combination meter and brake fluid level switch.
5	**CHECK LAN SYSTEM.** Check the DTC in LAN system. <Ref. to LAN(diag)-10, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is DTC of LAN system displayed?	Perform the diagnosis according to DTC. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step **6**.
6	**CHECK COMBINATION METER.** Check the combination meter. <Ref. to IDI-6, SELF-DIAGNOSIS DISPLAY MODE, OPERATION, Combination Meter System.>	Is combination meter OK?	Go to step **7**.	Replace the combination meter case assembly. <Ref. to IDI-20, REMOVAL, Combination Meter.>
7	**CHECK VDC SYSTEM.** Check the DTC in VDC system. <Ref. to VDC(diag)-23, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is DTC of VDC system displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-35, List of Diagnostic Trouble Code (DTC).>	Go to step **8**.
8	**CHECK ELECTRONIC PARKING BRAKE CM.** With the parking brake released, display the current data of the electronic parking brake CM using Subaru Select Monitor.	Is “Brake Warning Light” ON?	Replace the electronic parking brake CM. <Ref. to PB-5, Parking Brake Actuator.>	Go to step **9**.
9	**CHECK ELECTRONIC PARKING BRAKE CM.** With the parking brake released, display the current data of the electronic parking brake CM using Subaru Select Monitor.	Is “Parking System Warning Light” ON?	Replace the electronic parking brake CM. <Ref. to PB-5, Parking Brake Actuator.>	Go to step **10**.
10	**CHECK OTHER DTC DETECTION.**	Is any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary poor contact interference.