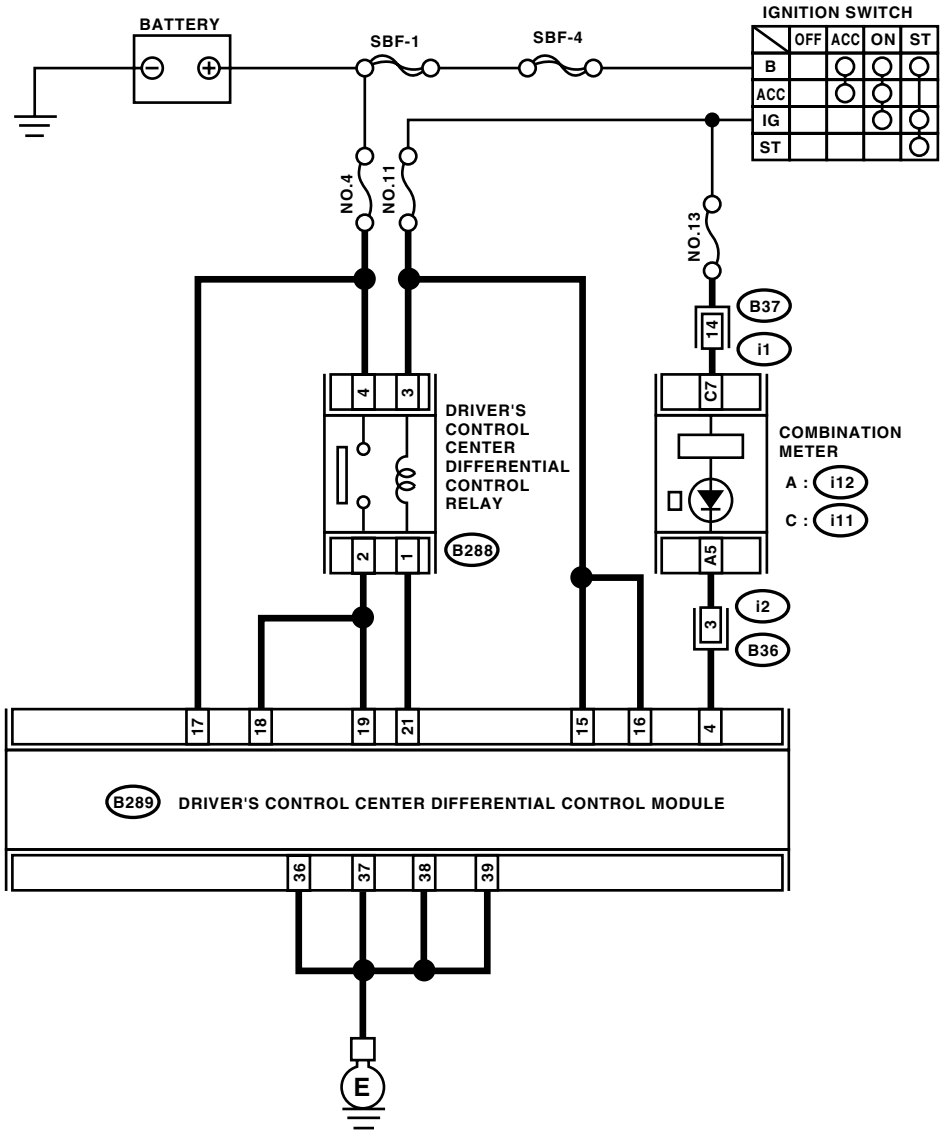
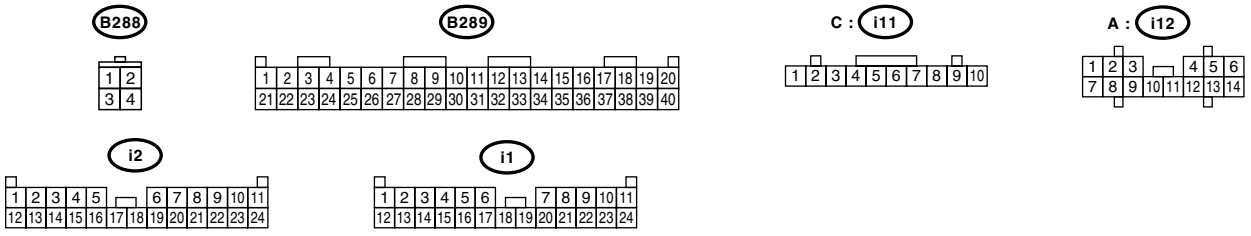
11.Diagnostic Procedure with Diagnostic Trouble Code (DTC)

A: DTC CANNOT BE CALLED UP

WIRING DIAGRAM:





MT-00961

	Step	Check	Yes	No
1	**CHECK THE AUTO INDICATOR LIGHT.** Turn the ignition switch to ON.	Does the AUTO indicator light illuminate?	Go to step **14.**	Go to step **2.**
2	**CHECK THE GROUND CIRCUIT OF DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Turn the ignition switch to OFF. 2)Disconnect the connector of driver's control center differential control module. 3)Measure the resistance between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 36 — Chassis ground:*** ***(B289) No. 37 — Chassis ground:*** ***(B289) No. 38 — Chassis ground:*** ***(B289) No. 39 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **3.**	Repair the open circuit of driver's control center differential control module ground circuit.
3	**CHECK FUSE (No. 4).** Remove the fuse (No. 4).	Is the fuse (No. 4) is blown out?	Replace fuse (No.4). If the replaced fuse (No.4) is blown out easily, repair short circuit in harness between fuse (No.4) and driver's control center differential control module.	Go to step **4.**
4	**CHECK FUSE (No. 11).** Remove the fuse (No. 11).	Is the fuse (No. 11) is blown out?	Replace fuse (No.11). If the replaced fuse (No.11) is blown out easily, repair short circuit in harness between fuse (No.11) and driver's control center differential control module.	Go to step **5.**
5	**CHECK POWER SUPPLY CIRCUIT OF DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** Measure the voltage between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 17 (+) — Chassis ground (–):***	Is the voltage more than 10 V?	Go to step **6.**	Repair the open circuit in harness between fuse (No. 4) and driver's control center differential control module, or fuse (No. 4) and battery.
6	**CHECK POWER SUPPLY CIRCUIT OF DRIVER'S CONTROL CENTER DIFFERENTIAL RELAY.** 1)Disconnect the harness connector of driver's control center differential relay. 2)Measure the voltage between driver's control center differential relay harness connector and chassis ground. ***Connector & terminal*** ***(B288) No. 4 (+) — Chassis ground (–):***	Is the voltage more than 10 V?	Go to step **7.**	Repair the open circuit between fuse (No. 4) and driver's control center differential relay.

	Step	Check	Yes	No
7	**CHECK IGNITION POWER SUPPLY CIRCUIT OF DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Turn the ignition switch to ON. (engine OFF) 2)Measure the voltage between driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 15 (+) — Chassis ground (–):*** ***(B289) No. 16 (+) — Chassis ground (–):***	Is the voltage more than 10 V?	Go to step **8.**	Repair the open circuit in harness between fuse (No. 11) and driver's control center differential control module, or fuse (No. 11) and battery.
8	**CHECK IGNITION POWER SUPPLY CIRCUIT OF DRIVER'S CONTROL CENTER DIFFERENTIAL RELAY.** Measure the voltage between driver's control center differential relay and chassis ground. ***Connector & terminal*** ***(B288) No. 3 (+) — Chassis ground (–):***	Is the voltage more than 10 V?	Go to step **9.**	Repair the open circuit between fuse (No. 11) and driver's control center differential control module.
9	**CHECK HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND DRIVER'S CONTROL RELAY.** Measure the resistance of harness between driver's control center differential control module harness connector and driver's control relay harness connector. ***Connector & terminal*** ***(B289) No. 18 — (B288) No. 2:*** ***(B289) No. 19 — (B288) No. 2:*** ***(B289) No. 21 — (B288) No. 1:***	Is the resistance less than 1 Ω?	Go to step **10.**	Repair the open circuit between driver's control center differential control module harness connector and driver's control relay harness connector.
10	**CHECK HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND DRIVER'S CONTROL RELAY.** Measure the resistance of harness between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 18 — Chassis ground:*** ***(B289) No. 19 — Chassis ground:*** ***(B289) No. 21 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **11.**	Repair the short circuit between driver's control center differential control module harness connector and driver's control relay harness connector.
11	**CHECK DRIVER'S CONTROL RELAY.** Measure the resistance between driver's control relay terminals. ***Terminals*** ***No. 4 — No. 2:***	Is the resistance more than 1 MΩ?	Go to step **12.**	Replace the driver's control relay.
12	**CHECK DRIVER'S CONTROL RELAY.** Connect the terminal No. 3 to battery positive side, and terminal No.1 to battery negative side, and then measure the resistance between driver's control relay terminals. ***Terminals*** ***No. 4 — No. 2:***	Is the resistance less than 1 Ω?	Go to step **13.**	Replace the driver's control relay.

	Step	Check	Yes	No
13	**CHECK IGNITION POWER SUPPLY CIRCUIT OF DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Connect all connectors. 2)Turn the ignition switch to ON. (engine OFF) 3)Measure the voltage between driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 18 (+) — Chassis ground (–):*** ***(B289) No. 19 (+) — Chassis ground (–):*** ***(B289) No. 21 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **14.**	Go to step **23.**
14	**CHECK MANUAL MODE SWITCH.** Push the manual mode switch to enter the manual mode.	Is the manual mode obtained?	Go to step **15.**	Repair the switch. <Ref. to 6MT-47, DTC 31 MANUAL MODE SWITCH, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>
15	**CHECK DRIVER'S CONTROL CENTER DIFFERENTIAL INDICATOR LIGHT.** Operate the center differential control dial.	Does the center differential indicator light illuminate according to center differential control dial?	Go to step **17.**	Go to step **16.**
16	**CHECK THE CENTER DIFFERENTIAL CONTROL DIAL** <Ref. to 6MT-45, DTC 24 CHECK CENTER DIFFERENTIAL CONTROL DIAL., Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is the center differential control dial circuit normal?	Go to step **17.**	Repair it.
17	**CHECK THE PARKING BRAKE SWITCH** <Ref. to 6MT-51, DTC 32 CHECK PARKING BRAKE SWITCH, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is the parking brake switch circuit normal?	Go to step **18.**	Repair it.
18	**CHECK THE ACCELERATOR POSITION SENSOR** <Ref. to 6MT-38, DTC 21 ACCELERATOR POSITION SENSOR, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Is the accelerator position sensor circuit normal?	Go to step **19.**	Repair it.
19	**READ THE DTC** Read the DTC. <Ref. to 6MT-12, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is the DTC called up?	Go back to the Basic Diagnostic Procedure. <Ref. to 6MT-2, PROCEDURE, Basic Diagnostics Procedure.>	Go to step **20.**
20	**CHECK THE DRIVER'S CONTROL CENTER DIFFERENTIAL INDICATOR LIGHT.** 1)Turn the ignition switch to OFF. 2)Disconnect harness connector from combination meter. 3)Turn the ignition switch to ON. (engine OFF) 4)Short between the combination meter harness connector and chassis ground. ***Connector & terminal*** ***(i12) No. 5 — Chassis ground:***	Does the lowest light of driver's control center differential indicator illuminate?	Go to step **21.**	Check the combination meter.

	Step	Check	Yes	No
21	**CHECK THE HARNESS BETWEEN COMBINATION METER AND DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector from driver's control center differential control module. 3)Measure the resistance of harness between combination meter harness connector and driver's control center differential control module harness connector. ***Connector & terminal*** ***(i12) No. 5 — (B289) No. 4:***	Is the resistance less than 1 Ω?	Go to step **22.**	Repair the open circuit and connector of harness between combination meter harness connector and driver's control center differential control module harness connector.
22	**CHECK THE HARNESS BETWEEN COMBINATION METER AND DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** Measure the resistance of harness between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 4 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **23.**	Repair the open circuit and connector of harness between combination meter harness connector and driver's control center differential control module harness connector.
23	**CHECK THE POOR CONTACT IN HARNESS CONNECTOR**	Is there any poor contact in harness connectors of each circuit?	Repair the poor contact.	Replace the driver's control center differential control module.

B: CHECK REAR DIFFERENTIAL OIL TEMPERATURE SWITCH

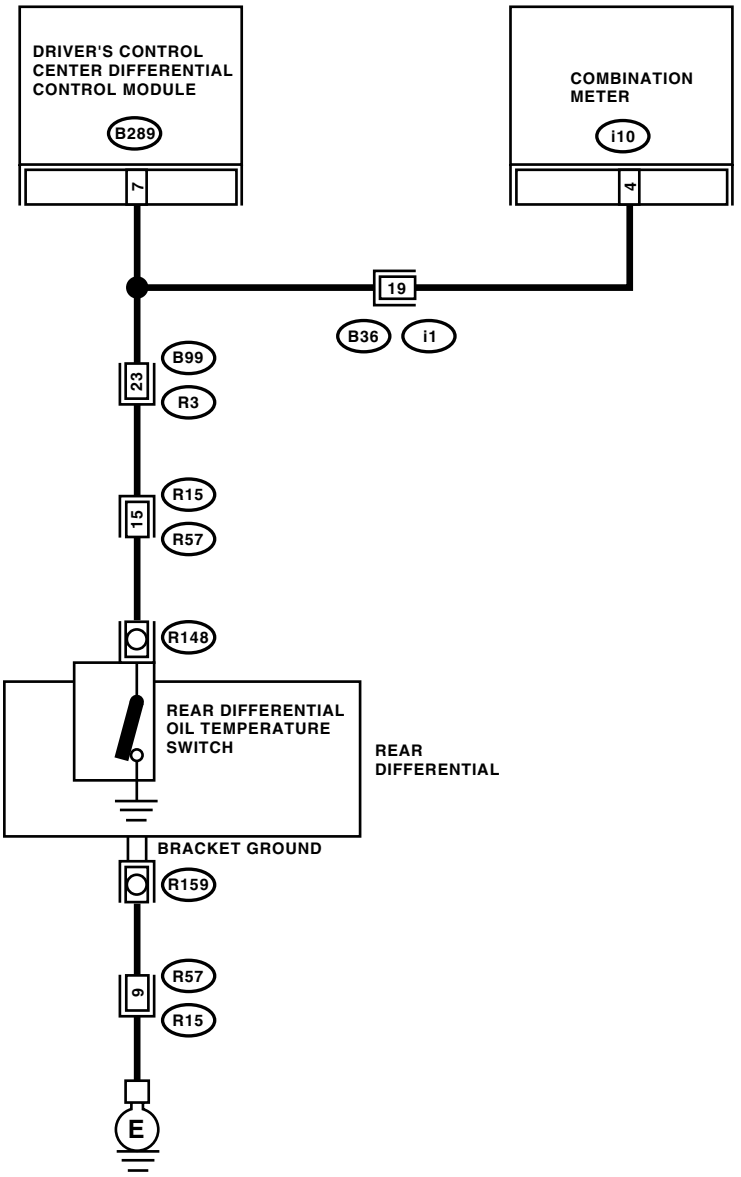
DIAGNOSIS:

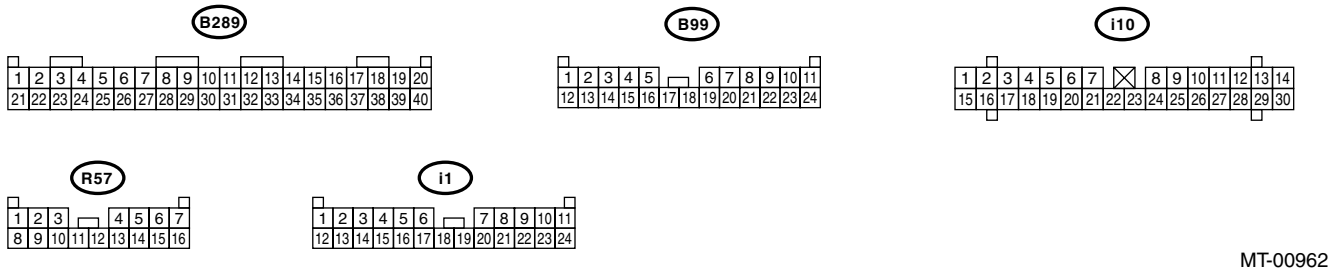
Input signal circuit of rear differential oil temperature switch is open or shorted.

TROUBLE SYMPTOM:

- Center differential stays free.
- Handling tends to oversteer.
- Rear differential oil temperature switch warning light illuminates.

WIRING DIAGRAM:





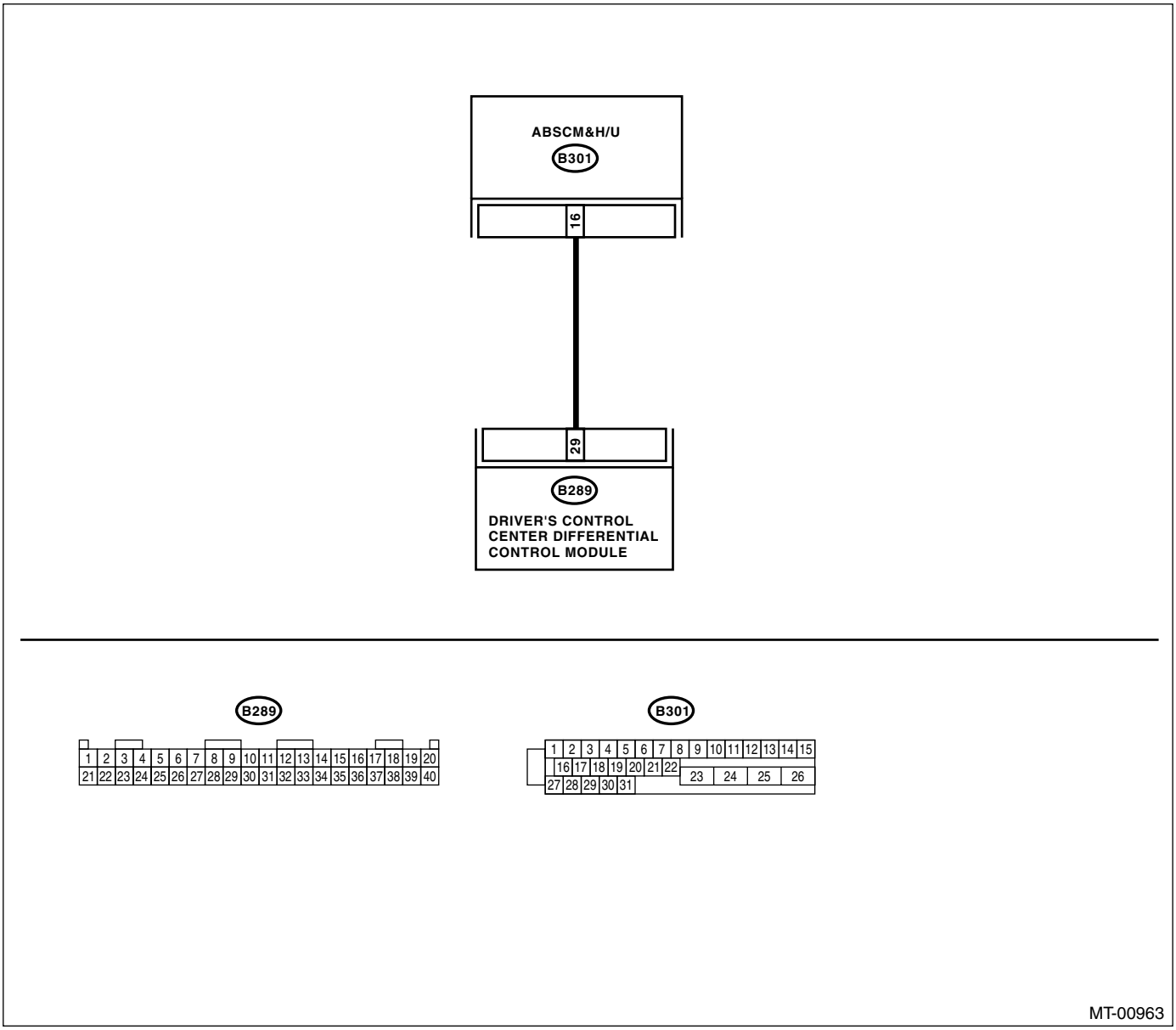
MT-00962

	Step	Check	Yes	No
1	**CHECK REAR DIFFERENTIAL OIL TEMPERATURE SWITCH WARNING LIGHT CIRCUIT.** 1)Turn the ignition switch to OFF. 2)Disconnect the connector of driver's control center differential control module harness connector. 3)Turn the ignition switch to ON. (engine OFF) 4)Measure the power supply voltage of rear differential oil temperature switch. ***Connector & terminal*** ***(B289) No. 7 (+) — Chassis ground (–):***	Is the voltage less than 0.4 V?	Go to step **7.**	Go to step **2.**
2	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND COMBINATION METER.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector from the combination meter. 3)Measure the resistance between combination meter and driver's control center differential control module harness connector. ***Connector & terminal*** ***(B289) No. 7 — (i10) No. 4:***	Is the resistance less than 1 Ω?	Go to step **3.**	Repair the open circuit between driver's control center differential control module and combination meter.
3	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND REAR DIFFERENTIAL OIL TEMPERATURE SWITCH.** 1)Disconnect the connector from the rear differential oil temperature switch. 2)Measure the resistance between driver's control center differential control module harness connector and rear differential oil temperature switch harness connector. ***Connector & terminal*** ***(B289) No. 7 — (R148) No. 1:***	Is the resistance less than 1 Ω?	Go to step **4.**	Repair the open circuit between driver's control center differential control module and rear differential oil temperature switch.
4	**CHECK REAR DIFFERENTIAL OIL TEMPERATURE SWITCH GROUND CIRCUIT.** 1)Disconnect the harness connector from bracket ground of rear differential. 2)Measure the resistance between the rear differential oil temperature switch ground harness connector and chassis ground. ***Connector & terminal*** ***(R159) No. 1 — Chassis ground:***	Is the resistance more than 1 MΩ?	Repair the open circuit of rear differential oil temperature switch ground circuit and poor contact of harness connector.	Go to step **5.**
5	**CHECK REAR DIFFERENTIAL OIL TEMPERATURE SWITCH.** Measure the resistance between rear differential oil temperature switch terminal and rear differential oil temperature switch body. ***Terminals*** ***No. 1 — Rear differential oil temperature switch body:***	Is the resistance less than 1 Ω?	Go to step **6.**	Replace the rear differential oil temperature switch.
6	**CHECK REAR DIFFERENTIAL OIL TEMPERATURE SWITCH WARNING LIGHT.** 1)Turn the ignition switch to ON. 2)Short between the combination meter harness connector and chassis ground. ***Terminals*** ***No. 4 (+) — Chassis ground (–):***	Does the rear differential oil temperature switch warning light turn OFF?	Go to step **7.**	Replace the combination meter.

Step		Check	Yes	No
7	**CHECK POOR CONTACT.**	Is there any poor contact in the circuit of rear differential oil temperature switch?	Repair the poor contact.	Replace the driver's control center differential control module.

C: DTC 11 FRONT ABS WHEEL SPEED SENSOR RH SIGNAL

DIAGNOSIS:
Front ABS wheel speed sensor RH signal circuit is open or shorted.
TROUBLE SYMPTOM:
Tight corner braking condition occurs.
WIRING DIAGRAM:



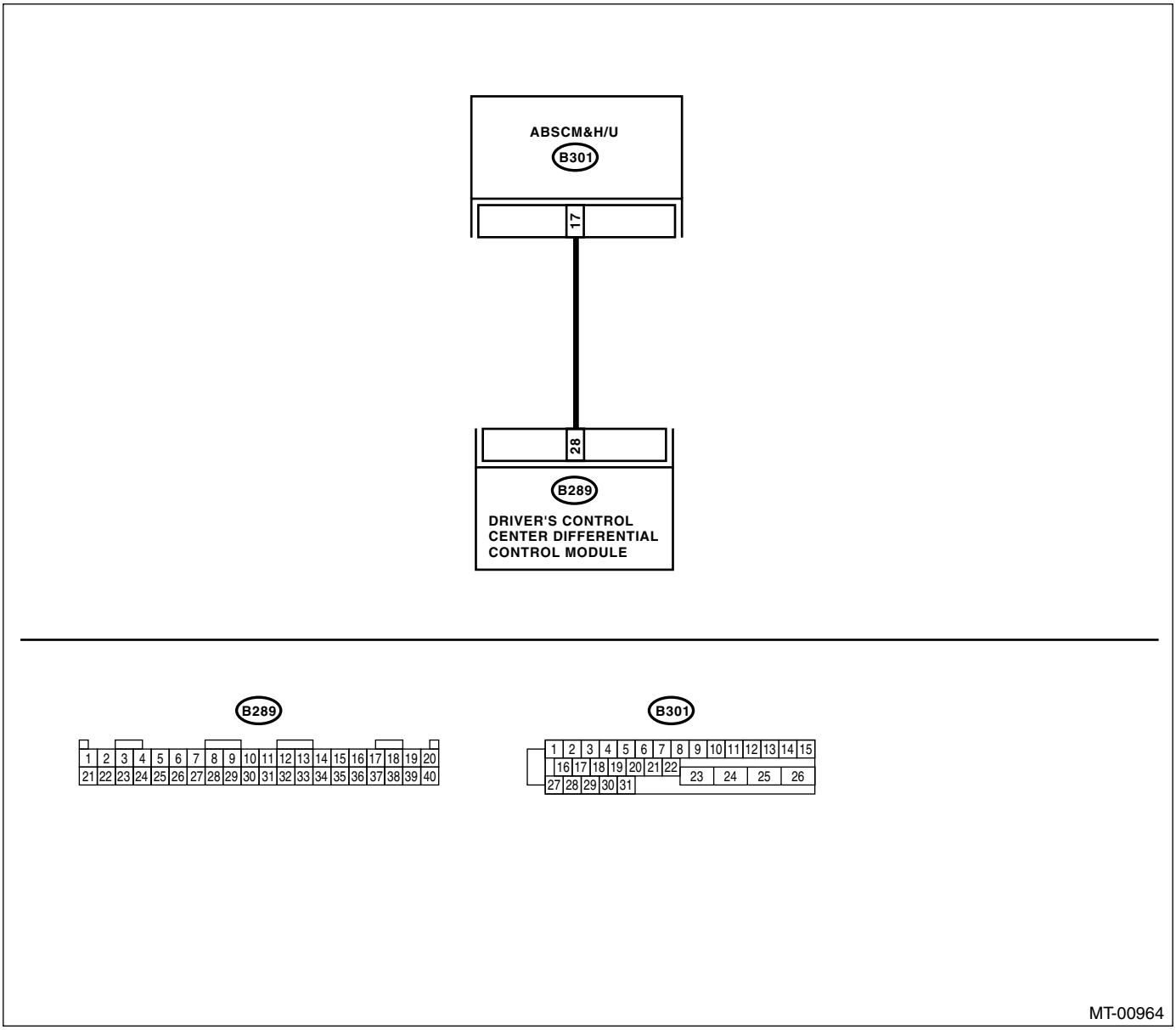
Step	Check	Yes	No
1 **CHECK ABSCM&H/U.**	Is the DTC of front ABS wheel speed sensor RH displayed on ABS self diagnosis test mode?	Check with referring to DTC section of ABS. <Ref. to ABS-23, LIST, List of Diagnostic Trouble Code (DTC).>	Go to step **2.**

	Step	Check	Yes	No
2	**CHECK HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of driver's control center differential control module and ABSCM&H/U. 3)Measure the resistance of harness between driver's control center differential control module and ABSCM&H/U harness connector. ***Connector & terminal*** ***(B289) No. 29 — (B301) No. 16:***	Is the resistance less than 1 Ω?	Go to step **3.**	Repair the open harness between driver's control center differential control module and ABSCM&H/U.
3	**CHECK HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** Measure the resistance of harness between harness connector of driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 29 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **4.**	Repair the short of harness between driver's control center differential control module and ABSCM&H/U.
4	**CHECK BATTERY SHORT OF HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** 1)Connect all the harness connectors. 2)Turn the ignition switch to ON. 3)Measure the voltage of harness between harness connector of driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 29 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **5.**	Repair the short of harness between driver's control center differential control module and ABSCM&H/U.
5	**CHECK ABS WHEEL SPEED SENSOR SIGNAL.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of driver's control center differential control module. 3)Lift-up the vehicle and place safety stands. NOTE: Raise all wheels off floor. 4)Connect the oscilloscope to terminal of driver's control center differential control module connector. ***Connector & terminal*** ***Positive probe; (B289) No. 29:*** ***Ground lead; (B289) No. 36:*** 5)Start the engine, and drive the wheels slowly. NOTE: The speed difference between front and rear wheels may light the ABS warning light, but this indicates no malfunction. When AT control diagnosis is finished, perform the ABS memory clearance procedure of on-board diagnostics system. <Ref. to ABS-21, Clear Memory Mode.> 6)Measure the signal voltage indicated on oscilloscope.	Is the voltage less than 1 V ←→ more than 8 V?	Go to step **6.**	Check the ABSCM&H/U.

	Step	Check	Yes	No
6	**CHECK POOR CONTACT IN HARNESS CONNECTORS.**	Is there any poor contact in harness connector?	Repair the poor contact.	Replace the driver's control center differential control module.

D: DTC 12 FRONT ABS WHEEL SPEED SENSOR LH SIGNAL

DIAGNOSIS:
Front ABS wheel speed sensor LH signal circuit is open or shorted.
TROUBLE SYMPTOM:
Tight corner braking condition occurs.
WIRING DIAGRAM:



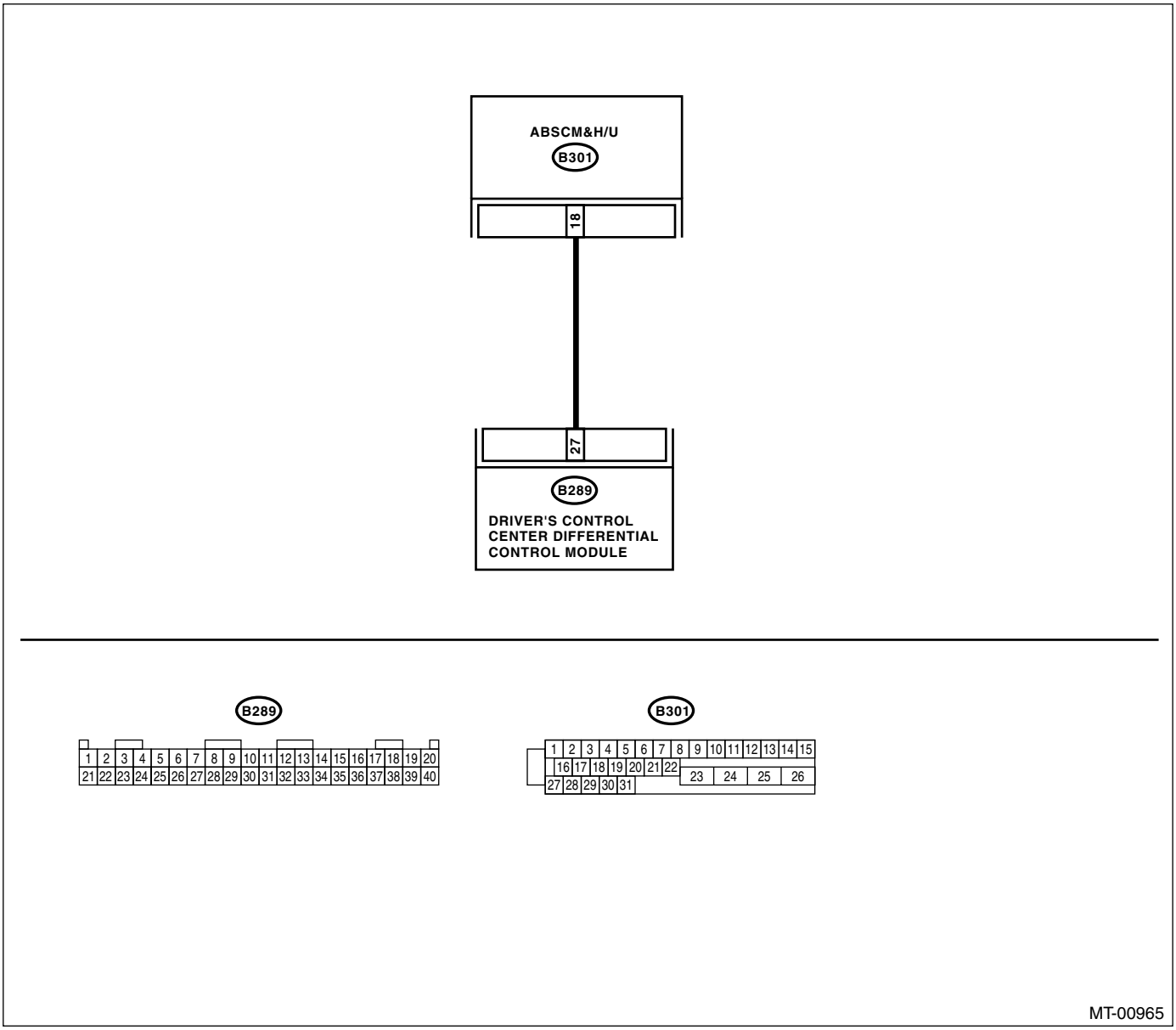
Step	Check	Yes	No
1 **CHECK ABSCM&H/U.**	Is the DTC of front ABS wheel speed sensor LH displayed on ABS self diagnosis test mode?	Check with referring to DTC section of ABS. <Ref. to ABS-23, LIST, List of Diagnostic Trouble Code (DTC).>	Go to step **2.**

	Step	Check	Yes	No
2	**CHECK HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of driver's control center differential control module and ABSCM&H/U. 3)Measure the resistance of harness between driver's control center differential control module and ABSCM&H/U harness connector. ***Connector & terminal*** ***(B289) No. 28 — (B301) No. 17:***	Is the resistance less than 1 Ω?	Go to step **3.**	Repair the open harness between driver's control center differential control module and ABSCM&H/U.
3	**CHECK HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** Measure the resistance of harness between harness connector of driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 28 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **4.**	Repair the short of harness between driver's control center differential control module and ABSCM&H/U.
4	**CHECK BATTERY SHORT OF HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** 1)Connect all the harness connectors. 2)Turn the ignition switch to ON. 3)Measure the voltage of harness between harness connector of driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 28 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **5.**	Repair the short of harness between driver's control center differential control module and ABSCM&H/U.
5	**CHECK ABS WHEEL SPEED SENSOR SIGNAL.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of driver's control center differential control module. 3)Lift-up the vehicle and place safety stands. NOTE: Raise all wheels off floor. 4)Connect the oscilloscope to terminal of driver's control center differential control module connector. ***Connector & terminal*** ***Positive probe; (B289) No. 28:*** ***Ground lead; (B289) No. 36:*** 5)Start the engine, and drive the wheels slowly. NOTE: The speed difference between front and rear wheels may light the ABS warning light, but this indicates no malfunction. When AT control diagnosis is finished, perform the ABS memory clearance procedure of on-board diagnostics system. <Ref. to ABS-21, Clear Memory Mode.> 6)Measure the signal voltage indicated on oscilloscope.	Is the voltage less than 1 V ←→ more than 8 V?	Go to step **6.**	Check the ABSCM&H/U.

Step		Check	Yes	No
6	**CHECK POOR CONTACT IN HARNESS CONNECTORS.**	Is there any poor contact in harness connector?	Repair the poor contact.	Replace the driver's control center differential control module.

E: DTC 13 REAR ABS WHEEL SPEED SENSOR RH SIGNAL

DIAGNOSIS:
Rear ABS wheel speed sensor RH signal circuit is open or shorted.
TROUBLE SYMPTOM:
Tight corner braking condition occurs.
WIRING DIAGRAM:



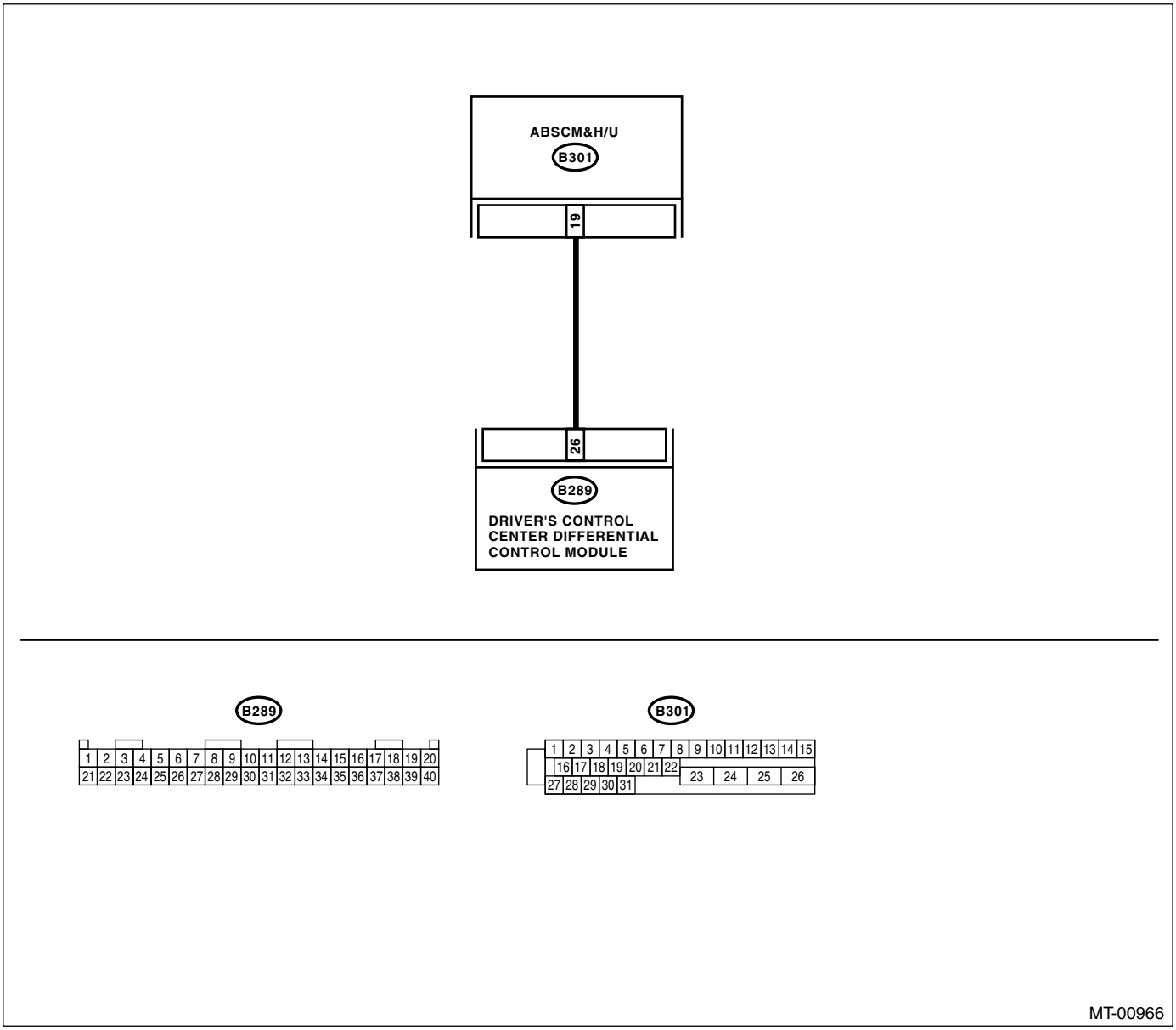
Step	Check	Yes	No
1 **CHECK ABSCM&H/U.**	Is the DTC of rear ABS wheel speed sensor RH displayed on ABS self diagnosis test mode?	Check with referring to DTC section of ABS. <Ref. to ABS-23, LIST, List of Diagnostic Trouble Code (DTC).>	Go to step **2.**

	Step	Check	Yes	No
2	**CHECK HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of driver's control center differential control module and ABSCM&H/U. 3)Measure the resistance of harness between driver's control center differential control module and ABSCM&H/U harness connector. ***Connector & terminal*** ***(B289) No. 27 — (B301) No. 18:***	Is the resistance less than 1 Ω?	Go to step **3.**	Repair the open harness between driver's control center differential control module and ABSCM&H/U.
3	**CHECK HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** Measure the resistance of harness between harness connector of driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 27 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **4.**	Repair the short of harness between driver's control center differential control module and ABSCM&H/U.
4	**CHECK BATTERY SHORT OF HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** 1)Connect all the harness connectors. 2)Turn the ignition switch to ON. 3)Measure the voltage of harness between harness connector of driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 27 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **5.**	Repair the short of harness between driver's control center differential control module and ABSCM&H/U.
5	**CHECK ABS WHEEL SPEED SENSOR SIGNAL.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of driver's control center differential control module. 3)Lift-up the vehicle and place safety stands. NOTE: Raise all wheels off floor. 4)Connect the oscilloscope to terminal of driver's control center differential control module connector. ***Connector & terminal*** ***Positive probe; (B289) No. 27:*** ***Ground lead; (B289) No. 36:*** 5)Start the engine, and drive the wheels slowly. NOTE: The speed difference between front and rear wheels may light the ABS warning light, but this indicates no malfunction. When AT control diagnosis is finished, perform the ABS memory clearance procedure of on-board diagnostics system. <Ref. to ABS-21, Clear Memory Mode.> 6)Measure the signal voltage indicated on oscilloscope.	Is the voltage less than 1 V ←→ more than 8 V?	Go to step **6.**	Check the ABSCM&H/U.

Step		Check	Yes	No
6	**CHECK POOR CONTACT IN HARNESS CONNECTORS.**	Is there any poor contact in harness connector?	Repair the poor contact.	Replace the driver's control center differential control module.

F: DTC 14 REAR ABS WHEEL SPEED SENSOR LH SIGNAL

DIAGNOSIS:
Rear ABS wheel speed sensor LH signal circuit is open or shorted.
TROUBLE SYMPTOM:
Tight corner braking condition occurs.
WIRING DIAGRAM:



Step	Check	Yes	No
1 **CHECK ABSCM&H/U.**	Is the DTC of rear ABS wheel speed sensor LH displayed on ABS self diagnosis test mode?	Check with referring to DTC section of ABS. <Ref. to ABS-23, LIST, List of Diagnostic Trouble Code (DTC).>	Go to step **2.**

	Step	Check	Yes	No
2	**CHECK HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of driver's control center differential control module and ABSCM&H/U. 3)Measure the resistance of harness between driver's control center differential control module and ABSCM&H/U harness connector. ***Connector & terminal*** ***(B289) No. 26 — (B301) No. 19:***	Is the resistance less than 1 Ω?	Go to step **3.**	Repair the open harness between driver's control center differential control module and ABSCM&H/U.
3	**CHECK HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** Measure the resistance of harness between harness connector of driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 26 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **4.**	Repair the short of harness between driver's control center differential control module and ABSCM&H/U.
4	**CHECK BATTERY SHORT OF HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** 1)Connect all the harness connectors. 2)Turn the ignition switch to ON. 3)Measure the voltage of harness between harness connector of driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 26 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **5.**	Repair the short of harness between driver's control center differential control module and ABSCM&H/U.
5	**CHECK ABS WHEEL SPEED SENSOR SIGNAL.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of driver's control center differential control module. 3)Lift-up the vehicle and place safety stands. NOTE: Raise all wheels off floor. 4)Connect the oscilloscope to terminal of driver's control center differential control module connector. ***Connector & terminal*** ***Positive probe; (B289) No. 26:*** ***Ground lead; (B289) No. 36:*** 5)Start the engine, and drive the wheels slowly. NOTE: The speed difference between front and rear wheels may light the ABS warning light, but this indicates no malfunction. When AT control diagnosis is finished, perform the ABS memory clearance procedure of on-board diagnostics system. <Ref. to ABS-21, Clear Memory Mode.> 6)Measure the signal voltage indicated on oscilloscope.	Is the voltage less than 1 V ←→ more than 8 V?	Go to step **6.**	Check the ABSCM&H/U.

	Step	Check	Yes	No
6	**CHECK POOR CONTACT IN HARNESS CONNECTORS.**	Is there any poor contact in harness connector?	Repair the poor contact.	Replace the driver's control center differential control module.

G: DTC 21 ACCELERATOR POSITION SENSOR

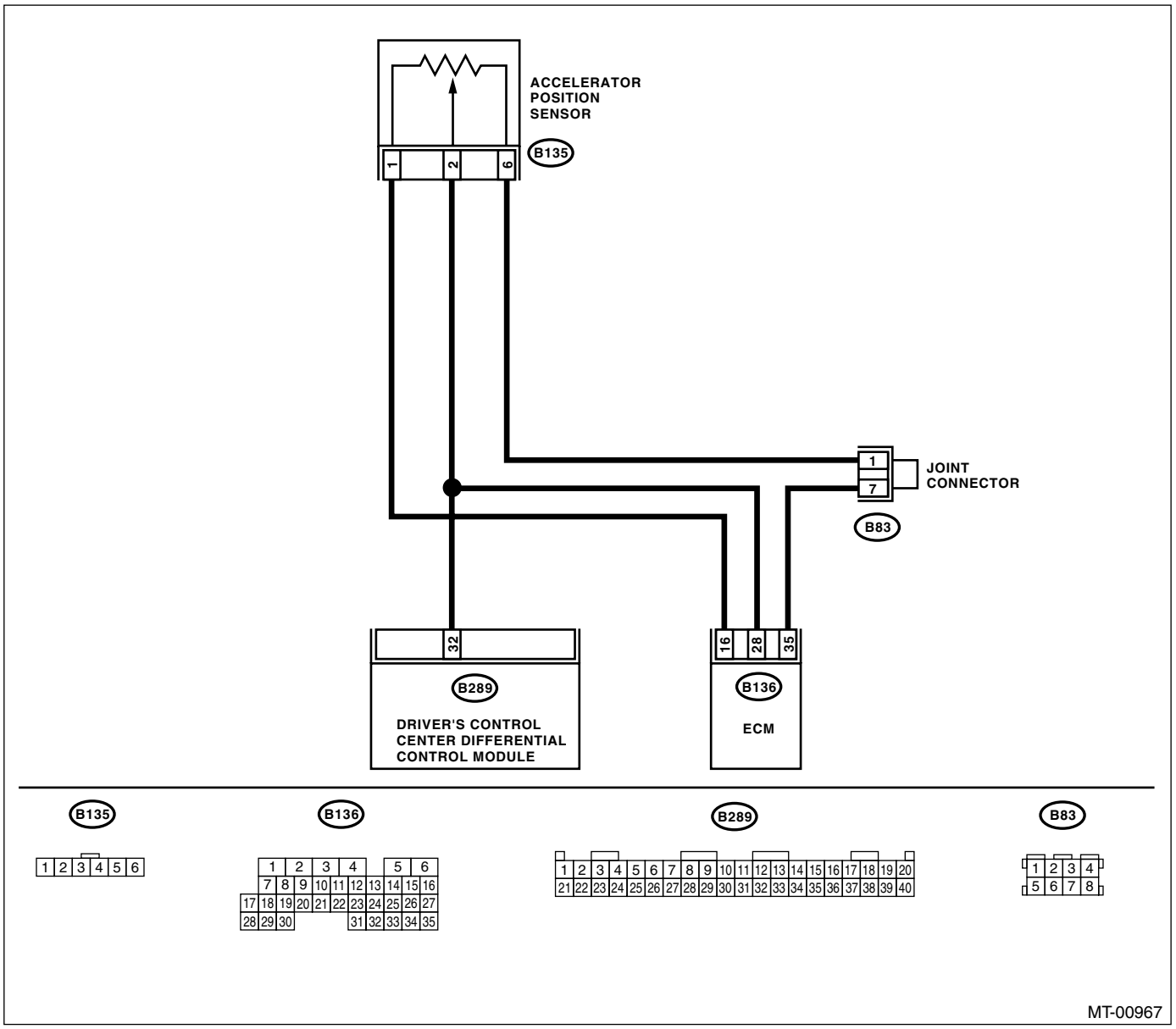
DIAGNOSIS:

The accelerator position sensor input signal circuit is open or shorted.

TROUBLE SYMPTOM:

- Tight corner braking condition occurs.
- Handling tends to oversteer.

WIRING DIAGRAM:



Step	Check	Yes	No
1 **CHECK DTC.**	Is the DTC displayed on engine self diagnosis test mode?	Check with referring to DTC section of engine. <Ref. to EN(H4DOTC)-71, LIST, List of Diagnostic Trouble Code (DTC).>	Go to step **2.**

	Step	Check	Yes	No
2	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ACCELERATOR POSITION SENSOR.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of driver's control center differential control module and accelerator position sensor. 3)Measure the resistance of harness between driver's control center differential control module harness connector and accelerator position sensor. ***Connector & terminal*** ***(B289) No. 32 — (B135) No. 2:***	Is the resistance less than 1 Ω?	Go to step **3.**	Repair the open circuit of harness between driver's control center differential control module and accelerator position sensor.
3	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ECM.** 1)Disconnect the harness connector of ECM. 2)Measure the resistance of harness between driver's control center differential control module harness connector and ECM harness connector. ***Connector & terminal*** ***(B289) No. 32 — (B136) No. 28:***	Is the resistance less than 1 Ω?	Go to step **4.**	Repair the open circuit of harness between driver's control center differential control module and ECM.
4	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ACCELERATOR POSITION SENSOR.** Measure the resistance of harness between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 32 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **5.**	Repair the short circuit of harness between driver's control center differential control module and accelerator position sensor and ECM.
5	**CHECK INPUT SIGNAL OF DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Connect the connectors to driver's control center differential control module and accelerator position sensor. 2)Turn the ignition switch to ON (engine OFF). 3)Release the accelerator pedal. 4)Measure the voltage between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 32 (+) — Chassis ground (–):***	Is the voltage 0.3 — 1.8 V?	Go to step **6.**	Go to step **7.**
6	**CHECK INPUT SIGNAL OF DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Fully depress the accelerator pedal. 2)Measure the voltage between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 32 (+) — Chassis ground (–):***	Is the voltage 2.8 — 4.7 V?	Go to step **8.**	Go to step **7.**
7	**CHECK THE POOR CONTACT.**	Is there any poor contact in accelerator position sensor circuit?	Repair the poor contact.	Replace the driver's control center differential control module.

Step		Check	Yes	No
8	CHECK THE POOR CONTACT.	Is there any poor contact in accelerator position sensor circuit?	Repair the poor contact.	Check the ECM.

H: DTC 22 LATERAL G SENSOR

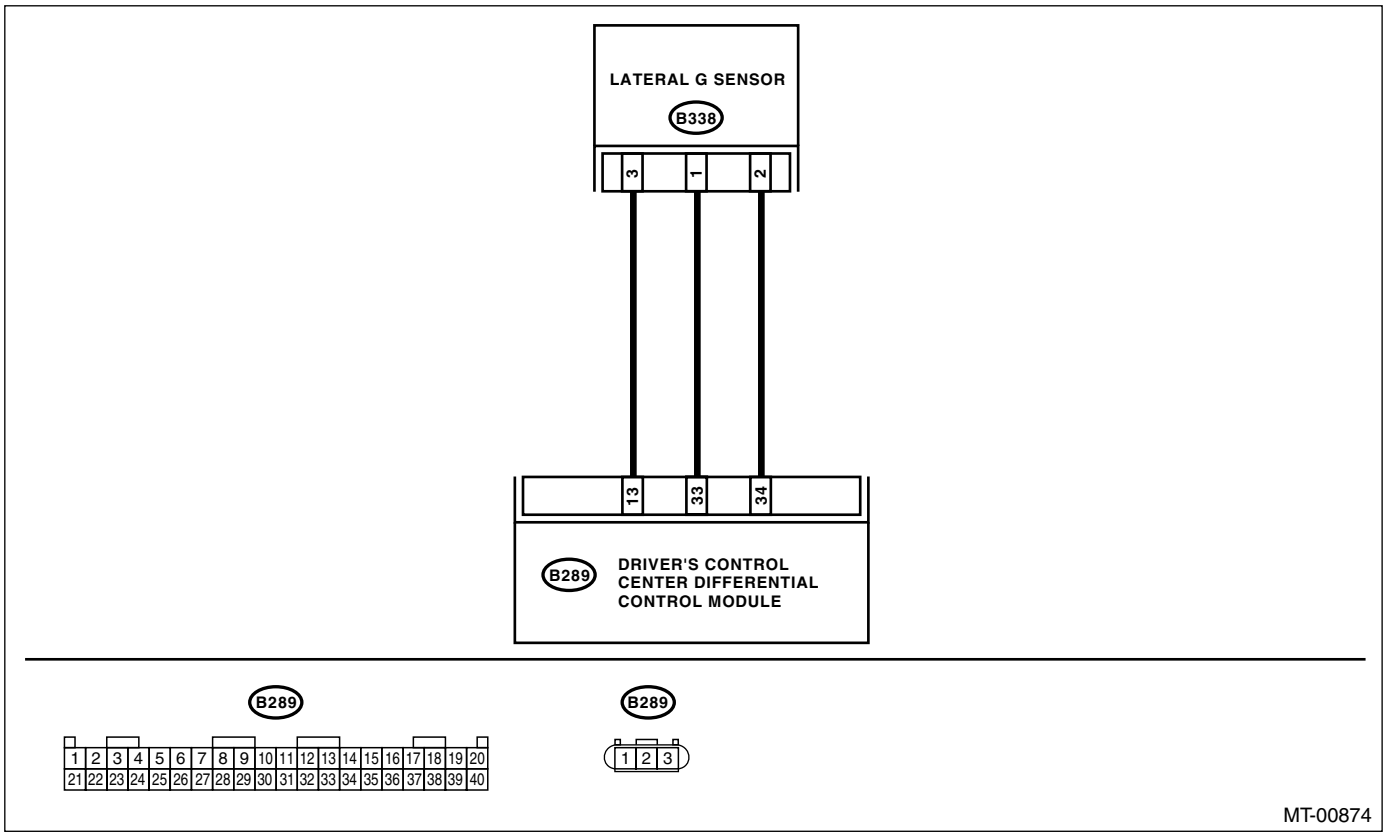
DIAGNOSIS:

The lateral G sensor input signal circuit is open or shorted.

TROUBLE SYMPTOM:

Handling tends to understeer at high speed cornering.

WIRING DIAGRAM:



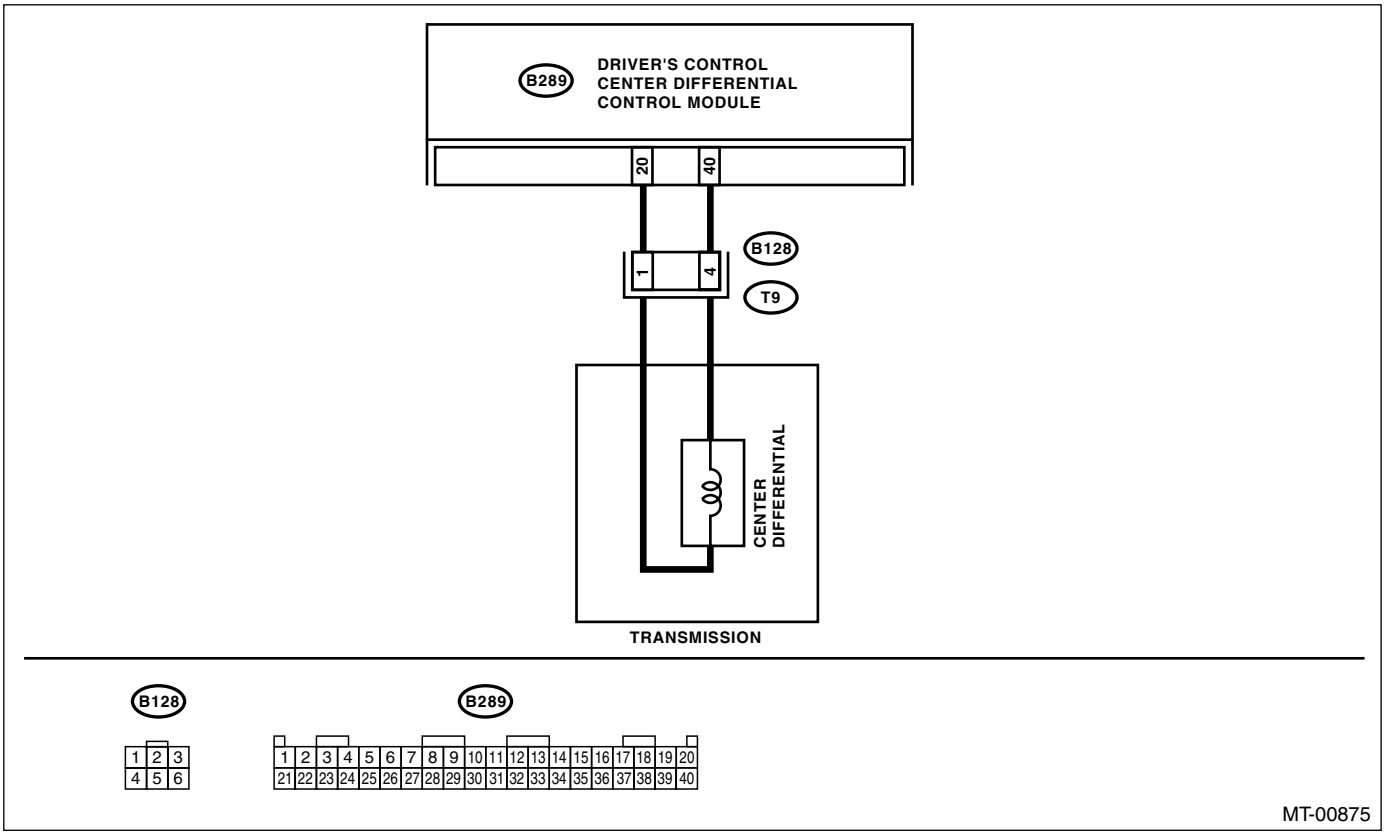
Step		Check	Yes	No
1	**CHECK HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE CONNECTOR AND LATERAL G SENSOR CONNECTOR.** 1)Turn the ignition switch to OFF. 2)Disconnect the connector from driver's control center differential control module and lateral G sensor. 3)Measure the resistance of harness between driver's control center differential control module connector and lateral G sensor connector. ***Connector & terminal*** ***(B289) No. 33 — (B338) No. 1:*** ***(B289) No. 34 — (B338) No. 2:*** ***(B289) No. 13 — (B338) No. 3:***	Is the resistance less than 1 Ω?	Go to step **2.**	Repair the open harness between driver's control center differential control module connector and lateral G sensor connector.

	Step	Check	Yes	No
2	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE CONNECTOR AND LATERAL G SENSOR CONNECTOR.** Measure the resistance between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 33 — Chassis ground:*** ***(B289) No. 34 — Chassis ground:*** ***(B289) No. 13 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **3.**	Repair the short of harness between driver's control center differential control module connector and lateral G sensor connector.
3	**CHECK THE LATERAL G SENSOR.** 1)Remove the lateral G sensor from body. 2)Connect the connector to lateral G sensor. 3)Connect the connector to driver's control center differential control module. 4)Turn the ignition switch to ON. 5)Measure the voltage between lateral G sensor terminals when the lateral G sensor is horizontal. ***Connector & terminal*** ***(B338) No. 1 (+) — No. 2 (–):***	Is the voltage 2.3 — 2.7 V?	Go to step **4.**	Replace the lateral G sensor.
4	**CHECK THE G SENSOR.** Measure the voltage between lateral G sensor terminals when the lateral G sensor connector is tilted 90° to right. ***Connector & terminal*** ***(B338) No. 1 (+) — No. 2 (–):***	Is the voltage 3.5 — 4.1 V?	Go to step **5.**	Replace the lateral G sensor.
5	**CHECK THE G SENSOR.** Measure the voltage between lateral G sensor terminals when lateral G sensor connector is tilted 90° to left. ***Connector & terminal*** ***(B338) No. 1 (+) — No. 2 (–):***	Is the voltage 0.8 — 1.5 V?	Go to step **6.**	Replace the lateral G sensor.
6	**CHECK THE POOR CONTACT OF CONNECTOR.**	Is there any poor contact in connector between driver's control center differential control module and lateral G sensor.	Repair the poor contact.	Replace the driver's control center differential control module.

I: DTC 23 CHECK CENTER DIFFERENTIAL.

DIAGNOSIS:
Output signal circuit of center differential is open or shorted.
TROUBLE SYMPTOM:
- Center differential does not operate.
- Lock ratio of center differential does not operate, or malfunction occurs.
- Tight corner braking condition occurs.
- Handling tends to oversteer.

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND TRANSMISSION HARNESS.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of driver's control center differential control module. 3)Disconnect the transmission harness connector and bulk harness connector. 4)Measure the resistance of harness between driver's control center differential control module harness connector and transmission harness connector. ***Connector & terminal*** ***(B289) No. 20 — (B128) No. 1:*** ***(B289) No. 40 — (B128) No. 4:***	Is the resistance less than 1 Ω?	Go to step **2.**	Repair the open circuit of bulk harness between driver's control center differential control module and transmission harness.

	Step	Check	Yes	No
2	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND TRANSMISSION HARNESS.** Measure the resistance between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 20 — Chassis ground:*** ***(B289) No. 40 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **3.**	Repair the short circuit of bulk harness between driver's control center differential control module and transmission harness.
3	**CHECK THE CENTER DIFFERENTIAL.** Measure the resistance between transmission harness connector terminals. ***Connector & terminal*** ***(T9) No. 1 — No. 4:***	Is the resistance 1.0 — 2.0 Ω?	Go to step **4.**	Replace the center differential.
4	**CHECK THE OUTPUT SIGNAL OF DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Connect all the harness connectors. 2)Turn the ignition switch to ON. (engine OFF) 3)Release the parking brake. 4)Set the center differential control dial to differential lock. 5)Measure the voltage between driver's control center differential control module and harness connector. ***Connector & terminal*** ***(B289) No. 20 (+) — (B289) No. 40 (–):***	Is the voltage 6.0 — 7.0 V?	Go to step **5.**	Check the power supply circuit. <Ref. to 6MT-18, DTC CANNOT BE CALLED UP, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>
5	**CHECK THE OUTPUT SIGNAL OF DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Turn the center differential control dial from differential lock to differential free position. 2)Measure the voltage between driver's control center differential control module and harness connector. ***Connector & terminal*** ***(B289) No. 20 (+) — (B289) No. 40 (–):***	Does the voltage change smoothly?	Circuit is already returned to normal condition this time though the indicator light illuminates. A temporary poor connector or harness may be the case. Repair the poor contact in connector or harness of driver's control center differential control module and transmission harness. Check the poor contact in power supply circuit, too.	Repair the power supply circuit. <Ref. to 6MT-18, DTC CANNOT BE CALLED UP, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

J: DTC 24 CHECK CENTER DIFFERENTIAL CONTROL DIAL.

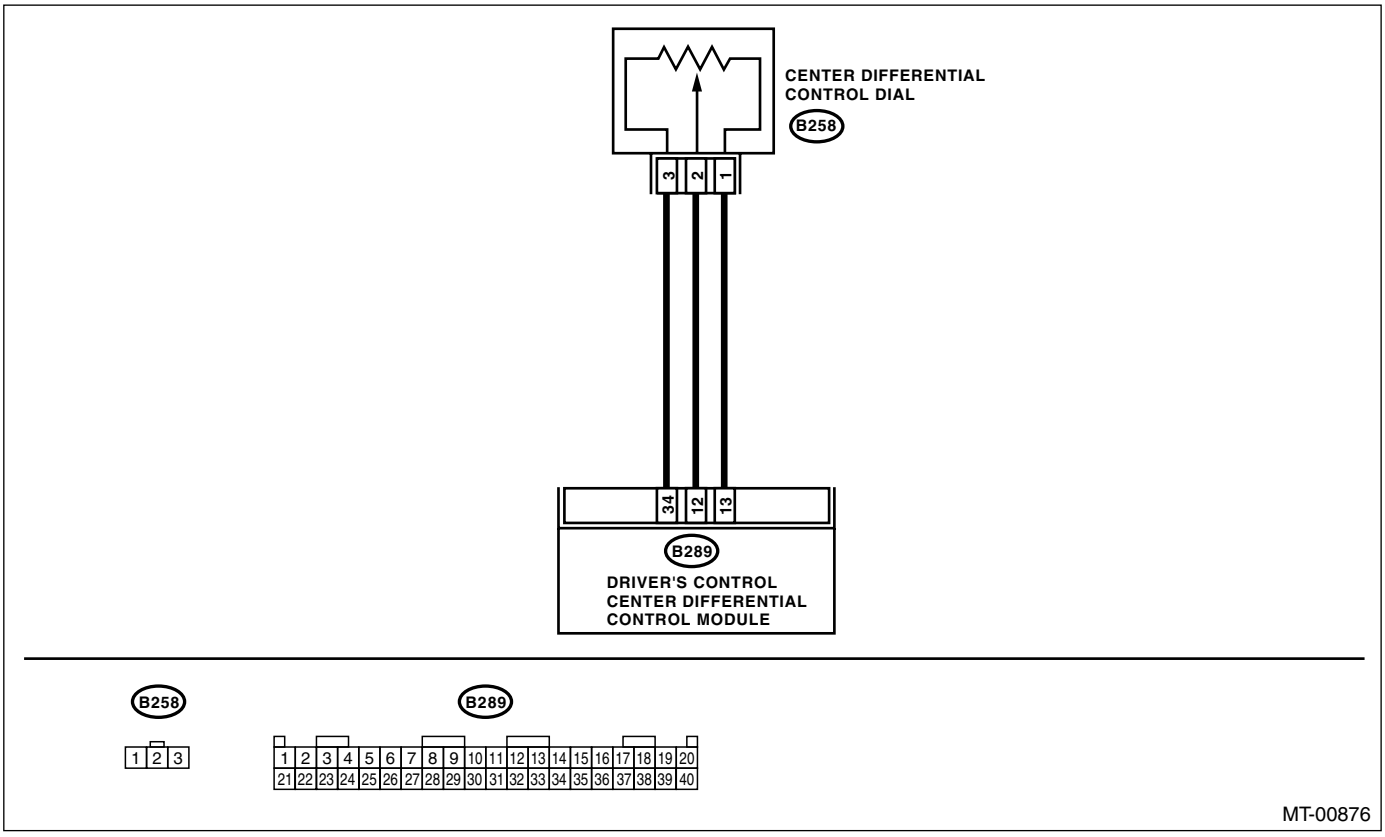
DIAGNOSIS:

Input signal circuit of center differential control dial is open or shorted.

TROUBLE SYMPTOM:

- Indicator light does not operate though setting the center differential control dial.
- Torque characteristics do not change.

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND CENTER DIFFERENTIAL CONTROL DIAL.** 1)Turn the ignition switch to OFF. 2)Disconnect the connector of driver's control center differential control module and center differential control dial. 3)Measure the resistance of harness between driver's control center differential control module and center differential control dial harness connector. ***Connector & terminal*** ***(B258) No. 1 — (B289) No. 13:*** ***(B258) No. 2 — (B289) No. 12:*** ***(B258) No. 3 — (B289) No. 34:***	Is the resistance less than 1 Ω?	Go to step **2.**	Repair the open circuit between driver's control center differential control module and center differential control dial.

	Step	Check	Yes	No
2	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND CENTER DIFFERENTIAL CONTROL DIAL.** Measure the resistance between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 13 — Chassis ground:*** ***(B289) No. 12 — Chassis ground:*** ***(B289) No. 34 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **3.**	Repair the short circuit between driver's control center differential control module and center differential control dial.
3	**CHECK THE CENTER DIFFERENTIAL CONTROL DIAL.** 1)Remove the center differential control dial. 2)Measure the resistance between center differential control dial connectors. ***Terminals*** ***No. 1 — No. 3:***	Is the resistance 7.5 — 12.5 kΩ?	Go to step **4.**	Replace the driver's control dial.
4	**CHECK THE CENTER DIFFERENTIAL CONTROL DIAL.** Measure the resistance between center differential control dial connectors. ***Terminals*** ***No. 1 — No. 2:***	Dose the resistance change smoothly when setting the dial from differential lock to differential free?	Go to step **5.**	Replace the center differential control dial.
5	**CHECK THE OUTPUT POWER SUPPLY OF DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Connect all the harness connectors. 2)Turn the ignition switch to ON. (engine OFF) 3)Set the manual mode switch to manual mode. 4)Measure the voltage between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 13 (+) — (B289) No. 34 (–):***	Is the voltage approx. 5 V?	Go to step **6.**	Replace the driver's control center differential control module.
6	**CHECK POOR CONTACT IN HARNESS CONNECTORS.**	Is there any poor contact in harness connector of center differential control dial circuit?	Repair the poor contact of harness connector.	Replace the driver's control center differential control module.

K: DTC 31 MANUAL MODE SWITCH

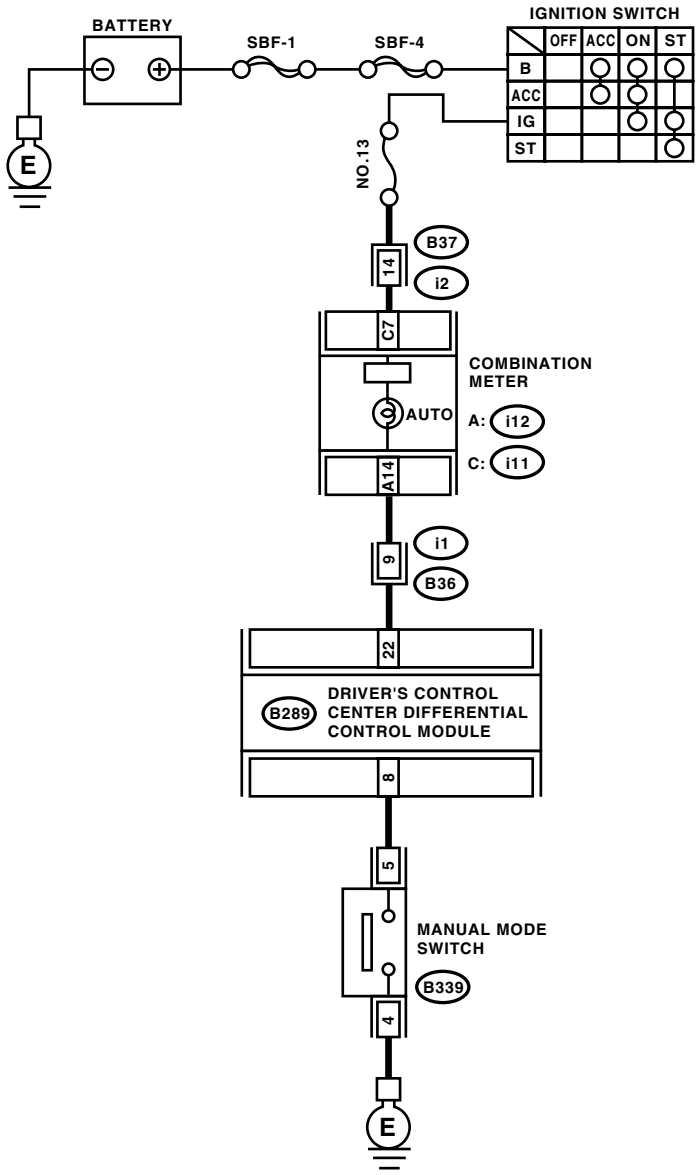
DIAGNOSIS:

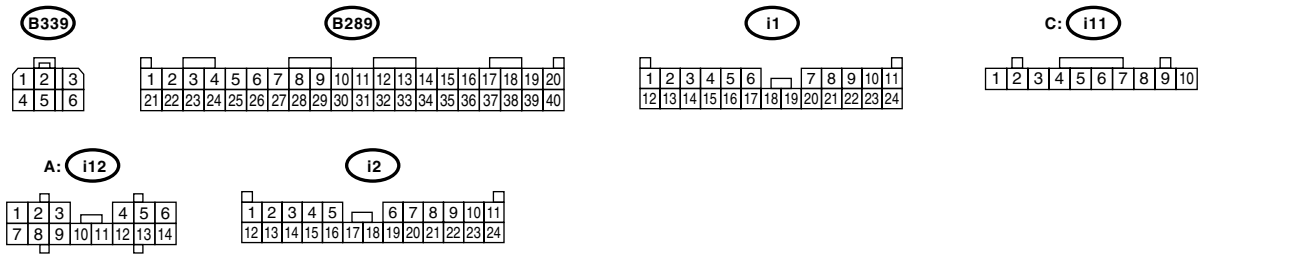
Input signal circuit of manual mode switch circuit is open or shorted.

TROUBLE SYMPTOM:

- Driver's control center differential can not be manual mode. Or can not be auto mode.
- AUTO indicator does not illuminate, or does not go off.

WIRING DIAGRAM:





MT-00968

	Step	Check	Yes	No
1	**CHECK OPERATION OF MANUAL MODE SWITCH.** Set the manual mode switch to auto mode.	Does the AUTO indicator light in combination meter illuminate?	Go to step **8.**	Go to step **2.**
2	**CHECK AUTO INDICATOR LIGHT.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of driver's control center differential control module. 3)Turn the ignition switch to ON. (Engine OFF) 4)Short between the driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 22 — Chassis ground:***	Does the AUTO indicator light in combination meter illuminate?	Go to step **8.**	Go to step **3.**
3	**CHECK POWER SUPPLY OF COMBINATION METER.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of combination meter. 3)Turn the ignition switch to ON. (Engine OFF) 4)Measure the voltage between combination meter harness connector and chassis ground. ***Connector & terminal*** ***(i11) No. 7 (+) — Chassis ground (–):***	Is the voltage more than 10 V?	Go to step **4.**	Check and repair the open and short of harness between battery and combination meter, and poor contact of harness connector.
4	**CHECK THE HARNESS BETWEEN COMBINATION METER AND DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of combination meter. 3)Measure the resistance between combination meter harness connector and driver's control center differential control module harness connector. ***Connector & terminal*** ***(i12) No. 14 — (B289) No. 22:***	Is the resistance less than 1 Ω?	Go to step **5.**	Repair the open circuit of harness between combination meter harness connector and driver's control center differential control module harness connector, and poor contact of harness connector.
5	**CHECK THE HARNESS BETWEEN COMBINATION METER AND DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** Measure the resistance between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 22 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **6.**	Repair the short circuit of harness between combination meter harness connector and driver's control center differential control module harness connector.
6	**CHECK HARNESS CONNECTOR POOR CONTACT.**	Is there any poor contact in the circuit between combination meter and driver's control module?	Repair the poor contact.	Go to step **7.**
7	**CHECK AUTO INDICATOR LIGHT.** 1)Connect the harness connector of combination meter. 2)Short between the driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 22 — Chassis ground:***	Does the AUTO indicator light light up?	Replace the driver's control center differential control module.	Replace the combination meter.

	Step	Check	Yes	No
8	**CHECK GROUND CIRCUIT OF MANUAL MODE SWITCH.** 1)Turn the ignition switch to OFF. 2)Disconnect the manual mode switch connector. 3)Measure the resistance between manual mode switch harness connector and chassis ground. ***Connector & terminal*** ***(B339) No. 4 — Chassis ground:***	Is the resistance more than 1 MΩ?	Repair the open circuit of harness between manual mode switch harness connector and chassis ground.	Go to step **9.**
9	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND MANUAL MODE SWITCH.** 1)Disconnect the driver's control center differential control module harness connector. 2)Measure the resistance of harness between driver's control center differential control module and manual mode switch. ***Connector & terminal*** ***(B289) No. 8 — (B339) No. 5:***	Is the resistance less than 1 Ω?	Go to step **10.**	Repair the open circuit of harness between driver's control center differential control module and manual mode switch.
10	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND MANUAL MODE SWITCH.** Measure the resistance of harness between driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 8 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **11.**	Repair the short circuit of harness between driver's control center differential control module and manual mode switch.
11	**CHECK THE MANUAL MODE SWITCH.** 1)Remove the manual mode switch. 2)Measure the resistance of between manual mode switch connectors. ***Terminals*** ***No. 4 — No. 5:***	Is the resistance more than 1 MΩ?	Go to step **12.**	Replace the manual mode switch.
12	**CHECK THE MANUAL MODE SWITCH.** 1)Keep depressing the manual mode switch. 2)Measure the resistance of between manual mode switch connectors. ***Terminals*** ***No. 4 — No. 5:***	Is the resistance less than 1 Ω?	Go to step **13.**	Replace the manual mode switch.
13	**CHECK THE INPUT SIGNAL OF DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Install the manual mode switch. 2)Connect the harness connector of driver's control center differential control module. 3)Turn the ignition switch to ON. (engine OFF) 4)Measure the voltage between driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 8 (+) — Chassis ground (–):***	Is the voltage more than 4.3 V?	Go to step **14.**	Replace the driver's control center differential control module.

	Step	Check	Yes	No
14	**CHECK THE INPUT SIGNAL OF DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Keep depressing the manual mode switch. 2)Measure the voltage between driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 8 (+) — Chassis ground (–):***	Is the voltage less than 0.1 V?	Go to step **15.**	Replace the driver's control center differential control module.
15	**CHECK POOR CONTACT IN HARNESS CONNECTOR.**	Is there any poor contact in manual mode switch circuit?	Repair the poor contact.	Replace the driver's control center differential control module.

L: DTC 32 CHECK PARKING BRAKE SWITCH

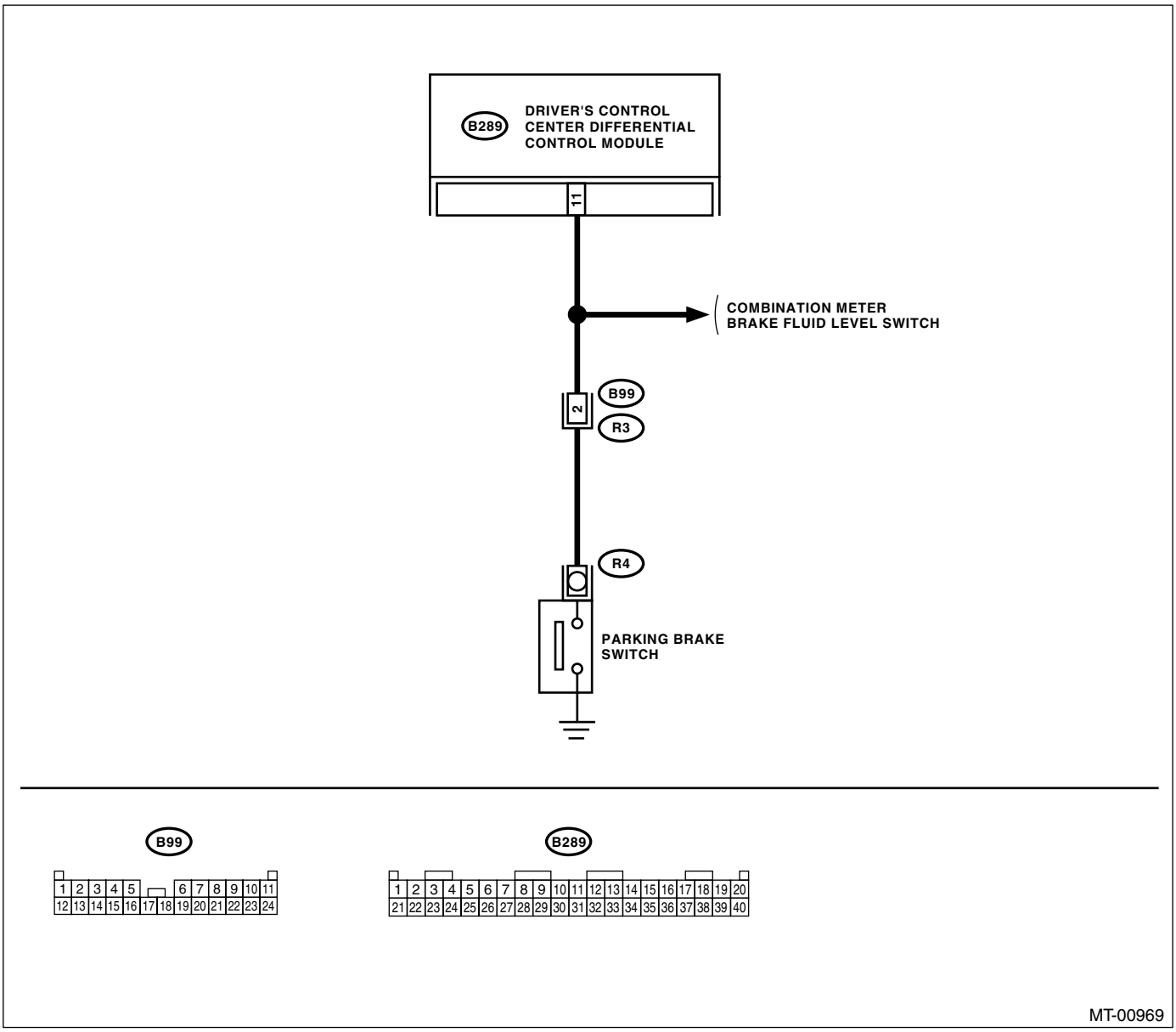
DIAGNOSIS:

Input signal circuit of parking brake switch is open or shorted.

TROUBLE SYMPTOM:

- Differential does not tend to be free though apply the parking brake.
- Differential stays free by releasing the parking brake.

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK THE PARKING BRAKE SWITCH CIRCUIT.** 1)Turn the ignition switch to ON. 2)Start the engine. 3)Apply the parking brake.	Does the parking brake warning light illuminate?	Go to step **2.**	Check the parking pilot & brake fluid warning light circuit.
2	**CHECK THE PARKING BRAKE SWITCH CIRCUIT.** Release the parking brake.	Does the parking brake warning light turn OFF?	Go to step **3.**	Check the brake fluid level and ABS circuit.

	Step	Check	Yes	No
3	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND PARKING BRAKE SWITCH.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of driver's control center differential control module and parking brake switch. 3)Measure the resistance of harness between driver's control center differential control module and parking brake switch. ***Connector & terminal*** ***(B289) No. 11 — (R4) No. 1:***	Is the resistance less than 1 Ω?	Go to step **4.**	Repair the open circuit of harness and poor contact of connector.
4	**CHECK THE HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND PARKING BRAKE SWITCH.** Measure the resistance between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 11 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **5.**	Repair the short circuit of harness.
5	**CHECK THE INPUT SIGNAL OF DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Connect all the harness connectors. 2)Disconnect the harness connector of combination meter. 3)Turn the ignition switch to ON. 4)Release the parking brake. 5)Measure the voltage between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 11 (+) — Chassis ground (–):***	Is the voltage more than 8 V?	Go to step **6.**	Replace the driver's control center differential control module.
6	**CHECK THE INPUT SIGNAL OF DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Apply the parking brake. 2)Measure the voltage between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 11 (+) — Chassis ground (–):***	Is the voltage less than 0.4 V?	Go to step **7.**	Replace the driver's control center differential control module.
7	**CHECK POOR CONTACT IN HARNESS CONNECTOR.**	Is there any poor contact in harness connector of parking brake circuit?	Repair the poor contact of harness connector.	Replace the driver's control center differential control module.

M: DTC 33 STOP LIGHT SWITCH

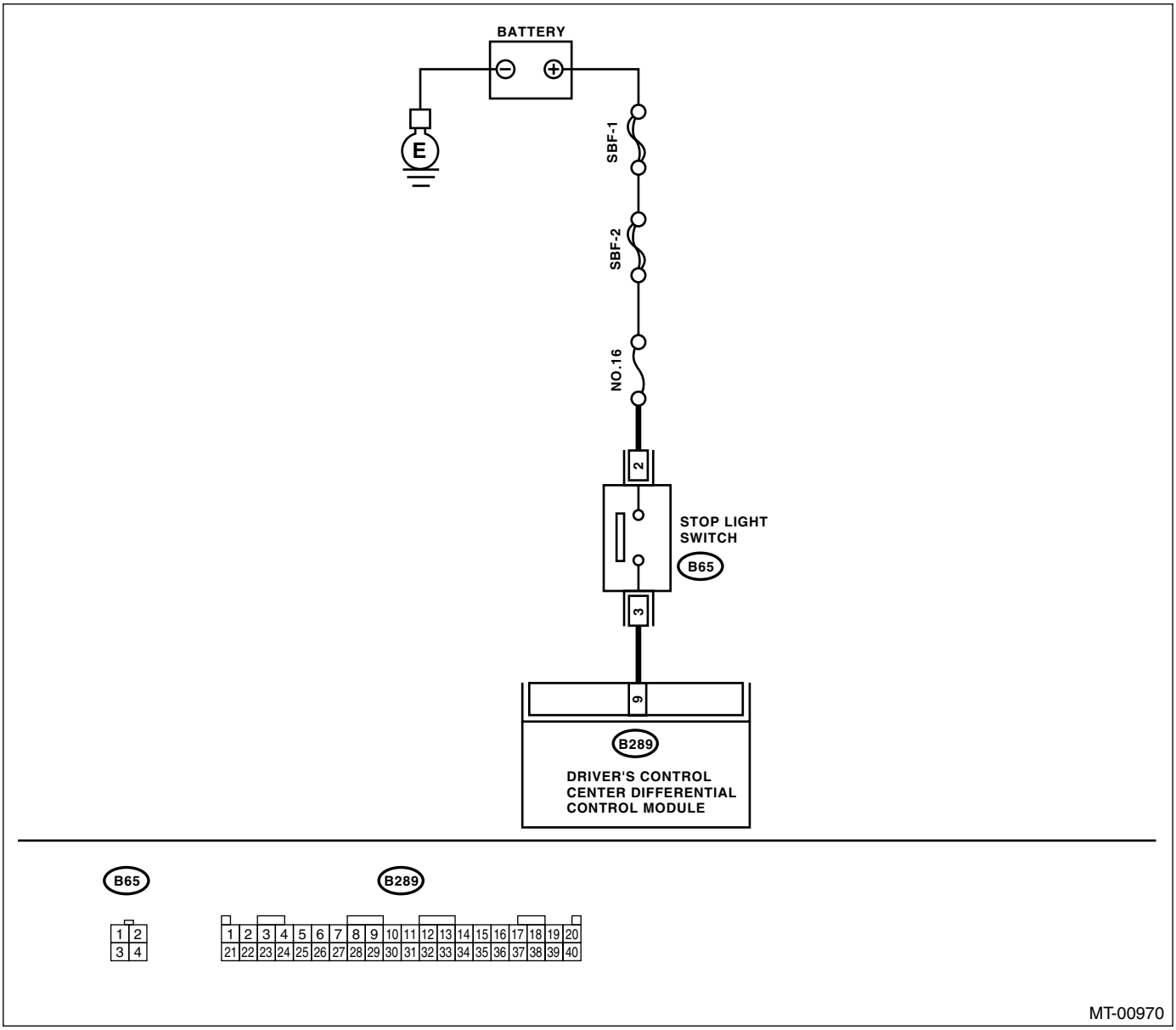
DIAGNOSIS:

Open or short circuit in stop light switch circuit.

TROUBLE SYMPTOM:

Wheels are locked while the ABS operates.

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK DTC.**	Is the stop light switch related DTC displayed during ABS self-diagnosis test mode?	Check according to ABS DTC.	Go to step **2.**

	Step	Check	Yes	No
2	**CHECK INPUT SIGNAL OF STOP LIGHT SWITCH AND DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Turn the ignition switch to OFF. 2)Disconnect the connector of driver's control center differential control module. 3)Set the brake pedal depressed. 4)Measure the voltage between driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 9 (+) — Chassis ground (–):***	Is the voltage more than 8 V?	Go to step **3.**	Repair the open or short circuit of harness between driver's control center differential control module and stop light switch.
3	**CHECK POOR CONTACT.**	Is there any poor contact?	Repair the poor contact.	Replace the driver's control center differential control module.

N: DTC 34 ABS SWITCH SIGNAL

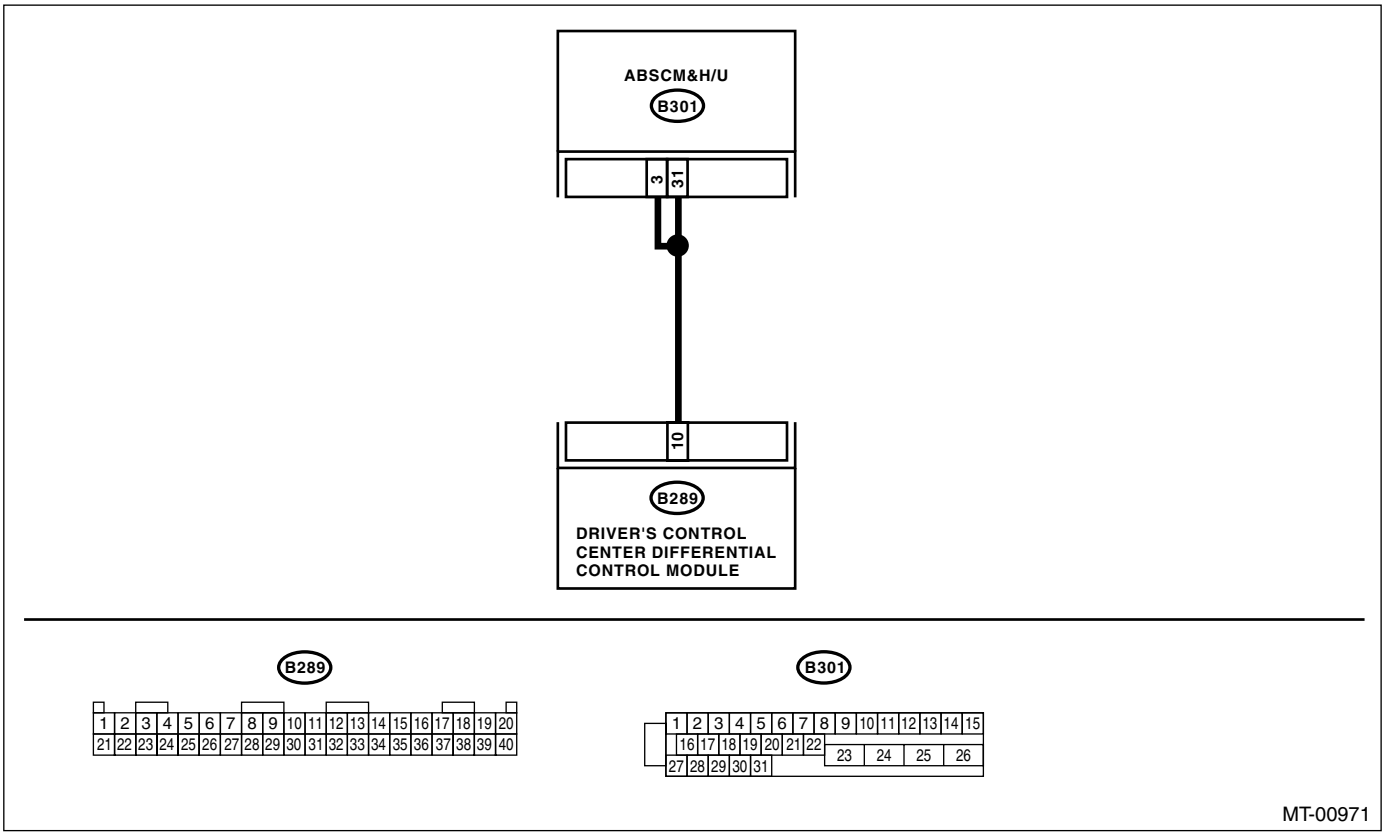
DIAGNOSIS:

Open or short in combination signal circuit of driver's control center differential control.

TROUBLE SYMPTOM:

- ABS warning light illuminates.
- Wheels are locked while the ABS operates.

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.**	Is DTC code displayed during ABS self-diagnosis test mode?	Check according to ABS DTC.	Go to step **2.**
2	**CHECK HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** 1)Turn the ignition switch to OFF. 2)Disconnect the harness connector of driver's control center differential control module and ABSCM&H/U. 3)Measure the resistance of harness between driver's control center differential control module and ABSCM&H/U harness connector. ***Connector & terminal*** ***(B289) No. 10 — (B301) No. 31:*** ***(B289) No. 10 — (B301) No. 3:***	Is the resistance less than 1 Ω?	Go to step **3.**	Repair the open circuit of harness connector between driver's control center differential control module and ABSCM&H/U, and poor contact of harness connector.
3	**CHECK HARNESS BETWEEN DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE AND ABSCM&H/U.** Measure the resistance between driver's control center differential control module and chassis ground. ***Connector & terminal*** ***(B289) No. 10 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **4.**	Repair the short of harness between driver's control center differential control module and ABSCM&H/U.

	Step	Check	Yes	No
4	**CHECK THE DRIVER'S CONTROL CENTER DIFFERENTIAL CONTROL MODULE.** 1)Connect driver's control center differential control module connector. 2)Turn the ignition switch to ON. 3)Measure the voltage between driver's control center differential control module harness connector and chassis ground. ***Connector & terminal*** ***(B289) No. 10 (+) — Chassis ground (–):***	Is the voltage more than 8 V?	Go to step **5.**	Replace the driver's control center differential control module.
5	**CHECK POOR CONTACT IN HARNESS CONNECTOR.**	Is there any poor contact in combination circuit of driver's control center differential control?	Repair the poor contact.	Check the ABSCM&H/U.