15.Diagnostic Procedure for No-diagnostic Trouble Code (DTC)

A: CHECK GEAR POSITION.

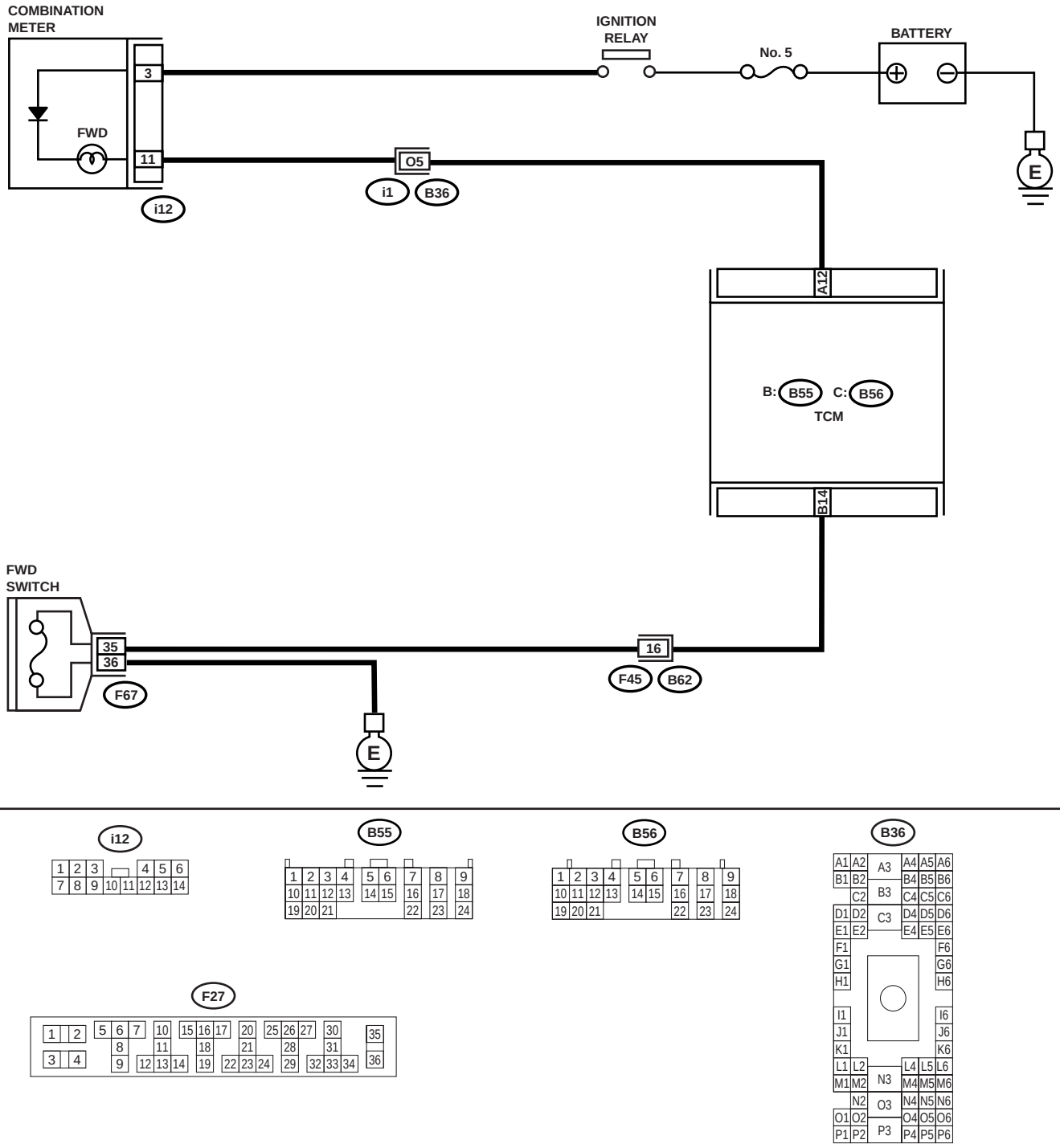
	Step	Value	Yes	No
1	**CHECK GEAR POSITION.** 1) Lift-up the vehicle and place safety stand. NOTE: Raise all wheels off ground. 2) Start the engine. 3) Move select lever to “D”, and drive vehicle. 4) Read data of gear position using Subaru Select Monitor. •Gear position is indicated. NOTE: The speed difference 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-22, Clear Memory Mode.> Does the transmission gear correspond to the gear which is shown on display?	Transmission gear corresponds to the display indication.	Go to step 2.	Check shift solenoid 1 and shift solenoid 2 signal circuit. <Ref. to AT-76, DTC 71 SHIFT SOLENOID 1, Diagnostic Procedure with Diagnostic Trouble Code (DTC).> and <Ref. to AT-80, DTC 72 SHIFT SOLENOID 2, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>
2	**CHECK VEHICLE.** Is the target model without VDC system or without SPORT shift?	VDC system or SPORT shift is equipped.	Go to step CHECK FWD SWITCH. <Ref. to AT-130, CHECK FWD SWITCH., Diagnostic Procedure for No-diagnostic Trouble Code (DTC).>	Go to step CHECK BRAKE SWITCH. <Ref. to AT-133, CHECK BRAKE SWITCH., Diagnostic Procedure for No-diagnostic Trouble Code (DTC).>

B: CHECK FWD SWITCH.

DIAGNOSIS:

- LED does not come on even if FWD switch is ON.
- FWD switch circuit is open or shorted.

WIRING DIAGRAM:



AT-00667

Vehicle-id:
SIE-id::B: Check FWD Switch.
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DIAGNOSTIC PROCEDURE FOR NO-DIAGNOSTIC TROUBLE CODE (DTC)

	Step	Value	Yes	No
1	**CHECK FWD SWITCH.** When fuse is inserted to FWD switch, does LED light up?	LED lights up.	Go to step CHECK BRAKE SWITCH.<Ref. to AT-133, CHECK BRAKE SWITCH., Diagnostic Procedure for No-diagnostic Trouble Code (DTC).>	Go to step **2.**
2	**CHECK FWD INDICATOR LIGHT.** 1) Turn ignition switch to OFF. 2) Remove combination meter. 3) Remove FWD indicator light bulb from combination meter. Is FWD indicator light bulb OK?	Bulb is OK.	Go to step **3.**	Replace FWD indicator light bulb. <Ref. to IDI-12, Combination Meter Assembly.>
3	**CHECK HARNESS CONNECTOR BETWEEN TCM AND FWD SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connector from TCM and FWD switch. 3) Measure resistance of harness between TCM and FWD switch connector. ***Connector & terminal*** ***(B55) No. 14 — (F27) No. 35:*** Is the measured value less than the specified value?	1 Ω	Go to step **4.**	Repair open circuit in harness between TCM and FWD switch connector.
4	**CHECK HARNESS CONNECTOR BETWEEN TCM AND FWD SWITCH.** Measure resistance of harness connector between TCM and body to make sure that circuit does not short. ***Connector & terminal*** ***(B55) No. 14 — Chassis ground:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **5.**	Repair short circuit in harness between TCM and FWD switch connector.
5	**CHECK HARNESS CONNECTOR BETWEEN FWD SWITCH AND CHASSIS GROUND.** Measure resistance of harness between FWD switch and chassis ground. ***Connector & terminal*** ***(F27) No. 36 — Chassis ground:*** Is the measured value less than the specified value?	1 Ω	Go to step **6.**	Repair open circuit in harness between FWD switch connector and chassis ground.
6	**CHECK INPUT SIGNAL FOR TCM.** 1) Turn ignition switch to OFF. 2) Connect connector to TCM and FWD switch. 3) Turn ignition switch to ON. 4) Measure signal voltage for TCM while installing the fuse to FWD switch connector. ***Connector & terminal*** ***(B55) No. 20 (+) — Chassis ground (–):*** Is the measured value less than the specified value?	1 V	Go to step **7.**	Go to step **11.**

DIAGNOSTIC PROCEDURE FOR NO-DIAGNOSTIC TROUBLE CODE (DTC)

	Step	Value	Yes	No
7	**CHECK INPUT SIGNAL FOR TCM.** Measure signal voltage for TCM while removing the fuse from FWD switch connector. ***Connector & terminal*** ***(B55) No. 20 (+) — Chassis ground (–):*** Does the measured value exceed the specified value?	9 V	Go to step **8.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
8	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Turn ignition switch to OFF. 2) Disconnect connector from TCM and combination meter. 3) Measure resistance of harness between TCM and diagnosis connector. ***Connector & terminal*** ***(B56) No. 2 — (i12) No. 11:*** Is the measured value less than the specified value?	1 Ω	Go to step **9.**	Repair open circuit in harness between TCM and combination meter and poor contact in coupling connector.
9	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** Measure resistance of harness connector between TCM and chassis ground to make sure that circuit does not short. ***Connector & terminal*** ***(B54) No. 12 — Chassis ground:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **10.**	Repair short circuit in harness between TCM and combination meter connector.
10	**CHECK OUTPUT SIGNAL EMITTED FROM TCM.** 1) Turn ignition switch to OFF. 2) Connect connector to TCM and combination meter. 3) Turn ignition switch to ON. 4) Measure signal voltage for TCM while installing and removing the fuse to FWD switch connector. ***Connector & terminal*** ***(B56) No. 2 — Chassis ground:*** Is the measured value less than the specified value?	1 V	Go to step **11.**	Go to step **12.**
11	**CHECK OUTPUT SIGNAL EMITTED FROM TCM.** Measure signal voltage for TCM while removing the fuse from FWD switch connector. ***Connector & terminal*** ***(B56) No. 2 — Chassis ground:*** Does the measured value exceed the specified value?	9 V	Go to step **12.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
12	**CHECK POOR CONTACT.** Is there poor contact in FWD switch circuit?	There is poor contact.	Repair poor contact.	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>

C: CHECK BRAKE SWITCH.

Step		Value	Yes	No
1	**CHECK BRAKE SWITCH.** When the brake pedal is depressed, does LED light up?	LED lights up.	Go to step CHECK ABS SWITCH. <Ref. to AT-134, CHECK ABS SWITCH., Diagnostic Procedure for No-diagnostic Trouble Code (DTC).>	Check brake switch circuit. <Ref. to WI-58, A/T Control System.>

D: CHECK ABS SWITCH.

Step		Value	Yes	No
1	**CHECK ABS SWITCH.** Does the LED of ABS switch light up?	LED lights up.	Check ABS switch circuit. <Ref. to ABS-64, DTC 44 A COMBINATION OF AT CONTROL ABNORMAL, Diagnostics Chart with Diagnosis Connector.>	Go to step CHECK CRUISE CONTROL SWITCH. <Ref. to AT-135, CHECK CRUISE CONTROL SWITCH., Diagnostic Procedure for No-diagnostic Trouble Code (DTC).>

Vehicle-id:
SIE-id::D: Check ABS Switch.
~

E: CHECK CRUISE CONTROL SWITCH.

Step		Value	Yes	No
1	**CHECK CRUISE CONTROL SWITCH.** When cruise control is set, does LED light up?	LED lights up.	Go to step CHECK INHIBITOR SWITCH. <Ref. to AT-136, CHECK INHIBITOR SWITCH., Diagnostic Procedure for No-diagnostic Trouble Code (DTC).>	Check cruise control. <Ref. to CC-2, Basic Diagnostic Procedure.>

Vehicle-id:
SIE-id::E: Check Cruise Control Switch.
~

F: CHECK INHIBITOR SWITCH.

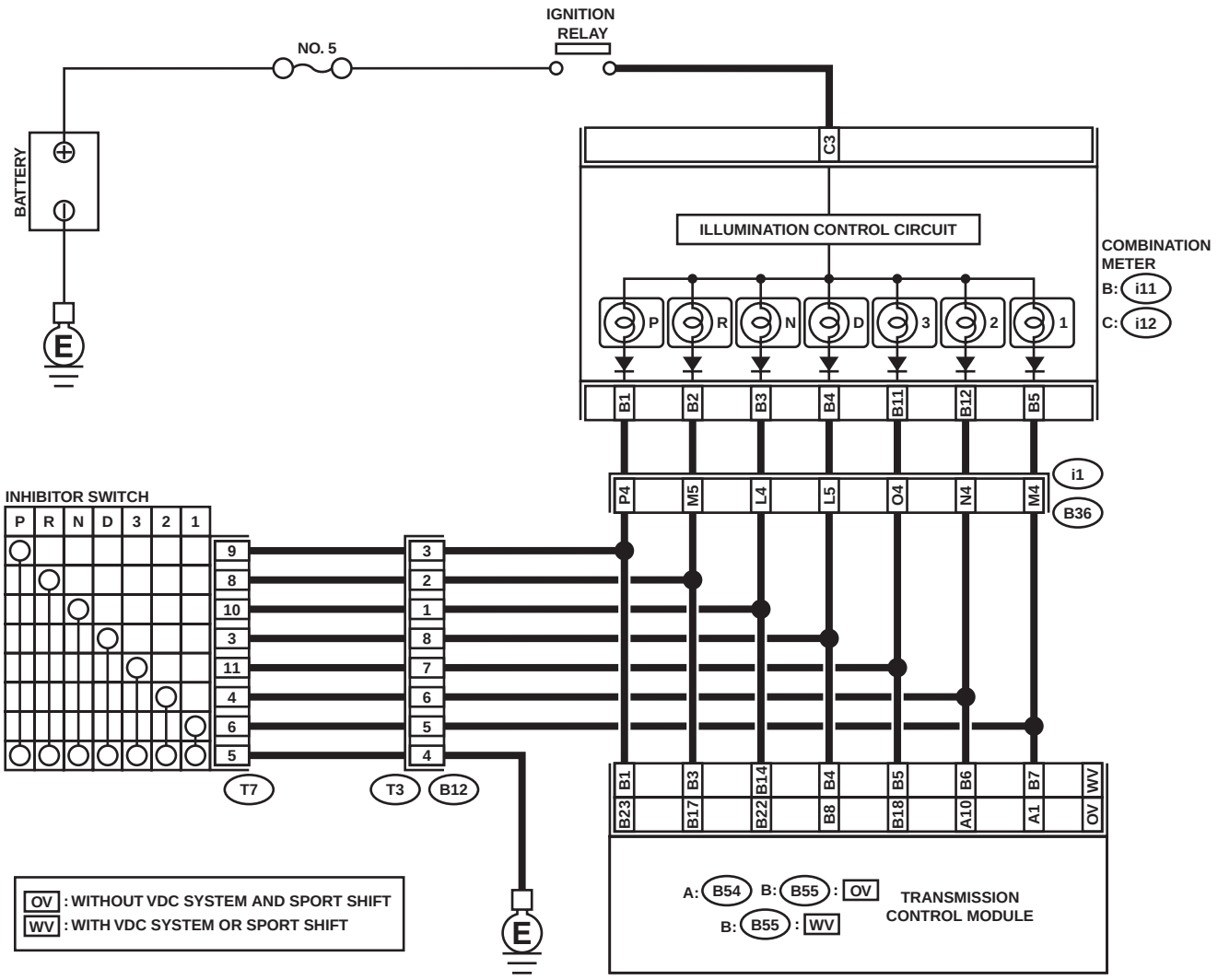
DIAGNOSIS:

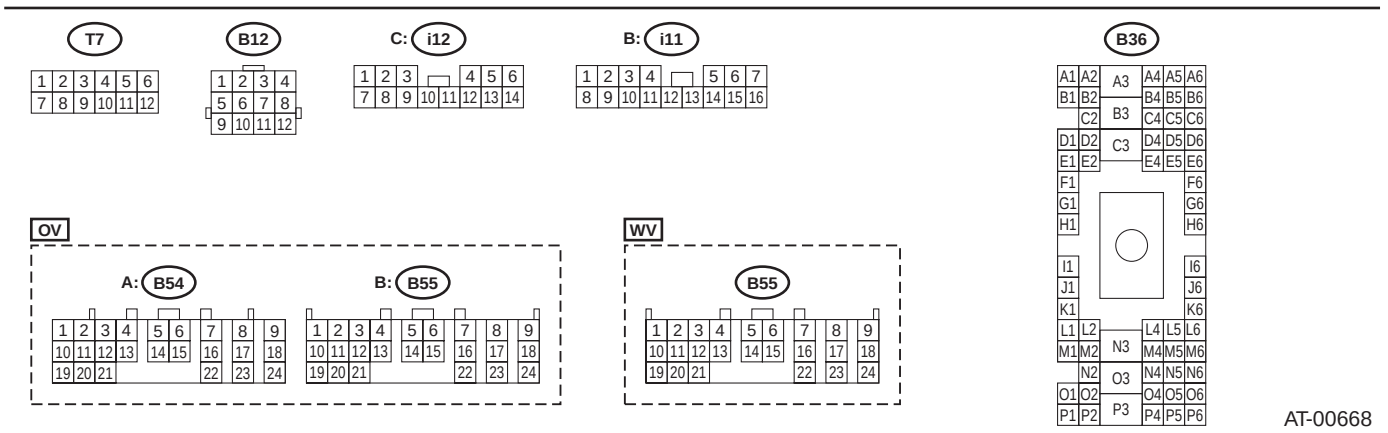
Input signal circuit of inhibitor switch is open or shorted.

TROUBLE SYMPTOM:

- Shift characteristics are erroneous.
- Engine brake is not effected when selector lever is in “3” range.
- Engine brake is not effected when selector lever is in “2” range.
- Engine brake is not effected when selector lever is in “1” range.

WIRING DIAGRAM:





AT-00668

Vehicle-id:
SIE-id::F:Check Inhibitor Switch.
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DIAGNOSTIC PROCEDURE FOR NO-DIAGNOSTIC TROUBLE CODE (DTC)

	Step	Value	Yes	No
1	**CHECK “P” RANGE SWITCH.** When “P” range is selected, does LED light up?	LED lights up.	Go to step **2.**	Go to step **22.**
2	**CHECK INDICATOR LIGHT.** Does combination meter “P” range indicator illuminate?	Indicator lights up.	Go to step **3.**	Go to step **26.**
3	**CHECK “P” RANGE SWITCH.** When the “R” range is selected, does “P” range LED light up?	LED lights up.	Go to step **28.**	Go to step **4.**
4	**CHECK “R” RANGE SWITCH.** When the “R” range is selected, does LED light up?	LED lights up.	Go to step **5.**	Go to step **29.**
5	**CHECK INDICATOR LIGHT.** Does combination meter “R” range indicator illuminate?	Indicator lights up.	Go to step **6.**	Go to step **32.**
6	**CHECK “R” RANGE SWITCH.** When the “N” range is selected, does “R” range LED light up?	LED lights up.	Go to step **34.**	Go to step **7.**
7	**CHECK “N” RANGE SWITCH.** When the “N” range is selected, does LED light up?	LED lights up.	Go to step **8.**	Go to step **35.**
8	**CHECK INDICATOR LIGHT.** Does combination meter “N” range indicator illuminate?	Indicator lights up.	Go to step **9.**	Go to step **38.**
9	**CHECK “N” RANGE SWITCH.** When the “D” range is selected, does “N” range LED light up?	LED lights up.	Go to step **40.**	Go to step **10.**
10	**CHECK “D” RANGE SWITCH.** When the “D” range is selected, does LED light up?	LED lights up.	Go to step **11.**	Go to step **41.**
11	**CHECK INDICATOR LIGHT.** Does combination meter “D” range indicator illuminate?	Indicator lights up.	Go to step **12.**	Go to step **44.**
12	**CHECK “D” RANGE SWITCH.** When the “3” range is selected, does “D” range LED light up?	LED lights up.	Go to step **46.**	Go to step **13.**
13	**CHECK “3” RANGE SWITCH.** When the “3” range is selected, does LED light up?	LED lights up.	Go to step **14.**	Go to step **47.**
14	**CHECK INDICATOR LIGHT.** Does combination meter “3” range indicator illuminate?	Indicator lights up.	Go to step **15.**	Go to step **50.**
15	**CHECK “3” RANGE SWITCH.** When the “2” range is selected, does “3” range LED light up?	LED lights up.	Go to step **52.**	Go to step **16.**
16	**CHECK “2” RANGE SWITCH.** When the “2” range is selected, does LED light up?	LED lights up.	Go to step **17.**	Go to step **53.**
17	**CHECK INDICATOR LIGHT.** Does combination meter “2” range indicator illuminate?	Indicator lights up.	Go to step **18.**	Go to step **56.**
18	**CHECK “2” RANGE SWITCH.** When the “1” range is selected, does “2” range LED light up?	LED lights up.	Go to step **58.**	Go to step **19.**
19	**CHECK “1” RANGE SWITCH.** When the “1” range is selected, does LED light up?	LED lights up.	Go to step **20.**	Go to step **59.**

DIAGNOSTIC PROCEDURE FOR NO-DIAGNOSTIC TROUBLE CODE (DTC)

	Step	Value	Yes	No
20	**CHECK INDICATOR LIGHT.** Does combination meter “1” range indicator illuminate?	Indicator lights up.	Go to step **21.**	Go to step **62.**
21	**CHECK “1” RANGE SWITCH.** When the “2” range is selected, does “1” range LED light UP?	LED lights up.	Go to step **64.**	Go to step CHECK SPORT SHIFT SWITCH. <Ref. to AT-150, CHECK SPORT SHIFT SWITCH., Diagnostic Procedure for No-diagnostic Trouble Code (DTC).>
22	**CHECK HARNESS CONNECTOR BETWEEN INHIBITOR SWITCH AND CHASSIS GROUND.** 1) Turn ignition switch to OFF. 2) Disconnect connector from inhibitor switch. 3) Measure resistance of harness between inhibitor switch and chassis ground. ***Connector & terminal*** ***(T7) No. 5 — Chassis ground:*** Is the measured value less than the specified value?	1 Ω	Go to step **23.**	Repair open circuit in harness between inhibitor switch connector and chassis ground, and poor contact in coupling connector.
23	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connectors from TCM and inhibitor switch. 3) Measure resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 1 — (T7) No. 9*** ***Without VDC system and SPORT shift:*** ***(B55) No. 23 — (T7) No. 9 :*** Is the measured value less than the specified value?	1 Ω	Go to step **24.**	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
24	**CHECK INPUT SIGNAL FOR TCM.** 1) Turn ignition switch to OFF. 2) Connect connector to TCM and inhibitor switch. 3) Turn ignition switch to ON. 4) Move select lever to “P” range. 5) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 1 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B55) No. 23 (+) — Chassis ground (–):*** Is the measured value less than the specified value?	1 V	Go to step **25.**	Go to step **65.**

	Step	Value	Yes	No
25	**CHECK INPUT SIGNAL FOR TCM.** 1) Move select lever to any range other than “P”. 2) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 1 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B55) No. 23 (+) — Chassis ground (–):*** Does the measured value exceed the specified value?	8 V	Go to step **65.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
26	**CHECK “P” RANGE INDICATOR LIGHT BULB.** 1) Turn ignition switch to OFF. 2) Remove combination meter. 3) Remove “P” range indicator light bulb from combination meter. Is “P” range indicator light bulb OK?	Bulb is OK.	Go to step **27.**	Replace “P” range indicator light bulb. <Ref. to IDI-12, Combination Meter Assembly.>
27	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect connectors from TCM and combination meter. 2) Measure resistance of harness between TCM and combination meter. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 1 — (i11) No. 1:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 23 — (i11) No. 1:*** Is the measured value less than the specified value?	1 Ω	Go to step **65.**	Repair open circuit in harness between inhibitor switch connector and combination meter, and poor contact in coupling connector.
28	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connectors from TCM, inhibitor switch and combination meter. 3) Measure resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 1 — Chassis ground:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 23 — (i11) No.1 :*** Does the measured value exceed the specified value?	1 MΩ	Go to step **29.**	Repair ground short circuit in “P” range circuit.

	Step	Value	Yes	No
29	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connectors from TCM and inhibitor switch. 3) Measure resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 3 — (T7) No. 8:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 17 — (T7) No. 8:*** Is the measured value less than the specified value?	1 Ω	Go to step **30.**	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
30	**CHECK INPUT SIGNAL FOR TCM.** 1) Turn ignition switch to OFF. 2) Connect connector to TCM and inhibitor switch. 3) Turn ignition switch to ON. 4) Move select lever to “R” range. 5) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 3 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B55) No. 17 (+) — Chassis ground (–):*** Is the measured value less than the specified value?	1 V	Go to step **31.**	Go to step **65.**
31	**CHECK INPUT SIGNAL FOR TCM.** 1) Move select lever to any range other than “R”. 2) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 3 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B55) No. 17 (+) — Chassis ground (–):*** Does the measured value exceed the specified value?	8 V	Go to step **65.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
32	**CHECK “R” RANGE INDICATOR LIGHT BULB.** 1) Turn ignition switch to OFF. 2) Remove combination meter. 3) Remove “R” range indicator light bulb from combination meter. Is “R” range indicator light bulb OK?	Bulb is OK.	Go to step **33.**	Replace “R” range indicator light bulb. <Ref. to IDI-12, Combination Meter Assembly.>

	Step	Value	Yes	No
33	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect connectors from TCM and combination meter. 2) Measure resistance of harness between TCM and combination meter. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 3 — (i11) No. 2:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 17 — (i11) No. 2:*** Is the measured value less than the specified value?	1 Ω	Go to step **65.**	Repair open circuit in harness between TCM connector and combination meter, and poor contact in TCM connector.
34	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connectors from TCM, inhibitor switch and combination meter. 3) Measure resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 3 — Chassis ground:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 17 — Chassis ground:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **35.**	Repair ground short circuit in “R” range circuit.
35	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connectors from TCM and inhibitor switch. 3) Measure resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 14 — (T7) No. 10:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 22 — (T7) No. 10:*** Is the measured value less than the specified value?	1 Ω	Go to step **36.**	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
36	**CHECK INPUT SIGNAL FOR TCM.** 1) Turn ignition switch to OFF. 2) Connect connector to TCM and inhibitor switch. 3) Turn ignition switch to ON. 4) Move select lever to "N" range. 5) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 14 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B55) No. 22 (+) — Chassis ground (–):*** Is the measured value less than the specified value?	1 V	Go to step **37.**	Go to step **65.**

DIAGNOSTIC PROCEDURE FOR NO-DIAGNOSTIC TROUBLE CODE (DTC)

	Step	Value	Yes	No
37	**CHECK INPUT SIGNAL FOR TCM.** 1) Move select lever to any range other than “N”. 2) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 14 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B55) No. 22 (+) — Chassis ground (–):*** Does the measured value exceed the specified value?	8 V	Go to step **65.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
38	**CHECK “N” RANGE INDICATOR LIGHT BULB.** 1) Turn ignition switch to OFF. 2) Remove combination meter. 3) Remove “N” range indicator light bulb from combination meter. Is “N” range indicator light bulb OK?	Bulb is OK.	Go to step **39.**	Replace “N” range indicator light bulb. <Ref. to IDI-12, Combination Meter Assembly.>
39	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect connectors from TCM and combination meter. 2) Measure resistance of harness between TCM and combination meter. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 14 — (i11) No. 3:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 22 — (i11) No. 3:*** Is the measured value less than the specified value?	1 Ω	Go to step **65.**	Repair open circuit in harness between inhibitor switch connector and combination meter.
40	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connectors from TCM, inhibitor switch and combination meter. 3) Measure resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 14 — Chassis ground:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 22 — Chassis ground:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **41.**	Repair ground short circuit in “N” range circuit.

	Step	Value	Yes	No
41	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connectors from TCM and inhibitor switch. 3) Measure resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 4 — (T7) No. 3:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 8 — (T7) No. 3:*** Is the measured value less than the specified value?	1 Ω	Go to step **42.**	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
42	**CHECK INPUT SIGNAL FOR TCM.** 1) Turn ignition switch to OFF. 2) Connect connector to TCM and inhibitor switch. 3) Turn ignition switch to ON. 4) Move select lever to “D” range. 5) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 4 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B55) No. 8 (+) — Chassis ground (–):*** Is the measured value less than the specified value?	1 V	Go to step **43.**	Go to step **65.**
43	**CHECK INPUT SIGNAL FOR TCM.** 1) Move select lever to any range other than “D”. 2) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 4 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B55) No. 8 (+) — Chassis ground (–):*** Does the measured value exceed the specified value?	8 V	Go to step **65.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
44	**CHECK “D” RANGE INDICATOR LIGHT BULB.** 1) Turn ignition switch to OFF. 2) Remove combination meter. 3) Remove “D” range indicator light bulb from combination meter. Is “D” range indicator light bulb OK?	Bulb is OK.	Go to step **45.**	Replace “D” range indicator light bulb. <Ref. to IDI-12, Combination Meter Assembly.>

DIAGNOSTIC PROCEDURE FOR NO-DIAGNOSTIC TROUBLE CODE (DTC)

	Step	Value	Yes	No
45	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect connectors from TCM and combination meter. 2) Measure resistance of harness between TCM and combination meter. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 4 — (i11) No. 4:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 8 — (i11) No. 4:*** Is the measured value less than the specified value?	1 Ω	Go to step **65.**	Repair open circuit in harness between inhibitor switch connector and combination meter.
46	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connectors from TCM, inhibitor switch and combination meter. 3) Measure resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 4 — Chassis ground:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 8 — Chassis ground:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **47.**	Repair ground short circuit in “D” range circuit.
47	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connector from TCM and inhibitor switch. 3) Measure resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 5 — (T7) No. 11:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 18 — (T7) No. 11:*** Is the measured value less than the specified value?	1 Ω	Go to step **48.**	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
48	**CHECK INPUT SIGNAL FOR TCM.** 1) Turn ignition switch to OFF. 2) Connect connector to TCM and inhibitor switch. 3) Turn ignition switch to ON. 4) Move selec lever to “3” range. 5) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 5 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B55) No. 18 (+) — Chassis ground (–):*** Is the measured value less than the specified value?	1 V	Go to step **49.**	Go to step **65.**

	Step	Value	Yes	No
49	**CHECK INPUT SIGNAL FOR TCM.** 1) Move select lever to any range other than "3". 2) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 5 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B55) No. 18 (+) — Chassis ground (–):*** Does the measured value exceed the specified value?	8 V	Go to step **65.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
50	**CHECK "3" RANGE INDICATOR LIGHT BULB.** 1) Turn ignition switch to OFF. 2) Remove combination meter. 3) Remove "3" range indicator light bulb from combination meter. Is "3" range indicator light bulb OK?	Bulb is OK.	Go to step **51.**	Replace "3" range indicator light bulb. <Ref. to IDI-12, Combination Meter Assembly.>
51	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect connectors from TCM and combination meter. 2) Measure resistance of harness between TCM and combination meter. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 5 — (i11) No. 11:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 18 — (i11) No. 11:*** Is the measured value less than the specified value?	1 Ω	Go to step **65.**	Repair open circuit in harness between TCM connector and combination meter, and poor contact in TCM connector.
52	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connectors from TCM, inhibitor switch and combination meter. 3) Measure resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 5 — Chassis ground:*** ***Without VDC system and SPORT shift:*** ***(B55) No. 18 — Chassis ground:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **53.**	Repair ground short circuit in "3" range circuit.

	Step	Value	Yes	No
53	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connector from TCM and inhibitor switch. 3) Measure resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 6 — (T7) No. 4:*** ***Without VDC system and SPORT shift:*** ***(B54) No. 10 — (T7) No. 4:*** Is the measured value less than the specified value?	1 Ω	Go to step **54.**	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
54	**CHECK INPUT SIGNAL FOR TCM.** 1) Turn ignition switch to OFF. 2) Connect connector to TCM and inhibitor switch. 3) Turn ignition switch to ON. 4) Move select lever to “2” range. 5) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 6 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B54) No. 10 (+) — Chassis ground (–):*** Is the measured value less than the specified value?	1 V	Go to step **55.**	Go to step **65.**
55	**CHECK INPUT SIGNAL FOR TCM.** 1) Move select lever to any range other than “2”. 2) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 6 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B54) No. 10 (+) — Chassis ground (–):*** Does the measured value exceed the specified value?	8 V	Go to step **65.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
56	**CHECK “2” RANGE INDICATOR LIGHT BULB.** 1) Turn ignition switch to OFF. 2) Remove combination meter. 3) Remove “2” range indicator light bulb from combination meter. Is “2” range indicator light bulb OK?	Bulb is OK.	Go to step **57.**	Replace “2” range indicator light bulb. <Ref. to IDI-12, Combination Meter Assembly.>

	Step	Value	Yes	No
57	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect connectors from TCM and combination meter. 2) Measure resistance of harness between TCM and combination meter. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 6 — (i11) No. 12:*** ***Without VDC system and SPORT shift:*** ***(B54) No. 10 — (i11) No. 12:*** Is the measured value less than the specified value?	1 Ω	Go to step **65.**	Repair open circuit in harness between TCM and combination meter, and poor contact in TCM connector.
58	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connectors from TCM, inhibitor switch and combination meter. 3) Measure resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 6 — Chassis ground:*** ***Without VDC system and SPORT shift:*** ***(B54) No. 10 — Chassis ground:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **59.**	Repair ground short circuit in “2” range circuit.
59	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connectors from TCM and inhibitor switch. 3) Measure resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 7 — (T7) No. 6:*** ***Without VDC system and SPORT shift:*** ***(B54) No. 1 — (T7) No. 6:*** Is the measured value less than the specified value?	1 Ω	Go to step **60.**	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
60	**CHECK INPUT SIGNAL FOR TCM.** 1) Turn ignition switch to OFF. 2) Connect connector to TCM and inhibitor switch. 3) Turn ignition switch to ON. 4) Move select lever to “1“ range. 5) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 7 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B54) No. 1 (+) — Chassis ground (–):*** Is the measured value less than the specified value?	1 V	Go to step **61.**	Go to step **65.**

DIAGNOSTIC PROCEDURE FOR NO-DIAGNOSTIC TROUBLE CODE (DTC)

	Step	Value	Yes	No
61	**CHECK INPUT SIGNAL FOR TCM.** 1) Move select lever to any range other than “1”. 2) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 7 (+) — Chassis ground (–):*** ***Without VDC system and SPORT shift:*** ***(B55) No. 1 (+) — Chassis ground (–):*** Does the measured value exceed the specified value?	8 V	Go to step **65.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
62	**CHECK “1” RANGE INDICATOR LIGHT BULB.** 1) Turn ignition switch to OFF. 2) Remove combination meter. 3) Remove “1” range indicator light bulb from combination meter. Is “1” range indicator light bulb OK?	Bulb is OK.	Go to step **63.**	Replace “1” range indicator light bulb. <Ref. to IDI-12, Combination Meter Assembly.>
63	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect connectors from TCM and combination meter. 2) Measure resistance of harness between TCM and combination meter. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 7 — (i11) No. 5:*** ***Without VDC system and SPORT shift:*** ***(B54) No. 1 — (i11) No. 5:*** Is the measured value less than the specified value?	1 Ω	Go to step **65.**	Repair open circuit in harness between TCM and combination meter, and poor contact in TCM connector.
64	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn ignition switch to OFF. 2) Disconnect connectors from TCM, inhibitor switch and combination meter. 3) Measure resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***With VDC system or SPORT shift:*** ***(B55) No. 7 — Chassis ground:*** ***Without VDC system and SPORT shift:*** ***(B54) No. 1 — Chassis ground:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **65.**	Repair ground short circuit in “1” range circuit.
65	**CHECK POOR CONTACT.** Is there poor contact in inhibitor switch circuit?	There is poor contact.	Repair poor contact.	Adjust inhibitor switch and select cable. <Ref. to AT-50, ADJUSTMENT, Inhibitor Switch.> and <Ref. to CS-31, Select Cable.>

MEMO:

Vehicle-id:
SIE-id::F: Check Inhibitor Switch.
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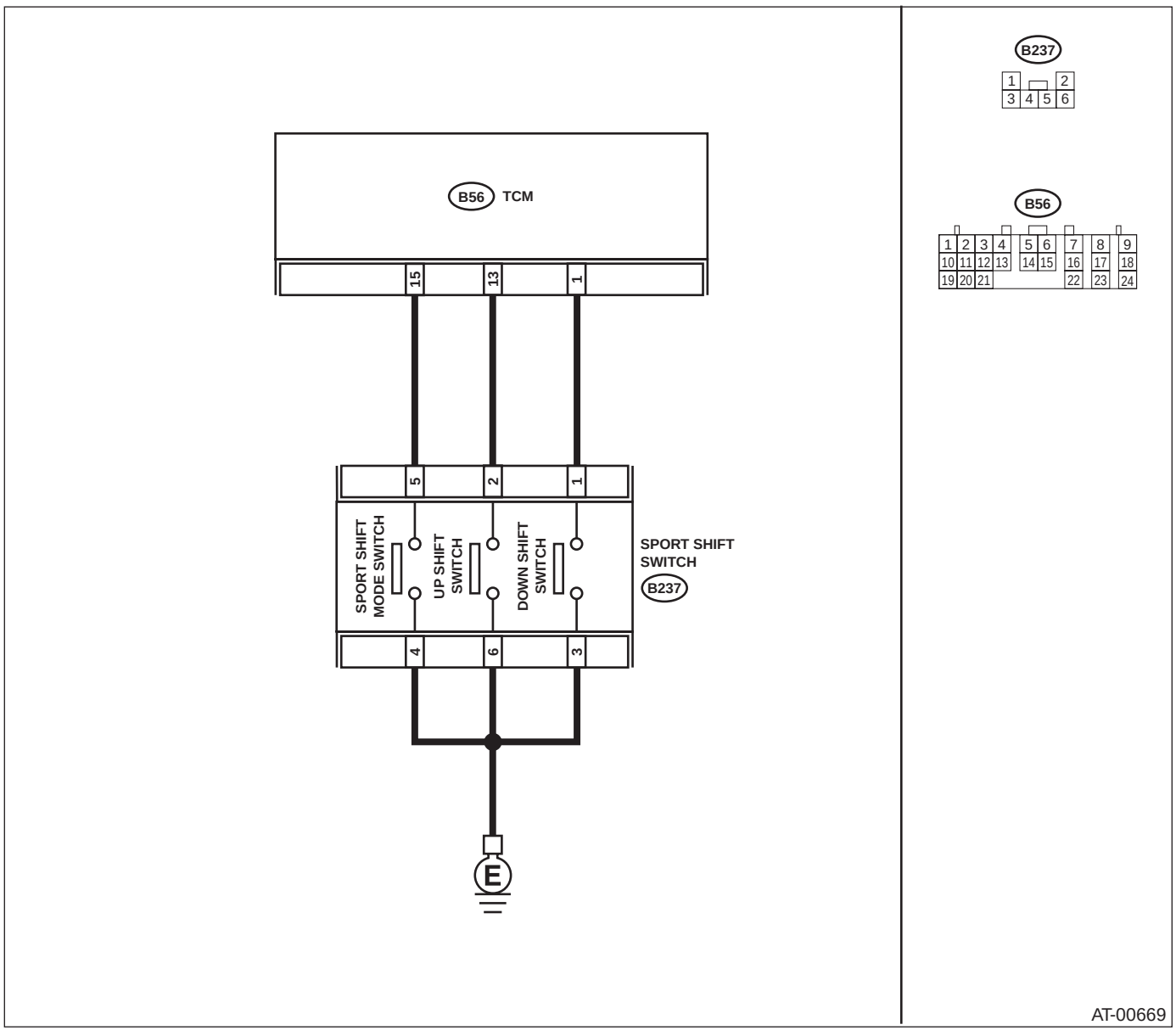
G: CHECK SPORT SHIFT SWITCH.

DIAGNOSIS:
SPORT shift switch input signal circuit is open or shorted.
TROUBLE SYMPTOM:
- No SPORT shift mode occurs.
- Does not shift gears in SPORT shift mode.

WIRING DIAGRAM:



Vehicle-id:
SIE-id::G: Check SPORT SHIFT Switch.
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DIAGNOSTIC PROCEDURE FOR NO-DIAGNOSTIC TROUBLE CODE (DTC)

	Step	Value	Yes	No
1	**CHECK VEHICLE.** Is the target model equipped with SPORT shift?	Model with sport shift	Go to step **2.**	Go to step SYMPTOM RELATED DIAGNOSTIC. <Ref. to AT-160, Symptom Related Diagnostic.>
2	**CHECK SPORT SHIFT SWITCH.** Does LED light up when select lever is moved to SPORT shift mode?	Lights up.	Go to step **3.**	Go to step **5.**
3	**CHECK SPORT SHIFT SWITCH.** Does LED light up when select lever is moved to shift up side?	Lights up.	Go to step **4.**	Go to step **12.**
4	**CHECK SPORT SHIFT SWITCH.** Does LED light up when select lever is moved to shift down side?	Lights up.	Go to step CHECK SPORT SHIFT INDICATOR. <Ref. to AT-156, CHECK SPORT SHIFT INDICATOR., Diagnostic Procedure for No-diagnostic Trouble Code (DTC).>	Go to step **19.**
5	**CHECK SPORT SHIFT SWITCH GROUND LINE.** 1) Turn ignition switch to OFF. 2) Disconnect connector from SPORT shift switch. 3) Measure resistance of harness between SPORT shift switch connector and chassis ground. ***Connector & terminal*** ***(B237) No. 4 —- Chassis ground:*** Is the measured value less than the specified value?	1 Ω	Go to step **6.**	Repair open circuit in harness between SPORT shift switch and chassis ground.
6	**CHECK SPORT SHIFT SWITCH.** Measure resistance between SPORT shift switch terminals. ***Connector & terminal*** ***(B237) No. 4 —- No. 5:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **7.**	Replace lever plate assembly.
7	**CHECK SPORT SHIFT SWITCH.** 1) Move select lever to SPORT shift mode. 2) Measure resistance between SPORT shift switch terminals. ***Connector & terminal*** ***(B237) No. 4 — No. 5:*** Is the measured value less than the specified value?	1 Ω	Go to step **8.**	Replace lever plate assembly.
8	**CHECK HARNESS CONNECTOR BETWEEN TCM AND SPORT SHIFT SWITCH.** 1) Disconnect connector from TCM. 2) Measure resistance of harness between TCM connector and SPORT shift switch connector. ***Connector & terminal*** ***(B237) No. 5 — (B56) No. 15:*** Is the measured value less than the specified value?	1 Ω	Go to step **9.**	Repair open circuit in harness between SPORT shift switch connector and TCM connector and poor contact in coupling connector.

Vehicle-id:
SIE-id::G:Check SPORT SHIFT Switch.
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DIAGNOSTIC PROCEDURE FOR NO-DIAGNOSTIC TROUBLE CODE (DTC)

	Step	Value	Yes	No
9	**CHECK HARNESS CONNECTOR BETWEEN TCM AND SPORT SHIFT SWITCH.** 1) Disconnect connector from TCM. 2) Measure resistance of harness between SPORT shift switch connector and chassis ground. ***Connector & terminal*** ***(B237) No. 5 — Chassis ground:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **10.**	Repair short circuit in harness between SPORT shift switch connector and TCM connector.
10	**CHECK INPUT SIGNAL FOR TCM.** 1) Connect connector to TCM and SPORT shift switch. 2) Turn ignition switch to ON. (Engine is stopped.) 3) Move select lever to normal mode. 4) Measure signal voltage for TCM. ***Connector & terminal*** ***(B56) No. 15 (+) — Chassis ground (–):*** Does the measured value exceed the specified value?	9 V	Go to step **11.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
11	**CHECK INPUT SIGNAL FOR TCM.** 1) Move select lever to SPORT shift mode. 2) Measure signal voltage for TCM. ***Connector & terminal*** ***(B56) No. 15 (+) — Chassis ground (–):*** Is the measured value less than the specified value?	1 V	Go to step **26.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
12	**CHECK SPORT SHIFT SWITCH GROUND LINE.** 1) Turn ignition switch to OFF. 2) Disconnect connector from SPORT shift switch. 3) Measure resistance of harness between SPORT shift switch connector and chassis ground. ***Connector & terminal*** ***(B237) No. 6 — Chassis ground:*** Is the measured value less than the specified value?	1 Ω	Go to step **13.**	Repair open circuit in harness between SPORT shift switch and chassis ground.
13	**CHECK SPORT SHIFT SWITCH.** 1) Measure resistance between SPORT shift switch terminals. ***Connector & terminal*** ***(B237) No. 6 — No. 2:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **14.**	Replace guide plate assembly.
14	**CHECK SPORT SHIFT SWITCH.** 1) Move select lever to SPORT shift mode. 2) Measure resistance between SPORT shift switch terminals. ***Connector & terminal*** ***(B237) No. 6 — No. 2:*** Is the measured value less than the specified value?	1 Ω	Go to step **15.**	Replace guide plate assembly.

	Step	Value	Yes	No
15	**CHECK HARNESS CONNECTOR BETWEEN TCM AND SPORT SHIFT SWITCH.** 1) Disconnect connector from TCM. 2) Measure resistance of harness between TCM connector and SPORT shift switch connector. ***Connector & terminal*** ***(B237) No. 2 — (B56) No. 13:*** Is the measured value less than the specified value?	1 Ω	Go to step **16.**	Repair open circuit in harness between SPORT shift switch connector and TCM connector and poor contact in coupling connector.
16	**CHECK HARNESS CONNECTOR BETWEEN TCM AND SPORT SHIFT SWITCH.** 1) Disconnect connector from TCM. 2) Measure resistance of harness between SPORT shift switch connector and chassis ground. ***Connector & terminal*** ***(B237) No. 2 — Chassis ground:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **17.**	Repair short circuit in harness between SPORT shift switch connector and TCM connector.
17	**CHECK INPUT SIGNAL FOR TCM.** 1) Connect connector to TCM and SPORT shift switch. 2) Turn ignition switch to ON. (Engine is stopped.) 3) Measure signal voltage for TCM. ***Connector & terminal*** ***(B56) No. 13 (+) — Chassis ground (–):*** Does the measured value exceed the specified value?	9 V	Go to step **18.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
18	**CHECK INPUT SIGNAL FOR TCM.** 1) Move select lever to shift up side. 2) Measure signal voltage for TCM. ***Connector & terminal*** ***(B56) No. 13 (+) — Chassis ground (–):*** Is the measured value less than the specified value?	1 V	Go to step **26.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
19	**CHECK SPORT SHIFT SWITCH GROUND LINE.** 1) Turn ignition switch to OFF. 2) Disconnect connector from SPORT shift switch. 3) Measure resistance of harness between SPORT shift switch connector and chassis ground. ***Connector & terminal*** ***(B237) No. 3 — Chassis ground:*** Is the measured value less than the specified value?	1 Ω	Go to step **20.**	Repair open circuit in harness between SPORT shift switch and chassis ground.
20	**CHECK SPORT SHIFT SWITCH.** Measure resistance between SPORT shift switch terminals. ***Connector & terminal*** ***(B237) No. 3 — No. 1:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **21.**	Replace guide plate assembly.

DIAGNOSTIC PROCEDURE FOR NO-DIAGNOSTIC TROUBLE CODE (DTC)

	Step	Value	Yes	No
21	**CHECK SPORT SHIFT SWITCH.** 1) Move select lever to SPORT shift mode. 2) Measure resistance between SPORT shift switch terminals. ***Connector & terminal*** ***(B237) No. 3 — No. 1:*** Is the measured value less than the specified value?	1 Ω	Go to step **22.**	Replace guide plate assembly.
22	**CHECK HARNESS CONNECTOR BETWEEN TCM AND SPORT SHIFT SWITCH.** 1) Disconnect connector from TCM. 2) Measure resistance of harness between TCM connector and SPORT shift switch connector. ***Connector & terminal*** ***(B237) No. 1 — (B56) No. 2:*** Is the measured value less than the specified value?	1 Ω	Go to step **23.**	Repair open circuit in harness between SPORT shift switch connector and TCM connector and poor contact in coupling connector.
23	**CHECK HARNESS CONNECTOR BETWEEN TCM AND SPORT SHIFT SWITCH.** 1) Disconnect connector from TCM. 2) Measure resistance of harness between SPORT shift switch connector and chassis ground. ***Connector & terminal*** ***(B237) No. 1 — Chassis ground:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **24.**	Repair short circuit in harness between SPORT shift switch connector and TCM connector.
24	**CHECK INPUT SIGNAL FOR TCM.** 1) Connect connector to TCM and SPORT shift switch. 2) Turn ignition switch to ON. (Engine is stopped.) 3) Measure signal voltage for TCM. ***Connector & terminal*** ***(B56) No. 2 (+) — Chassis ground (–):*** Does the measured value exceed the specified value?	9 V	Go to step **25.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
25	**CHECK INPUT SIGNAL FOR TCM.** 1) Move select lever to shift up side. 2) Measure signal voltage for TCM. ***Connector & terminal*** ***(B56) No. 2 (+) — Chassis ground (–):*** Is the measured value less than the specified value?	1 V	Go to step **26.**	Replace TCM. <Ref. to AT-75, Transmission Control Module (TCM).>
26	**CHECK POOR CONTACT.** Is there poor contact in SPORT shift switch circuit?	There is poor contact.	Repair poor contact.	Intermittent poor contact in SPORT shift switch circuit connector or harness

MEMO:

Vehicle-id:
SIE-id::G: Check SPORT SHIFT Switch.
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DIAGNOSTIC PROCEDURE FOR NO-DIAGNOSTIC TROUBLE CODE (DTC)

H: CHECK SPORT SHIFT INDICATOR.

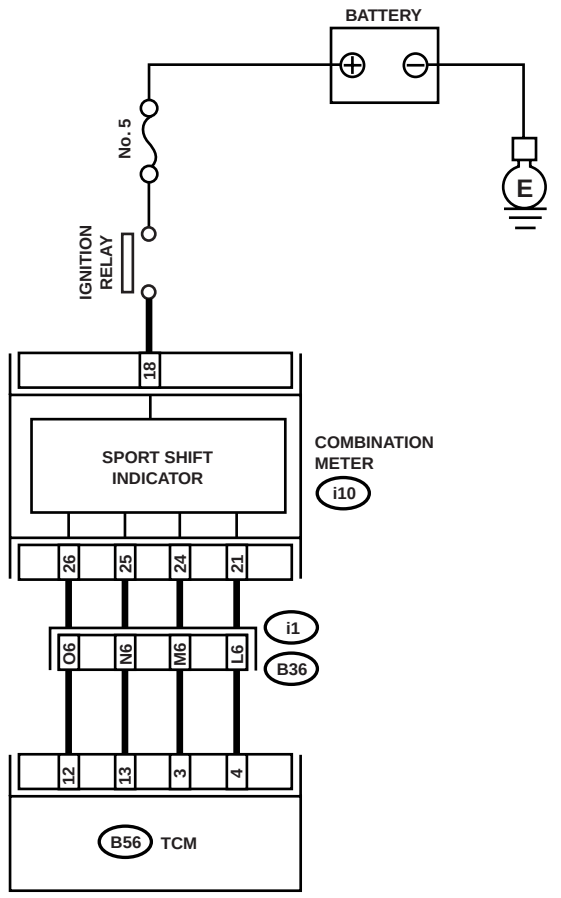
DIAGNOSIS:

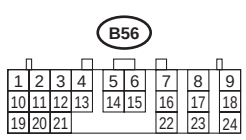
SPORT shift indicator output signal circuit is open or shorted.

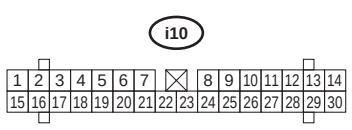
TROUBLE SYMPTOM:

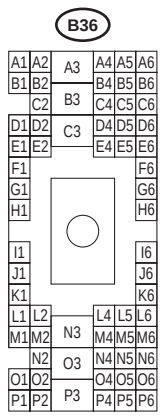
- SPORT shift indicator does not illuminate or remains illuminated.
- SPORT shift indicator display does not change.

WIRING DIAGRAM:









AT-00670

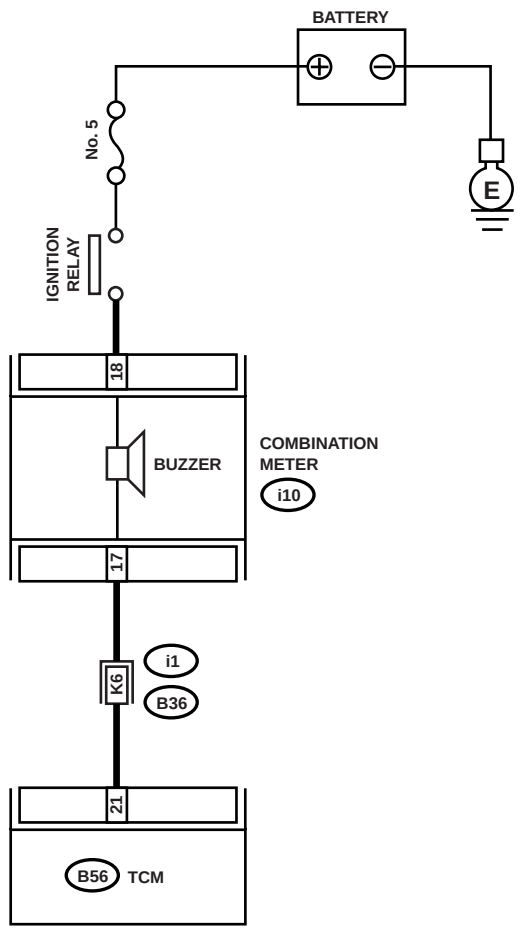
DIAGNOSTIC PROCEDURE FOR NO-DIAGNOSTIC TROUBLE CODE (DTC)

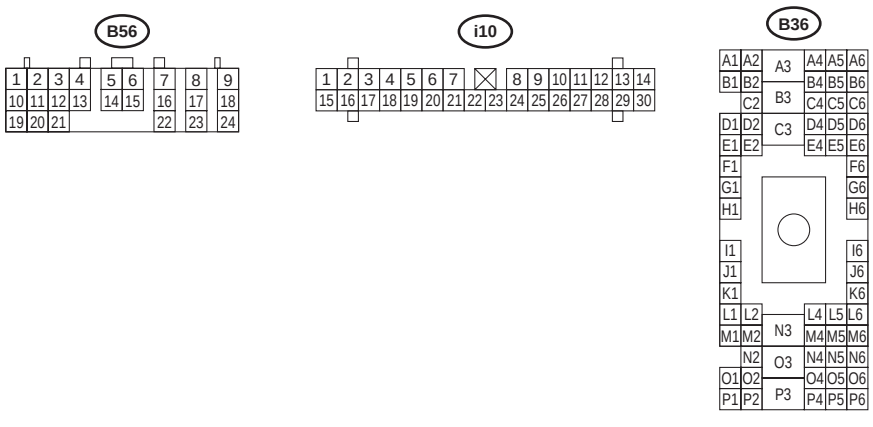
	Step	Value	Yes	No
1	**CHECK SPORT SHIFT INDICATOR.** Does SPORT shift indicator operate normally when driving in SPORT shift mode?	SPORT shift indicator operates normally.	<Ref. to AT-158, CHECK BUZZER., Diagnostic Procedure for No-diagnostic Trouble Code (DTC).>	Go to step **2.**
2	**CHECK COMBINATION METER.** Do meters and indicators other than SPORT shift indicator operate normally?	Combination meter operates normally.	Go to step **3.**	Check combination meter.
3	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Turn ignition switch to OFF. 2) Disconnect connector from TCM and combination meter. 3) Measure resistance of harness between TCM and combination meter. ***Connector & terminal*** ***(B56) No. 3 — (i10) No. 24:*** ***(B56) No. 4 — (i10) No. 21:*** ***(B56) No. 12 — (i10) No. 26:*** ***(B56) No. 13 — (i10) No. 25:*** Is the measured value less than the specified value?	1 Ω	Go to step **4.**	Repair open circuit in harness between TCM and combination meter connector and poor contact in coupling connector.
4	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** Measure resistance between TCM and chassis ground. ***Connector & terminal*** ***(B56) No. 3 — Chassis ground:*** ***(B56) No. 4 — Chassis ground:*** ***(B56) No. 12 — Chassis ground:*** ***(B56) No. 13 — Chassis ground:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **5.**	Repair short circuit in harness between TCM and combination meter connector.
5	**CHECK OUTPUT SIGNAL EMITTED FROM TCM.** 1) Connect connector to TCM and combination meter. 2) Turn ignition switch to ON. (Engine is stopped.) 3) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B56) No. 3 (+) — Chassis ground (–):*** ***(B56) No. 4 (+) — Chassis ground (–):*** ***(B56) No. 12 (+) — Chassis ground (–):*** ***(B56) No. 13 (+) — Chassis ground (–):*** Does the measured value exceed the specified value?	4	Go to step **6.**	Replace combination meter.
6	**CHECK POOR CONTACT.** Is there poor contact in SPORT shift indicator circuit?	There is poor contact.	Repair poor contact.	Replace TCM.

Vehicle-id:
SIE-id::H:Check SPORT SHIFT INDICATOR.
~

I: CHECK BUZZER.

DIAGNOSIS:
Buzzer output signal circuit is open or shorted.
TROUBLE SYMPTOM:
Buzzer does not sound or remains sounded.
WIRING DIAGRAM:





AT-00671

Vehicle-id:
SIE-id::I: Check BUZZER.
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	Step	Value	Yes	No
1	**CHECK BUZZER.** Turn ignition switch to ON. (Engine is stopped.) Does buzzer sound?	Buzzer sounds.	Go to step **2.**	Go to step **4.**
2	**CHECK HARNESS BETWEEN TCM AND COMBINATION METER.** 1) Turn ignition switch to OFF. 2) Disconnect connector from combination meter and TCM. 3) Measure resistance between TCM connector and chassis ground. ***Connector & terminal*** ***(B56) No. 21 — Chassis ground:*** Does the measured value exceed the specified value?	1 MΩ	Go to step **3.**	Repair short circuit in harness between TCM and combination meter connector.
3	**CHECK COMBINATION METER.** 1) Connect connector to combination meter. 2) Turn ignition switch to ON. (Engine is stopped.) Does buzzer sound?	Buzzer sounds.	Replace combination meter.	Go to step **7.**
4	**CHECK HARNESS AND CONNECTOR BETWEEN COMBINATION METER AND IGNITION RELAY.** 1) Turn ignition switch to ON. 2) Measure voltage between combination meter connector and chassis ground. ***Connector & terminal*** ***(i10) No. 18 (+) — Chassis ground (–):*** Does the measured value exceed the specified value?	9 V	Go to step **5.**	Repair open or short circuit in harness between combination meter and ignition relay.
5	**CHECK BUZZER.** Does buzzer sound when combination meter connector (i10) terminal 17 is shorted to chassis ground?	Buzzer sounds.	Go to step **6.**	Replace combination meter.
6	**CHECK HARNESS BETWEEN TCM AND COMBINATION METER.** 1) Turn ignition switch to OFF. 2) Disconnect connector from TCM and combination meter. 3) Measure resistance between combination meter connector and TCM connector. ***Connector & terminal*** ***(B56) No. 21 — (i10) No. 17:*** Is the measured value less than the specified value?	1 Ω	Go to step **7.**	Repair open circuit in harness between combination meter and TCM and poor contact in coupling connector.
7	**CHECK POOR CONTACT.** Is there poor contact in buzzer circuit?	There is poor contact.	Repair poor contact.	Replace TCM.