15. Diagnostic Procedure for No-trouble Code S004618

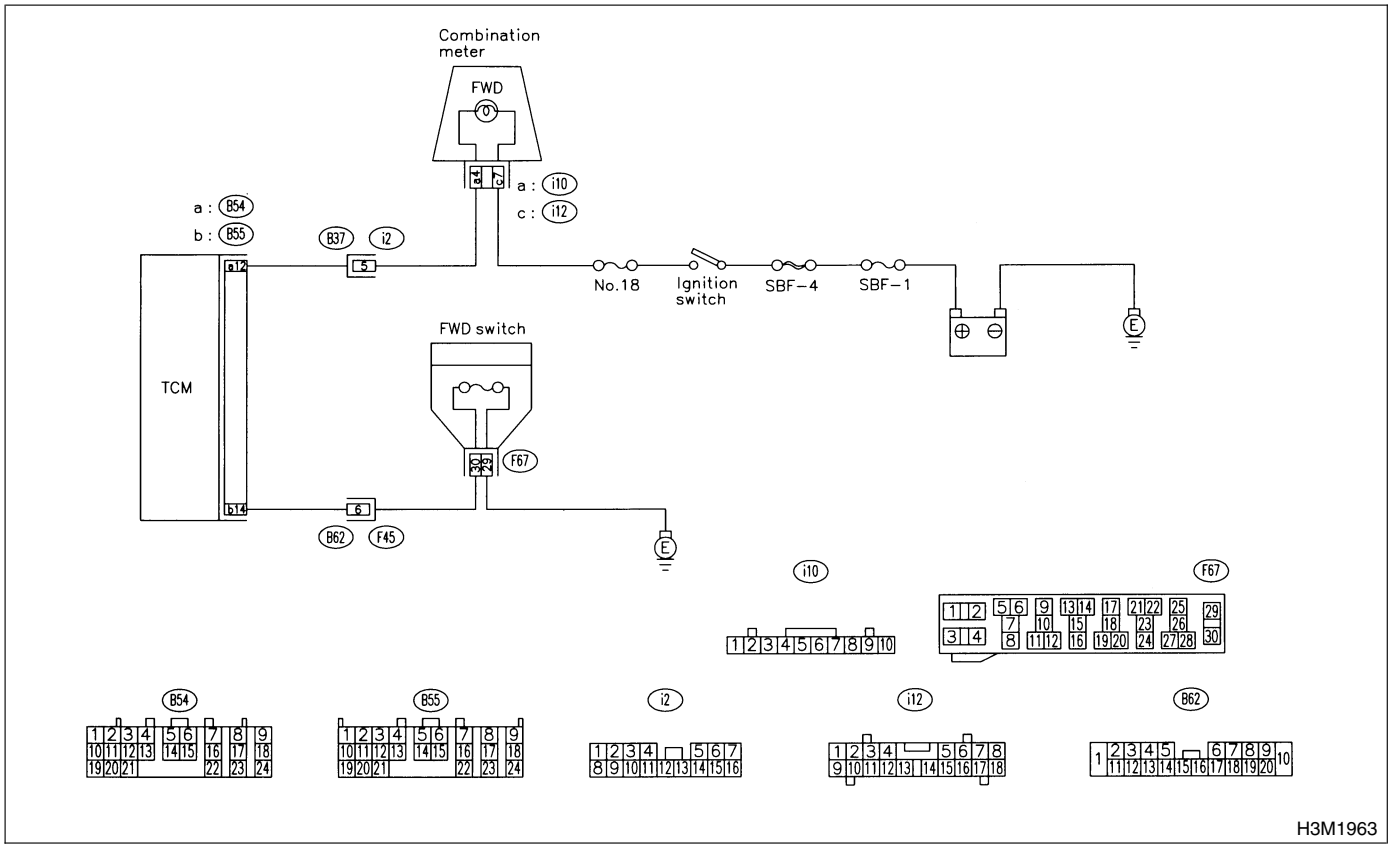
A: CHECK GEAR POSITION. S004618F15

No.	Step	Check	Yes	No
1	**CHECK GEAR POSITION.** 1) Lift-up the vehicle and place safety stand. **CAUTION:** **On AWD models, 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-18 OPERATION, Clear Memory Mode.>	Does the transmission gear correspond to the gear which is shown on display?	Go to step CHECK FWD SWITCH. <Ref. to AT-81 CHECK FWD SWITCH., Diagnostic Procedure for No-Trouble Code.>	Check shift solenoid 1 and shift solenoid 2 signal circuit. <Ref. to AT-51 TROUBLE CODE 71 — SHIFT SOLENOID 1 —, Diagnostic Procedure with Trouble Code.> and <Ref. to AT-54 TROUBLE CODE 72 — SHIFT SOLENOID 2 —, Diagnostic Procedure with Trouble Code.>

B: CHECK FWD SWITCH. S004618F16

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

WIRING DIAGRAM:



No.	Step	Check	Yes	No
1	**CHECK FWD SWITCH.**	When fuse is inserted to FWD switch, does LED light up?	Go to step CHECK BRAKE SWITCH. <Ref. to AT-83 CHECK BRAKE SWITCH., Diagnostic Procedure for No-Trouble Code.>	Go to step **2**.
2	**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*** ***(F67) No. 30 — (B55) No. 14:***	Is the resistance less than 1 Ω?	Go to step **3**.	Repair open circuit in harness between TCM and FWD switch connector.
3	**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:***	Is the resistance more than 1 MΩ?	Go to step **4**.	Repair short circuit in harness connector between TCM and chassis ground.

No.	Step	Check	Yes	No
4	**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. 14 (+) — Chassis ground (–):***	Is the voltage less than 1 V in FWD switch while installing?	Go to step **5**.	Go to step **11**.
5	**CHECK INPUT SIGNAL FOR TCM.** Measure signal voltage for TCM while removing the fuse from FWD switch connector. ***Connector & terminal*** ***(B55) No. 14 (+) — Chassis ground (–):***	Is the voltage more than 10 V in FWD switch while removing?	Go to step **6**.	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>
6	**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?	Go to step **7**.	Replace FWD indicator light bulb.
7	**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*** ***(B54) No. 12 — (i10) No. 4:***	Is the resistance less than 1 Ω?	Go to step **8**.	Repair open circuit in harness between TCM and combination meter and poor contact in coupling connector.
8	**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:***	Is the resistance more than 1 MΩ?	Go to step **9**.	Repair short circuit in harness between TCM and combination meter connector.
9	**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*** ***(B54) No. 12 (+) — Chassis ground (–):***	Is the voltage less than 1 V in FWD switch while installing?	Go to step **10**.	Go to step **11**.
10	**CHECK OUTPUT SIGNAL EMITTED FROM TCM.** Measure signal voltage for TCM while removing the fuse from FWD switch connector. ***Connector & terminal*** ***(B54) No. 12 (+) — Chassis ground (–):***	Is the voltage more than 10 V in FWD switch while removing?	Go to step **11**.	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>
11	**CHECK POOR CONTACT.**	Is there poor contact in FWD switch circuit?	Repair poor contact.	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>

C: CHECK BRAKE SWITCH. S004618F17

No.	Step	Check	Yes	No
1	**CHECK BRAKE SWITCH.**	When the brake pedal is depressed, does LED light up?	Go to step CHECK ABS SWITCH. <Ref. to AT-83 CHECK ABS SWITCH., Diagnostic Procedure for No-Trouble Code.>	Check brake switch circuit. <Ref. to BR-58 INSPECTION, Stop Light Switch.>

D: CHECK ABS SWITCH. S004618F18

No.	Step	Check	Yes	No
1	**CHECK ABS SWITCH.**	Does the LED of ABS switch light up?	Check ABS switch circuit. <Ref. to ABS-20 LIST, List of Diagnostic Trouble Code.> and <Ref. to ABS-52 TROUBLE CODE 38 — ABNORMAL OUTLET SOLENOID VALVE CIRCUIT(S) IN ABSCM&H/U (REAR LH) —, Diagnostics Chart with Diagnosis Connector.>	Go to step CHECK CRUISE CONTROL SWITCH. <Ref. to AT-83 CHECK CRUISE CONTROL SWITCH., Diagnostic Procedure for No-Trouble Code.>

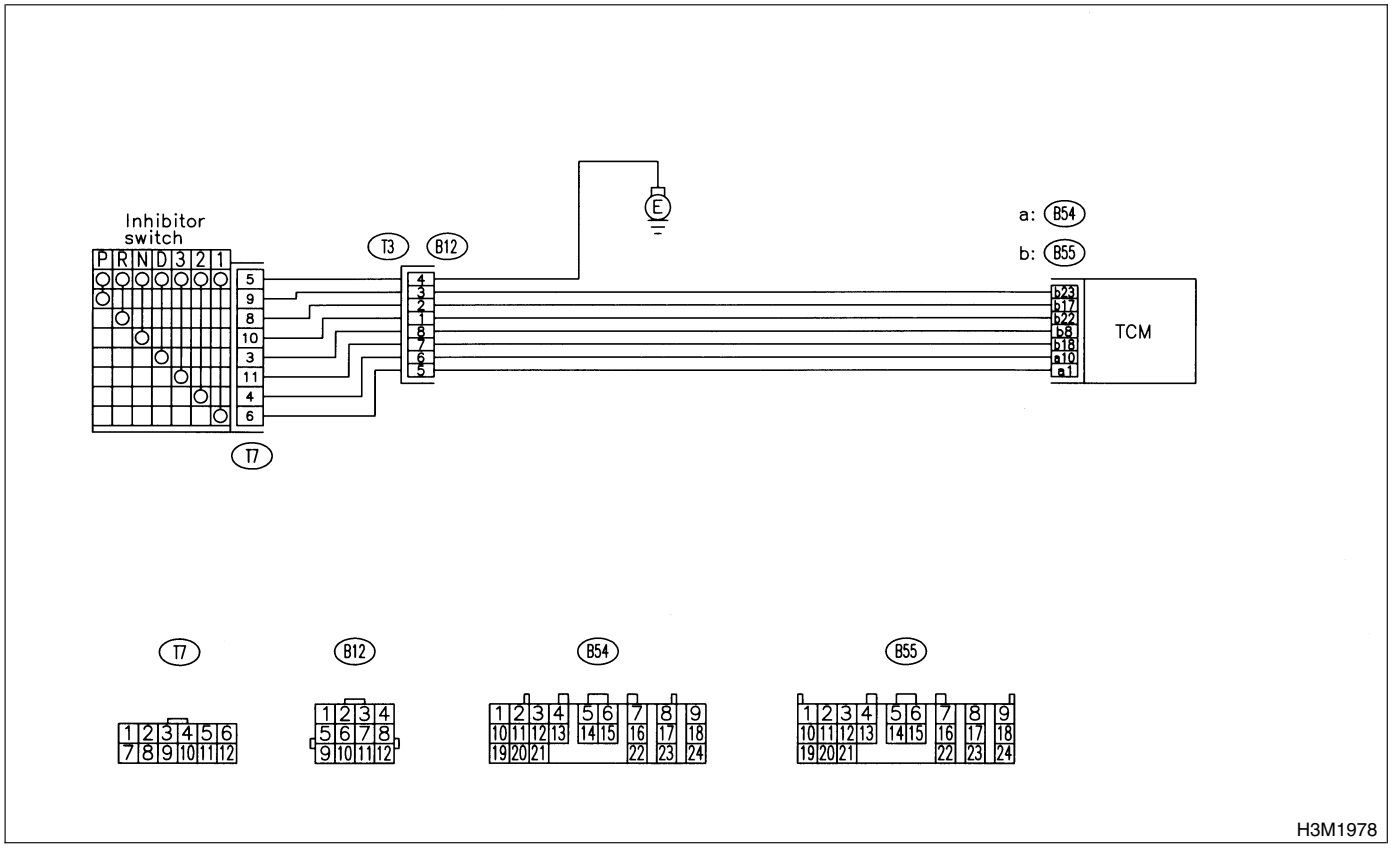
E: CHECK CRUISE CONTROL SWITCH. S004618F19

No.	Step	Check	Yes	No
1	**CHECK CRUISE CONTROL SWITCH.**	When cruise control is set, does LED light up?	Go to step CHECK INHIBITOR SWITCH. <Ref. to AT-84 CHECK INHIBITOR SWITCH, Diagnostic Procedure for No-Trouble Code.>	Check cruise control. <Ref. to CC-2 PROCEDURE, Basic Diagnostic Procedure.>

F: CHECK INHIBITOR SWITCH. S004618F20

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:



No.	Step	Check	Yes	No
1	**CHECK “P” RANGE SWITCH.**	When “P” range is selected, does LED light up?	Go to step **2**.	Go to step **15**.
2	**CHECK “P” RANGE SWITCH.**	When the “R” range is selected, does “P” range LED light up?	Go to step **20**.	Go to step **3**.
3	**CHECK “R” RANGE SWITCH.**	When the “R” range is selected, does LED light up?	Go to step **4**.	Go to step **22**.
4	**CHECK “R” RANGE SWITCH.**	When the “N” range is selected, does “R” range LED light up?	Go to step **26**.	Go to step **5**.
5	**CHECK “N” RANGE SWITCH.**	When the “N” range is selected, does LED light up?	Go to step **6**.	Go to step **28**.
6	**CHECK “N” RANGE SWITCH.**	When the “D” range is selected, does “N” range LED light up?	Go to step **32**.	Go to step **7**.

No.	Step	Check	Yes	No
7	**CHECK "D" RANGE SWITCH.**	When the "D" range is selected, does LED light up?	Go to step **8**.	Go to step **34**.
8	**CHECK "D" RANGE SWITCH.**	When the "3" range is selected, does "D" range LED light up?	Go to step **38**.	Go to step **9**.
9	**CHECK "3" RANGE SWITCH.**	When the "3" range is selected, does LED light up?	Go to step **10**.	Go to step **40**.
10	**CHECK "3" RANGE SWITCH.**	When the "2" range is selected, does "3" range LED light up?	Go to step **44**.	Go to step **11**.
11	**CHECK "2" RANGE SWITCH.**	When the "2" range is selected, does LED light up?	Go to step **12**.	Go to step **46**.
12	**CHECK "2" RANGE SWITCH.**	When the "1" range is selected, does "2" range LED light up?	Go to step **50**.	Go to step **13**.
13	**CHECK "1" RANGE SWITCH.**	When the "1" range is selected, does LED light up?	Go to step **14**.	Go to step **52**.
14	**CHECK "1" RANGE SWITCH.**	When the "P" range is selected, does "1" range LED light UP?	Go to step **56**.	Go to step SHIFT SOLENOID 1. <Ref. to AT-51 TROUBLE CODE 71 — SHIFT SOLENOID 1 —, Diagnostic Procedure with Trouble Code.>
15	**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*** ***(B12) No. 4 — Chassis ground:***	Is the resistance less than 1 Ω?	Go to step **16**.	Repair open circuit in harness between inhibitor switch connector and combination meter.
16	**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*** ***(B55) No. 23 — (B12) No. 3:***	Is the resistance less than 1 Ω?	Go to step **17**.	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
17	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 4 — No. 3:***	Is the resistance less than 1 Ω in "P" range?	Go to step **18**.	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>

No.	Step	Check	Yes	No
18	**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) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B55) No. 23 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "P" range?	Go to step **19**.	Go to step **58**.
19	**CHECK INPUT SIGNAL FOR TCM.** Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B55) No. 23 (+) — Chassis ground (–):***	Is the voltage more than 8 V in other ranges?	Go to step **58**.	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>
20	**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*** ***(B55) No. 23 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **21**.	Repair ground short circuit in "P" range circuit.
21	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 4 — No. 3:***	Is the resistance more than 1 MΩ in other ranges?	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>
22	**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*** ***(B55) No. 17 — (B12) No. 2:***	Is the resistance less than 1 Ω?	Go to step **23**.	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
23	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 2 — No. 4:***	Is the resistance less than 1 Ω in "R" range?	Go to step **24**.	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>
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) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B55) No. 17 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "R" range?	Go to step **25**.	Go to step **58**.
25	**CHECK INPUT SIGNAL FOR TCM.** Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B55) No. 17 (+) — Chassis ground (–):***	Is the voltage more than 9.5 V in other ranges?	Go to step **58**.	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>

No.	Step	Check	Yes	No
26	**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*** ***(B55) No. 17 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **27**.	Repair ground short circuit in "R" range circuit.
27	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 2 — No. 4:***	Is the resistance more than 1 MΩ in other ranges?	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>
28	**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*** ***(B55) No. 22 — (B12) No. 1:***	Is the resistance less than 1 Ω?	Go to step **29**.	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
29	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 4 — No. 1:***	Is the resistance less than 1 Ω in "N" range?	Go to step **30**.	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>
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) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B55) No. 22 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "N" range?	Go to step **31**.	Go to step **58**.
31	**CHECK INPUT SIGNAL FOR TCM.** Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B55) No. 22 (+) — Chassis ground (–):***	Is the voltage more than 8 V in other ranges?	Go to step **58**.	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>
32	**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*** ***(B55) No. 22 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **33**.	Repair ground short circuit in "N" range circuit.
33	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 1 — No. 4:***	Is the resistance more than 1 MΩ in other ranges?	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>

No.	Step	Check	Yes	No
34	**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*** ***(B55) No. 8 — (B12) No. 8:***	Is the resistance less than 1 Ω?	Go to step **35**.	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
35	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 4 — No. 8:***	Is the resistance less than 1 Ω in "D" range?	Go to step **36**.	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>
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) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B55) No. 8 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "D" range?	Go to step **39**.	Go to step **58**.
37	**CHECK INPUT SIGNAL FOR TCM.** Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B55) No. 8 (+) — Chassis ground (–):***	Is the voltage more than 9.5 V in other ranges?	Go to step **58**.	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>
38	**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*** ***(B55) No. 8 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **39**.	Repair ground short circuit in "D" range circuit.
39	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 4 — No. 8:***	Is the resistance more than 1 MΩ in other ranges?	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>
40	**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*** ***(B55) No. 18 — (B12) No. 7:***	Is the resistance less than 1 Ω?	Go to step **41**.	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
41	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 4 — No. 7:***	Is the resistance less than 1 Ω in "3" range?	Go to step **42**.	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>

No.	Step	Check	Yes	No
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) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B55) No. 18 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "3" range?	Go to step **43**.	Go to step **58**.
43	**CHECK INPUT SIGNAL FOR TCM.** Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B55) No. 18 (+) — Chassis ground (–):***	Is the voltage more than 9.5 V in other ranges?	Go to step **58**.	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>
44	**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*** ***(B55) No. 18 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **45**.	Repair ground short circuit in "3" range circuit.
45	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 4 — No. 7:***	Is the resistance more than 1 MΩ in other ranges?	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>
46	**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*** ***(B54) No. 10 — (B12) No. 6:***	Is the resistance less than 1 Ω?	Go to step **47**.	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
47	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 6 — No. 4:***	Is the resistance less than 1 Ω in "2" range?	Go to step **48**.	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>
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) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B54) No. 10 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "2" range?	Go to step **49**.	Go to step **58**.
49	**CHECK INPUT SIGNAL FOR TCM.** Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B54) No. 10 (+) — Chassis ground (–):***	Is the voltage more than 9.5 V in other ranges?	Go to step **58**.	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>

No.	Step	Check	Yes	No
50	**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*** ***(B54) No. 10 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **51**.	Repair ground short circuit in "2" range circuit.
51	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 6 — No. 4:***	Is the resistance more than 1 MΩ in other ranges?	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>
52	**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*** ***(B54) No. 1 — (B12) No. 5:***	Is the resistance less than 1 Ω?	Go to step **53**.	Repair open circuit in harness between TCM and inhibitor switch connector, and poor contact in coupling connector.
53	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 5 — No. 4:***	Is the resistance less than 1 Ω in "1" range?	Go to step **54**.	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>
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) Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B54) No. 1 (+) — Chassis ground (–):***	Is the voltage less than 1 V in "1" range?	Go to step **55**.	Go to step **58**.
55	**CHECK INPUT SIGNAL FOR TCM.** Measure voltage between TCM and chassis ground. ***Connector & terminal*** ***(B54) No. 1 (+) — Chassis ground (–):***	Is the voltage more than 9.5 V in other ranges?	Go to step **58**.	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>
56	**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*** ***(B54) No. 1 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **57**.	Repair ground short circuit in "1" range circuit.
57	**CHECK INHIBITOR SWITCH.** Measure resistance between inhibitor switch connector receptacle's terminals. ***Terminals*** ***(T3) No. 5 — No. 4:***	Is the resistance more than 1 MΩ in other ranges?	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>	Adjust inhibitor switch. <Ref. to AT-30 ADJUSTMENT, Inhibitor Switch.>

No.	Step	Check	Yes	No
58	**CHECK POOR CONTACT.**	Is there poor contact in inhibitor switch circuit?	Repair poor contact.	Replace TCM. <Ref. to AT-41 REMOVAL, Transmission Control Module (TCM).>

G: CHECK FWD LIGHT. S004618F21

No.	Step	Check	Yes	No
1	**CHECK FWD LIGHT.**	Does the LED of FWD light illuminate?	Check FWD light circuit. <Ref. to AT-81 CHECK FWD SWITCH., Diagnostic Procedure for No-Trouble Code.>	Go to step Symptom Related Diagnostic. <Ref. to AT-93 INSPECTION, Symptom Related Diagnostic.>