15. Diagnostic Procedure for No-diagnostic Trouble Code (DTC) S004794

A: CHECK GEAR POSITION. S004794F15

No.	Step	Check	Yes	No
1	**CHECK GEAR POSITION.** 1) Lift-up the vehicle and place safety stand. NOTE: On AWD models, raise all wheels off ground. 2) Start the engine. 3) Move the select lever to “D”, and drive the vehicle. 4) Read the 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 the AT control diagnosis is finished, perform the ABS memory clearance procedure of on-board diagnostics system. <Ref. to ABS-21, Clear Memory Mode.>	Does the transmission gear correspond to the gear which is shown on display?	Go to step **2**.	Check shift solenoid 1 and shift solenoid 2 signal circuit. <Ref. to AT-74, DTC 71 SHIFT SOLENOID 1, Diagnostic Procedure with Diagnostic Trouble Code (DTC).> and <Ref. to AT-78, DTC 72 SHIFT SOLENOID 2, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>
2	**CHECK VEHICLE.**	Is the target model without VDC sysem?	Go to step CHECK FWD SWITCH. <Ref. to AT-118, CEHCK FWD SWITCH., Diagnostic Procedure for No-diagnostic Trouble Code (DTC).>	Go to step CHECK BRAKE SWITCH. <Ref. to AT- 120, CEHCK BRAKE SWITCH., Diagnostic Procedure for No-diagnostic Trouble Code (DTC).>

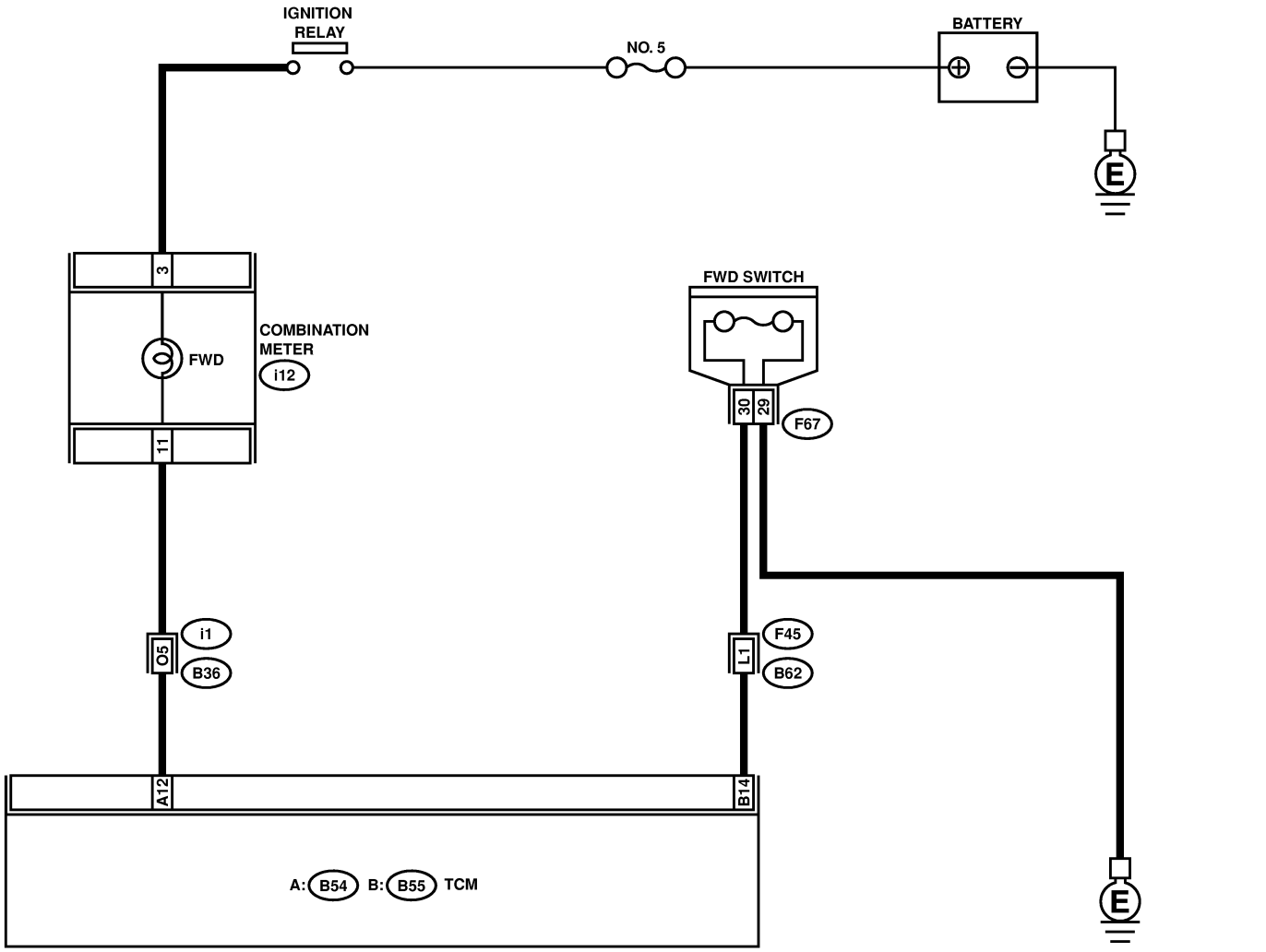
MEMO:

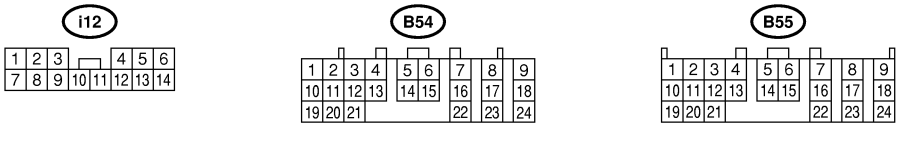
B: CHECK FWD SWITCH. S004794F16

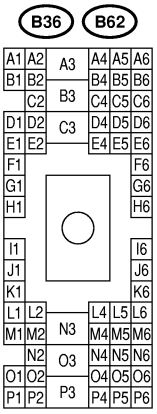
DIAGNOSIS:

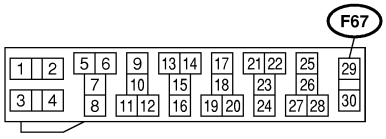
- LED does not come on even if FWD switch is ON.
- FWD switch circuit is open or shorted.

WIRING DIAGRAM:









B3M2237

No.	Step	Check	Yes	No
1	**CHECK FWD SWITCH.**	When the fuse is inserted to FWD switch, does the LED light up?	Go to step CHECK BRAKE SWITCH. <Ref. to AT-120, CHECK BRAKE SWITCH., Diagnostic Procedure for No-diagnostic Trouble Code (DTC).>	Go to step **2**.
2	**CHECK FWD INDICATOR LIGHT.** 1) Turn the ignition switch to OFF. 2) Remove the combination meter. 3) Remove the FWD indicator light bulb from combination meter.	Is the FWD indicator light bulb OK?	Go to step **3**.	Replace the FWD indicator light bulb. <Ref. to IDI-11, Combination Meter Assembly.>
3	**CHECK HARNESS CONNECTOR BETWEEN TCM AND FWD SWITCH.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from TCM and FWD switch. 3) Measure the resistance of harness between TCM and FWD switch connector. ***Connector & terminal*** ***(B55) No. 14 — (F67) No. 30:***	Is the resistance less than 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 the resistance of harness connector between TCM and body to make sure that circuit does not short. ***Connector & terminal*** ***(B55) No. 14 — Chassis ground:***	Is the resistance more than 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 the resistance of harness between FWD switch and chassis ground. ***Connector & terminal*** ***(F67) No. 29 — Chassis ground:***	Is the resistance less than 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 the ignition switch to OFF. 2) Connect the connector to TCM and FWD switch. 3) Turn the ignition switch to ON. 4) Measure the signal voltage for TCM while installing the fuse to FWD switch connector. ***Connector & terminal*** ***(B55) No. 14 (+) — Chassis ground (–):***	Is the voltage less than 1 V in FWD switch while installing?	Go to step **7**.	Go to step **12**.
7	**CHECK INPUT SIGNAL FOR TCM.** Measure the signal voltage for TCM while removing the fuse from FWD switch connector. ***Connector & terminal*** ***(B55) No. 14 (+) — Chassis ground (–):***	Is the voltage more than 9 V in FWD switch while removing?	Go to step **8**.	Replace the TCM. <Ref. to AT-49, Transmission Control Module (TCM).>

No.	Step	Check	Yes	No
8	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from TCM and combination meter. 3) Measure the resistance of harness between TCM and diagnosis connector. ***Connector & terminal*** ***(B54) No. 12 — (i12) No. 11:***	Is the resistance less than 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 the resistance of harness connector between TCM and chassis ground to make sure that circuit does not short. ***Connector & terminal*** ***(B54) No. 12 — Chassis ground:***	Is the resistance more than 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 the ignition switch to OFF. 2) Connect the connector to TCM and combination meter. 3) Turn the ignition switch to ON. 4) Measure the signal voltage for TCM while installing and removing the fuse to FWD switch connector. ***Connector & terminal*** ***(B54) No. 12 — Chassis ground:***	Is the voltage less than 1 V in FWD switch while installing?	Go to step **11**.	Go to step **12**.
11	**CHECK OUTPUT SIGNAL EMITTED FROM TCM.** Measure the signal voltage for TCM while removing the fuse from FWD switch connector. ***Connector & terminal*** ***(B54) No. 12 — Chassis ground:***	Is the voltage more than 9 V in FWD switch while removing?	Go to step **12**.	Replace the TCM. <Ref. to AT-49, Transmission Control Module (TCM).>
12	**CHECK POOR CONTACT.**	Is there poor contact in FWD switch circuit?	Repair poor contact.	Replace the TCM. <Ref. to AT-49, Transmission Control Module (TCM).>

C: CHECK BRAKE SWITCH. S004794F17

No.	Step	Check	Yes	No
1	**CHECK BRAKE SWITCH.**	When the brake pedal is depressed, does the LED light up?	Go to step CHECK ABS SWITCH. <Ref. to AT-121, CHECK ABS SWITCH., Diagnostic Procedure for No-Diagnostic Trouble Code (DTC).>	Check the brake switch circuit.

D: CHECK ABS SWITCH. S004794F18

No.	Step	Check	Yes	No
1	**CHECK ABS SWITCH.**	Does the LED of ABS switch light up?	Check the ABS switch circuit. <Ref. to ABS-118, DTC 44 ABS-AT CONTROL (NON CONTROLLED), Diagnostics Chart with Subaru Select Monitor.> and <Ref. to ABS-120, DTC 44 ABS-AT CONTROL (CONTROLLED), Diagnostics Chart with Subaru Select Monitor.>	Go to step CHECK CRUISE CONTROL SWITCH. <Ref. to AT-121, CHECK CRUISE CONTROL SWITCH., Diagnostic Procedure for No-Diagnostic Trouble Code (DTC).>

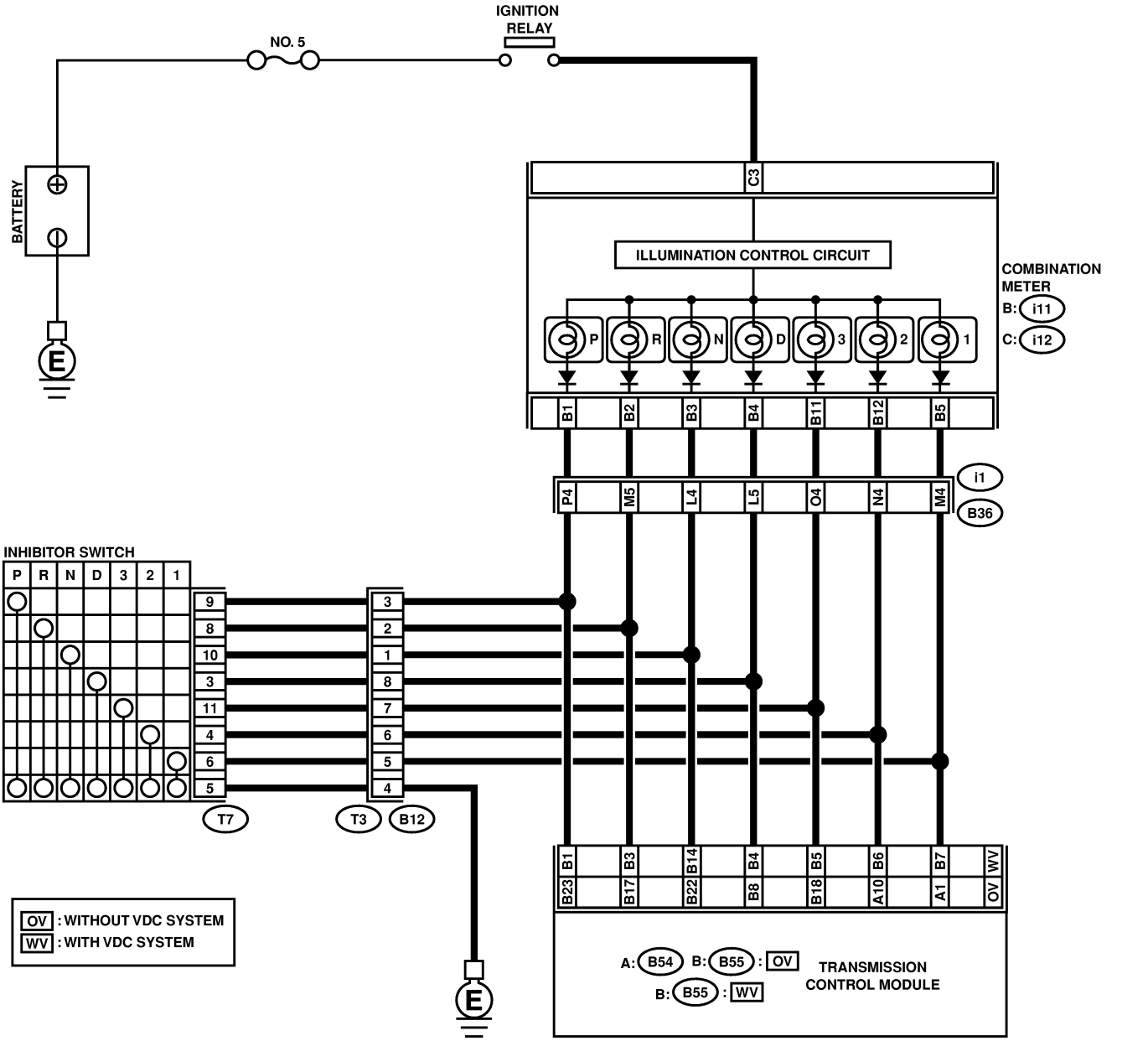
E: CHECK CRUISE CONTROL SWITCH. S004794F19

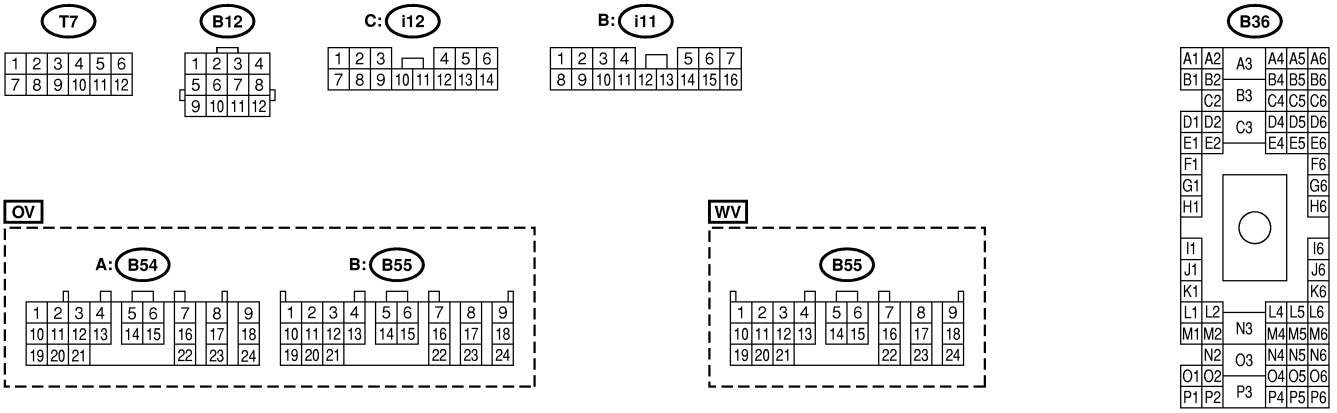
No.	Step	Check	Yes	No
1	**CHECK CRUISE CONTROL SWITCH.**	When cruise control is set, does the LED light up?	Go to step CHECK INHIBITOR SWITCH. <Ref. to AT-122, CHECK INHIBITOR SWITCH., Diagnostic Procedure for No-Diagnostic Trouble Code (DTC).>	Check the cruise control. <Ref. to CC-28, Diagnostics Chart with Trouble Code.>

F: CHECK INHIBITOR SWITCH. S004794F20

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:





B3M2238

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

No.	Step	Check	Yes	No
20	**CHECK INDICATOR LIGHT.**	Does the combination meter "1" range indicator illuminate?	Go to step **21**.	Go to step **62**.
21	**CHECK "1" RANGE SWITCH.**	When the "P" range is selected, does the "1" range LED light up?	Go to step **64**.	Go to step Symptom Related Diagnostic. <Ref. to AT-134, Symptom Related Diagnostic.>
22	**CHECK HARNESS CONNECTOR BETWEEN INHIBITOR SWITCH AND CHASSIS GROUND.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from inhibitor switch. 3) Measure the resistance of harness between inhibitor switch and chassis ground. ***Connector & terminal*** ***(T7) No. 5 — Chassis ground:***	Is the resistance less than 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 the ignition switch to OFF. 2) Disconnect the connectors from TCM and inhibitor switch. 3) Measure the resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 23 — (T7) No. 9*** ***With VDC system*** ***(B55) No. 1 — (T7) No. 9***	Is the resistance less than 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 the ignition switch to OFF. 2) Connect the connector to TCM and inhibitor switch. 3) Turn the ignition switch to ON. 4) Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 23 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 1 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "P" range?	Go to step **25**.	Go to step **65**.
25	**CHECK INPUT SIGNAL FOR TCM.** Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 23 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 1 (+) — Chassis ground (–):***	Is the voltage more than 8 V in other ranges?	Go to step **65**.	Replace the TCM. <Ref. to AT-49, Transmission Control Module (TCM).>
26	**CHECK "P" RANGE INDICATOR LIGHT BULB.** 1) Turn the ignition switch to OFF. 2) Remove the combination meter. 3) Remove the "P" range indicator light bulb from combination meter.	Is the "P" range indicator light bulb OK?	Go to step **27**.	Replace the "P" range indicator light bulb. <Ref. to IDI-11, Combination Meter Assembly.>

No.	Step	Check	Yes	No
27	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect the connectors from TCM and combination meter. 2) Measure the resistance of harness between TCM and combination meter. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 23 — (i11) No. 1:*** ***With VDC system*** ***(B55) No. 1 — (i11) No. 1:***	Is the resistance more than 1 Ω?	Go to step **65**.	Repair open circuit in harness between TCM connector and combination meter, and poor contact in coupling connector.
28	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn the ignition switch to OFF. 2) Disconnect the connectors from TCM, inhibitor switch and combination meter. 3) Measure the resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 23 — Chassis ground:*** ***With VDC system*** ***(B55) No. 1 — Chassis ground:***	Is the resistance less than 1 MΩ?	Go to step **29**.	Repair ground short circuit in "P" range circuit.
29	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn the ignition switch to OFF. 2) Disconnect the connectors from TCM and inhibitor switch. 3) Measure the resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 17 — (T7) No. 8:*** ***With VDC system*** ***(B55) No. 3 — (T7) No. 8:***	Is the resistance less than 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 the ignition switch to OFF. 2) Connect the connector to TCM and inhibitor switch. 3) Turn the ignition switch to ON. 4) Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 17 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 3 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "R" range?	Go to step **31**.	Go to step **65**.
31	**CHECK INPUT SIGNAL FOR TCM.** Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 17 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 3 (+) — Chassis ground (–):***	Is the voltage more than 8 V in other ranges?	Go to step **65**.	Replace the TCM. <Ref. to AT-49, Transmission Control Module (TCM).>

No.	Step	Check	Yes	No
32	**CHECK "R" RANGE INDICATOR LIGHT BULB.** 1) Turn the ignition switch to OFF. 2) Remove the combination meter. 3) Remove the "R" range indicator light bulb from combination meter.	Is the "R" range indicator light bulb OK?	Go to step **33**.	Replace the "R" range indicator light bulb. <Ref. to IDI-11, Combination Meter Assembly.>
33	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect the connectors from TCM and combination meter. 2) Measure the resistance of harness between TCM and combination meter. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 17 — (i11) No. 2:*** ***With VDC system*** ***(B55) No. 3 — (i11) No. 2:***	Is the resistance less than 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 the ignition switch to OFF. 2) Disconnect the connectors from TCM, inhibitor switch and combination meter. 3) Measure the resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 17 — Chassis ground:*** ***With VDC system*** ***(B55) No. 3 — Chassis ground:***	Is the resistance more than 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 the ignition switch to OFF. 2) Disconnect the connectors from TCM and inhibitor switch. 3) Measure the resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 22 — (T7) No. 10:*** ***With VDC system*** ***(B55) No. 14 — (T7) No. 10:***	Is the resistance less than 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 the ignition switch to OFF. 2) Connect the connector to TCM and inhibitor switch. 3) Turn the ignition switch to ON. 4) Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 22 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 14 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "N" range?	Go to step **37**.	Go to step **65**.

No.	Step	Check	Yes	No
37	**CHECK INPUT SIGNAL FOR TCM.** Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 22 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 14 (+) — Chassis ground (–):***	Is the voltage more than 8 V in other ranges?	Go to step **65**.	Replace the TCM. <Ref. to AT-49, Transmission Control Module (TCM).>
38	**CHECK "N" RANGE INDICATOR LIGHT BULB.** 1) Turn the ignition switch to OFF. 2) Remove the combination meter. 3) Remove the "N" range indicator light bulb from combination meter.	Is the "N" range indicator light bulb OK?	Go to step **39**.	Replace the "N" range indicator light bulb. <Ref. to IDI-11, Combination Meter Assembly.>
39	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect the connectors from TCM and combination meter. 2) Measure the resistance of harness between TCM and combination meter. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 22 — (i11) No. 3:*** ***With VDC system*** ***(B55) No. 14 — (i11) No. 3:***	Is the resistance less than 1 Ω?	Go to step **65**.	Repair open circuit in harness between TCM connector and combination meter, and poor contact in TCM connector.
40	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn the ignition switch to OFF. 2) Disconnect the connectors from TCM, inhibitor switch and combination meter. 3) Measure the resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 22 — Chassis ground:*** ***With VDC system*** ***(B55) No. 14 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **41**.	Repair ground short circuit in "N" range circuit.
41	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn the ignition switch to OFF. 2) Disconnect the connectors from TCM and inhibitor switch. 3) Measure the resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 8 — (T7) No. 3:*** ***With VDC system*** ***(B55) No. 4 — (T7) No. 3:***	Is the resistance less than 1 Ω?	Go to step **42**.	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.

No.	Step	Check	Yes	No
42	**CHECK INPUT SIGNAL FOR TCM.** 1) Turn the ignition switch to OFF. 2) Connect the connector to TCM and inhibitor switch. 3) Turn the ignition switch to ON. 4) Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 8 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 4 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "D" range?	Go to step **43**.	Go to step **65**.
43	**CHECK INPUT SIGNAL FOR TCM.** Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 8 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 4 (+) — Chassis ground (–):***	Is the voltage more than 8 V in other ranges?	Go to step **65**.	Replace the TCM. <Ref. to AT-49, Transmission Control Module (TCM).>
44	**CHECK "D" RANGE INDICATOR LIGHT BULB.** 1) Turn the ignition switch to OFF. 2) Remove the combination meter. 3) Remove the "D" range indicator light bulb from combination meter.	Is the "D" range indicator light bulb OK?	Go to step **45**.	Replace the "D" range indicator light bulb. <Ref. to IDI-11, Combination Meter Assembly.>
45	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect the connectors from TCM and combination meter. 2) Measure the resistance of harness between TCM and combination meter. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 8 — (i11) No. 4:*** ***With VDC system*** ***(B55) No. 4 — (i11) No. 4:***	Is the resistance less than 1 Ω?	Go to step **65**.	Repair open circuit in harness between TCM connector and combination meter, and TCM connector.
46	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn the ignition switch to OFF. 2) Disconnect the connectors from TCM, inhibitor switch and combination meter. 3) Measure the resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 8 — Chassis ground:*** ***With VDC system*** ***(B55) No. 4 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **47**.	Repair ground short circuit in "D" range circuit.

No.	Step	Check	Yes	No
47	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from TCM and inhibitor switch. 3) Measure the resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 18 — (T7) No. 11:*** ***With VDC system*** ***(B55) No. 5 — (T7) No. 11:***	Is the resistance less than 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 the ignition switch to OFF. 2) Connect the connector to TCM and inhibitor switch. 3) Turn the ignition switch to ON. 4) Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 18 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 5 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "3" range?	Go to step **49**.	Go to step **65**.
49	**CHECK INPUT SIGNAL FOR TCM.** Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 18 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 5 (+) — Chassis ground (–):***	Is the voltage more than 8 V in other ranges?	Go to step **65**.	Replace the TCM. <Ref. to AT-49, Transmission Control Module (TCM).>
50	**CHECK "3" RANGE INDICATOR LIGHT BULB.** 1) Turn the ignition switch to OFF. 2) Remove the combination meter. 3) Remove the "3" range indicator light bulb from combination meter.	Is the "3" range indicator light bulb OK?	Go to step **51**.	Replace the "3" range indicator light bulb. <Ref. to IDI-11, Combination Meter Assembly.>
51	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect the connectors from TCM and combination meter. 2) Measure the resistance of harness between TCM and combination meter. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 18 — (i11) No. 11:*** ***With VDC system*** ***(B55) No. 5 — (i11) No. 11:***	Is the resistance more than 1 Ω?	Go to step **65**.	Repair open circuit in harness between TCM connector and combination meter, and poor contact in TCM connector.

No.	Step	Check	Yes	No
52	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn the ignition switch to OFF. 2) Disconnect the connectors from TCM, inhibitor switch and combination meter. 3) Measure the resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B55) No. 18 — Chassis ground:*** ***With VDC system*** ***(B55) No. 5 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **53**.	Repair ground short circuit in "3" range circuit.
53	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from TCM and inhibitor switch. 3) Measure the resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***Without VDC system*** ***(B54) No. 10 — (T7) No. 4:*** ***With VDC system*** ***(B55) No. 6 — (T7) No. 4:***	Is the resistance less than 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 the ignition switch to OFF. 2) Connect the connector to TCM and inhibitor switch. 3) Turn the ignition switch to ON. 4) Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B54) No. 10 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 6 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "2" range?	Go to step **55**.	Go to step **65**.
55	**CHECK INPUT SIGNAL FOR TCM.** Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B54) No. 10 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 6 (+) — Chassis ground (–):***	Is the voltage more than 8 V in other ranges?	Go to step **65**.	Replace the TCM. <Ref. to AT-49, Transmission Control Module (TCM).>
56	**CHECK "2" RANGE INDICATOR LIGHT BULB.** 1) Turn the ignition switch to OFF. 2) Remove the combination meter. 3) Remove the "2" range indicator light bulb from combination meter.	Is the "2" range indicator light bulb OK?	Go to step **57**.	Replace the "2" range indicator light bulb. <Ref. to IDI-11, Combination Meter Assembly.>

No.	Step	Check	Yes	No
57	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect the connectors from TCM and combination meter. 2) Measure the resistance of harness between TCM and combination meter. ***Connector & terminal*** ***Without VDC system*** ***(B54) No. 10 — (i11) No. 12:*** ***With VDC system*** ***(B55) No. 6 — (i11) No. 12:***	Is the resistance less than 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 the ignition switch to OFF. 2) Disconnect the connectors from TCM, inhibitor switch and combination meter. 3) Measure the resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B54) No. 10 — Chassis ground:*** ***With VDC system*** ***(B55) No. 6 — Chassis ground:***	Is the resistance more than 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 the ignition switch to OFF. 2) Disconnect the connectors from TCM and inhibitor switch. 3) Measure the resistance of harness between TCM and inhibitor switch connector. ***Connector & terminal*** ***Without VDC system*** ***(B54) No. 1 — (T7) No. 6:*** ***With VDC system*** ***(B55) No. 7 — (T7) No. 6:***	Is the resistance less than 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 the ignition switch to OFF. 2) Connect the connector to TCM and inhibitor switch. 3) Turn the ignition switch to ON. 4) Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B54) No. 1 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 7 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "1" range?	Go to step **61**.	Go to step **65**.
61	**CHECK INPUT SIGNAL FOR TCM.** Measure the voltage between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B54) No. 1 (+) — Chassis ground (–):*** ***With VDC system*** ***(B55) No. 7 (+) — Chassis ground (–):***	Is the voltage more than 8 V in other ranges?	Go to step **65**.	Replace the TCM. <Ref. to AT-49, Transmission Control Module (TCM).>

No.	Step	Check	Yes	No
62	**CHECK "1" RANGE INDICATOR LIGHT BULB.** 1) Turn the ignition switch to OFF. 2) Remove the combination meter. 3) Remove the "1" range indicator light bulb from combination meter.	Is the "1" range indicator light bulb OK?	Go to step **63**.	Replace the "1" range indicator light bulb. <Ref. to IDI-11, Combination Meter Assembly.>
63	**CHECK HARNESS CONNECTOR BETWEEN TCM AND COMBINATION METER.** 1) Disconnect the connectors from TCM and combination meter. 2) Measure the resistance of harness between TCM and combination meter. ***Connector & terminal*** ***Without VDC system*** ***(B54) No. 1 — (i11) No. 5:*** ***With VDC system*** ***(B55) No. 7 — (i11) No. 5:***	Is the resistance less than 1Ω?	Go to step **65**.	Repair open circuit in harness between TCM and combination meter, poor contact in TCM connector.
64	**CHECK HARNESS CONNECTOR BETWEEN TCM AND INHIBITOR SWITCH.** 1) Turn the ignition switch to OFF. 2) Disconnect the connectors from TCM, inhibitor switch and combination meter. 3) Measure the resistance of harness between TCM and chassis ground. ***Connector & terminal*** ***Without VDC system*** ***(B54) No. 1 — Chassis ground:*** ***With VDC system*** ***(B55) No. 7 — Chassis ground:***	Is the resistance more than 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?	Repair poor contact.	Adjust the inhibitor switch and select cable. <Ref. to AT-29, ADJUSTMENT, Inhibitor Switch.> and <Ref. to CS-26, Select Cable.>