15. Diagnostics Chart with Trouble Code for 2200 cc Except California Spec. RHD Vehicles

A: DIAGNOSTIC TROUBLE CODE (DTC) LIST

DTC No.	Item	Index
P0101	Mass air flow sensor circuit range/performance problem (high input)	<Ref. to 2-7 [T15B0].>
P0102	Mass air flow sensor circuit low input	<Ref. to 2-7 [T15C0].>
P0103	Mass air flow sensor circuit high input	<Ref. to 2-7 [T15D0].>
P0106	Pressure sensor circuit range/performance problem	<Ref. to 2-7 [T15E0].>
P0107	Pressure sensor circuit low input	<Ref. to 2-7 [T15F0].>
P0108	Pressure sensor circuit high input	<Ref. to 2-7 [T15G0].>
P0116	Engine coolant temperature sensor circuit low input	<Ref. to 2-7 [T15H0].>
P0117	Engine coolant temperature sensor circuit high input	<Ref. to 2-7 [T15I0].>
P0121	Throttle position sensor circuit range/performance problem (high input)	<Ref. to 2-7 [T15J0].>
P0122	Throttle position sensor circuit low input	<Ref. to 2-7 [T15K0].>
P0123	Throttle position sensor circuit high input	<Ref. to 2-7 [T15L0].>
P0125	Insufficient coolant temperature for closed loop fuel control	<Ref. to 2-7 [T15M0].>
P0130	Front oxygen sensor circuit malfunction	<Ref. to 2-7 [T15N0].>
P0133	Front oxygen sensor circuit slow response	<Ref. to 2-7 [T15O0].>
P0135	Front oxygen sensor heater circuit malfunction	<Ref. to 2-7 [T15P0].>
P0136	Rear oxygen sensor circuit malfunction	<Ref. to 2-7 [T15Q0].>
P0139	Rear oxygen sensor circuit slow response	<Ref. to 2-7 [T15R0].>
P0141	Rear oxygen sensor heater circuit malfunction	<Ref. to 2-7 [T15S0].>
P0170	Fuel trim malfunction	<Ref. to 2-7 [T15T0].>
P0181	Fuel temperature sensor A circuit range/performance problem	<Ref. to 2-7 [T15U0].>
P0182	Fuel temperature sensor A circuit low input	<Ref. to 2-7 [T15V0].>
P0183	Fuel temperature sensor A circuit high input	<Ref. to 2-7 [T15W0].>
P0301	Cylinder 1 misfire detected	<Ref. to 2-7 [T15X0].>
P0302	Cylinder 2 misfire detected	<Ref. to 2-7 [T15Y0].>
P0303	Cylinder 3 misfire detected	<Ref. to 2-7 [T15Z0].>

DTC No.	Item	Index
P0304	Cylinder 4 misfire detected	<Ref. to 2-7 [T15AA0].>
P0325	Knock sensor circuit high input	<Ref. to 2-7 [T15AB0].>
P0335	Crankshaft position sensor circuit malfunction	<Ref. to 2-7 [T15AC0].>
P0336	Crankshaft position sensor circuit range/performance problem	<Ref. to 2-7 [T15AD0].>
P0340	Camshaft position sensor circuit malfunction	<Ref. to 2-7 [T15AE0].>
P0341	Camshaft position sensor circuit range/performance problem	<Ref. to 2-7 [T15AF0].>
P0420	Catalyst system efficiency below threshold	<Ref. to 2-7 [T15AG0].>
P0440	Evaporative emission control system malfunction	<Ref. to 2-7 [T15AH0].>
P0443	Evaporative emission control system purge control valve circuit low input	<Ref. to 2-7 [T15AI0].>
P0446	Evaporative emission control system vent control low input	<Ref. to 2-7 [T15AJ0].>
P0451	Evaporative emission control system pressure sensor range/performance problem	<Ref. to 2-7 [T15AK0].>
P0452	Evaporative emission control system pressure sensor low input	<Ref. to 2-7 [T15AL0].>
P0453	Evaporative emission control system pressure sensor high input	<Ref. to 2-7 [T15AM0].>
P0461	Fuel level sensor circuit range/performance problem	<Ref. to 2-7 [T15AN0].>
P0462	Fuel level sensor circuit low input	<Ref. to 2-7 [T15AO0].>
P0463	Fuel level sensor circuit high input	<Ref. to 2-7 [T15AP0].>
P0480	Cooling fan relay 1 circuit low input	<Ref. to 2-7 [T15AQ0].>
P0483	Cooling fan function problem	<Ref. to 2-7 [T15AR0].>
P0500	Vehicle speed sensor malfunction	<Ref. to 2-7 [T15AS0].>
P0506	Idle control system RPM lower than expected	<Ref. to 2-7 [T15AT0].>
P0507	Idle control system RPM higher than expected	<Ref. to 2-7 [T15AU0].>
P0601	Internal control module memory check sum error	<Ref. to 2-7 [T15AV0].>
P0703	Brake switch input malfunction	<Ref. to 2-7 [T15AW0].>
P0705	Transmission range sensor circuit malfunction	<Ref. to 2-7 [T15AX0].>
P0710	Transmission fluid temperature sensor circuit malfunction	<Ref. to 2-7 [T15AY0].>
P0715	Torque converter turbine speed sensor circuit malfunction	<Ref. to 2-7 [T15AZ0].>
P0720	Output speed sensor (vehicle speed sensor 2) circuit malfunction	<Ref. to 2-7 [T15BA0].>

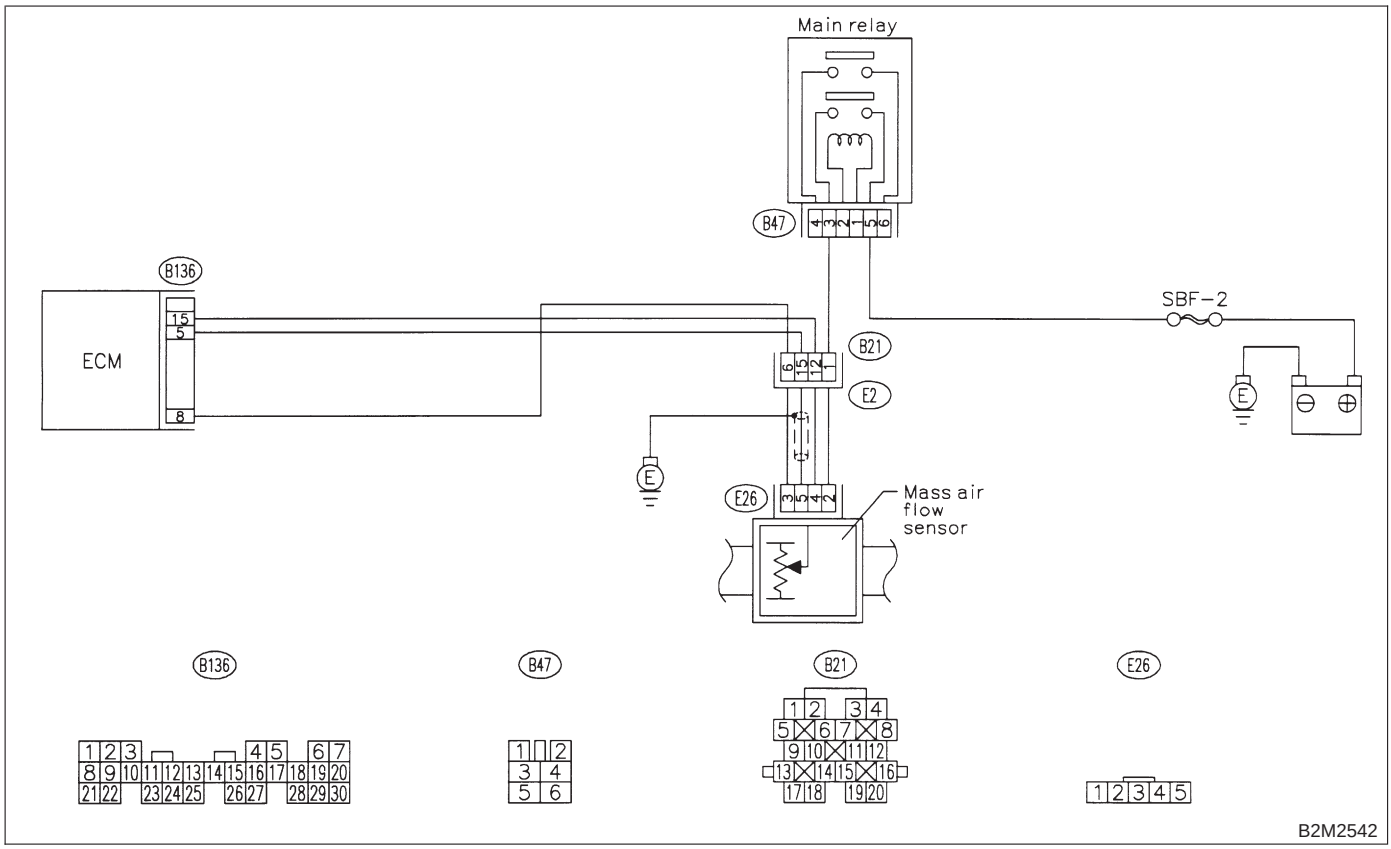
DTC No.	Item	Index
P0725	Engine speed input circuit malfunction	<Ref. to 2-7 [T15BB0].>
P0731	Gear 1 incorrect ratio	<Ref. to 2-7 [T15BC0].>
P0732	Gear 2 incorrect ratio	<Ref. to 2-7 [T15BD0].>
P0733	Gear 3 incorrect ratio	<Ref. to 2-7 [T15BE0].>
P0734	Gear 4 incorrect ratio	<Ref. to 2-7 [T15BF0].>
P0740	Torque converter clutch system malfunction	<Ref. to 2-7 [T15BG0].>
P0743	Torque converter clutch system (Duty solenoid B) electrical	<Ref. to 2-7 [T15BH0].>
P0748	Pressure control solenoid (Duty solenoid A) electrical	<Ref. to 2-7 [T15BI0].>
P0753	Shift solenoid A (Shift solenoid 1) electrical	<Ref. to 2-7 [T15BJ0].>
P0758	Shift solenoid B (Shift solenoid 2) electrical	<Ref. to 2-7 [T15BK0].>
P1100	Starter switch circuit low input	<Ref. to 2-7 [T15BL0].>
P1101	Neutral position switch circuit high input [AT vehicles]	<Ref. to 2-7 [T15BM0].>
P1102	Pressure sources switching solenoid valve circuit low input	<Ref. to 2-7 [T15BN0].>
P1103	Engine torque control signal 1 circuit malfunction	<Ref. to 2-7 [T15BO0].>
P1106	Engine torque control signal 2 circuit malfunction	<Ref. to 2-7 [T15BP0].>
P1115	Engine torque control cut signal circuit high input	<Ref. to 2-7 [T15BQ0].>
P1116	Engine torque control cut signal circuit low input	<Ref. to 2-7 [T15BR0].>
P1120	Starter switch circuit high input	<Ref. to 2-7 [T15BS0].>
P1121	Neutral position switch circuit low input [AT vehicles]	<Ref. to 2-7 [T15BT0].>
P1122	Pressure sources switching solenoid valve circuit high input	<Ref. to 2-7 [T15BU0].>
P1141	Mass air flow sensor circuit range/performance problem (low input)	<Ref. to 2-7 [T15BV0].>
P1142	Throttle position sensor circuit range/performance problem (low input)	<Ref. to 2-7 [T15BW0].>
P1143	Pressure sensor circuit range/performance problem (low input)	<Ref. to 2-7 [T15BX0].>
P1144	Pressure sensor circuit range/performance problem (high input)	<Ref. to 2-7 [T15BY0].>
P1150	Front oxygen sensor heater circuit high input	<Ref. to 2-7 [T15BZ0].>
P1151	Rear oxygen sensor heater circuit high input	<Ref. to 2-7 [T15CA0].>
P1325	Knock sensor circuit low input	<Ref. to 2-7 [T15CB0].>

DTC No.	Item	Index
P1400	Fuel tank pressure control solenoid valve circuit low input	<Ref. to 2-7 [T15CC0].>
P1420	Fuel tank pressure control solenoid valve circuit high input	<Ref. to 2-7 [T15CD0].>
P1422	Evaporative emission control system purge control valve circuit high input	<Ref. to 2-7 [T15CE0].>
P1423	Evaporative emission control system vent control high input	<Ref. to 2-7 [T15CF0].>
P1442	Fuel level sensor circuit range/performance problem 2	<Ref. to 2-7 [T15CG0].>
P1443	Evaporative emission control system vent control function problem	<Ref. to 2-7 [T15CH0].>
P1507	Idle control system malfunction (fail-safe)	<Ref. to 2-7 [T15CI0].>
P1510	Idle air control solenoid valve signal 1 circuit low input	<Ref. to 2-7 [T15CJ0].>
P1511	Idle air control solenoid valve signal 1 circuit high input	<Ref. to 2-7 [T15CK0].>
P1512	Idle air control solenoid valve signal 2 circuit low input	<Ref. to 2-7 [T15CL0].>
P1513	Idle air control solenoid valve signal 2 circuit high input	<Ref. to 2-7 [T15CM0].>
P1514	Idle air control solenoid valve signal 3 circuit low input	<Ref. to 2-7 [T15CN0].>
P1515	Idle air control solenoid valve signal 3 circuit high input	<Ref. to 2-7 [T15CO0].>
P1516	Idle air control solenoid valv esignal 4 circuit low input	<Ref. to 2-7 [T15CP0].>
P1517	Idle air control solenoid valve signal 4 circuit high input	<Ref. to 2-7 [T15CQ].>
P1520	Cooling fan relay 1 circuit high input	<Ref. to 2-7 [T15CR0].>
P1540	Vehicle speed sensor malfunction 2	<Ref. to 2-7 [T15CS0].>
P1560	Back-up voltage circuit malfunction	<Ref. to 2-7 [T15CT0].>
P1700	Throttle position sensor circuit malfunction for automatic transmission	<Ref. to 2-7 [T15CU0].>
P1701	Cruise control set signal circuit malfunction for automatic transmission	<Ref. to 2-7 [T15CV0].>
P1702	Automatic transmission diagnosis input signal circuit low input	<Ref. to 2-7 [T15CW0].>
P1703	Low clutch timing control solenoid valve circuit malfunction	<Ref. to 2-7 [T15CX0].>
P1704	2–4 brake timing control solenoid valve circuit malfunction	<Ref. to 2-7 [T15CY0].>
P1705	2–4 brake pressure control solenoid valve (Duty solenoid D) circuit malfunction	<Ref. to 2-7 [T15CZ0].>
P1722	Automatic transmission diagnosis input signal circuit high input	<Ref. to 2-7 [T15DA0].>
P1742	Automatic transmission diagnosis input signal circuit malfunction	<Ref. to 2-7 [T15DB0].>

B: DTC P0101 — MASS AIR FLOW SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM (HIGH INPUT) —

NOTE:
Check mass air flow sensor circuit.
<Ref. to 2-7 [T14B0].>

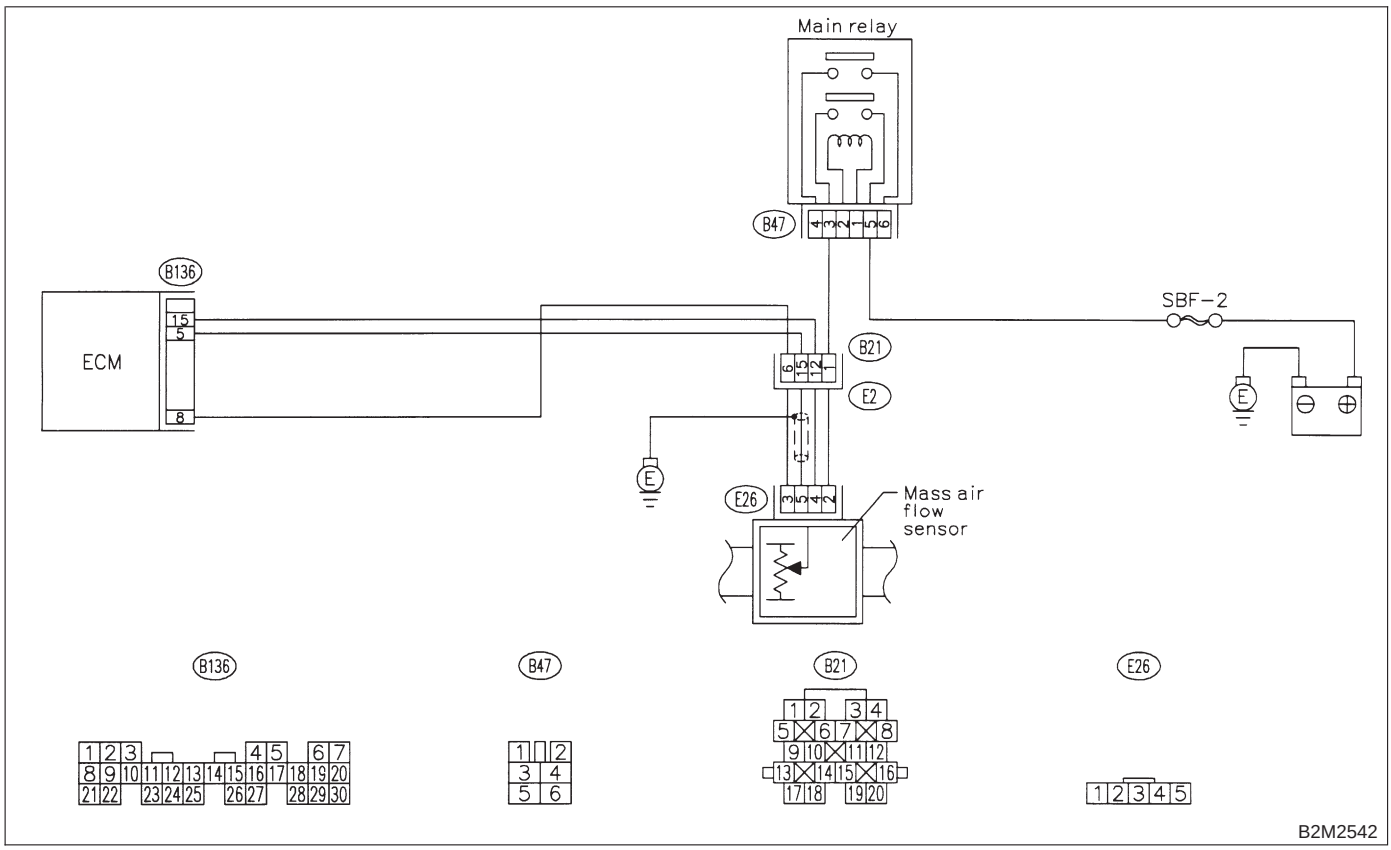
- **WIRING DIAGRAM:**



C: DTC P0102 — MASS AIR FLOW SENSOR CIRCUIT LOW INPUT —

NOTE:
Check mass air flow sensor circuit.
<Ref. to 2-7 [T14C0].>

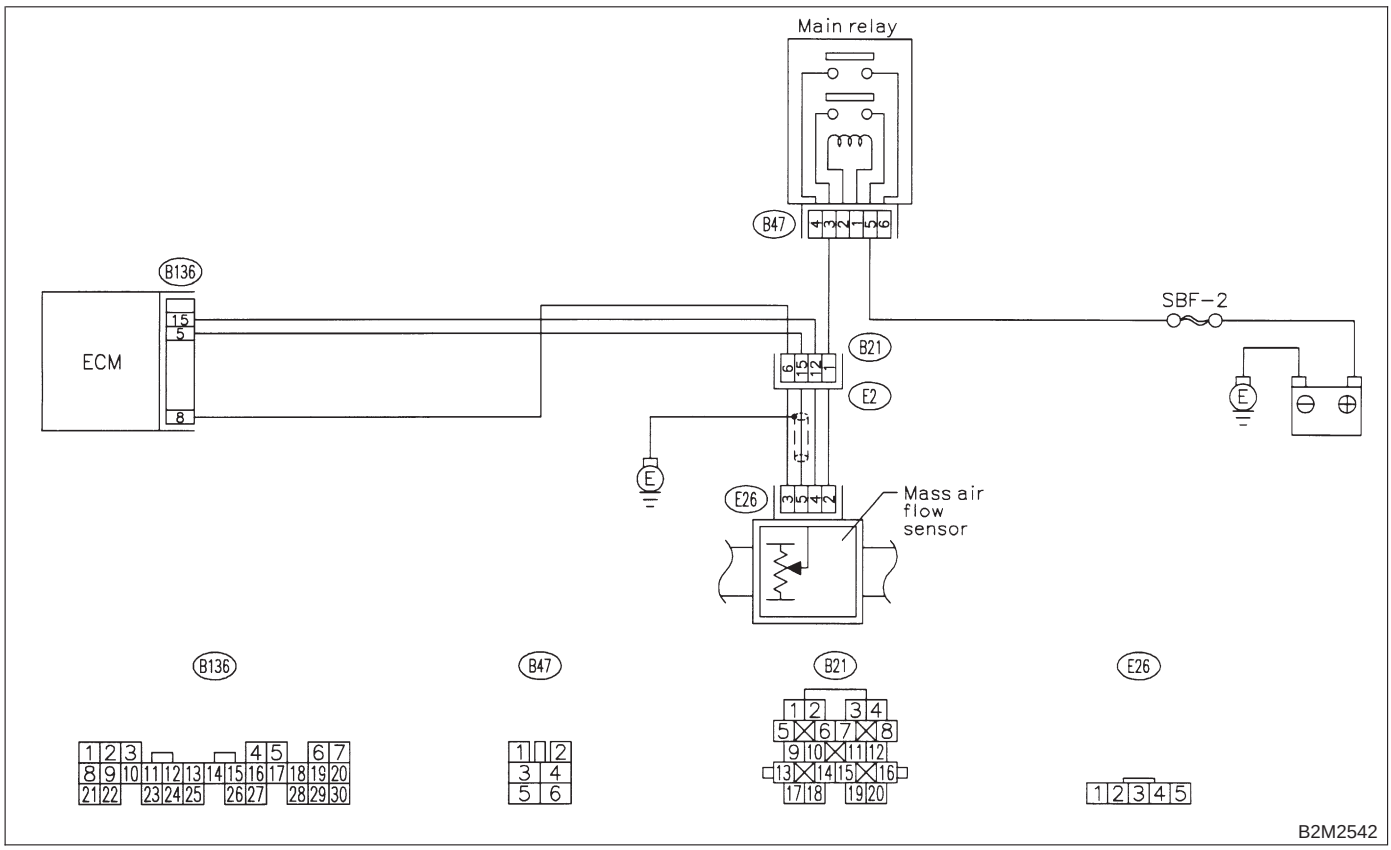
- **WIRING DIAGRAM:**



D: DTC P0103 — MASS AIR FLOW SENSOR CIRCUIT HIGH INPUT —

NOTE:
Check mass air flow sensor circuit.
<Ref. to 2-7 [T14D0].>

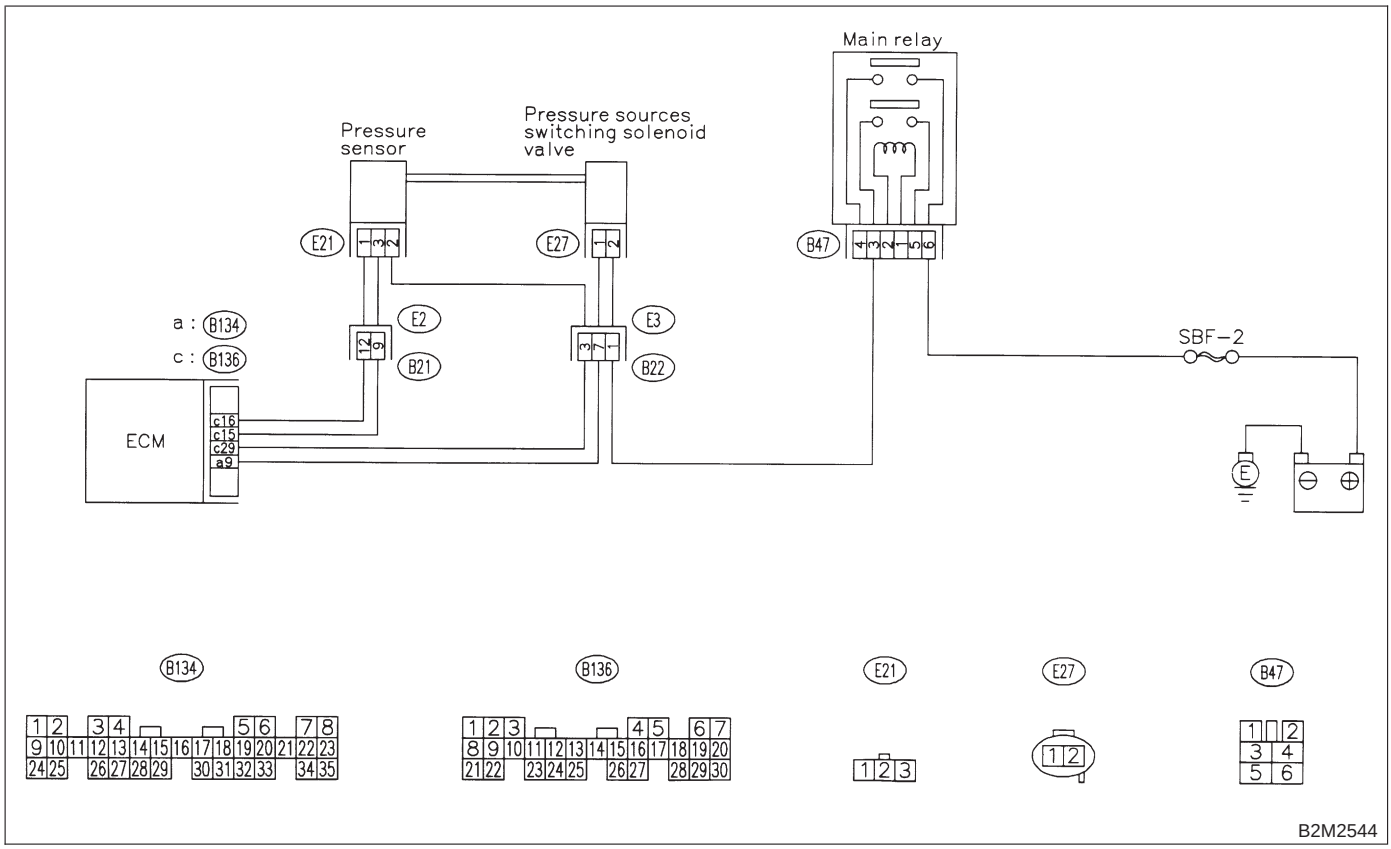
- **WIRING DIAGRAM:**



E: DTC P0106 — PRESSURE SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM —

NOTE:
Check pressure sensor circuit.
<Ref. to 2-7 [T14E0].>

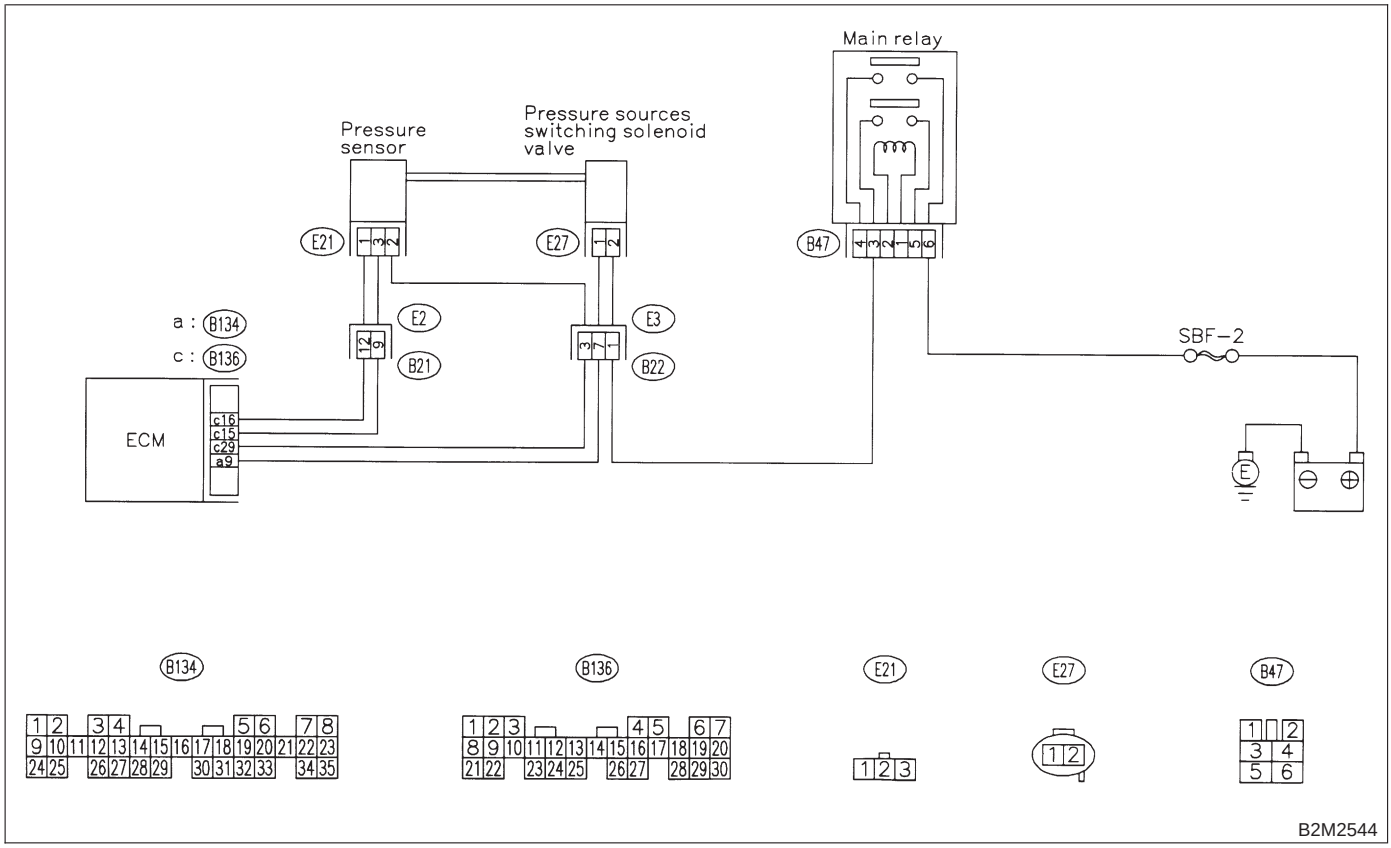
- **WIRING DIAGRAM:**



F: DTC P0107 — PRESSURE SENSOR CIRCUIT LOW INPUT —

NOTE:
Check pressure sensor circuit.
<Ref. to 2-7 [T14F0].>

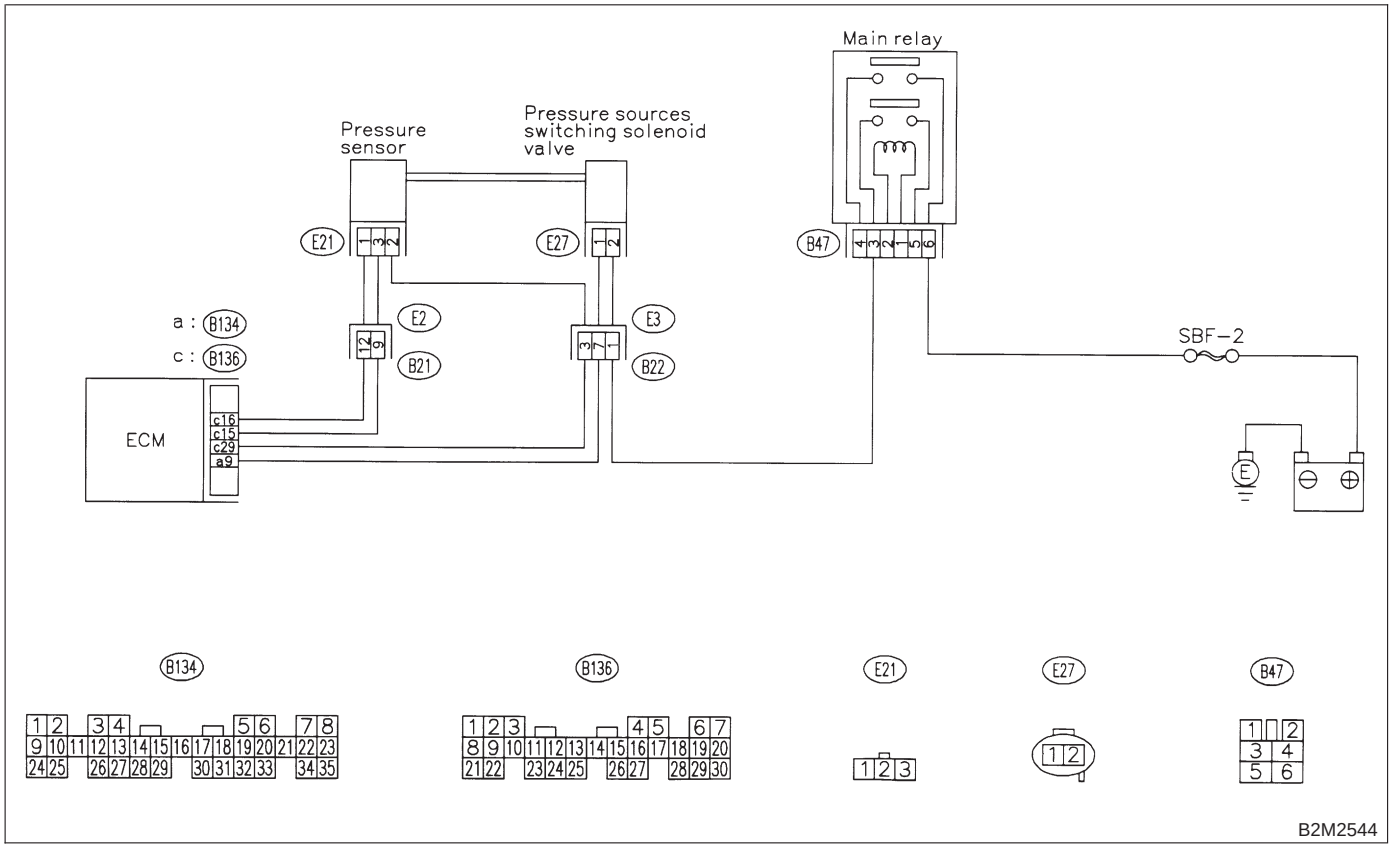
- **WIRING DIAGRAM:**



G: DTC P0108 — PRESSURE SENSOR CIRCUIT HIGH INPUT —

NOTE:
Check pressure sensor circuit.
<Ref. to 2-7 [T14G0].>

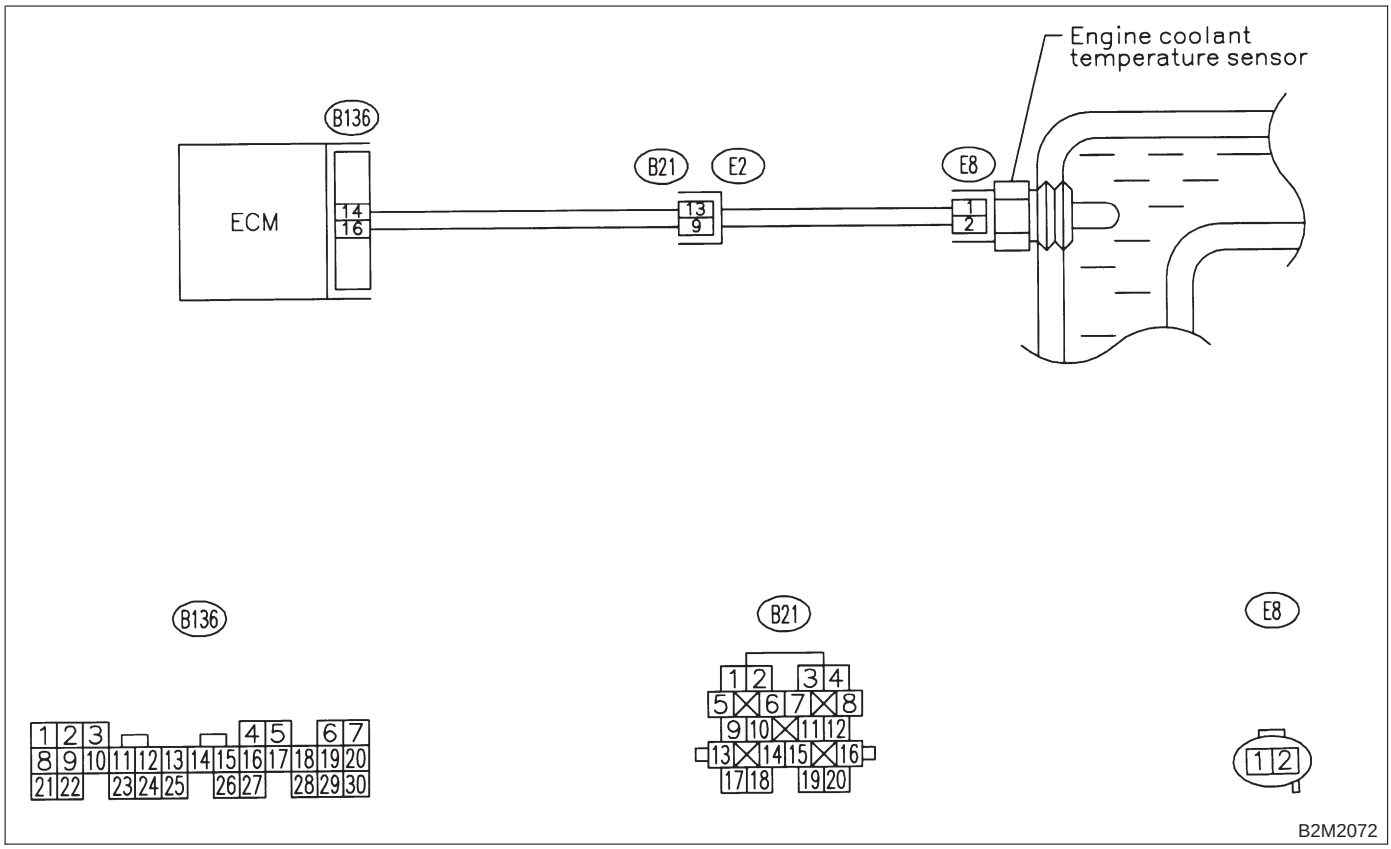
- **WIRING DIAGRAM:**



H: DTC P0116 — ENGINE COOLANT TEMPERATURE SENSOR CIRCUIT LOW INPUT —

NOTE:
Check engine coolant temperature sensor circuit.
<Ref. to 2-7 [T14H0].>

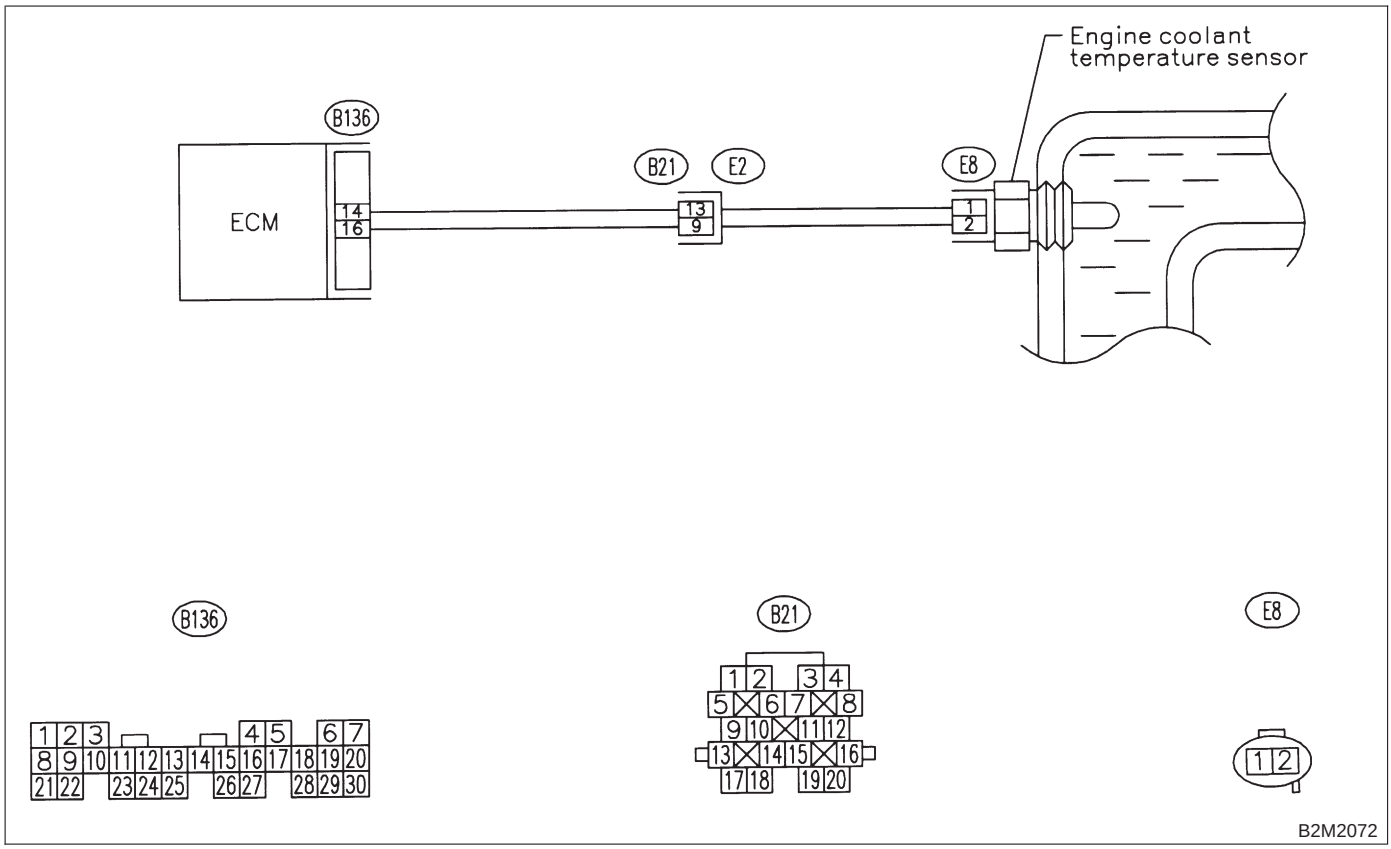
- **WIRING DIAGRAM:**



I: DTC P0117 — ENGINE COOLANT TEMPERATURE SENSOR CIRCUIT HIGH INPUT —

NOTE:
Check engine coolant temperature sensor circuit.
<Ref. to 2-7 [T14I0].>

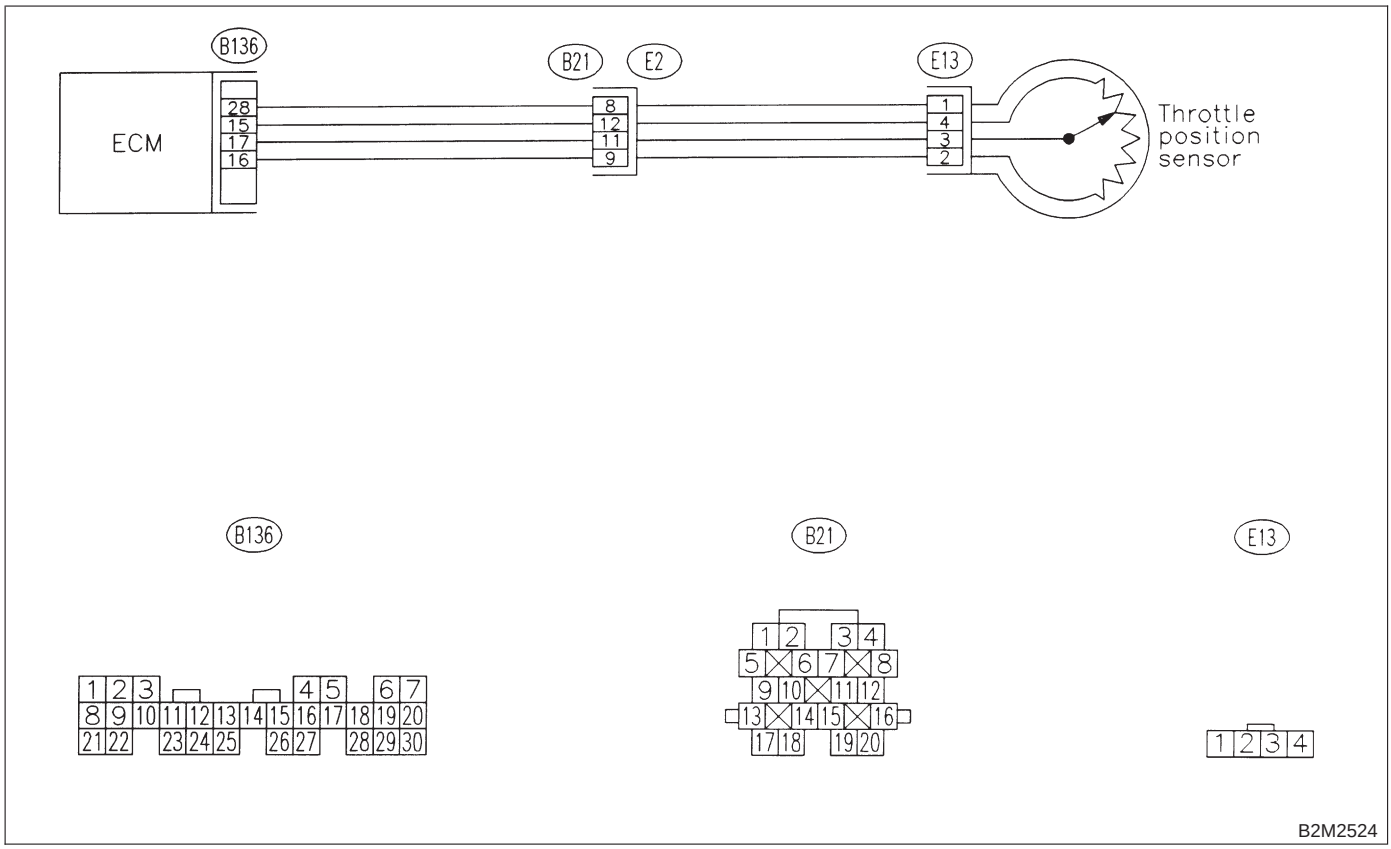
- **WIRING DIAGRAM:**



J: DTC P0121 — THROTTLE POSITION SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM (HIGH INPUT) —

NOTE:
Check throttle position sensor circuit.
<Ref. to 2-7 [T14J0].>

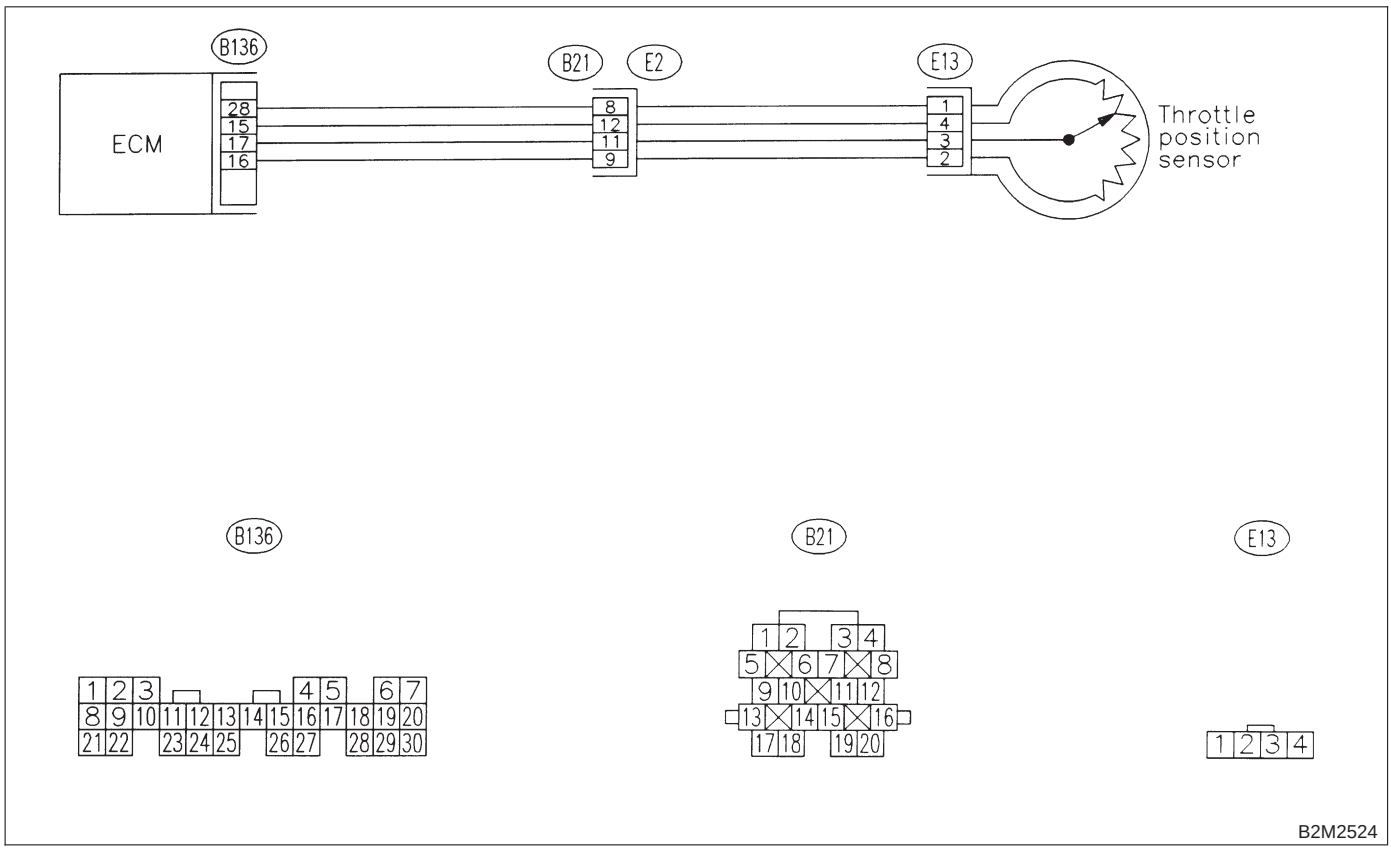
- **WIRING DIAGRAM:**



K: DTC P0122 — THROTTLE POSITION SENSOR CIRCUIT LOW INPUT —

NOTE:
Check throttle position sensor circuit.
<Ref. to 2-7 [T14K0].>

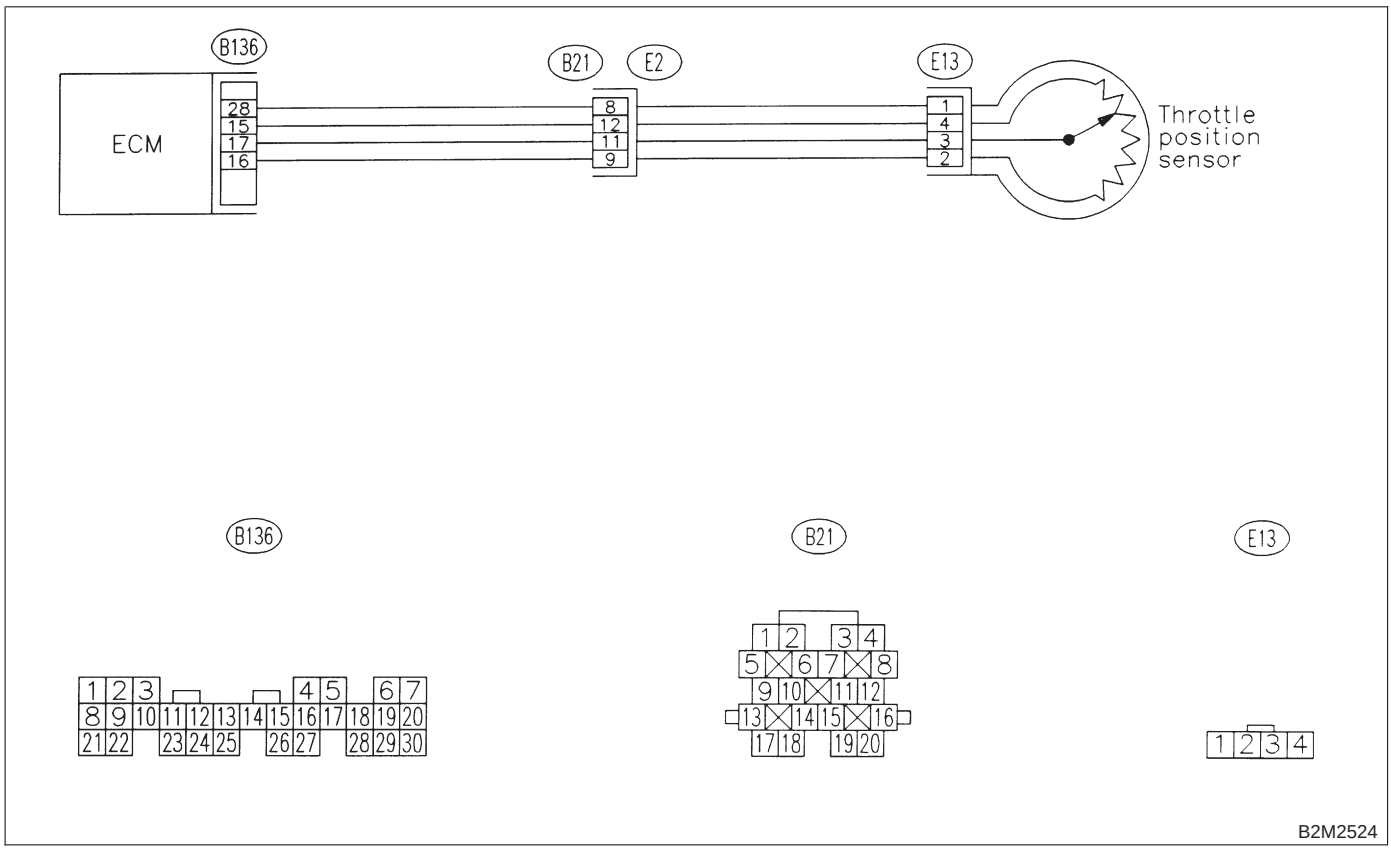
- **WIRING DIAGRAM:**



L: DTC P0123 — THROTTLE POSITION SENSOR CIRCUIT HIGH INPUT —

NOTE:
Check throttle position sensor circuit.
<Ref. to 2-7 [T14L0].>

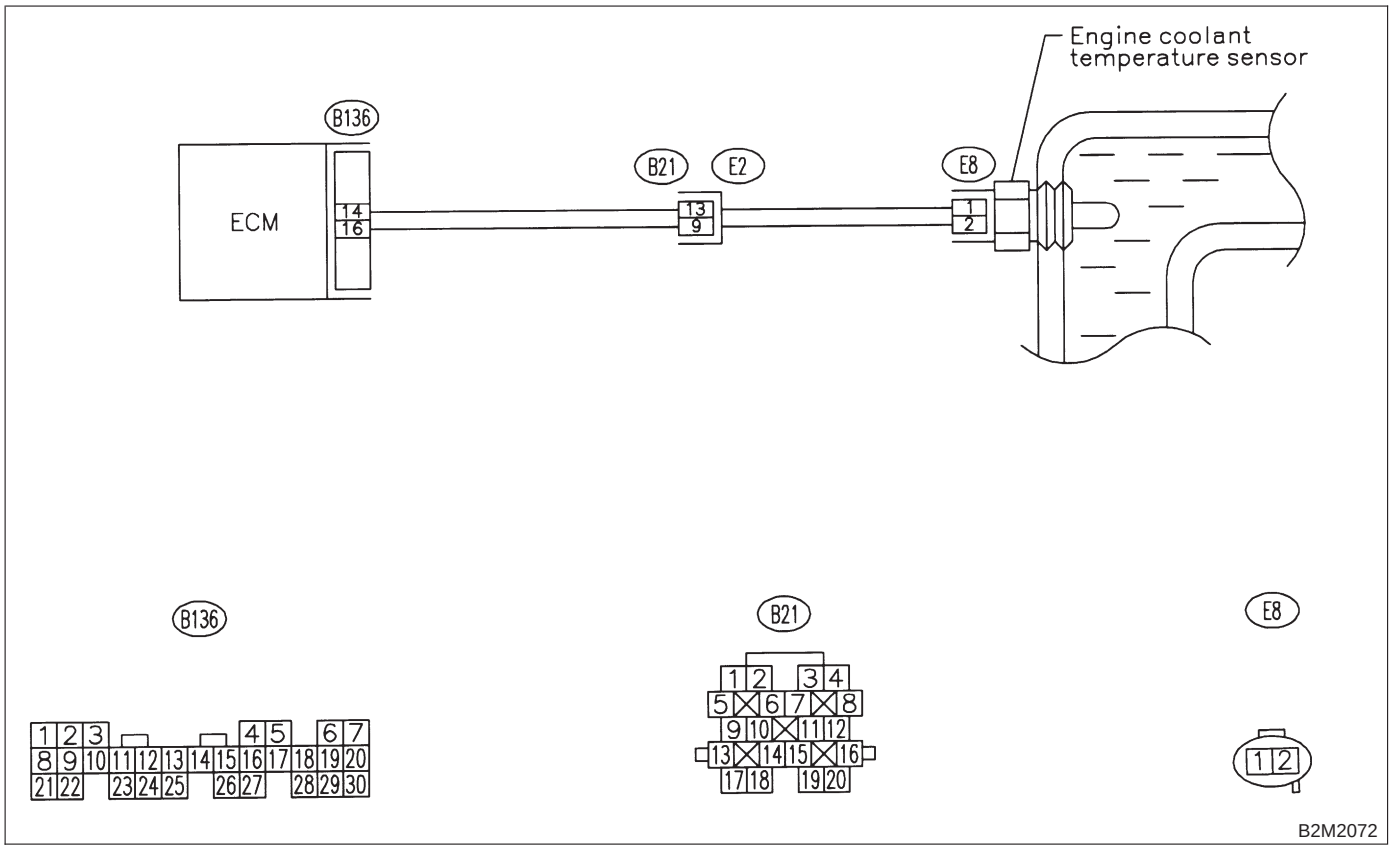
- **WIRING DIAGRAM:**



M: DTC P0125 — INSUFFICIENT COOLANT TEMPERATURE FOR CLOSED LOOP FUEL CONTROL —

NOTE:
Check insufficient coolant temperature for closed loop fuel control.
<Ref. to 2-7 [T14M0].>

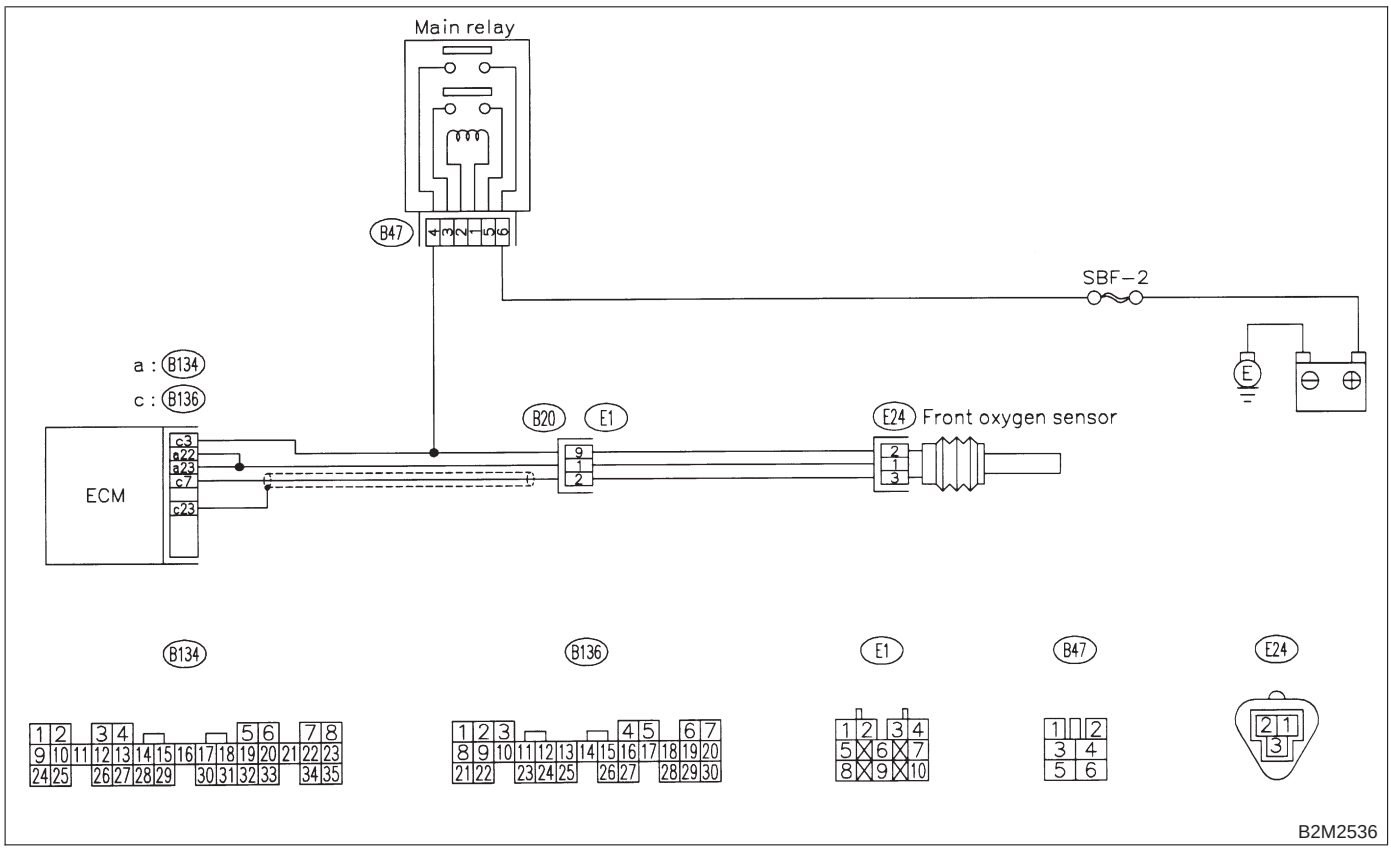
- **WIRING DIAGRAM:**



N: DTC P0130 — FRONT OXYGEN SENSOR CIRCUIT MALFUNCTION —

NOTE:
Check front oxygen sensor circuit.
<Ref. to 2-7 [T14N0].>

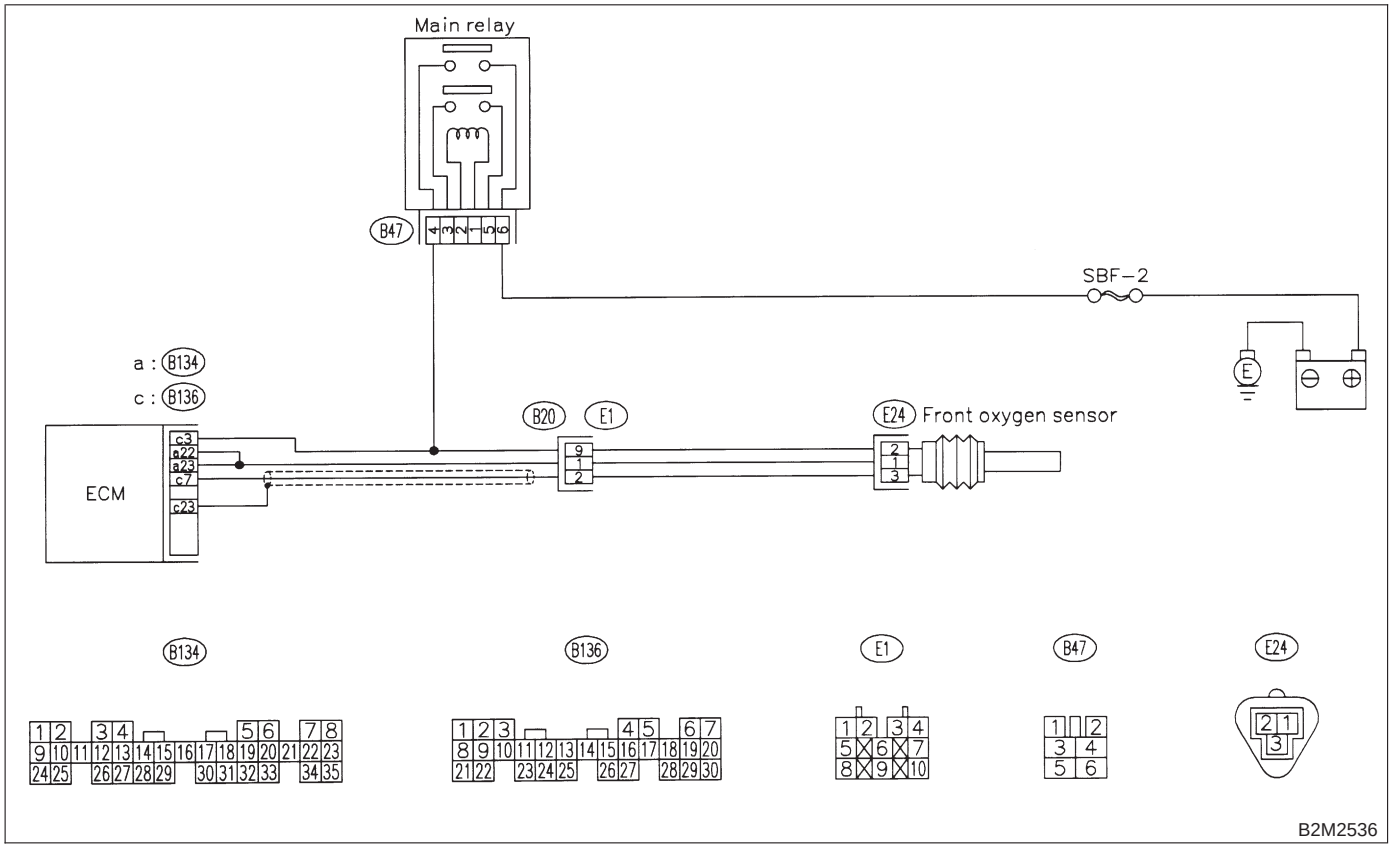
- **WIRING DIAGRAM:**



O: DTC P0133 — FRONT OXYGEN SENSOR CIRCUIT SLOW RESPONSE —

NOTE:
Check front oxygen sensor circuit.
<Ref. to 2-7 [T14O0].>

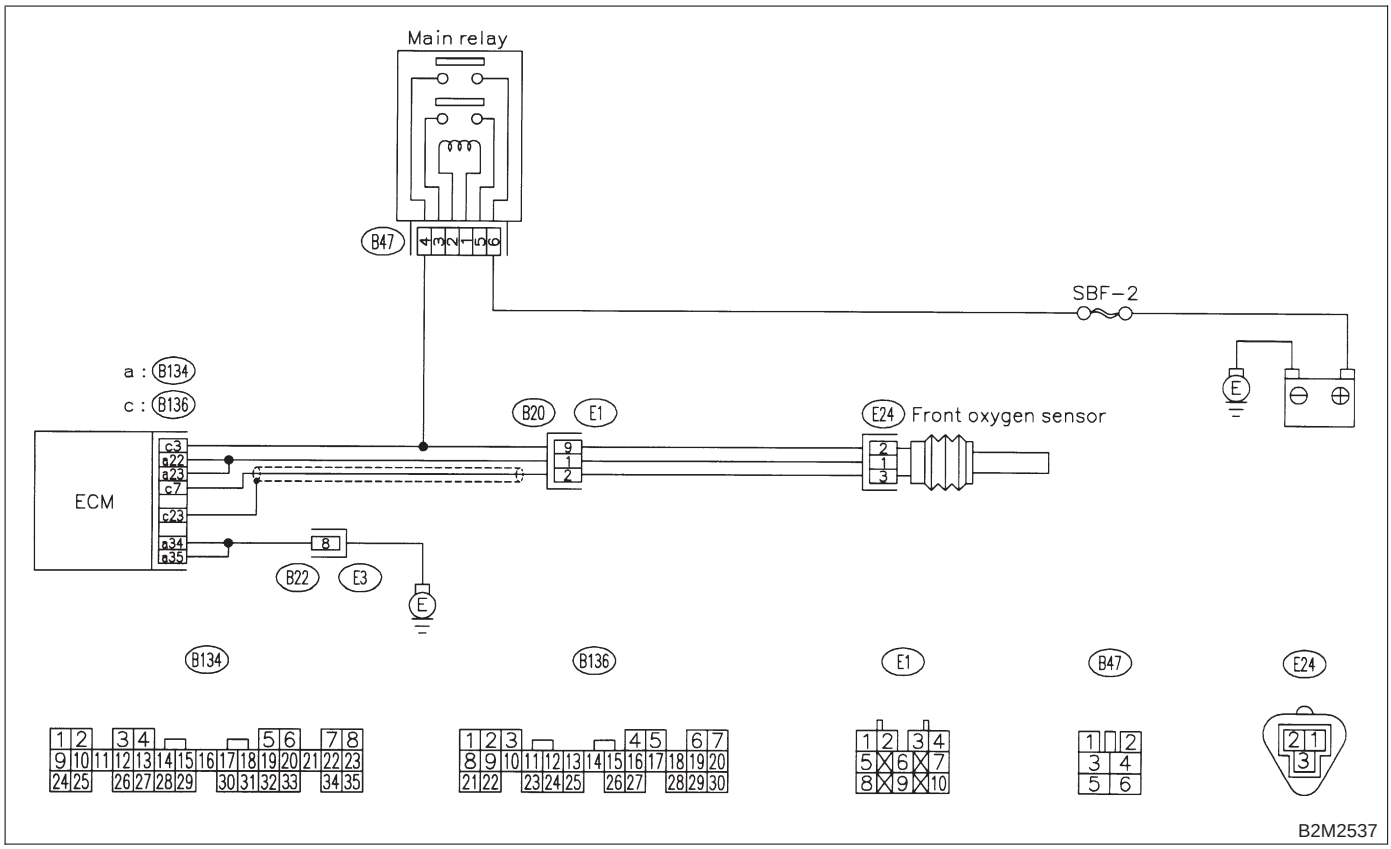
- **WIRING DIAGRAM:**



P: DTC P0135 — FRONT OXYGEN SENSOR HEATER CIRCUIT MALFUNCTION —

NOTE:
Check front oxygen sensor heater circuit.
<Ref. to 2-7 [T14P0].>

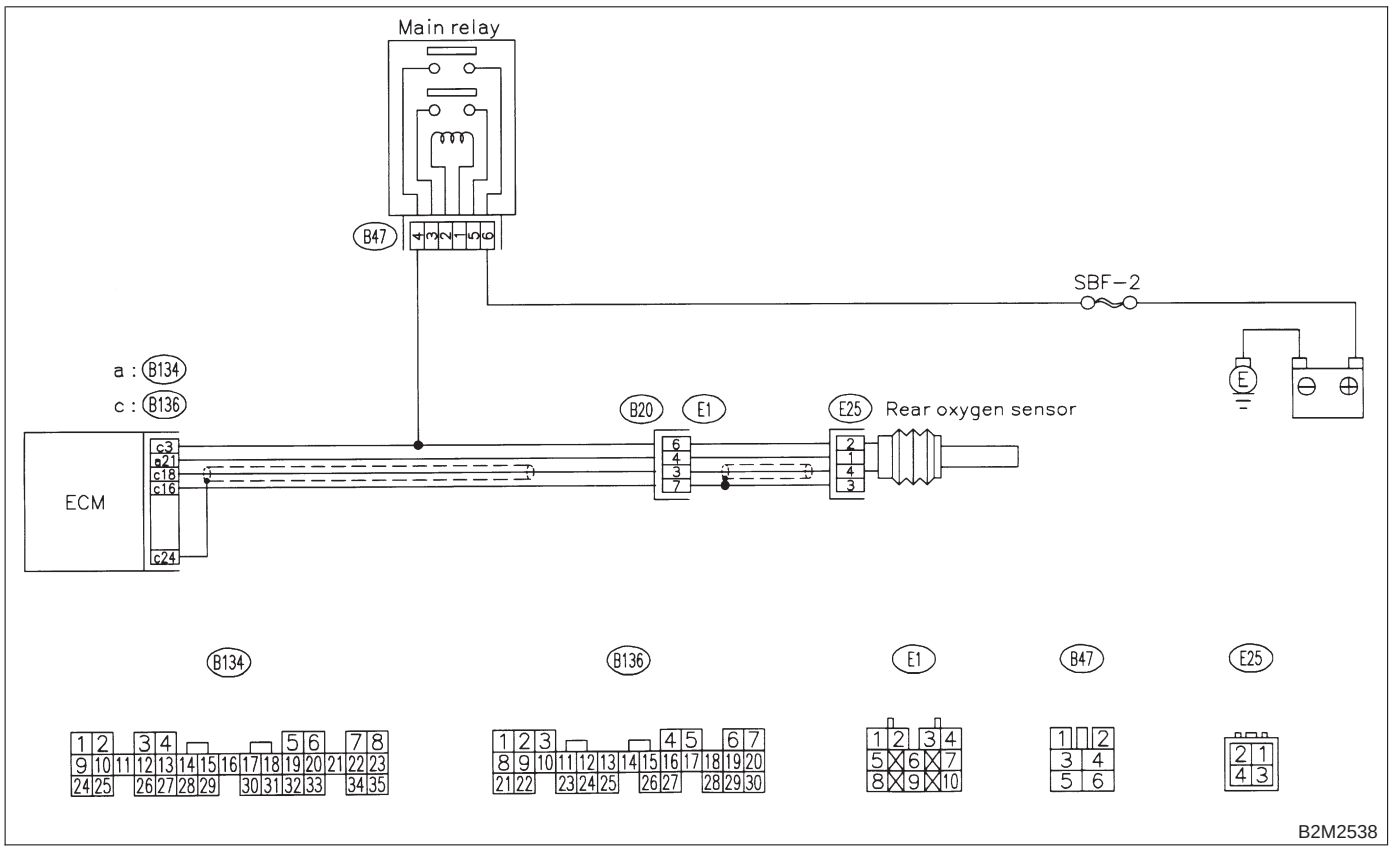
- **WIRING DIAGRAM:**



Q: DTC P0136 — REAR OXYGEN SENSOR CIRCUIT MALFUNCTION —

NOTE:
Check rear oxygen sensor circuit.
<Ref. to 2-7 [T14Q0].>

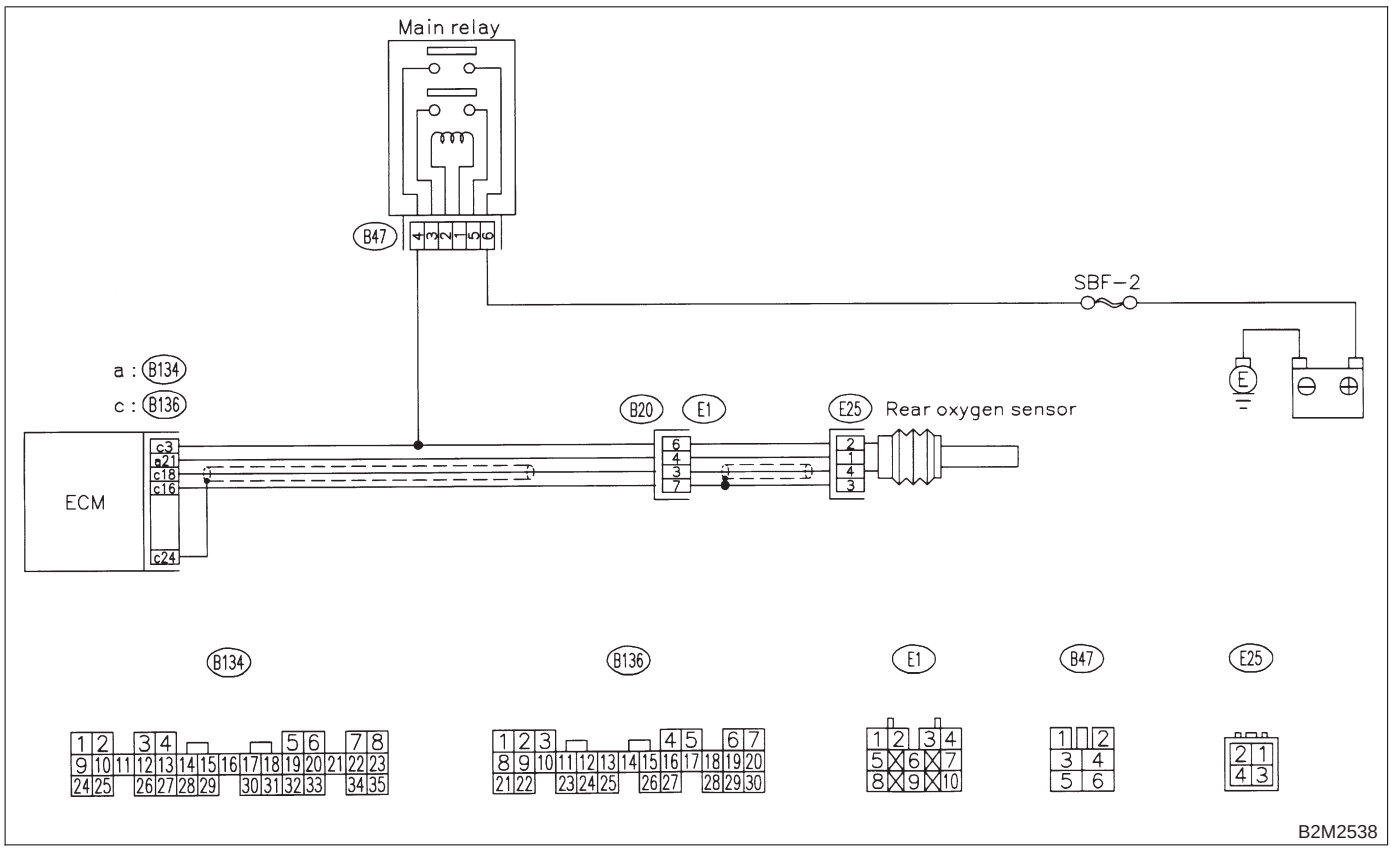
- **WIRING DIAGRAM:**



R: DTC P0139 — REAR OXYGEN SENSOR CIRCUIT SLOW RESPONSE —

NOTE:
Check rear oxygen sensor circuit.
<Ref. to 2-7 [T14R0].>

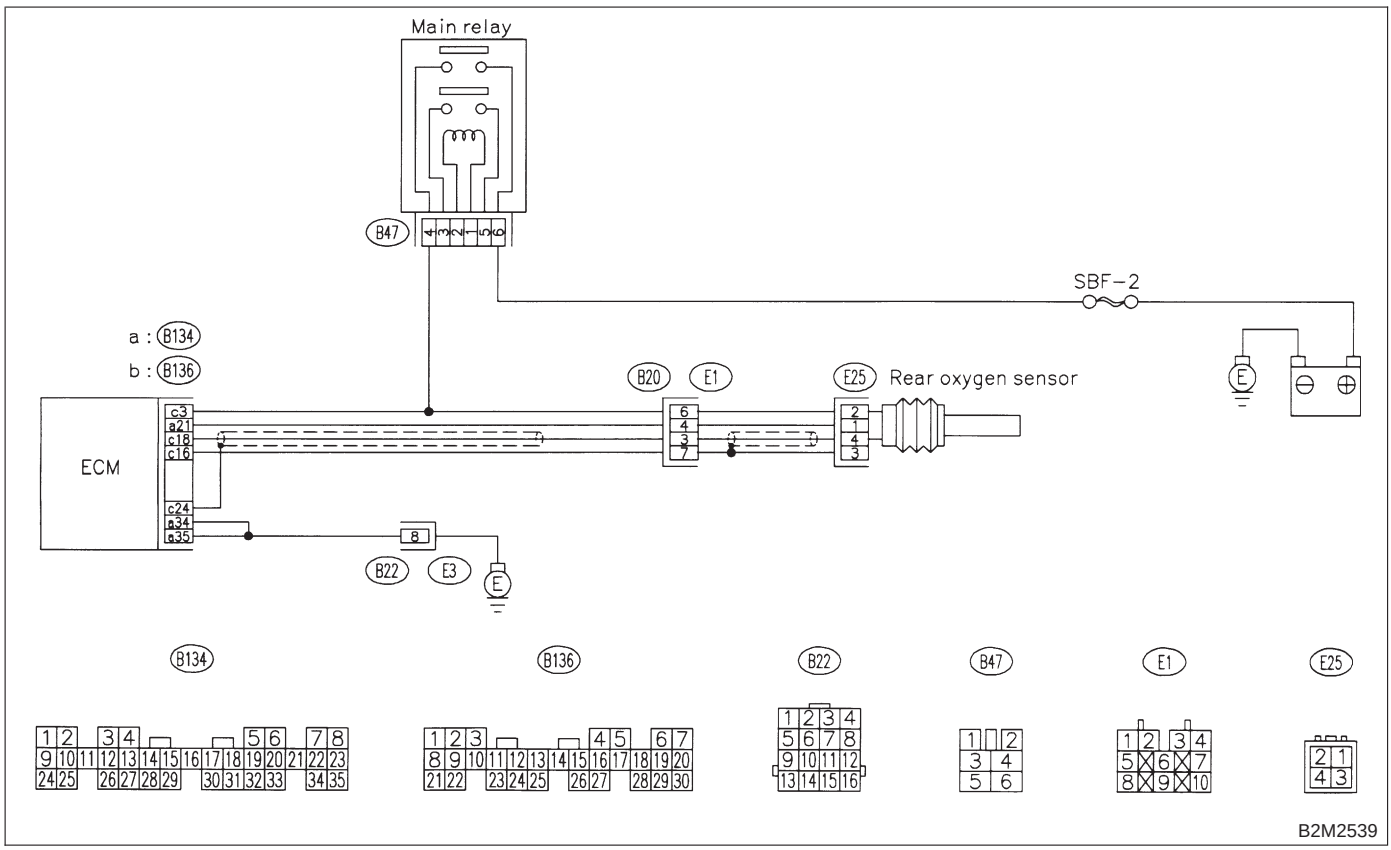
- **WIRING DIAGRAM:**



S: DTC P0141 — REAR OXYGEN SENSOR HEATER CIRCUIT MALFUNCTION —

NOTE:
Check rear oxygen sensor heater circuit.
<Ref. to 2-7 [T14S0].>

- **WIRING DIAGRAM:**



T: DTC P0170 — FUEL TRIM MALFUNCTION —

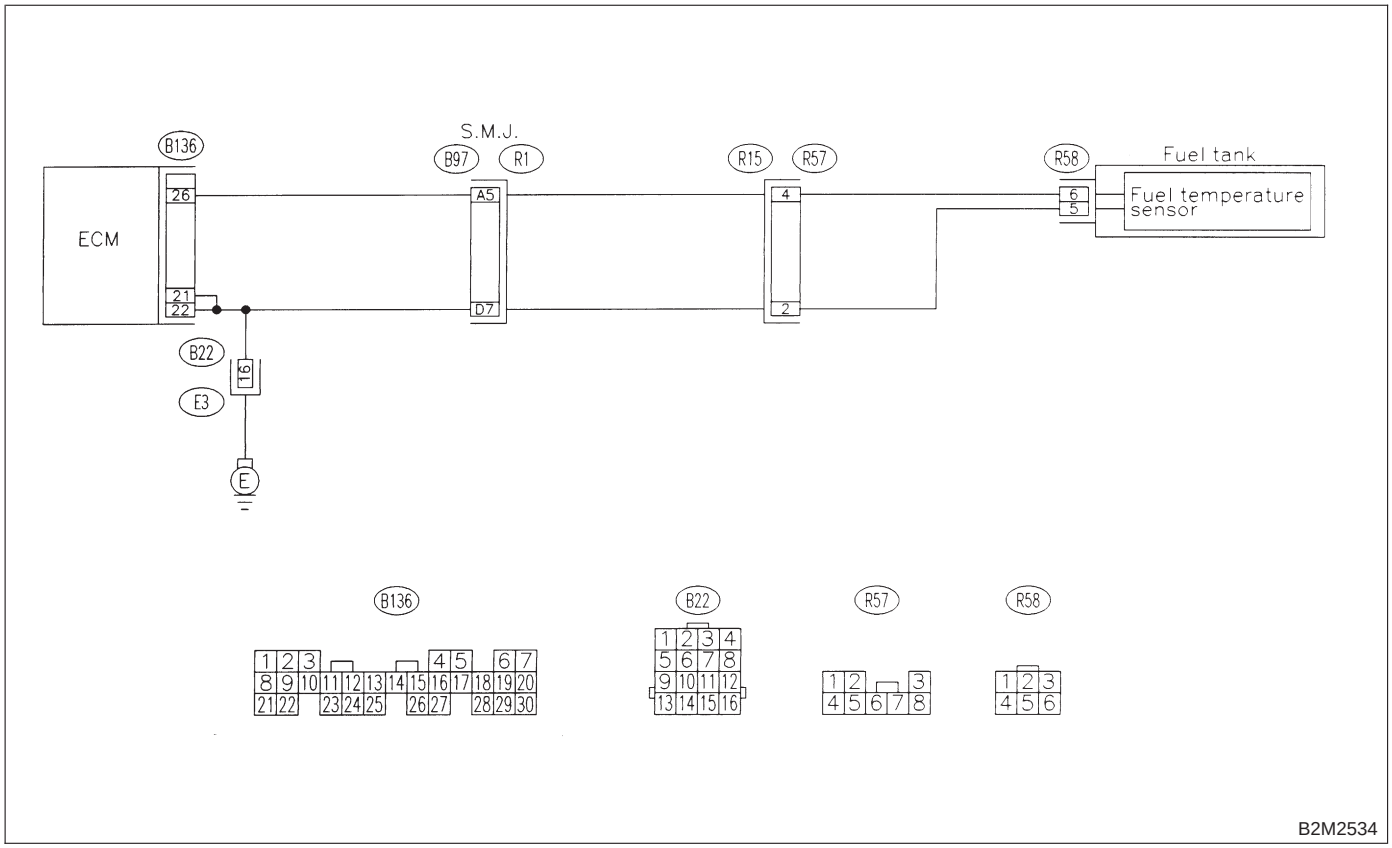
NOTE:
Check fuel trim control system.
<Ref. to 2-7 [T14T0].>

U: DTC P0181 — FUEL TEMPERATURE SENSOR A CIRCUIT RANGE/PERFORMANCE PROBLEM —

- **DTC DETECTING CONDITION:**
  - Two consecutive driving cycles with fault

CAUTION:
After repair or replacement of faulty parts, conduct CLEAR MEMORY MODE <Ref. to 2-7 [T3D0].> and INSPECTION MODE <Ref. to 2-7 [T3E0].>.

- **WIRING DIAGRAM:**



B2M2534

15U1 : CHECK ANY OTHER DTC ON DISPLAY.

CHECK : ***Does the Subaru select monitor or OBD-II general scan tool indicate DTC P0182 or P0183?***

YES : Inspect DTC P0182 or P0183 using “15. Diagnostics Chart with Trouble Code for 2200 cc Except California Spec. RHD Vehicles”. <Ref. to 2-7 [T15A0].>

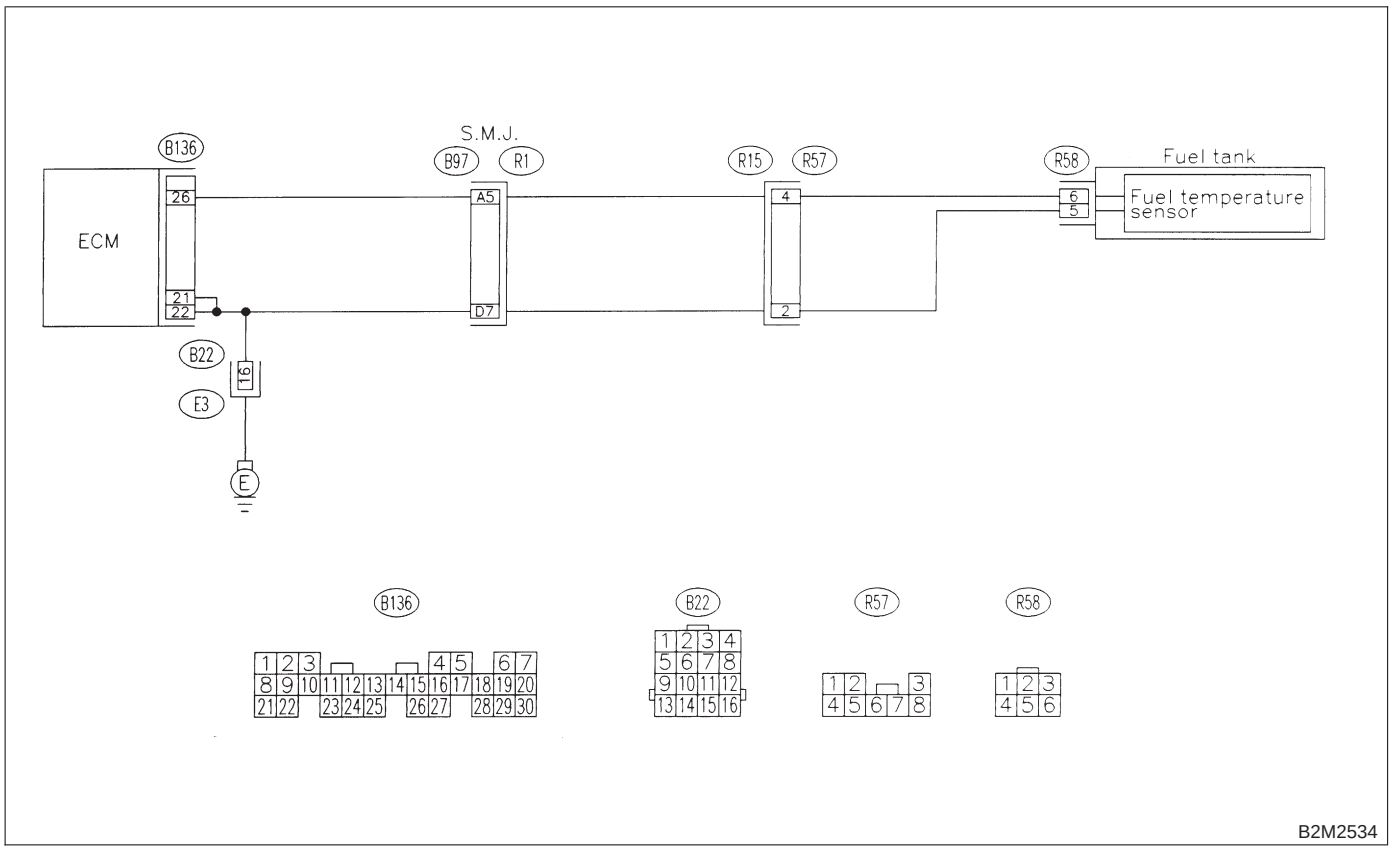
NOTE:
In this case, it is not necessary to inspect DTC P0181.

NO : Replace fuel temperature sensor. <Ref. to 2-1 [W8A0].>

V: DTC P0182 — FUEL TEMPERATURE SENSOR A CIRCUIT LOW INPUT —

NOTE:
Check fuel temperature sensor circuit.
<Ref. to 2-7 [T13W0].>

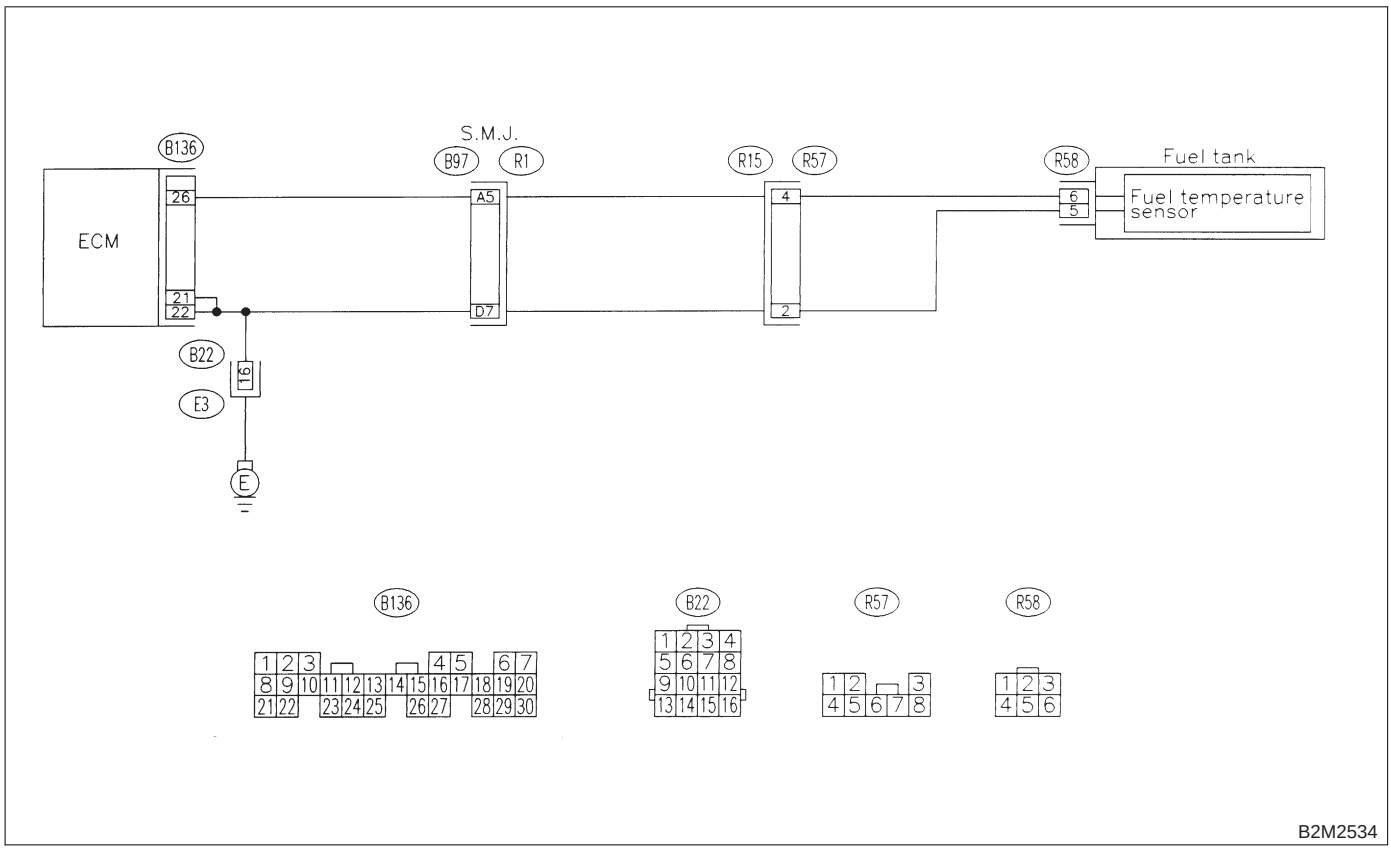
- **WIRING DIAGRAM:**



W: DTC P0183 — FUEL TEMPERATURE SENSOR A CIRCUIT HIGH INPUT —

NOTE:
Check fuel temperature sensor circuit.
<Ref. to 2-7 [T13X0].>

- **WIRING DIAGRAM:**



X: DTC P0301 — CYLINDER 1 MISFIRE DETECTED —

NOTE:
For the diagnostic procedure, refer to 2-7 [T15AA0].
<Ref. to 2-7 [T15AA0].>

Y: DTC P0302 — CYLINDER 2 MISFIRE DETECTED —

NOTE:
For the diagnostic procedure, refer to 2-7 [T15AA0].
<Ref. to 2-7 [T15AA0].>

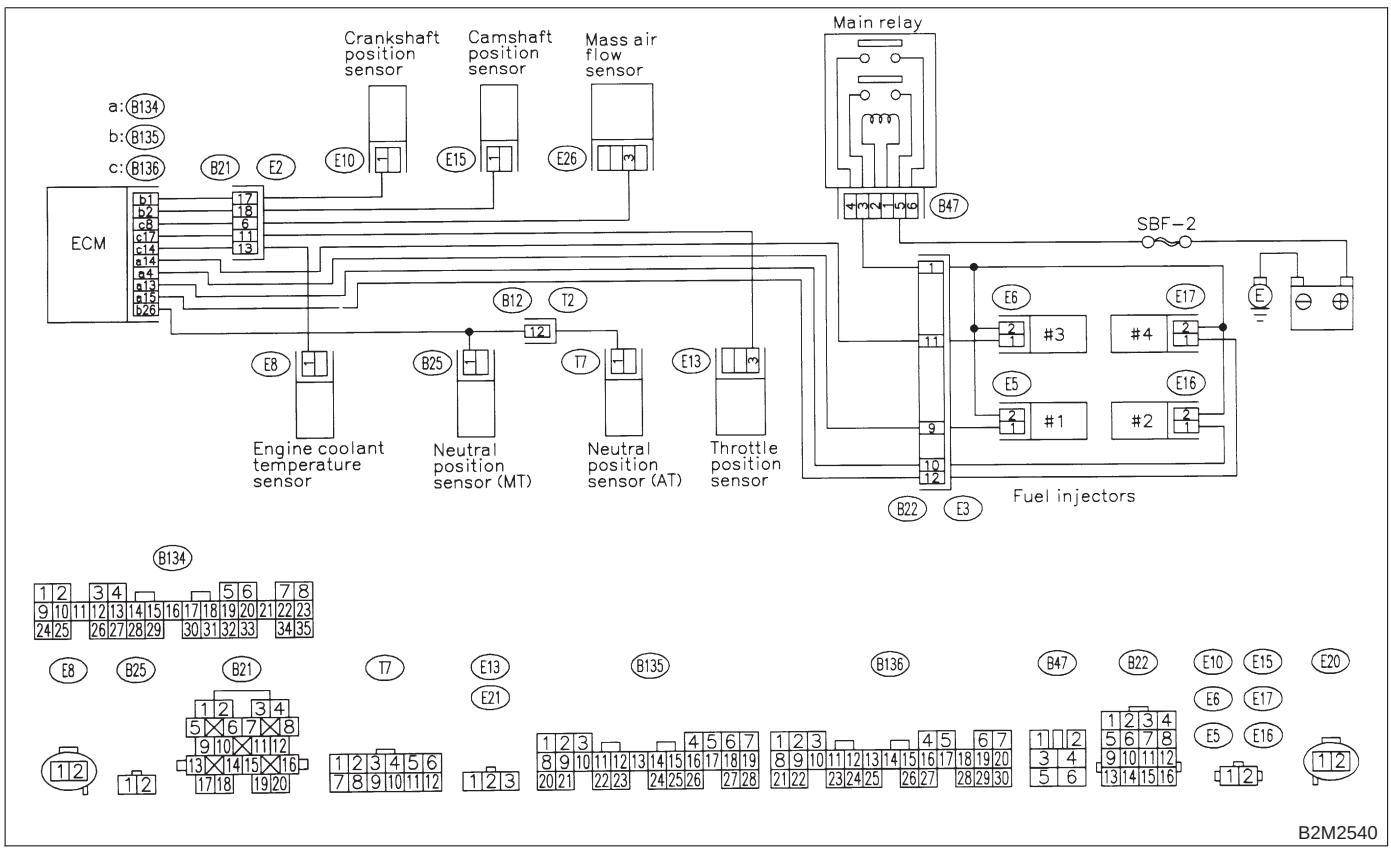
Z: DTC P0303 — CYLINDER 3 MISFIRE DETECTED —

NOTE:
For the diagnostic procedure, refer to 2-7 [T15AA0].
<Ref. to 2-7 [T15AA0].>

AA: DTC P0304 — CYLINDER 4 MISFIRE DETECTED —

NOTE:
Check fuel injection control system.
<Ref. to 2-7 [T14AA0].>

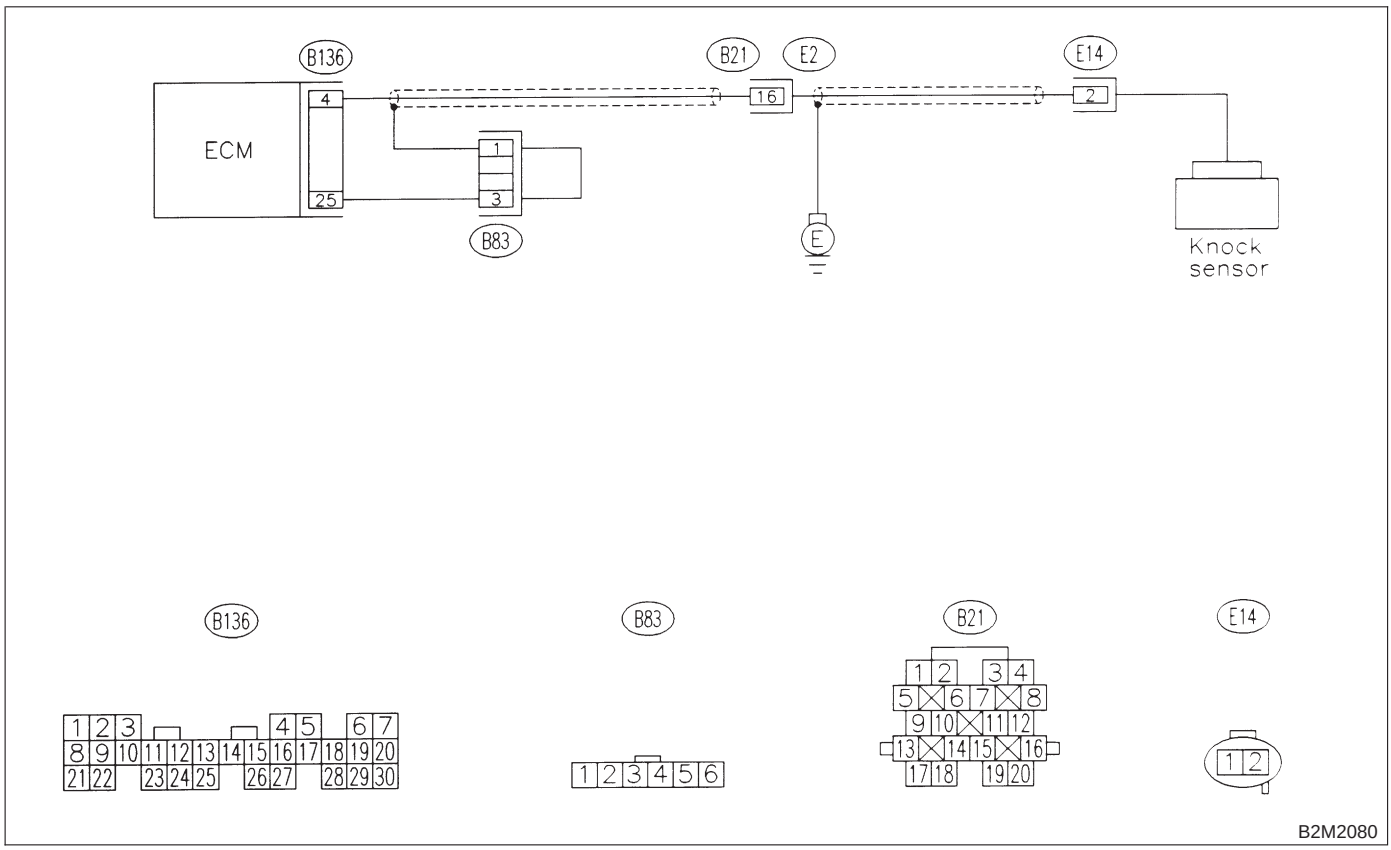
- **WIRING DIAGRAM:**



AB: DTC P0325 — KNOCK SENSOR CIRCUIT HIGH INPUT —

NOTE:
Check knock sensor circuit.
<Ref. to 2-7 [T12AC0].>

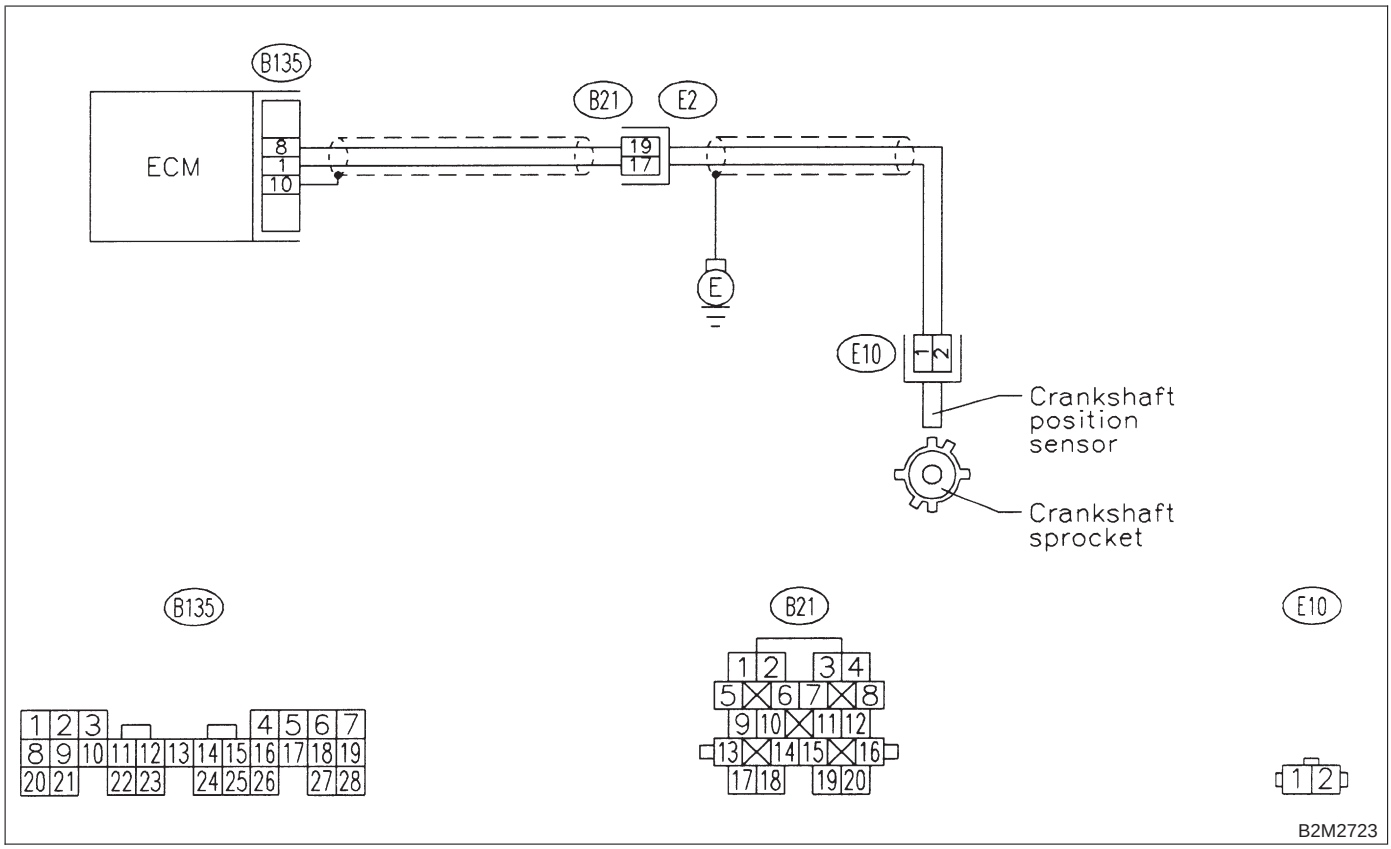
- **WIRING DIAGRAM:**



AC: DTC P0335 — CRANKSHAFT POSITION SENSOR CIRCUIT MALFUNCTION —

NOTE:
Check crankshaft position sensor circuit.
<Ref. to 2-7 [T12AD0].>

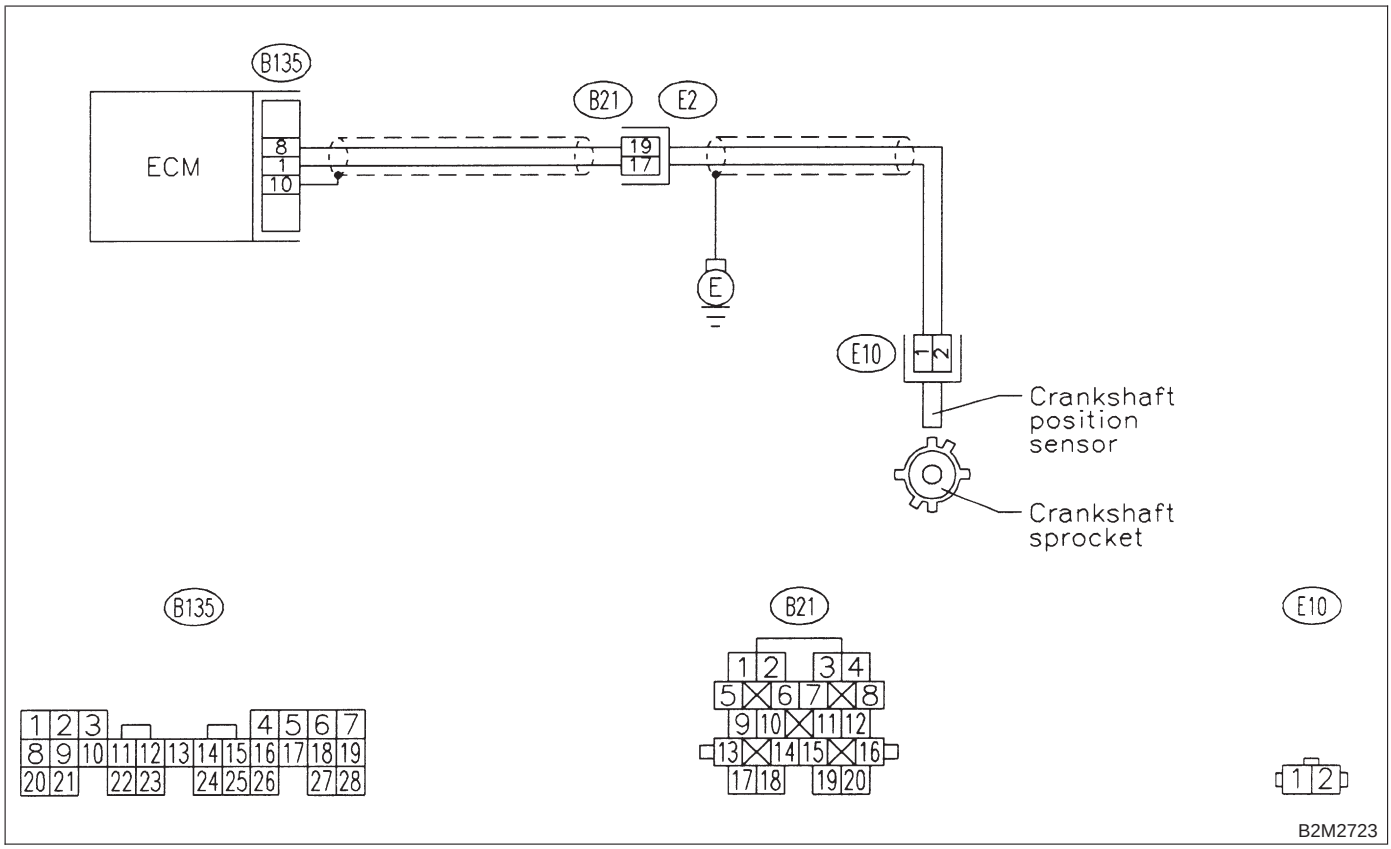
- **WIRING DIAGRAM:**



AD: DTC P0336 — CRANKSHAFT POSITION SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM —

NOTE:
Check crankshaft position sensor circuit.
<Ref. to 2-7 [T14AD0].>

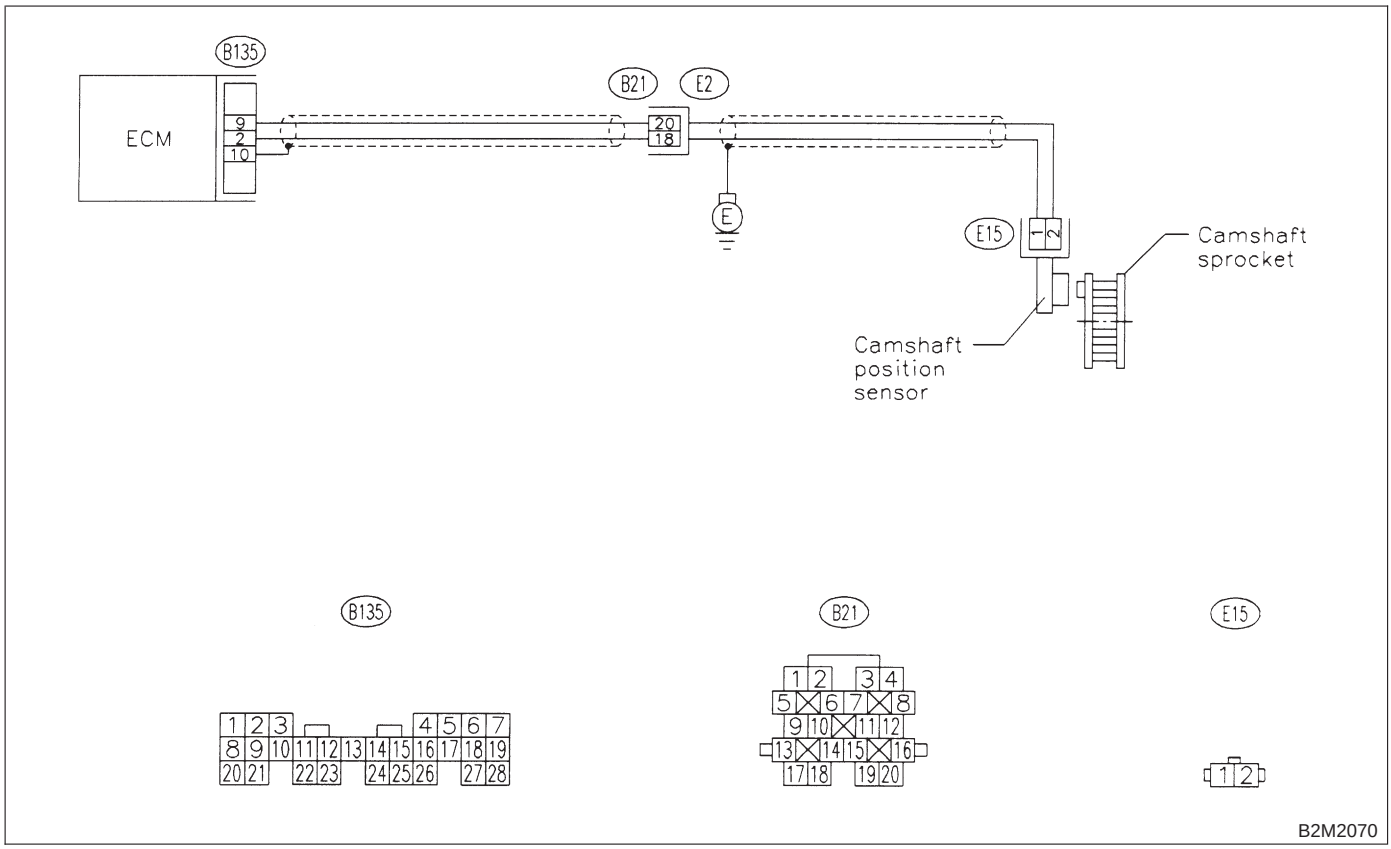
- **WIRING DIAGRAM:**



AE: DTC P0340 — CAMSHAFT POSITION SENSOR CIRCUIT MALFUNCTION —

NOTE:
Check camshaft position sensor circuit.
<Ref. to 2-7 [T12AF0].>

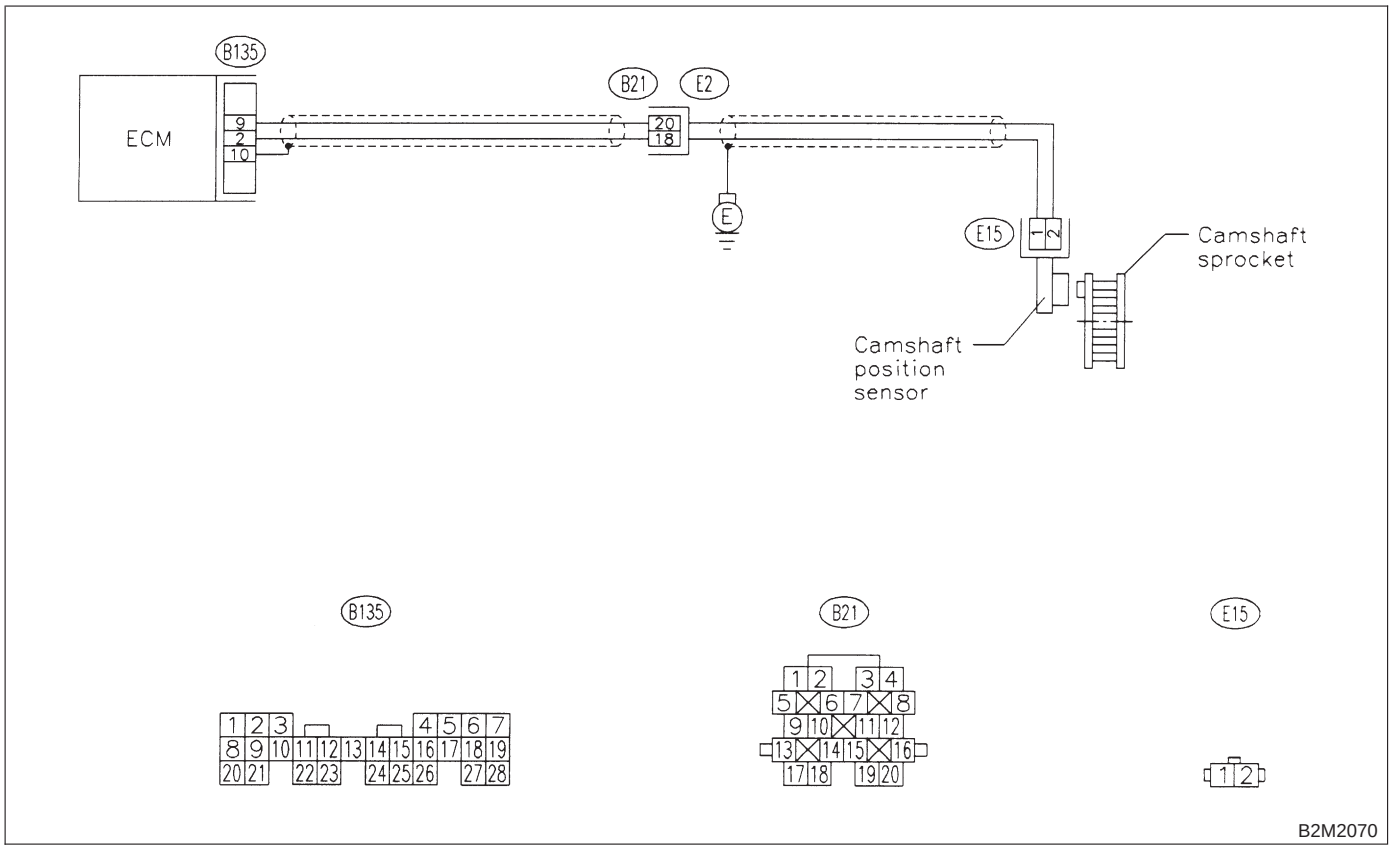
- **WIRING DIAGRAM:**



AF: DTC P0341 — CAMSHAFT POSITION SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM —

NOTE:
Check camshaft position sensor circuit.
<Ref. to 2-7 [T14AF0].>

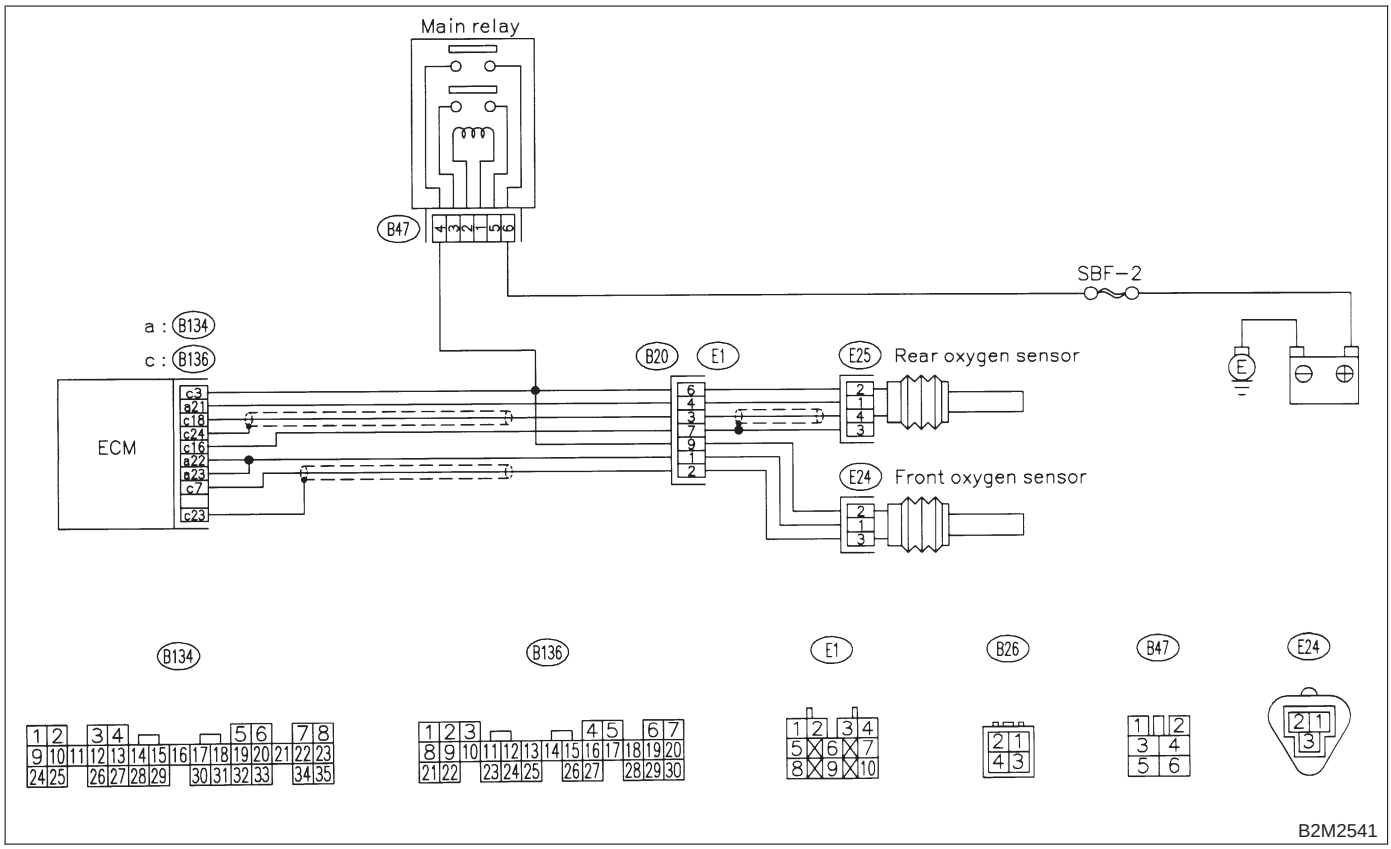
- **WIRING DIAGRAM:**



AG: DTC P0420 — CATALYST SYSTEM EFFICIENCY BELOW THRESHOLD —

NOTE:
Check catalyst system.
<Ref. to 2-7 [T14AG0].>

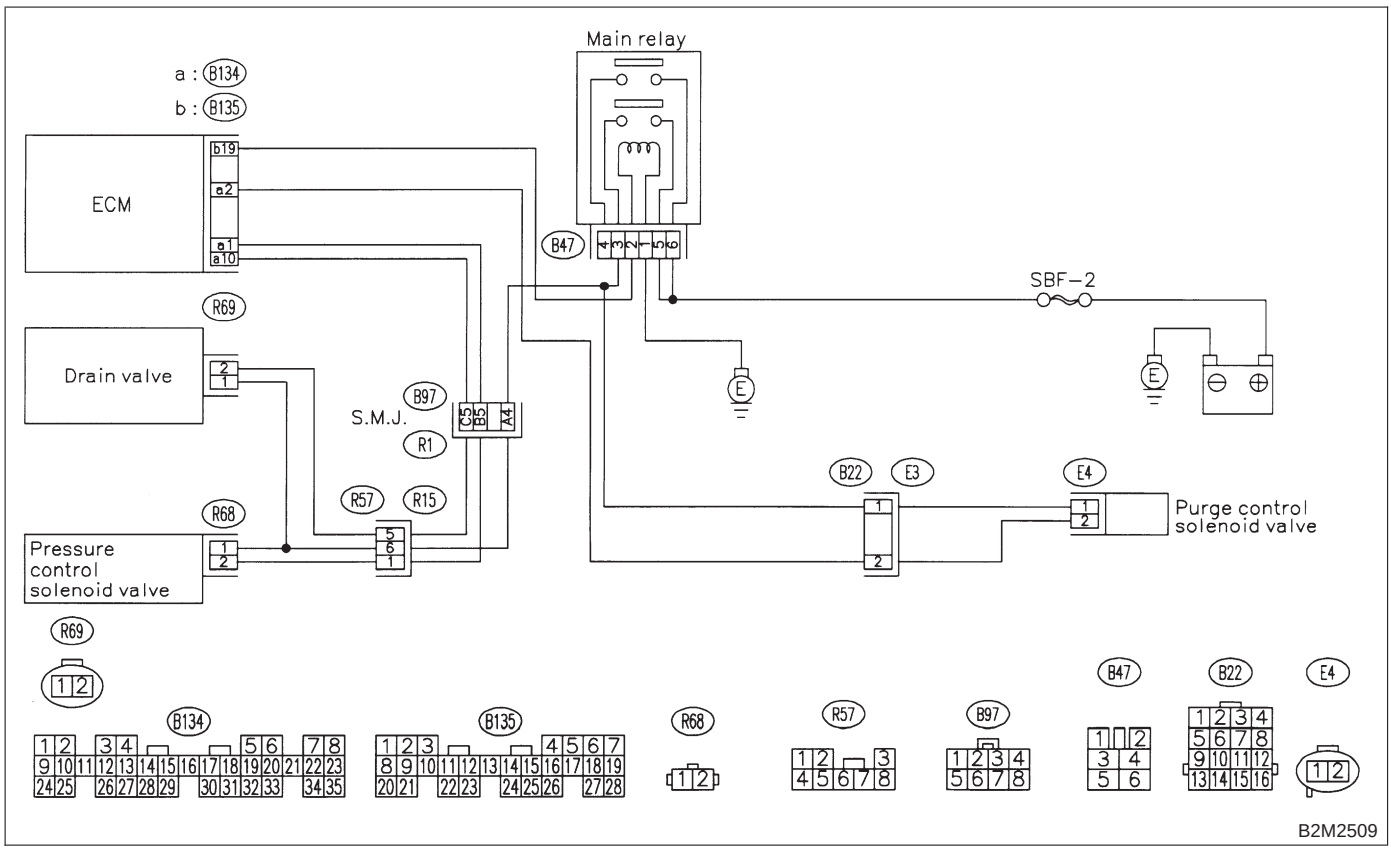
- **WIRING DIAGRAM:**



AH: DTC P0440 — EVAPORATIVE EMISSION CONTROL SYSTEM MALFUNCTION —

NOTE:
Check evaporative emission control system.
<Ref. to 2-7 [T14AH0].>

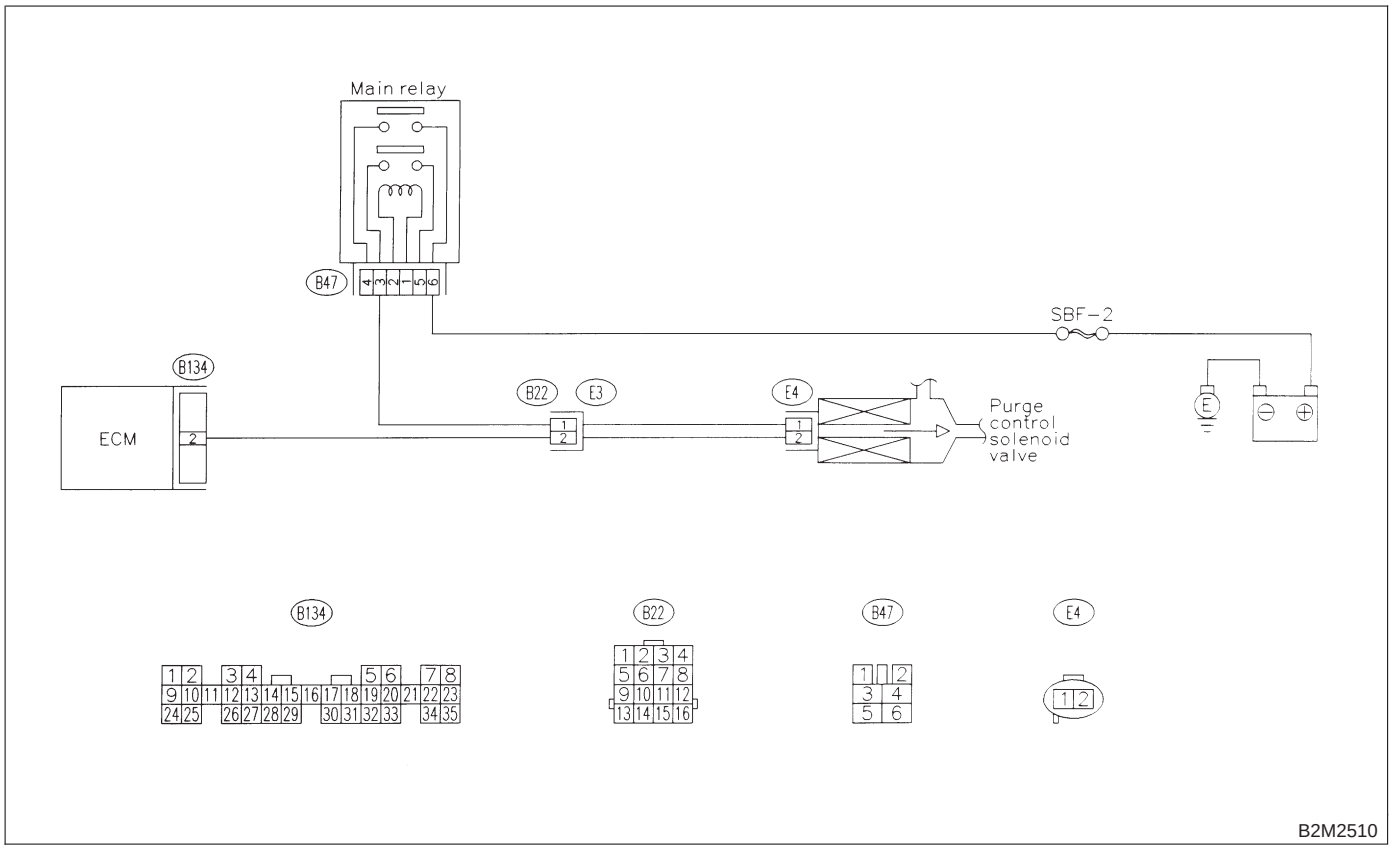
- **WIRING DIAGRAM:**



AI: DTC P0443 — EVAPORATIVE EMISSION CONTROL SYSTEM PURGE CONTROL VALVE CIRCUIT LOW INPUT —

NOTE:
Check purge control solenoid valve circuit.
<Ref. to 2-7 [T12AJ0].>

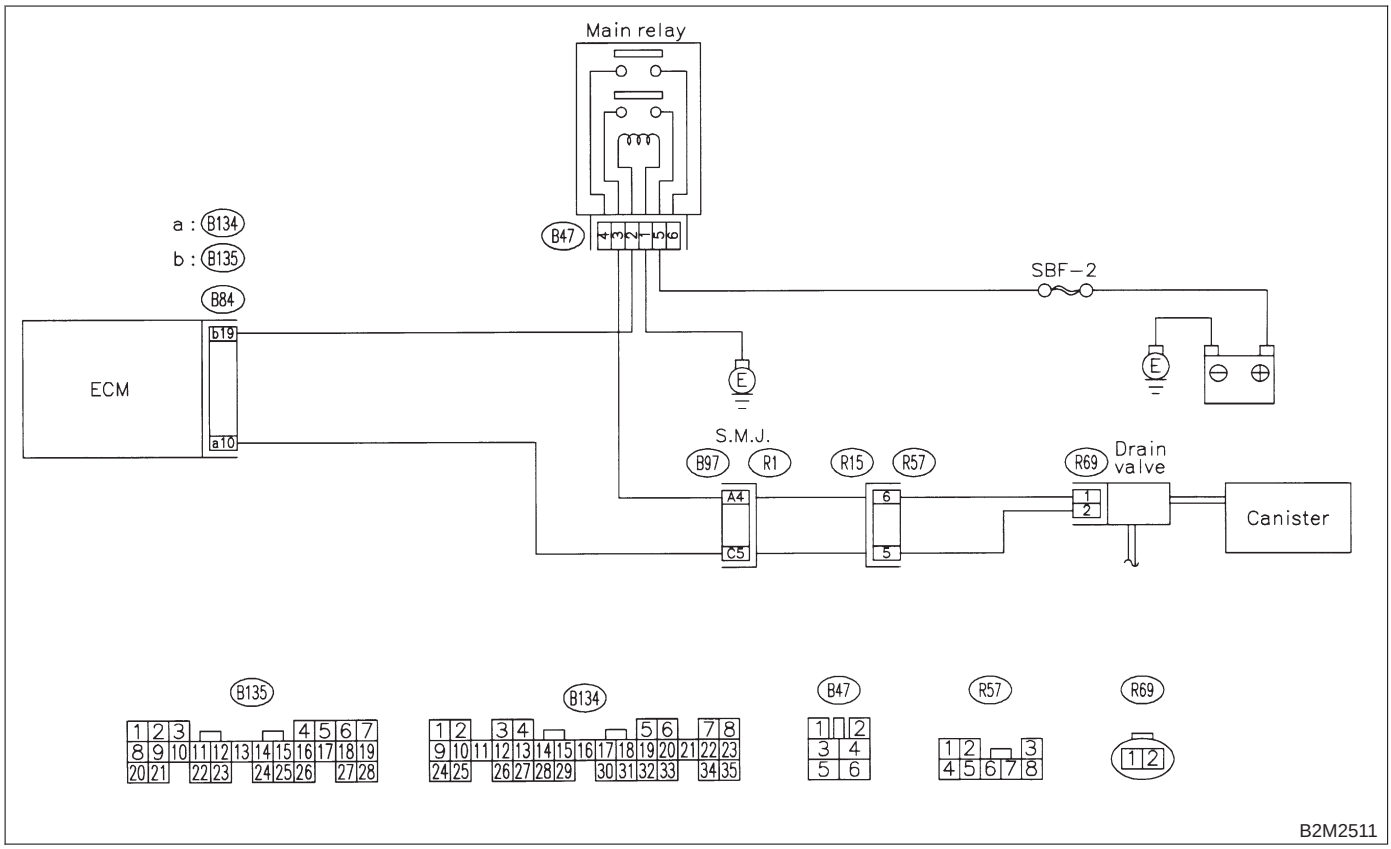
- **WIRING DIAGRAM:**



AJ: DTC P0446 — EVAPORATIVE EMISSION CONTROL SYSTEM VENT CONTROL LOW INPUT —

NOTE:
Check drain valve circuit.
<Ref. to 2-7 [T13AK0].>

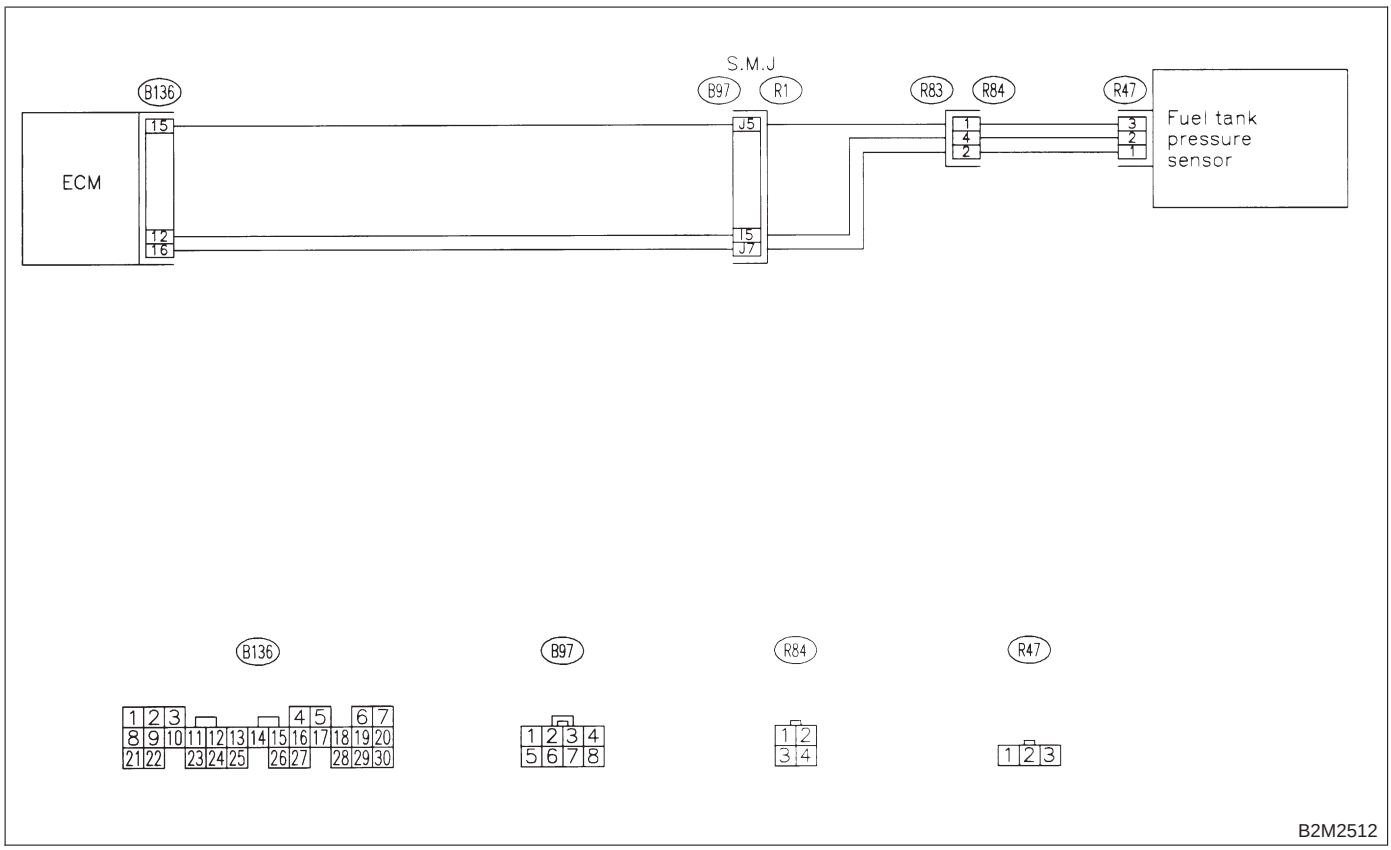
- **WIRING DIAGRAM:**



AK: DTC P0451 — EVAPORATIVE EMISSION CONTROL SYSTEM PRESSURE SENSOR RANGE/PERFORMANCE PROBLEM —

NOTE:
Check fuel tank pressure control system.
<Ref. to 2-7 [T12AL0].>

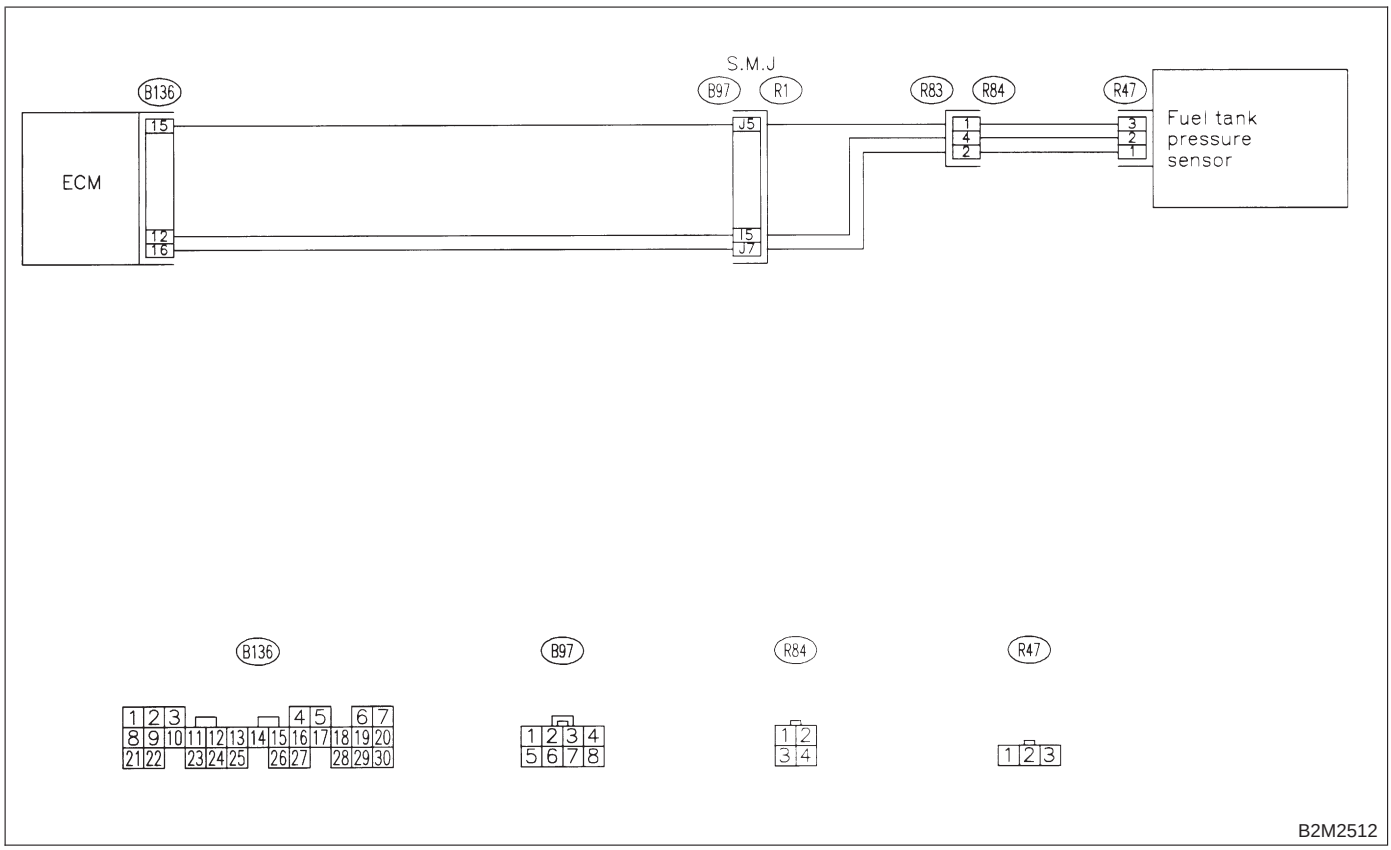
- **WIRING DIAGRAM:**



AL: DTC P0452 — EVAPORATIVE EMISSION CONTROL SYSTEM PRESSURE SENSOR LOW INPUT —

NOTE:
Check fuel tank pressure sensor circuit.
<Ref. to 2-7 [T13AM0].>

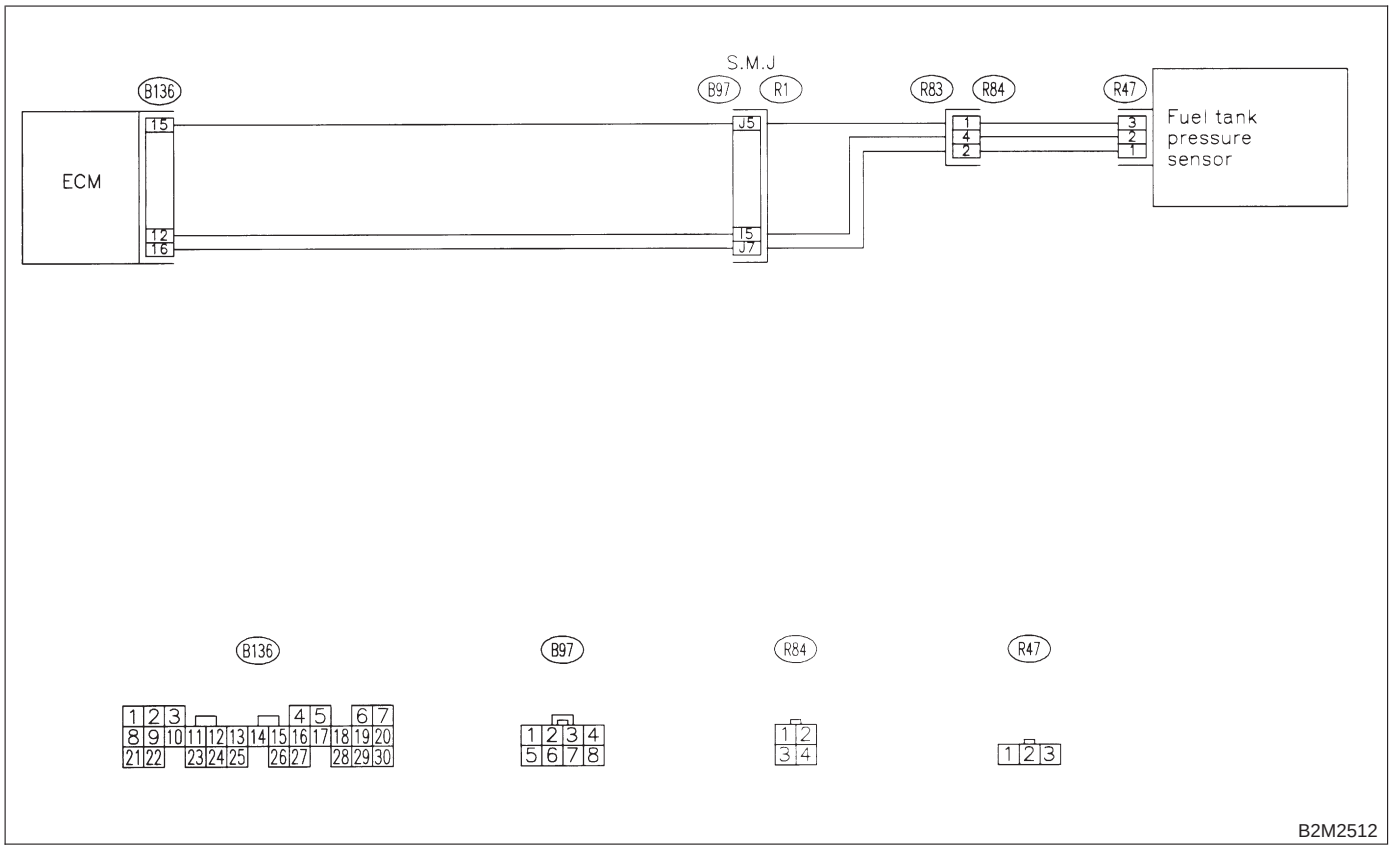
- **WIRING DIAGRAM:**



AM: DTC P0453 — EVAPORATIVE EMISSION CONTROL SYSTEM PRESSURE SENSOR HIGH INPUT —

NOTE:
Check fuel tank pressure sensor circuit.
<Ref. to 2-7 [T13AN0].>

- **WIRING DIAGRAM:**

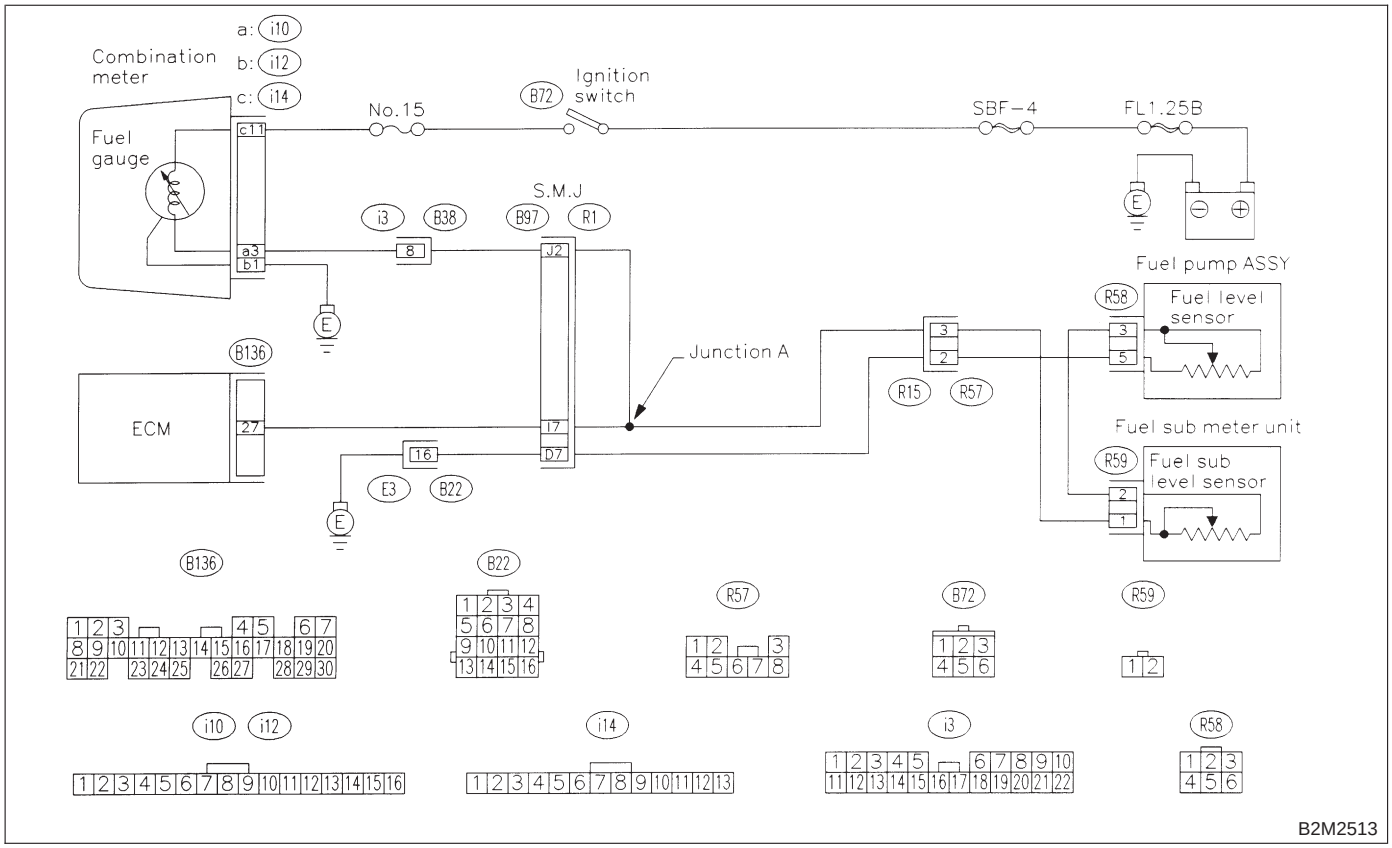


AN: DTC P0461 — FUEL LEVEL SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM —

- **DTC DETECTING CONDITION:**
  - Two consecutive driving cycles with fault

CAUTION:
After repair or replacement of faulty parts, conduct CLEAR MEMORY MODE <Ref. to 2-7 [T3D0].> and INSPECTION MODE <Ref. to 2-7 [T3E0].>.

- **WIRING DIAGRAM:**



15AN1 : CHECK ANY OTHER DTC ON DISPLAY.

CHECK : ***Does the Subaru select monitor or OBD-II general scan tool indicate DTC P0462 or P0463?***

YES : Inspect DTC P0462 or P0463 using “15. Diagnostics Chart with Trouble Code for 2200 cc Except California Spec. RHD Vehicles”. <Ref. to 2-7 [T15A0].>

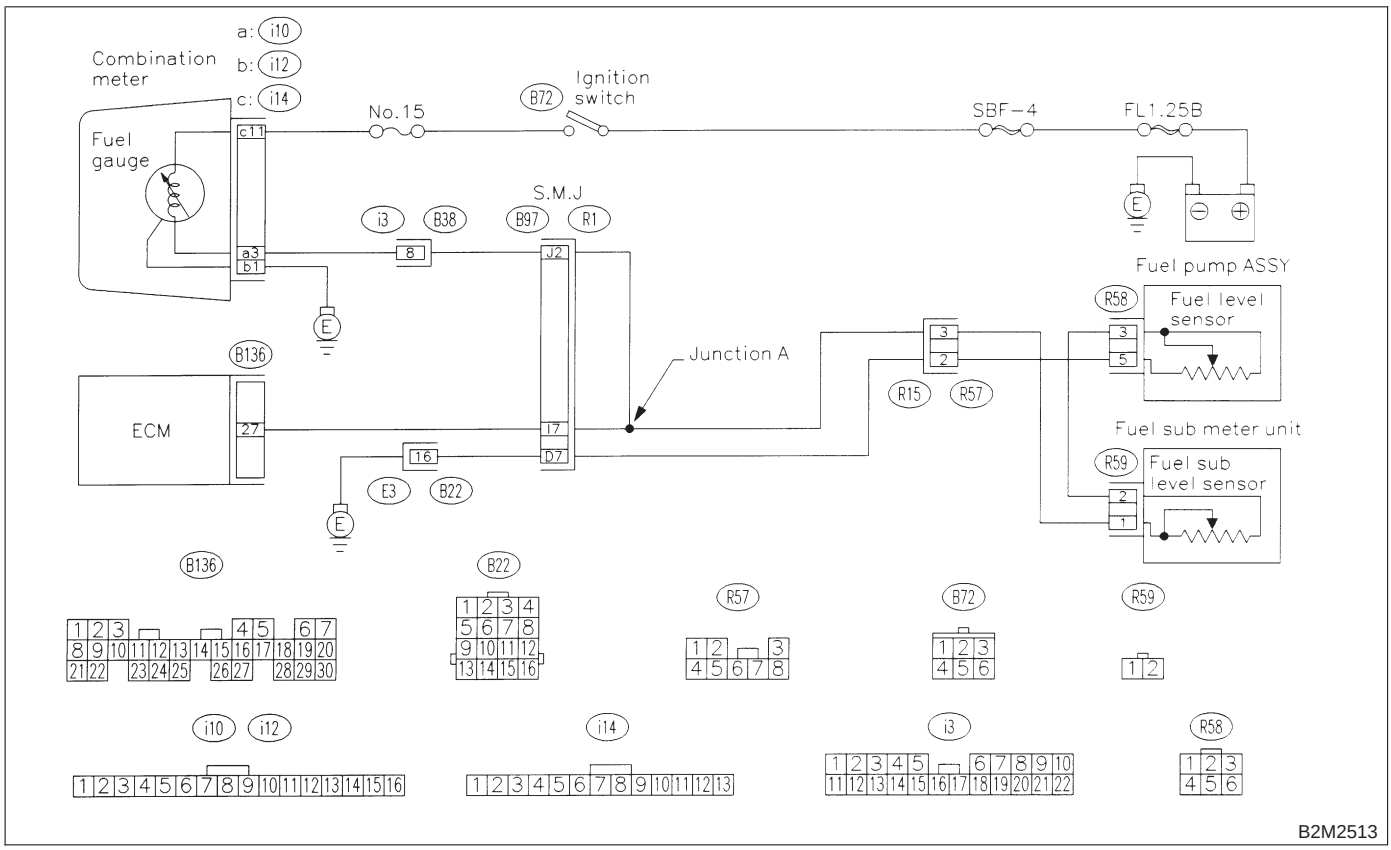
NOTE:
In this case, it is not necessary to inspect this trouble.

NO : Replace fuel sending unit <Ref. to 2-1 [W12A0].> and fuel sub meter unit <Ref. to 2-1 [W14A0].>.

AO: DTC P0462 — FUEL LEVEL SENSOR CIRCUIT LOW INPUT —

NOTE:
Check fuel level sensor circuit.
<Ref. to 2-7 [T13AP0].>

- **WIRING DIAGRAM:**

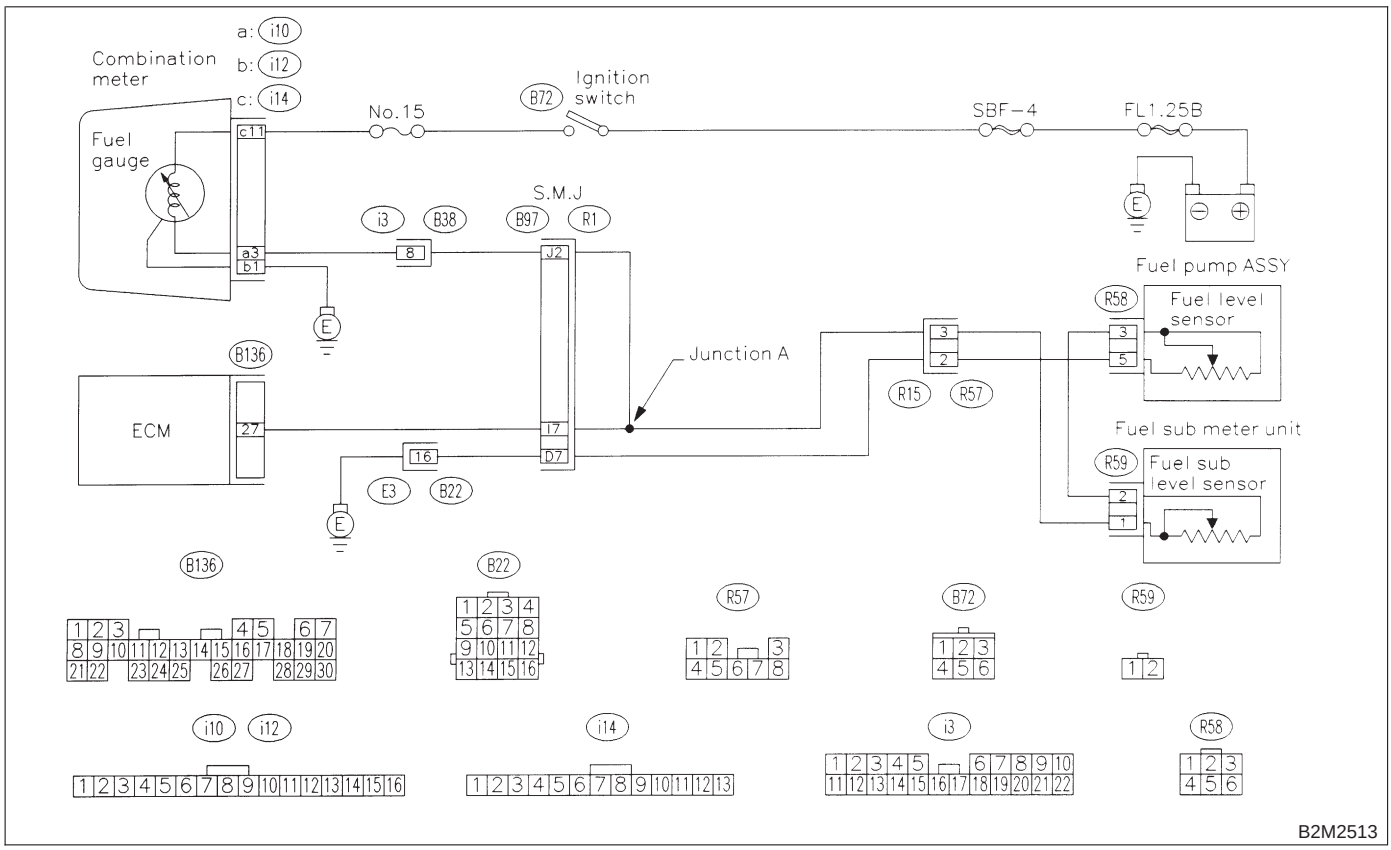


B2M2513

AP: DTC P0463 — FUEL LEVEL SENSOR CIRCUIT HIGH INPUT —

NOTE:
Check fuel level sensor circuit.
<Ref. to 2-7 [T13AQ0].>

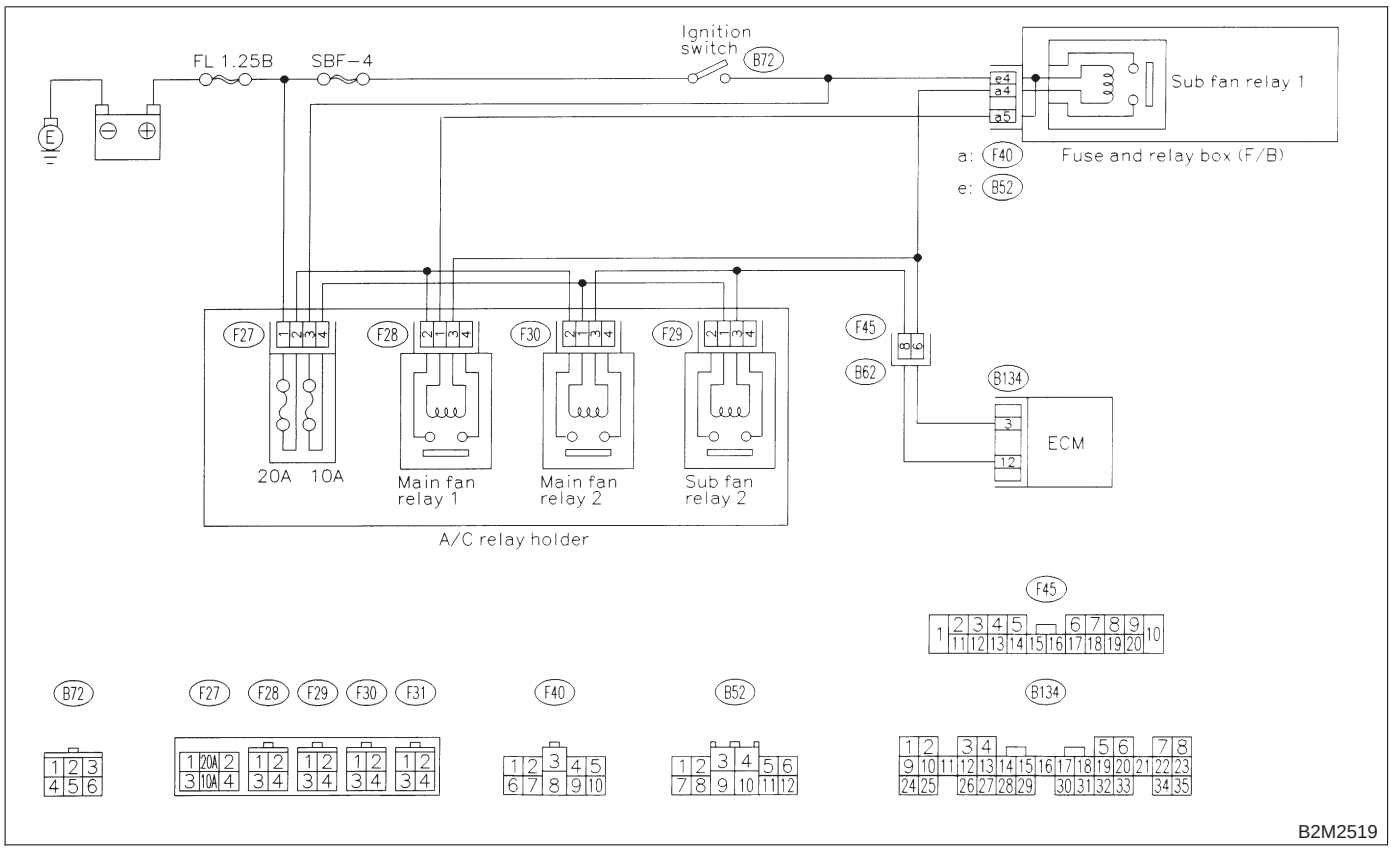
- **WIRING DIAGRAM:**



AQ: DTC P0480 — COOLING FAN RELAY 1 CIRCUIT LOW INPUT —

NOTE:
Check radiator fan relay 1 circuit.
<Ref. to 2-7 [T12AR0].>

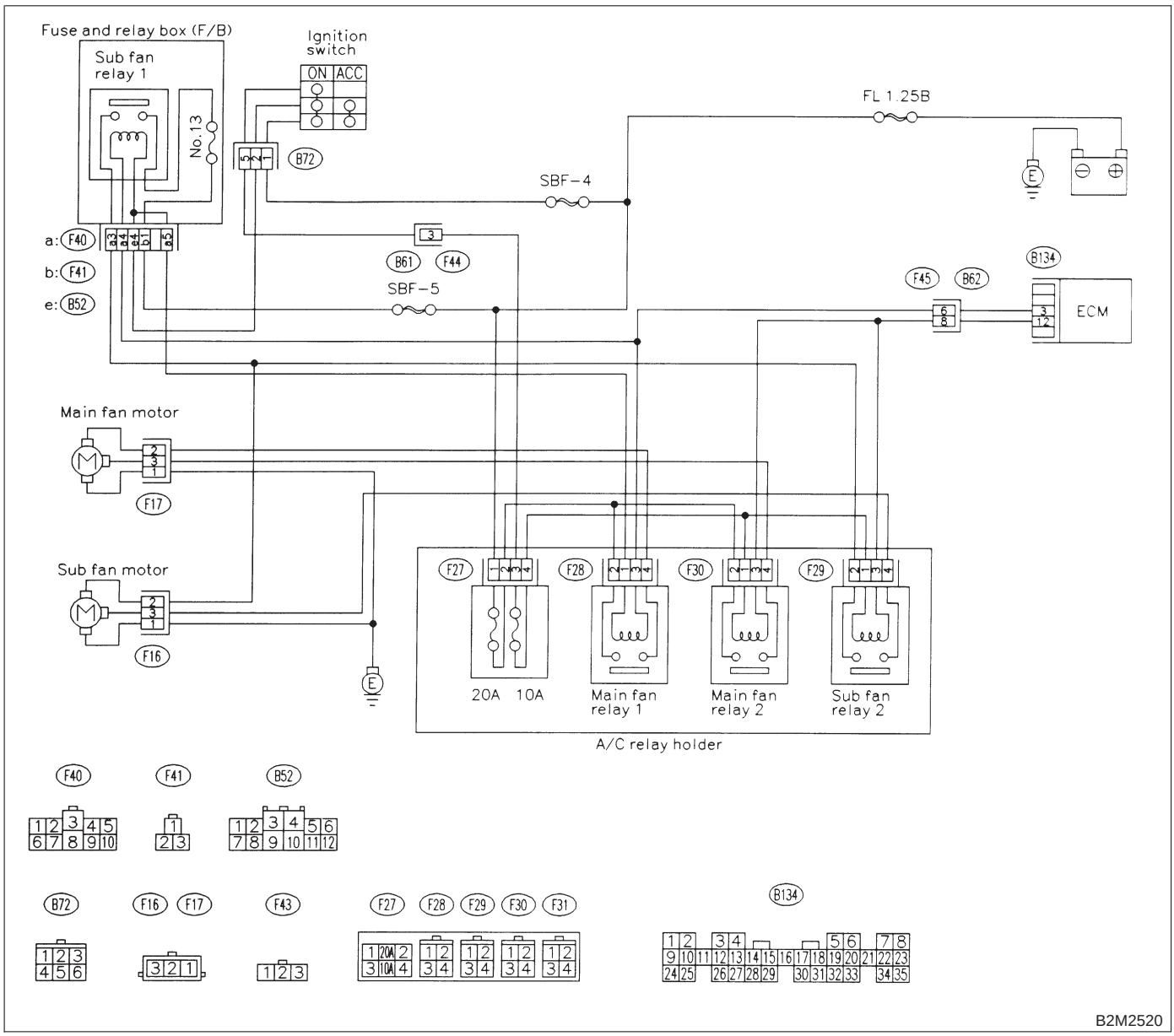
- **WIRING DIAGRAM:**



AR: DTC P0483 — COOLING FAN FUNCTION PROBLEM —

NOTE:
Check radiator fan control system.
<Ref. to 2-7 [T14AR0].>

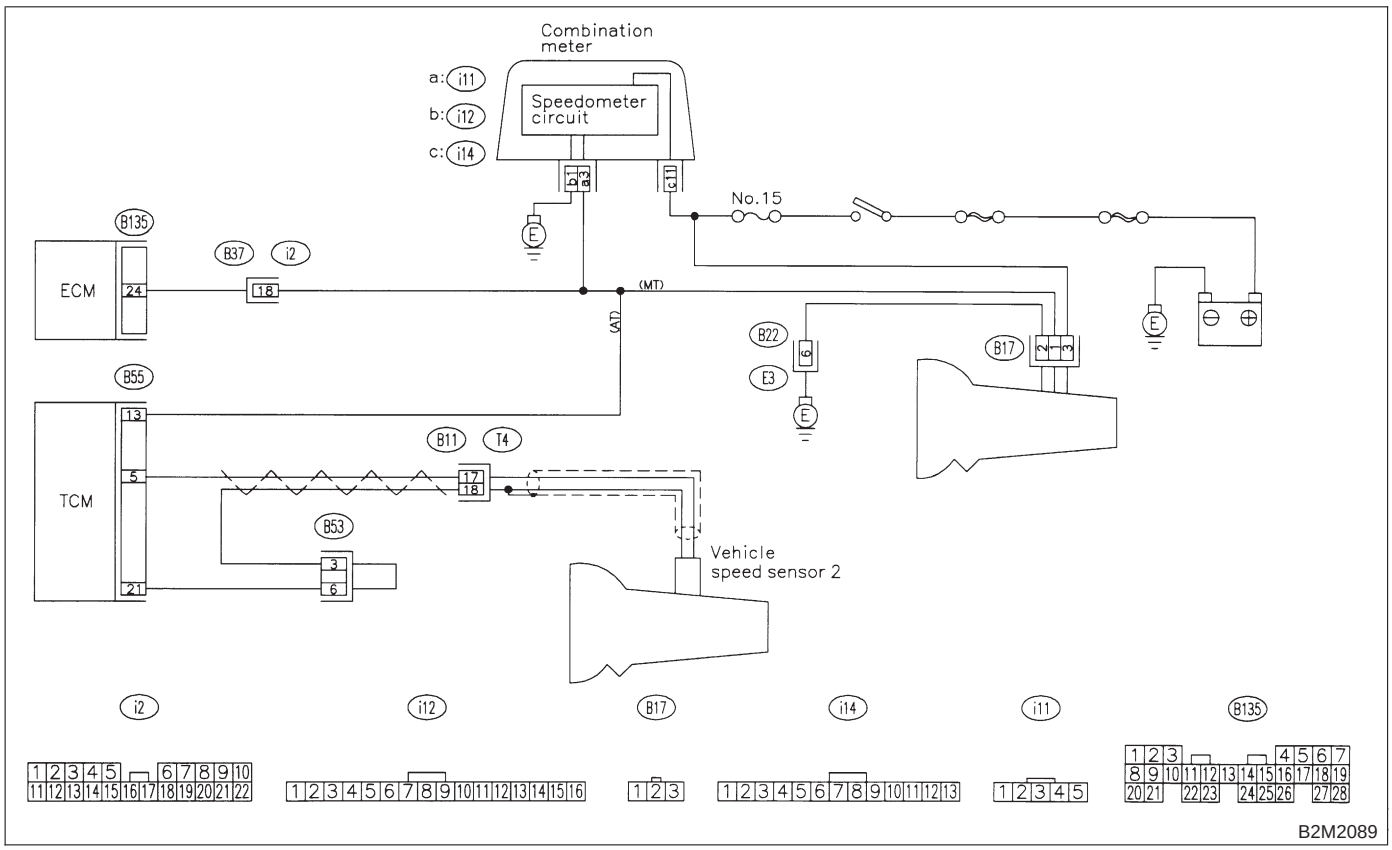
- **WIRING DIAGRAM:**



AS: DTC P0500 — VEHICLE SPEED SENSOR MALFUNCTION —

NOTE:
Check vehicle speed sensor 2 circuit.
<Ref. to 2-7 [T12AT0].>

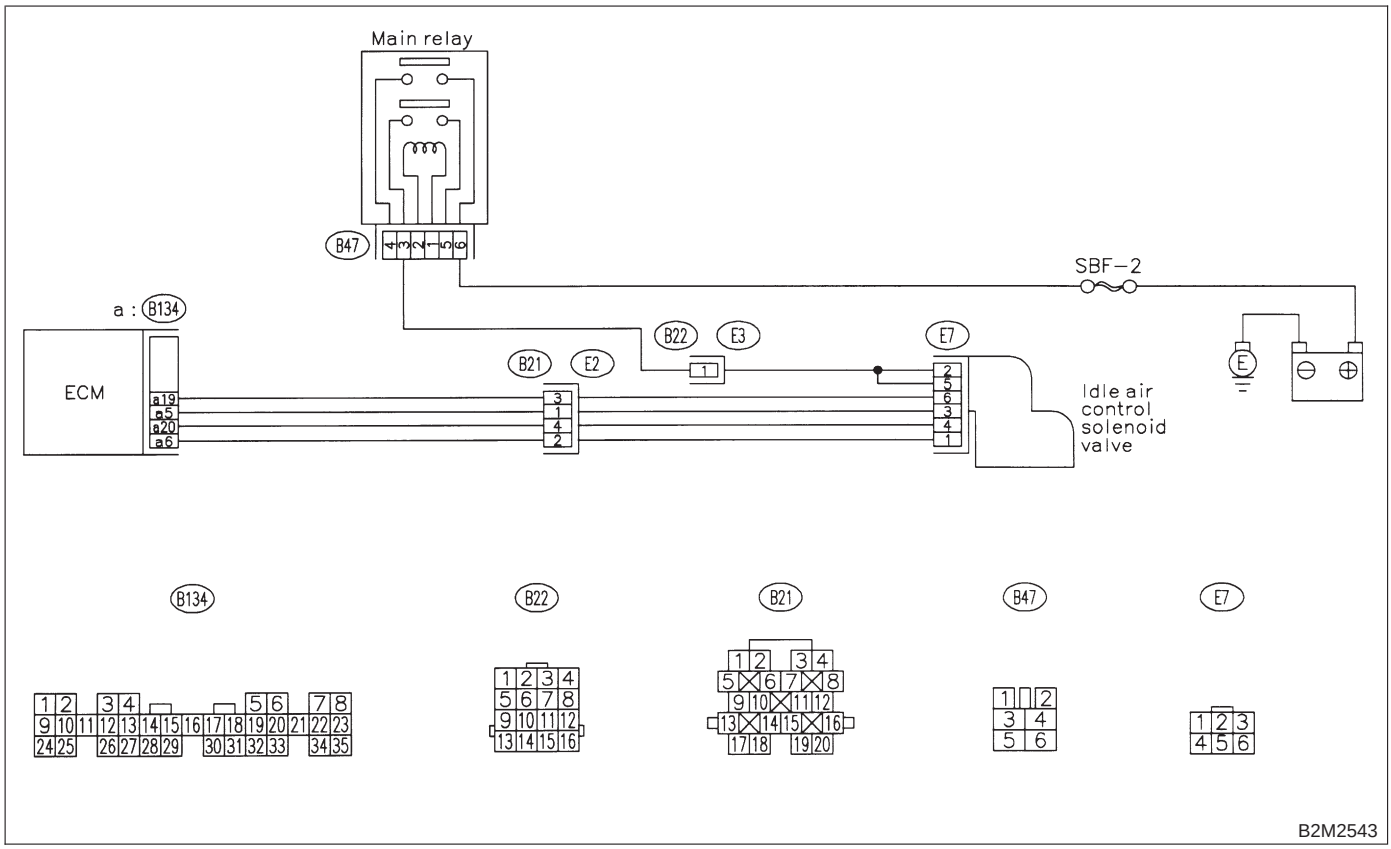
- **WIRING DIAGRAM:**



AT: DTC P0506 — IDLE CONTROL SYSTEM RPM LOWER THAN EXPECTED —

NOTE:
Check idle air control system.
<Ref. to 2-7 [T14AT0].>

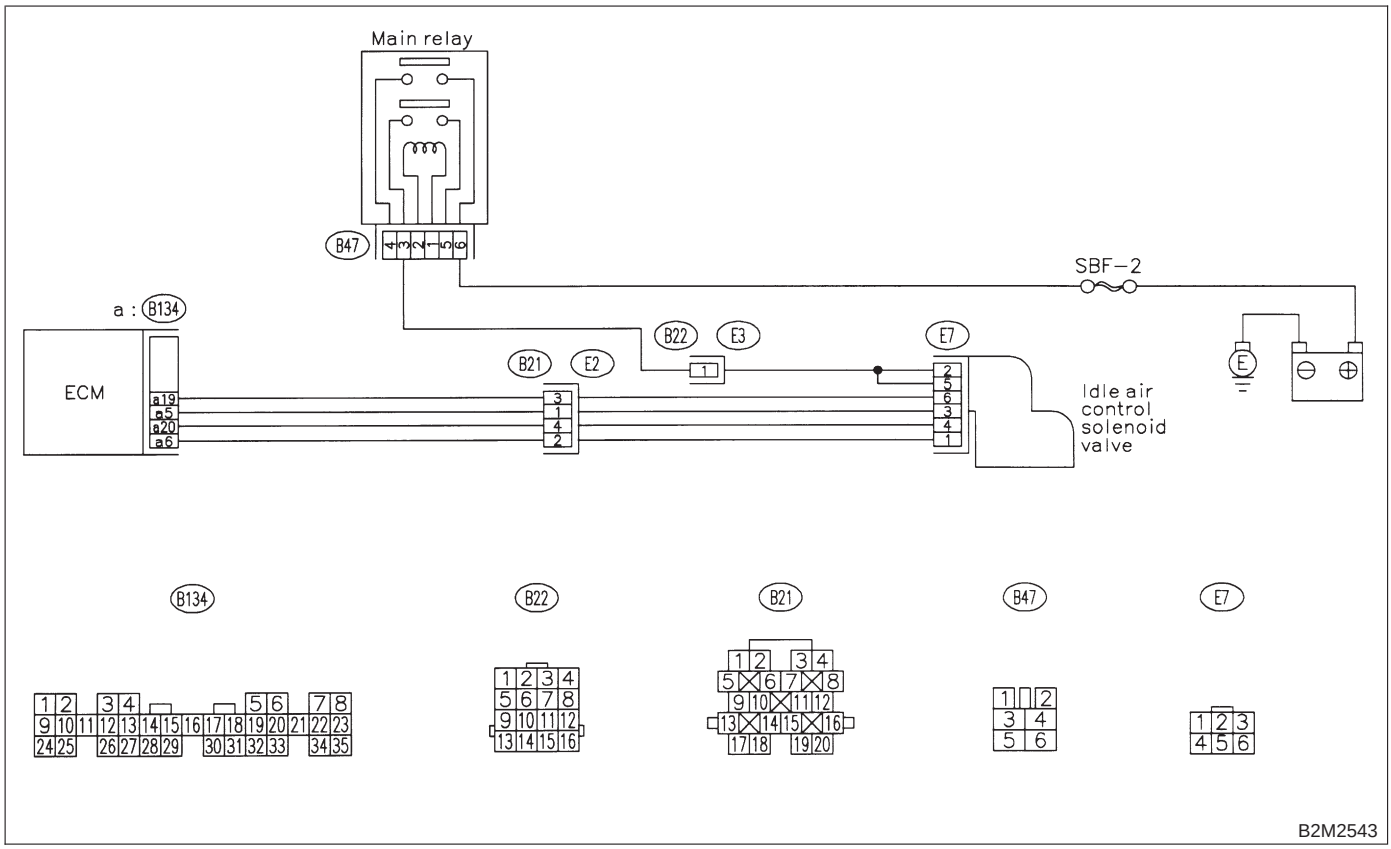
- **WIRING DIAGRAM:**



AU: DTC P0507 — IDLE CONTROL SYSTEM RPM HIGHER THAN EXPECTED —

NOTE:
Check idle air control system.
<Ref. to 2-7 [T14AU0].>

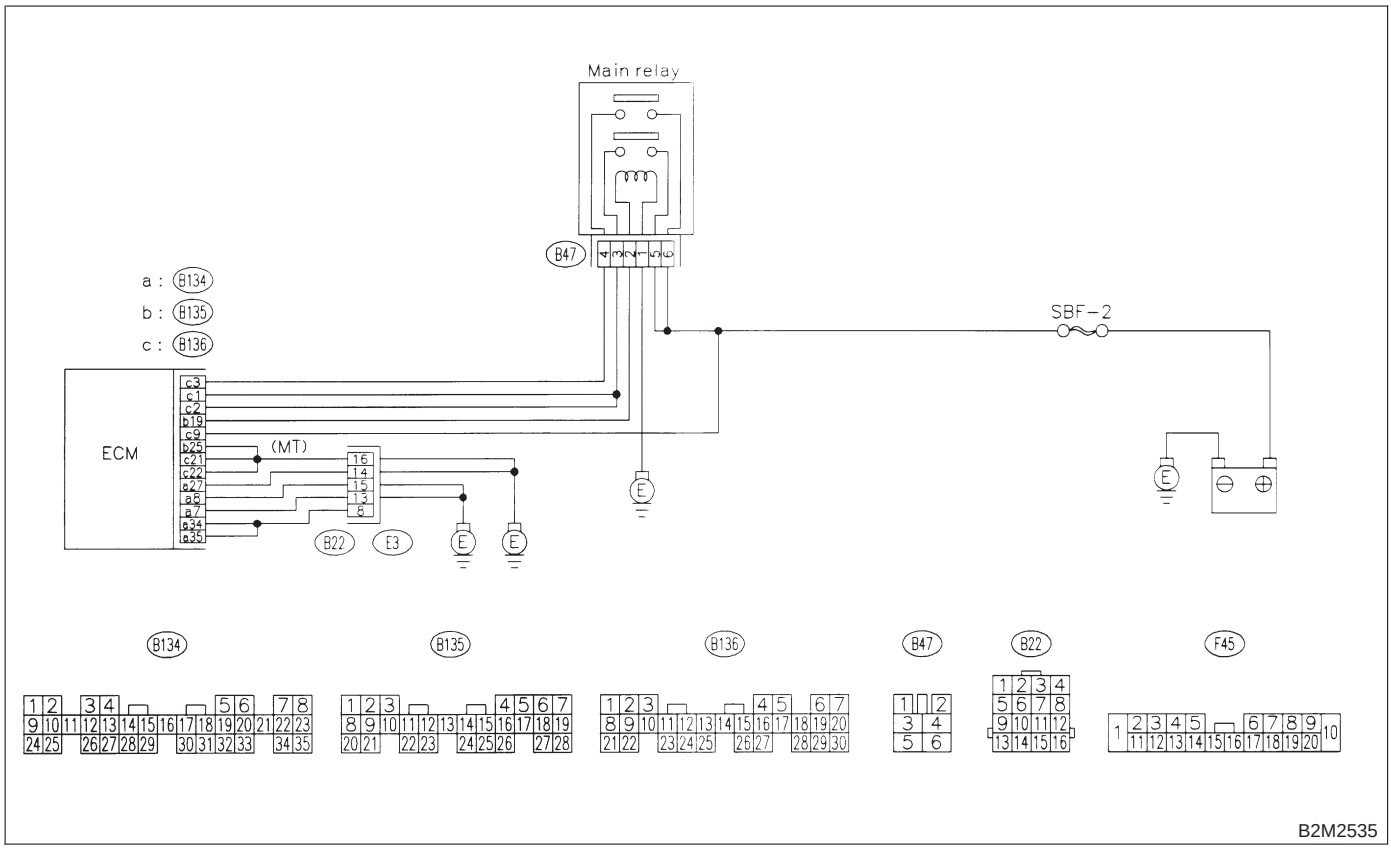
- **WIRING DIAGRAM:**



AV: DTC P0601 — INTERNAL CONTROL MODULE MEMORY CHECK SUM ERROR —

NOTE:
Check internal control module memory.
<Ref. to 2-7 [T14AV0].>

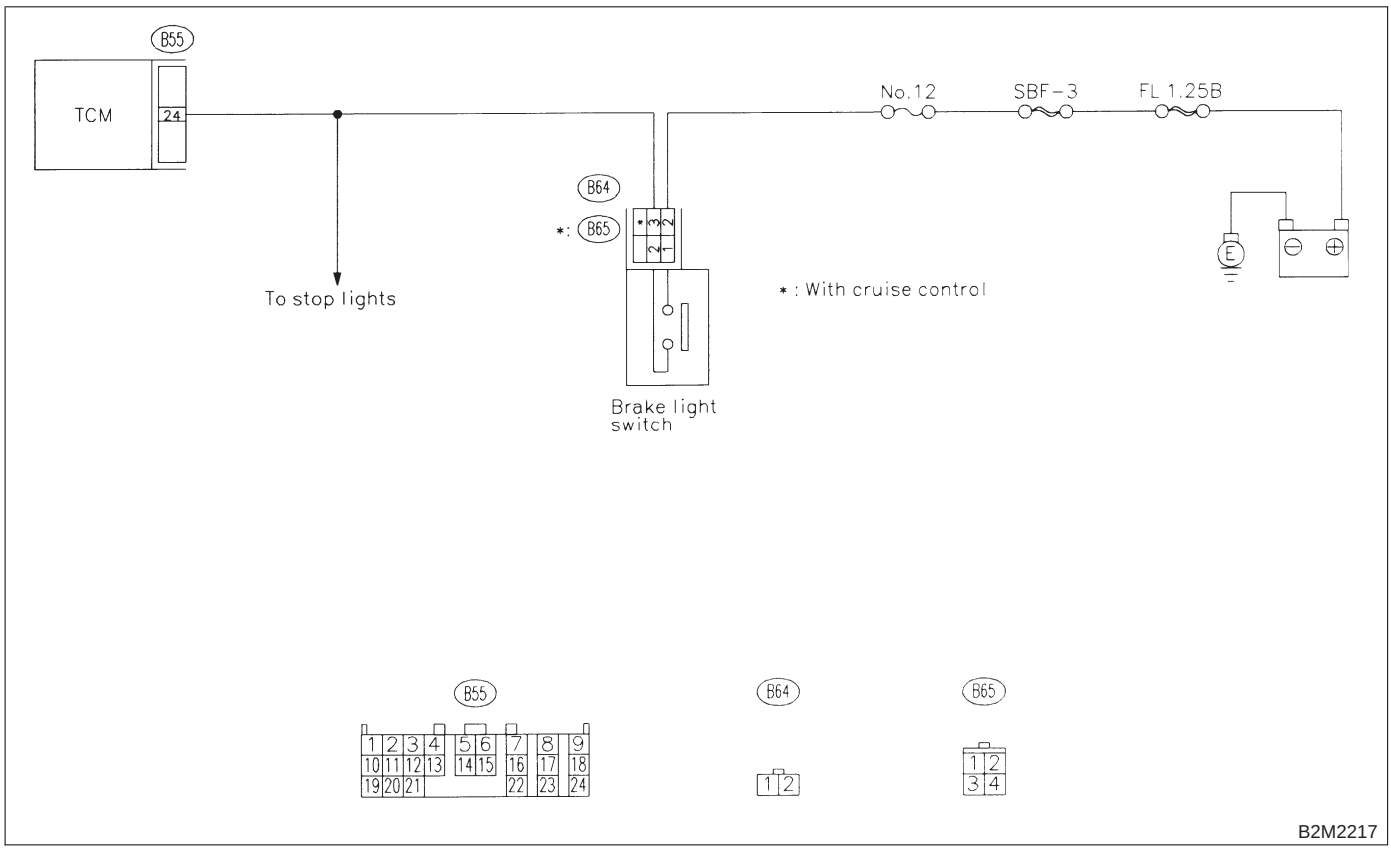
- **WIRING DIAGRAM:**



AW: DTC P0703 — BRAKE SWITCH INPUT MALFUNCTION —

NOTE:
Check brake switch input signal circuit.
<Ref. to 2-7 [T12AY0].>

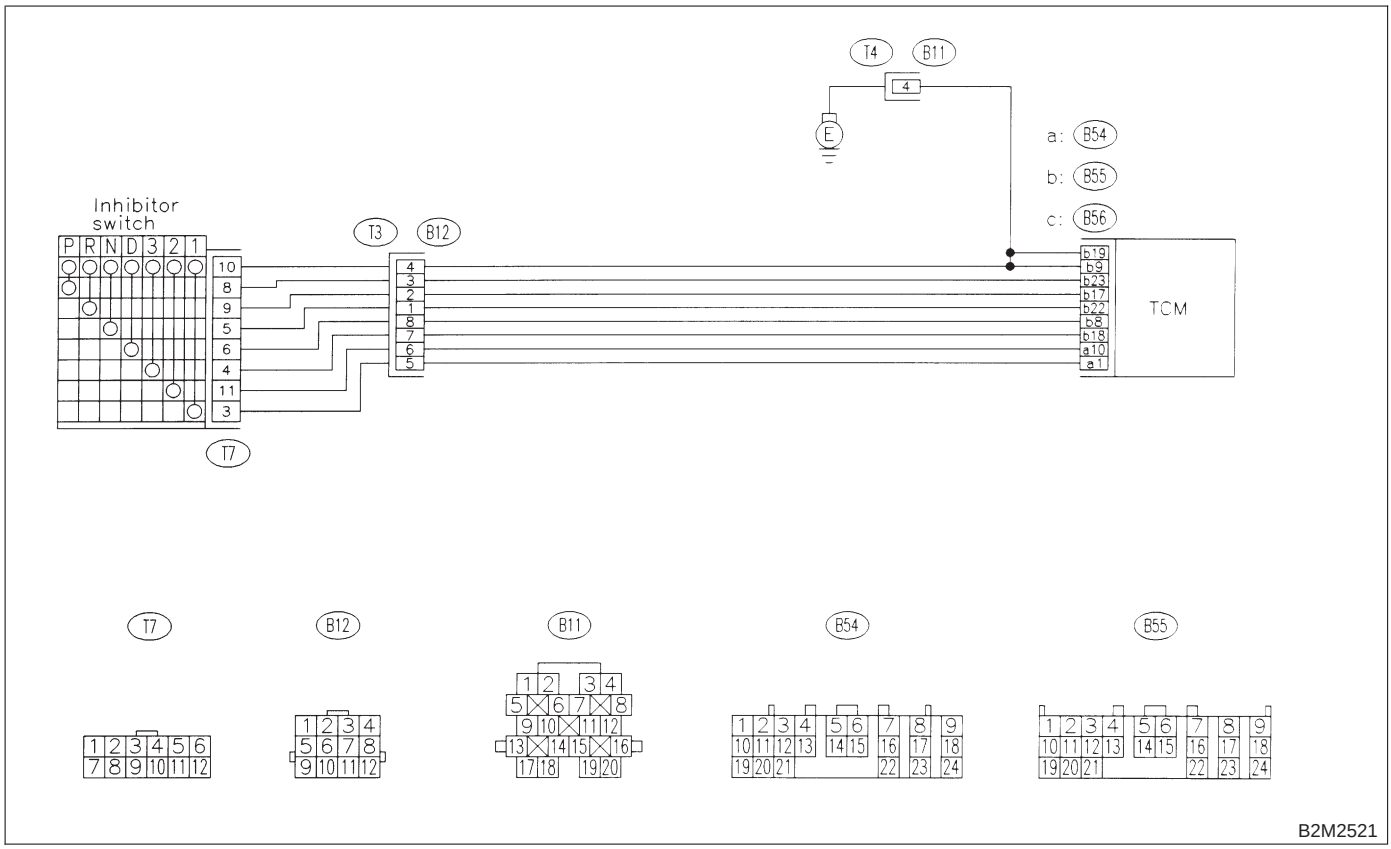
- **WIRING DIAGRAM:**



AX: DTC P0705 — TRANSMISSION RANGE SENSOR CIRCUIT MALFUNCTION —

NOTE:
Check inhibitor switch circuit.
<Ref. to 2-7 [T12AZ0].>

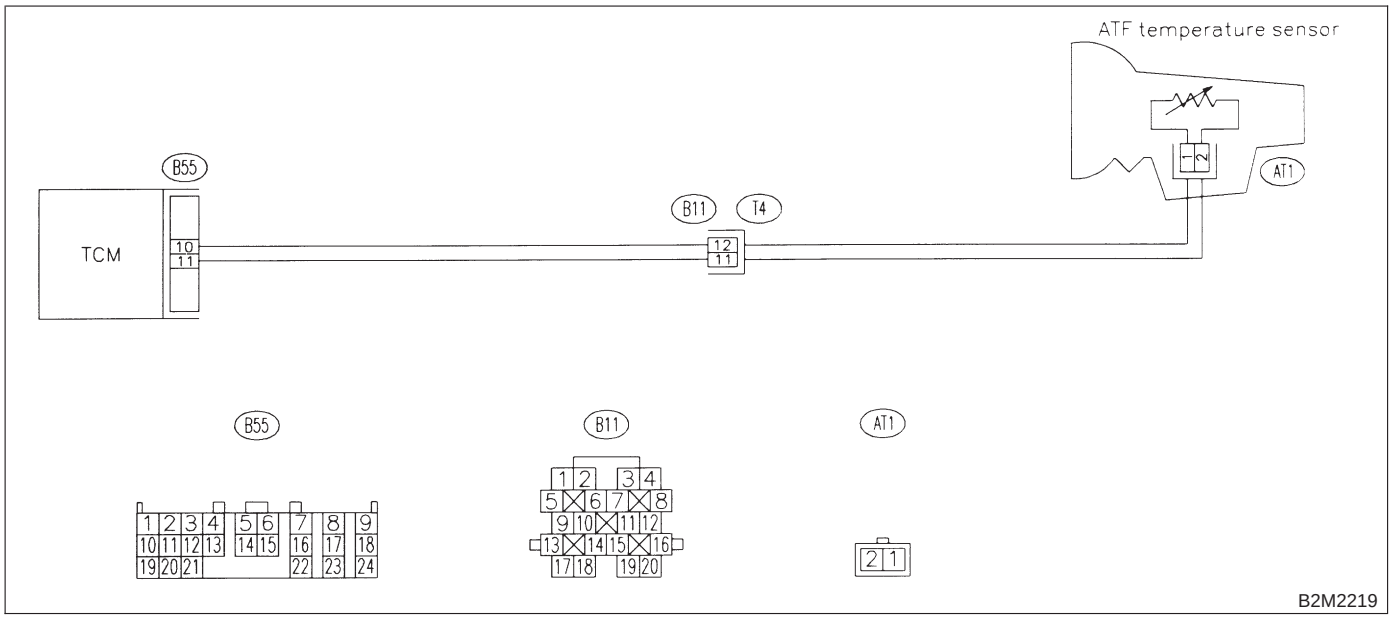
- **WIRING DIAGRAM:**



AY: DTC P0710 — TRANSMISSION FLUID TEMPERATURE SENSOR CIRCUIT MALFUNCTION —

NOTE:
Check automatic transmission fluid temperature sensor circuit.
<Ref. to 2-7 [T12BA0].>

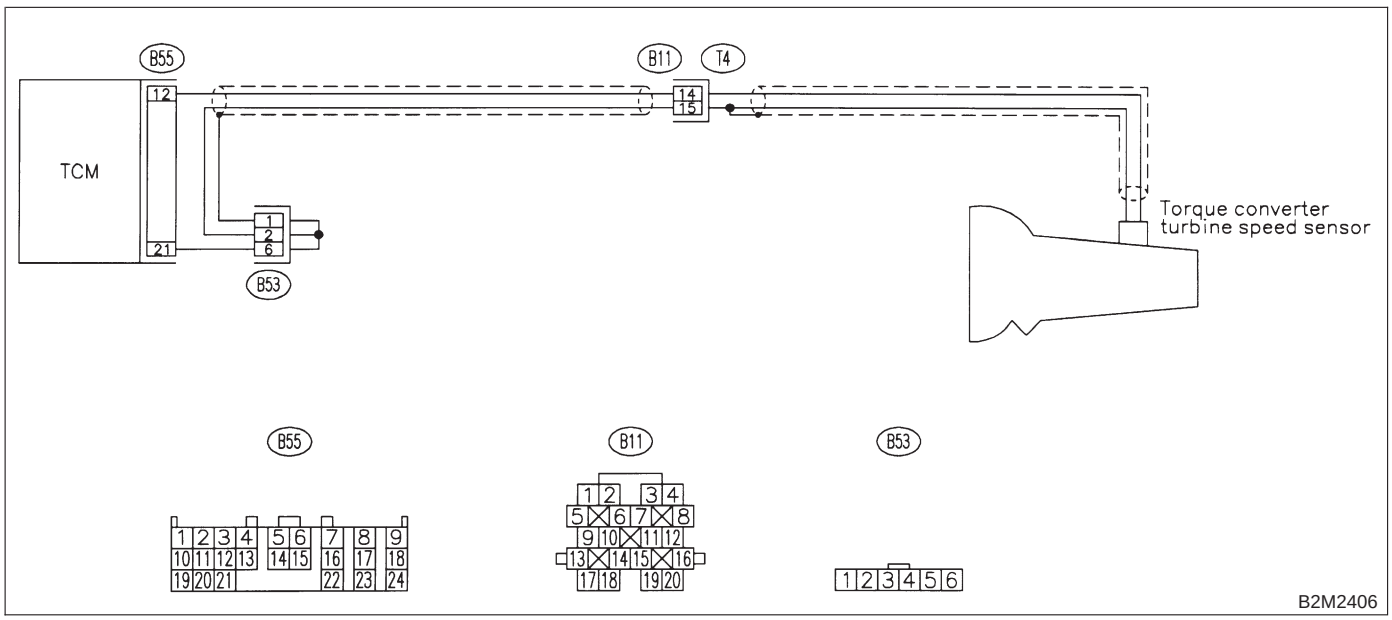
- **WIRING DIAGRAM:**



AZ: DTC P0715 — TORQUE CONVERTER TURBINE SPEED SENSOR CIRCUIT MALFUNCTION —

NOTE:
Check torque converter turbine speed sensor circuit.
<Ref. to 2-7 [T12BB0].>

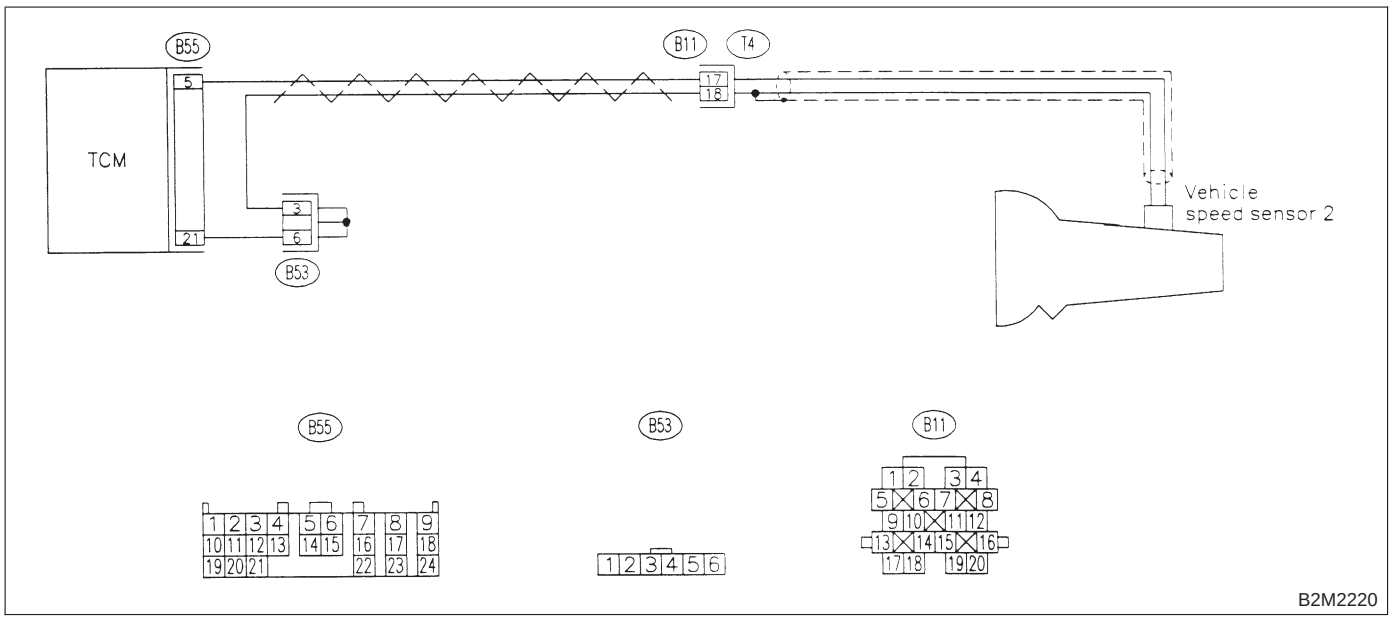
- **WIRING DIAGRAM:**



BA: DTC P0720 — OUTPUT SPEED SENSOR (VEHICLE SPEED SENSOR 2) CIRCUIT MALFUNCTION —

NOTE:
Check vehicle speed sensor 2 circuit.
<Ref. to 2-7 [T12BC0].>

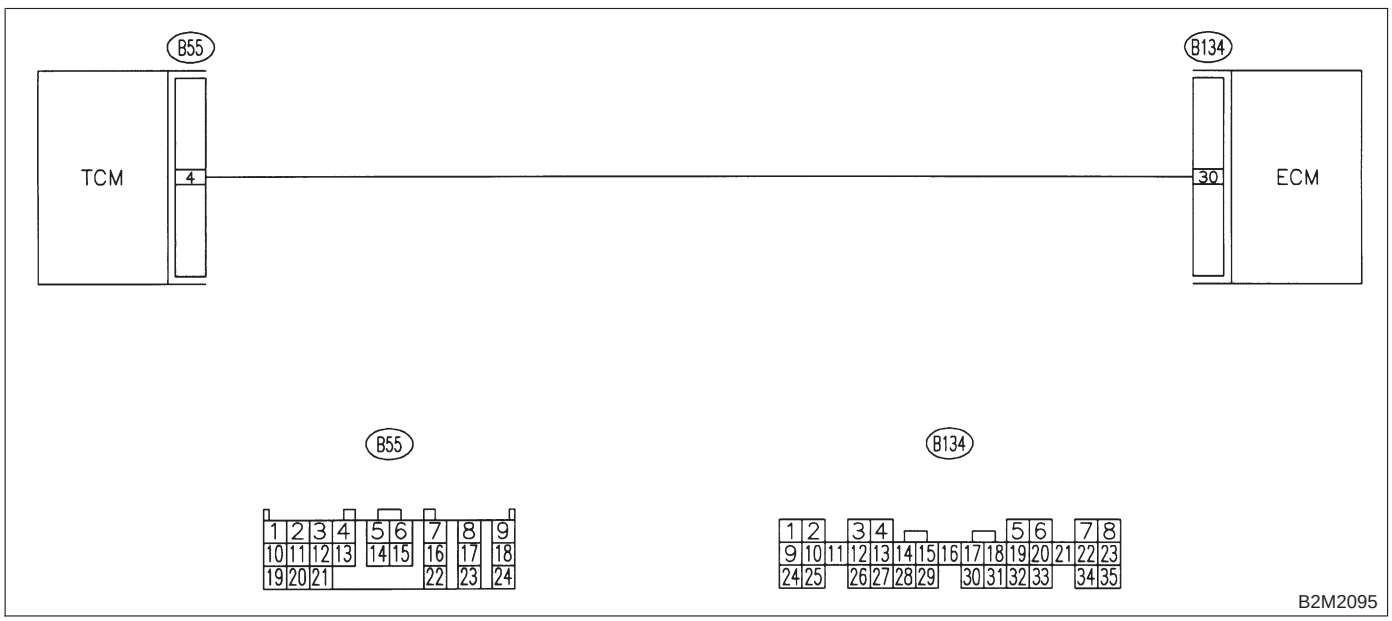
- **WIRING DIAGRAM:**



BB: DTC P0725 — ENGINE SPEED INPUT CIRCUIT MALFUNCTION —

NOTE:
Check engine speed signal input circuit.
<Ref. to 2-7 [T12BD0].>

- **WIRING DIAGRAM:**



BC: DTC P0731 — GEAR 1 INCORRECT RATIO —

NOTE:
For the diagnostic procedure, refer to 2-7 [T15BF0].
<Ref. to 2-7 [T15BF0].>

BD: DTC P0732 — GEAR 2 INCORRECT RATIO —

NOTE:
For the diagnostic procedure, refer to 2-7 [T15BF0].
<Ref. to 2-7 [T15BF0].>

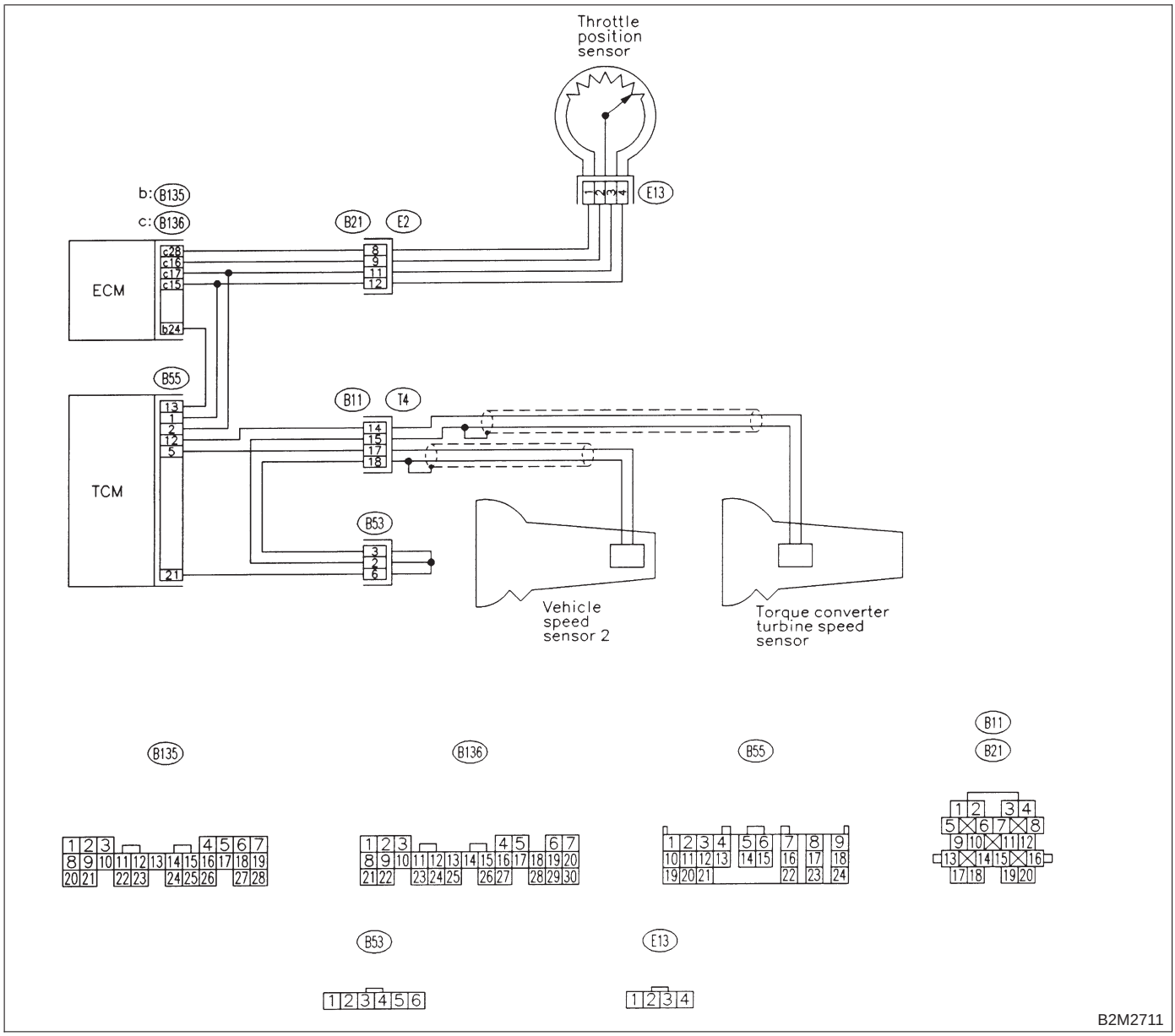
BE: DTC P0733 — GEAR 3 INCORRECT RATIO —

NOTE:
For the diagnostic procedure, refer to 2-7 [T15BF0].
<Ref. to 2-7 [T15BF0].>

BF: DTC P0734 — GEAR 4 INCORRECT RATIO —

NOTE:
Check shift change control system.
<Ref. to 2-7 [T14BF0].>

● **WIRING DIAGRAM:**



BG: DTC P0740 — TORQUE CONVERTER CLUTCH SYSTEM MALFUNCTION —

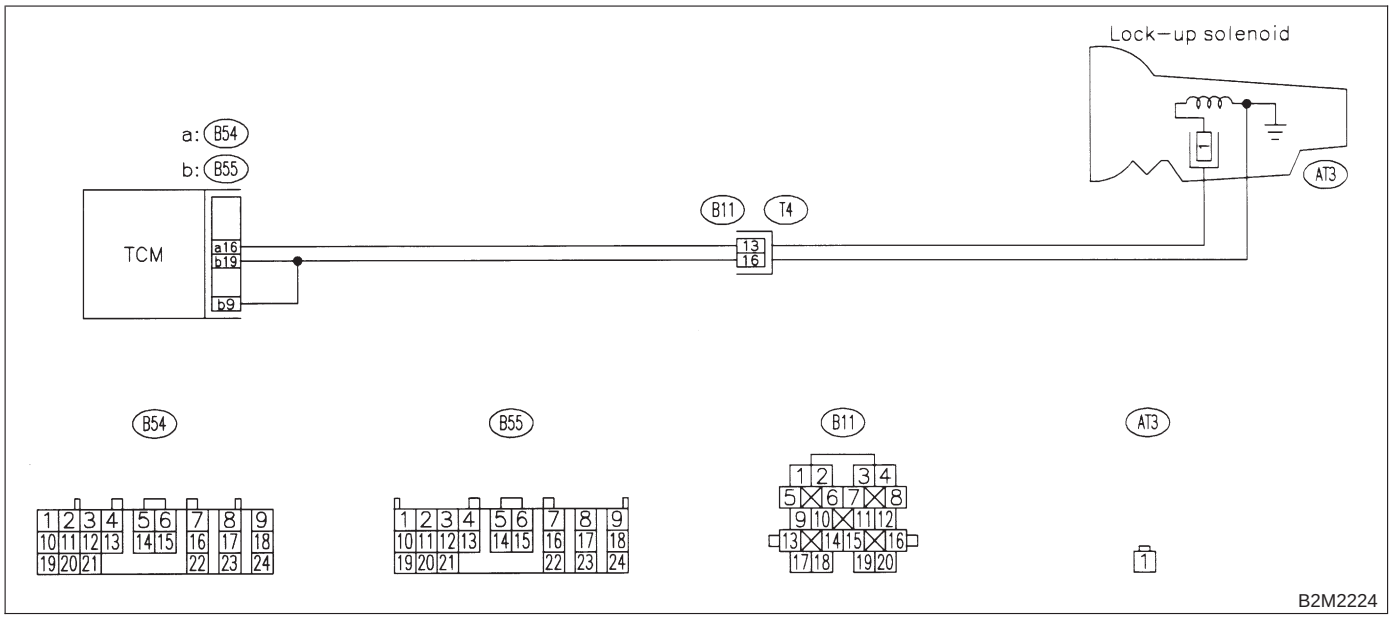
NOTE:
Check torque converter lock-up control system.
<Ref. to 2-7 [T14BG0].>

● **WIRING DIAGRAM:**

BH: DTC P0743 — TORQUE CONVERTER CLUTCH SYSTEM (DUTY SOLENOID B) ELECTRICAL —

NOTE:
Check duty solenoid B circuit.
<Ref. to 2-7 [T12BJ0].>

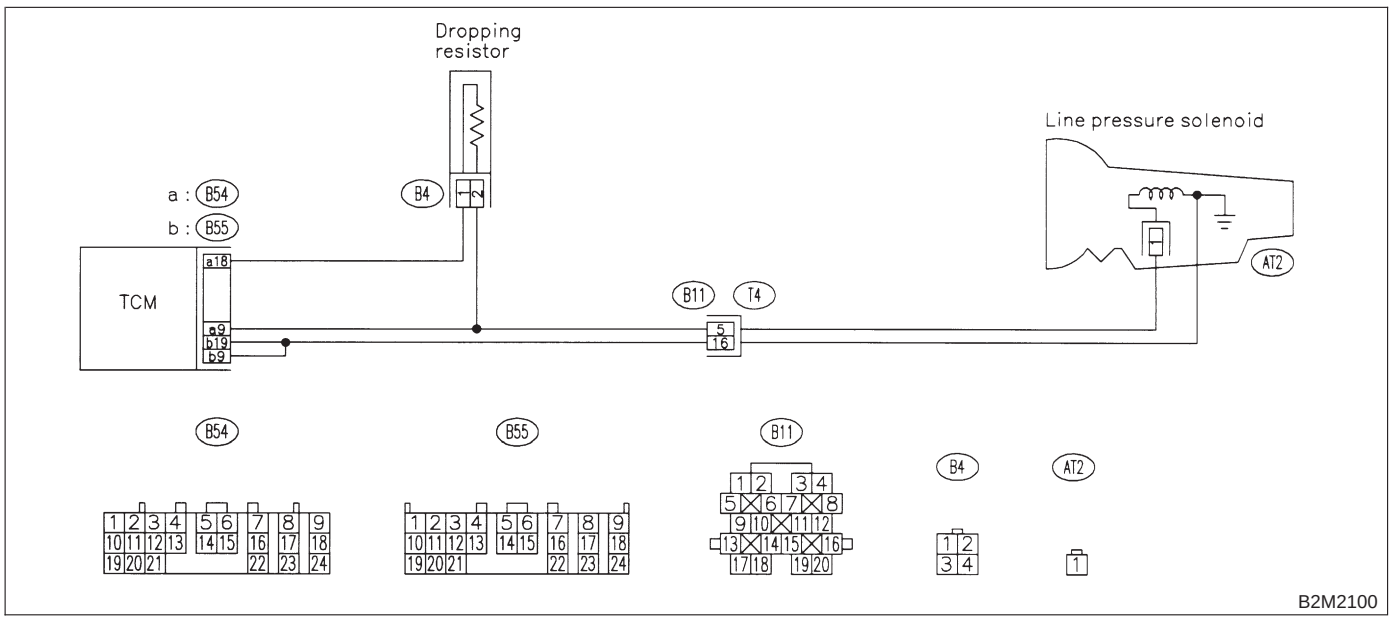
- **WIRING DIAGRAM:**



BI: DTC P0748 — PRESSURE CONTROL SOLENOID (DUTY SOLENOID A) ELECTRICAL —

NOTE:
Check duty solenoid A circuit.
<Ref. to 2-7 [T12BK0].>

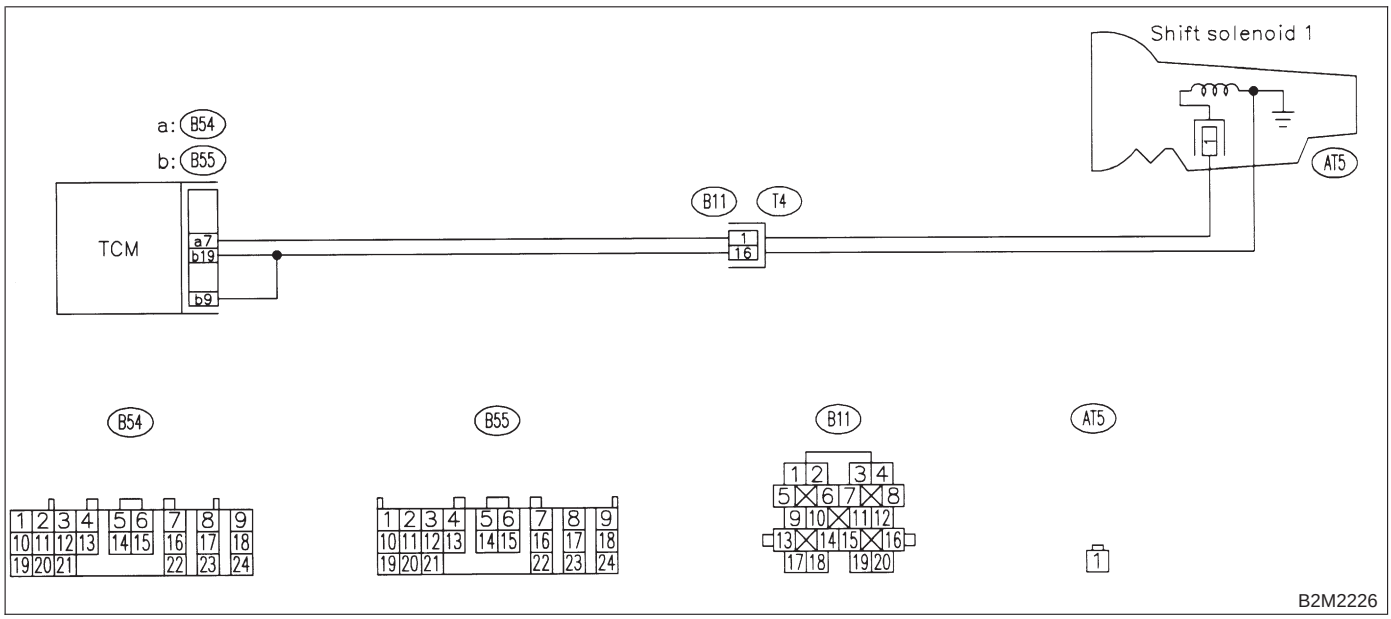
- **WIRING DIAGRAM:**



BJ: DTC P0753 — SHIFT SOLENOID A (SHIFT SOLENOID 1) ELECTRICAL —

NOTE:
Check shift solenoid 1 circuit.
<Ref. to 2-7 [T12BL0].>

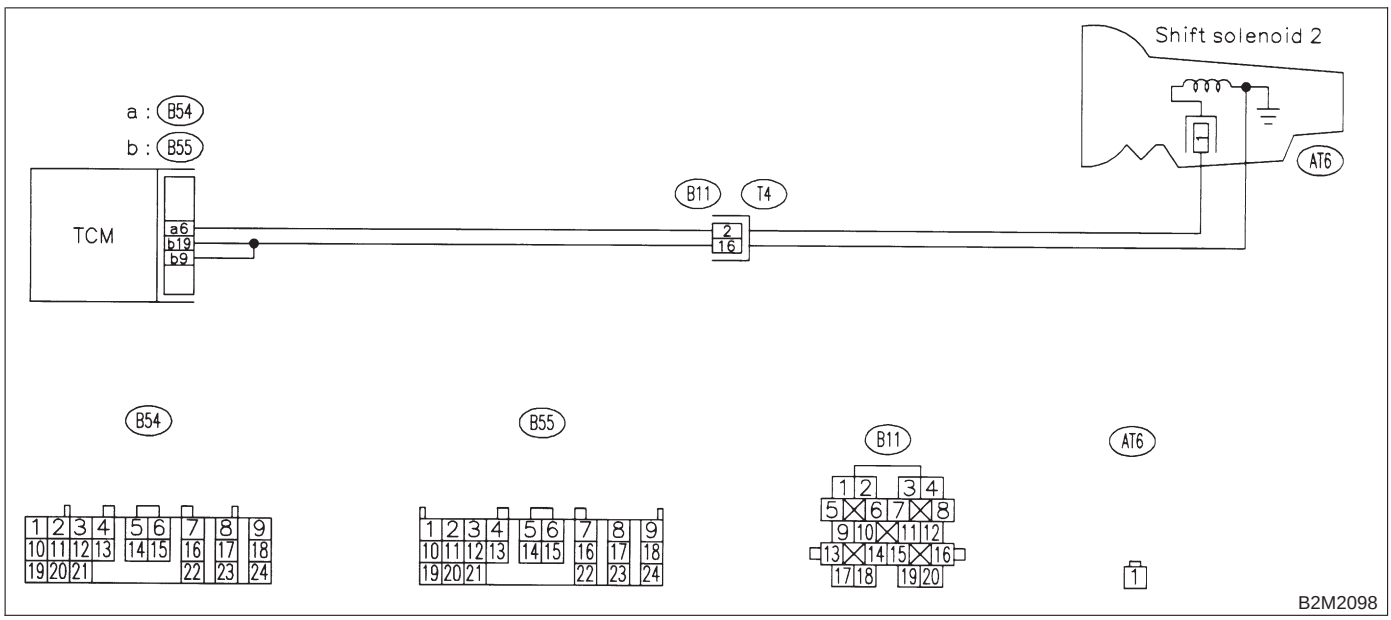
- **WIRING DIAGRAM:**



BK: DTC P0758 — SHIFT SOLENOID B (SHIFT SOLENOID 2) ELECTRICAL —

NOTE:
Check shift solenoid 2 circuit.
<Ref. to 2-7 [T12BM0].>

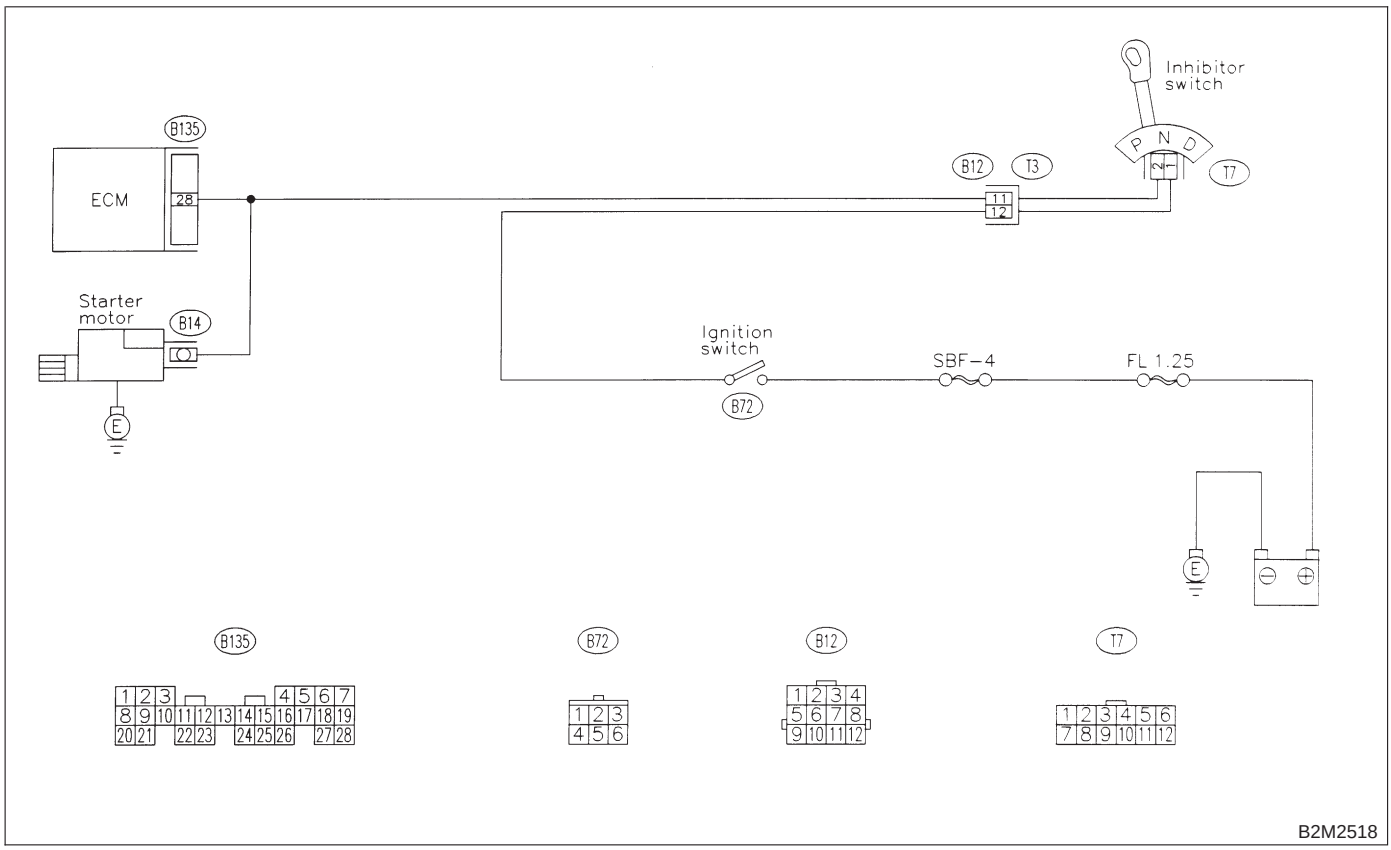
- **WIRING DIAGRAM:**



BL: DTC P1100 — STARTER SWITCH CIRCUIT LOW INPUT —

NOTE:
Check starter switch circuit.
<Ref. to 2-7 [T12BN0].>

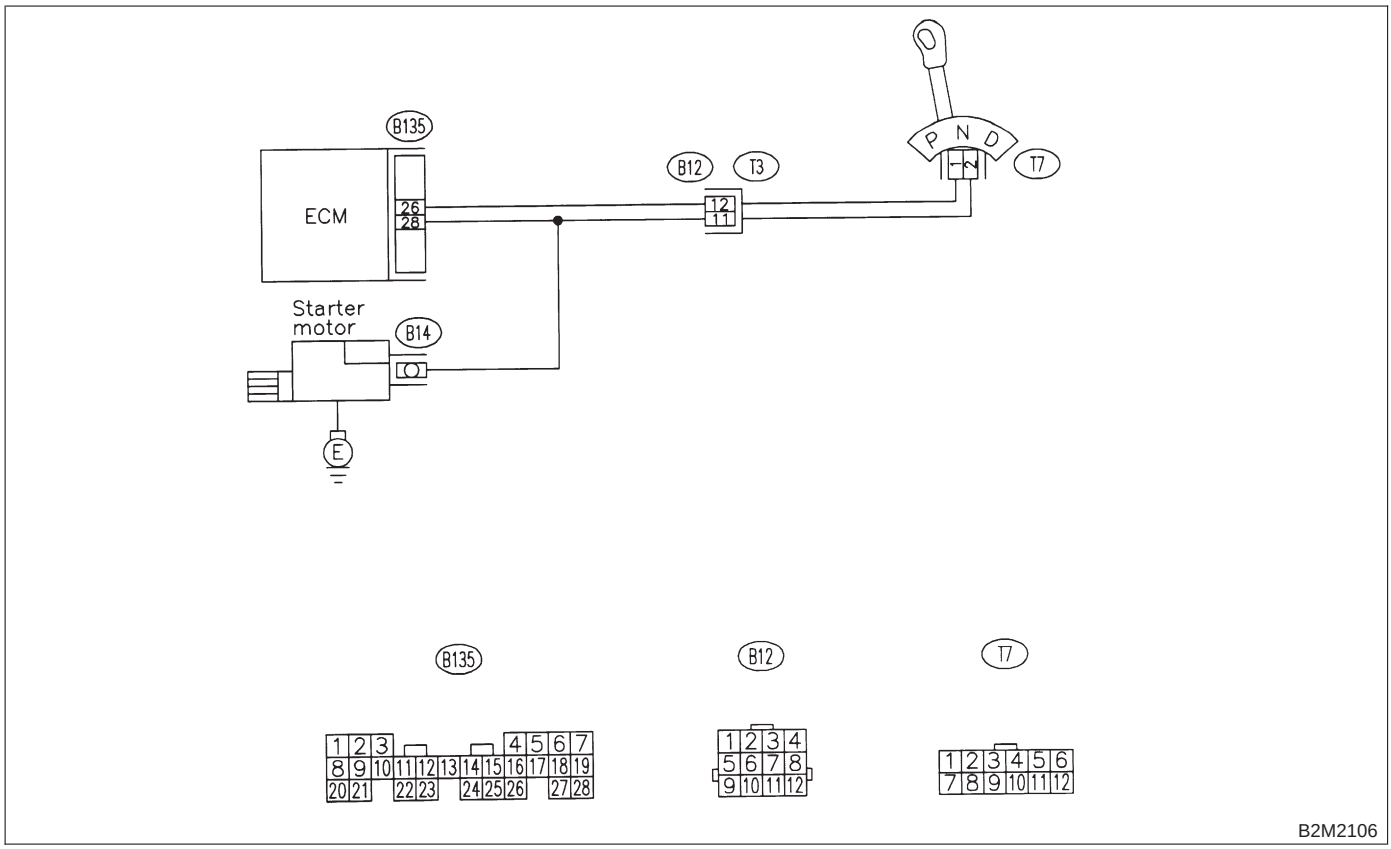
- **WIRING DIAGRAM:**



BM: DTC P1101 — NEUTRAL POSITION SWITCH CIRCUIT HIGH INPUT [AT VEHICLES] —

NOTE:
Check neutral position switch circuit.
<Ref. to 2-7 [T14BN0].>

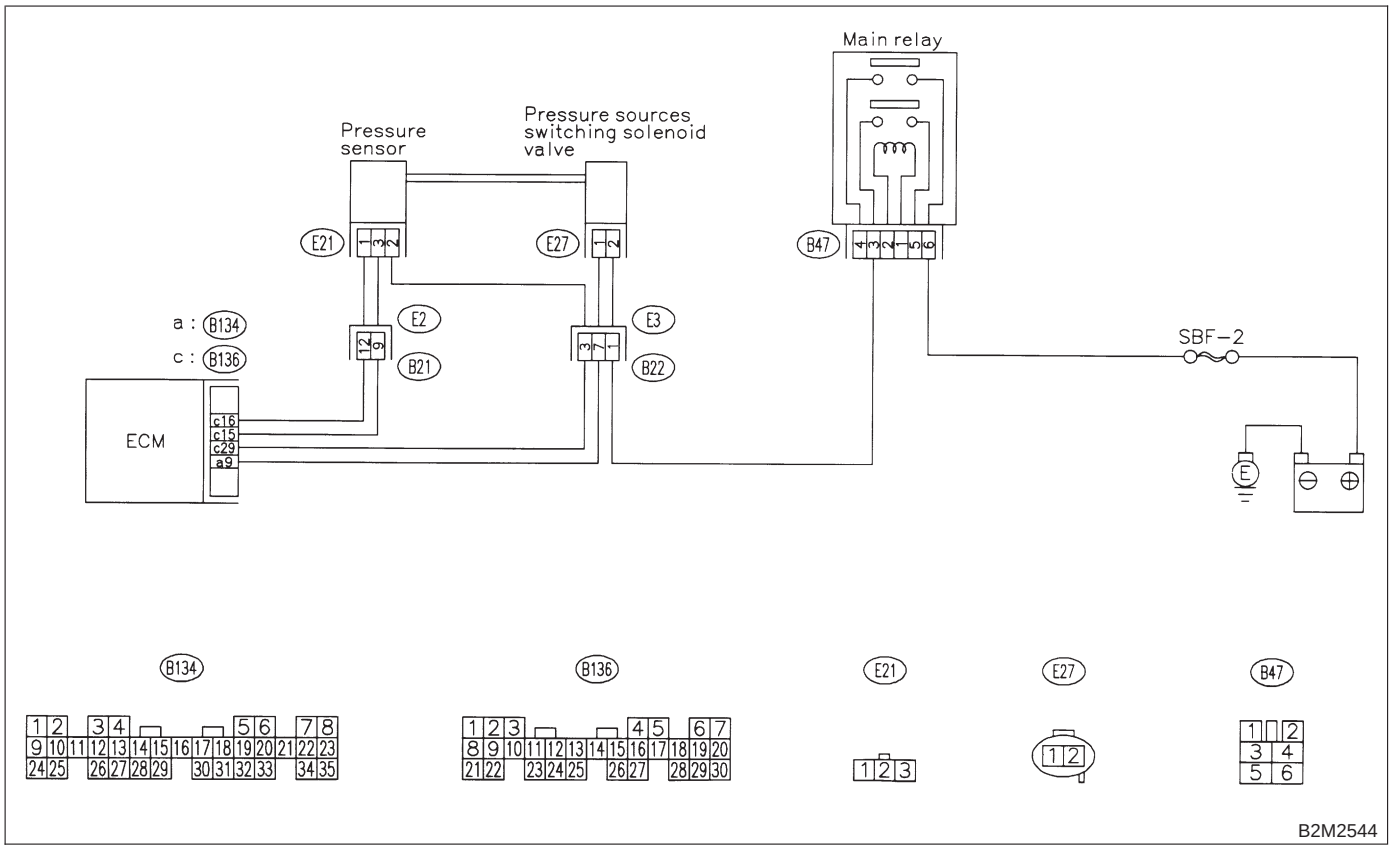
- **WIRING DIAGRAM:**



BN: DTC P1102 — PRESSURE SOURCES SWITCHING SOLENOID VALVE CIRCUIT LOW INPUT —

NOTE:
Check pressure sources switching solenoid valve circuit.
<Ref. to 2-7 [T14BO0].>

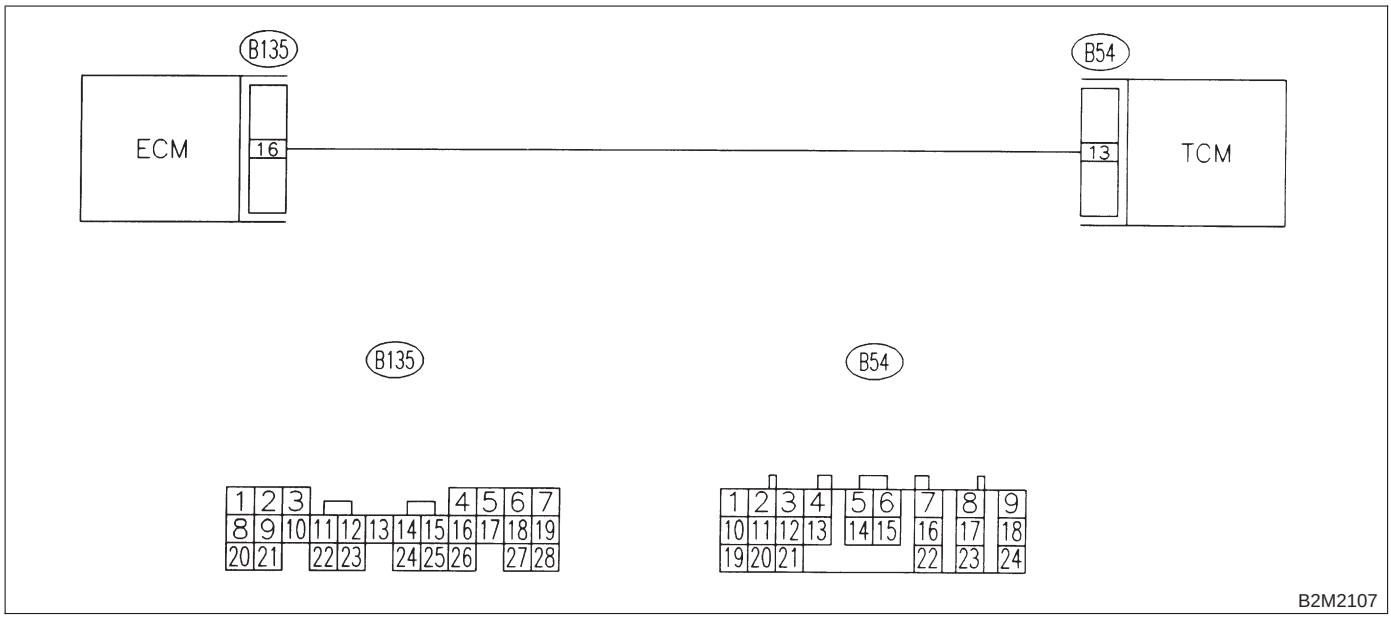
- **WIRING DIAGRAM:**



BO: DTC P1103 — ENGINE TORQUE CONTROL SIGNAL 1 CIRCUIT MALFUNCTION —

NOTE:
Check engine torque control signal 1 circuit.
<Ref. to 2-7 [T12BQ0].>

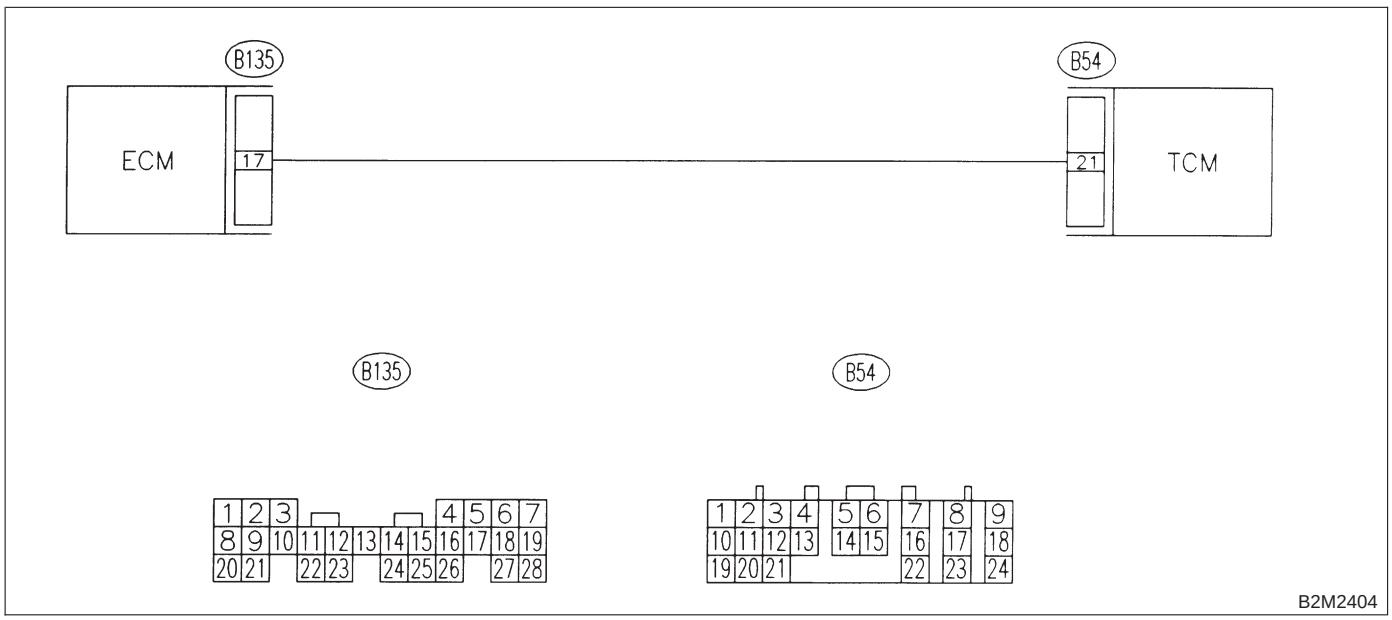
- **WIRING DIAGRAM:**



BP: DTC P1106 — ENGINE TORQUE CONTROL SIGNAL 2 CIRCUIT MALFUNCTION —

NOTE:
Check engine torque control signal 2 circuit.
<Ref. to 2-7 [T12BR0].>

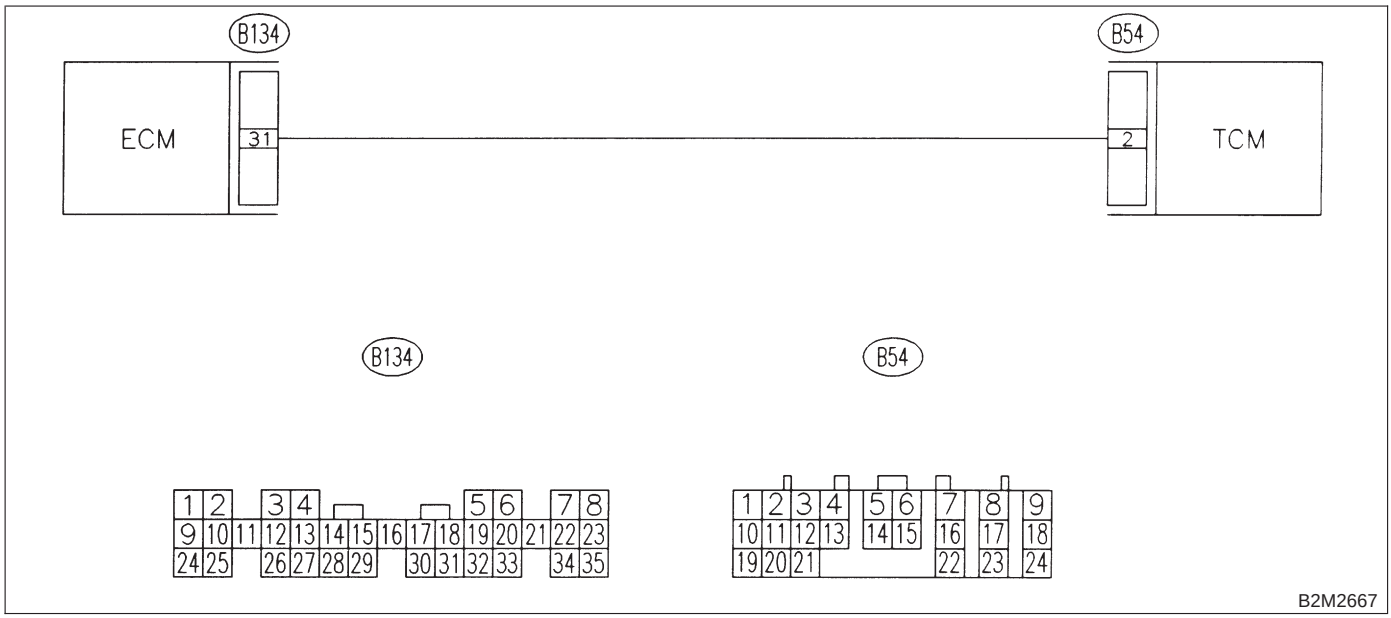
- **WIRING DIAGRAM:**



BQ: DTC P1115 — ENGINE TORQUE CONTROL CUT SIGNAL CIRCUIT HIGH INPUT —

NOTE:
Check engine torque control cut signal circuit.
<Ref. to 2-7 [T12BV0].>

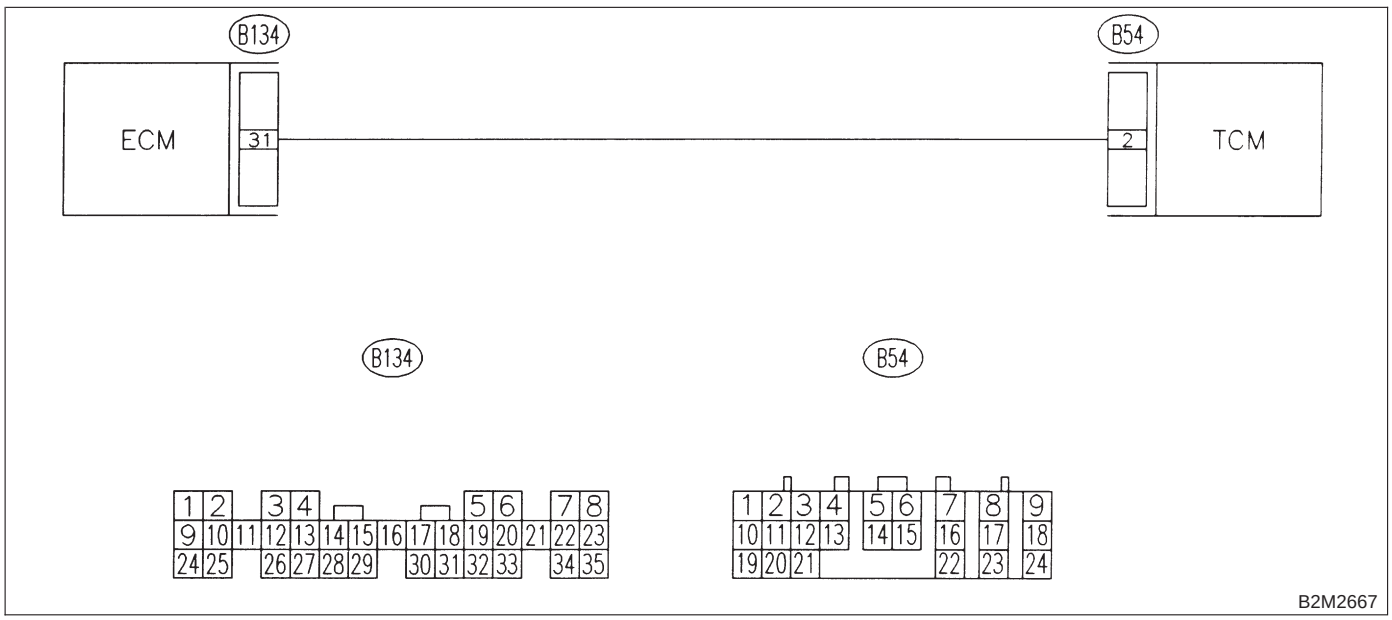
- **WIRING DIAGRAM:**



BR: DTC P1116 — ENGINE TORQUE CONTROL CUT SIGNAL CIRCUIT LOW INPUT —

NOTE:
Check engine torque control cut signal circuit.
<Ref. to 2-7 [T12BW0].>

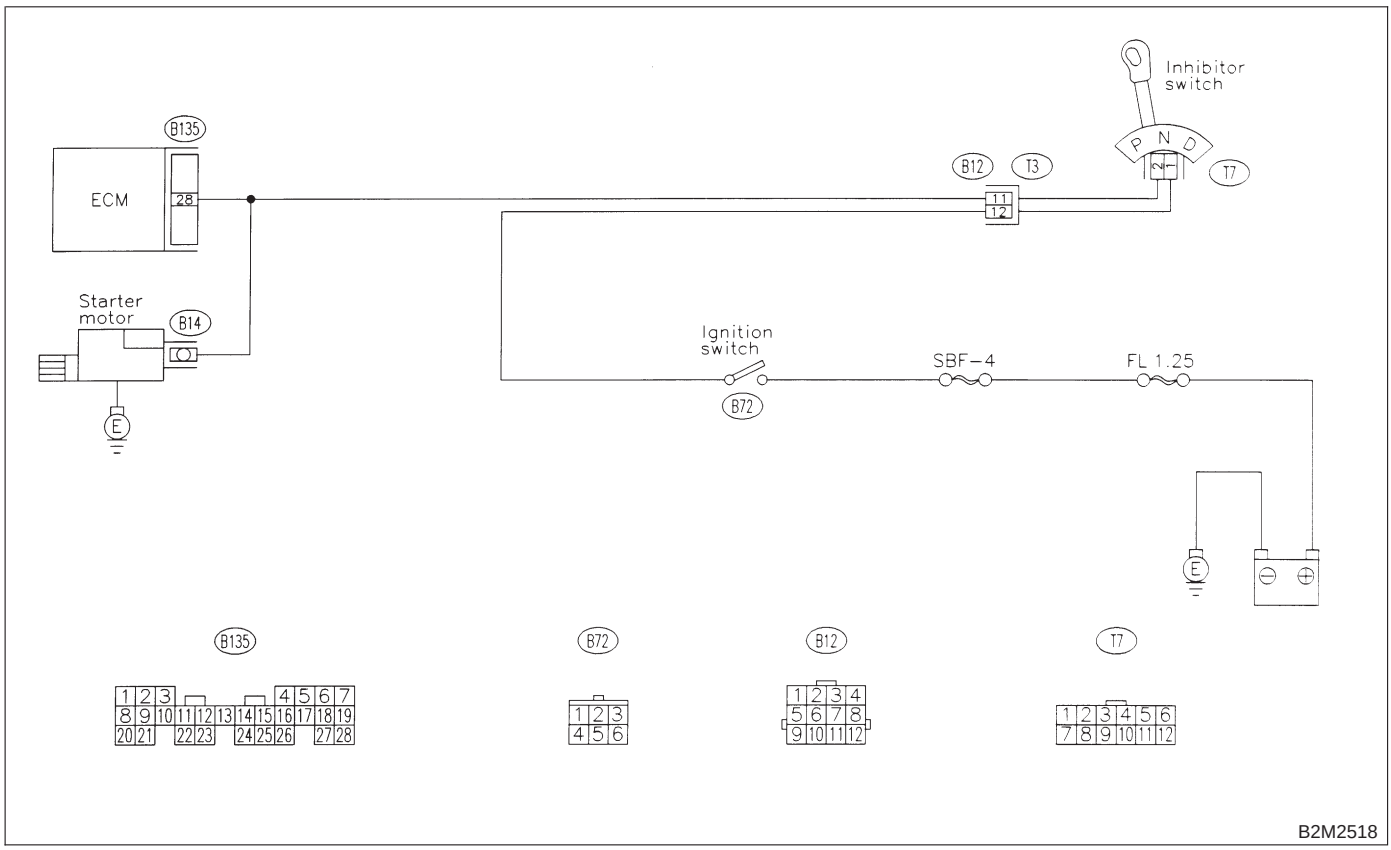
- **WIRING DIAGRAM:**



BS: DTC P1120 — STARTER SWITCH CIRCUIT HIGH INPUT —

NOTE:
Check starter switch circuit.
<Ref. to 2-7 [T12BX0].>

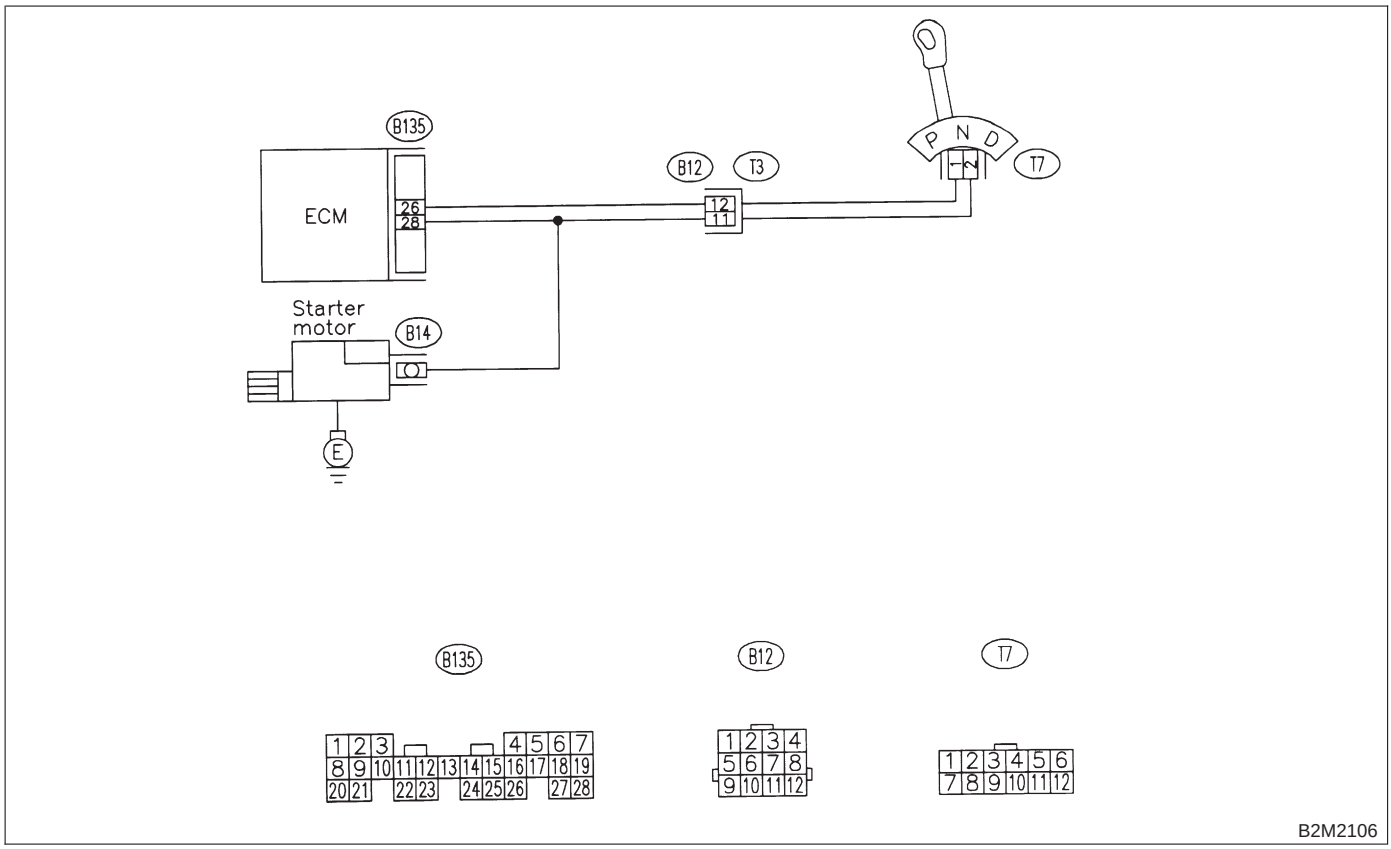
- **WIRING DIAGRAM:**



BT: DTC P1121 — NEUTRAL POSITION SWITCH CIRCUIT LOW INPUT [AT VEHICLES] —

NOTE:
Check neutral position switch circuit.
<Ref. to 2-7 [T14BV0].>

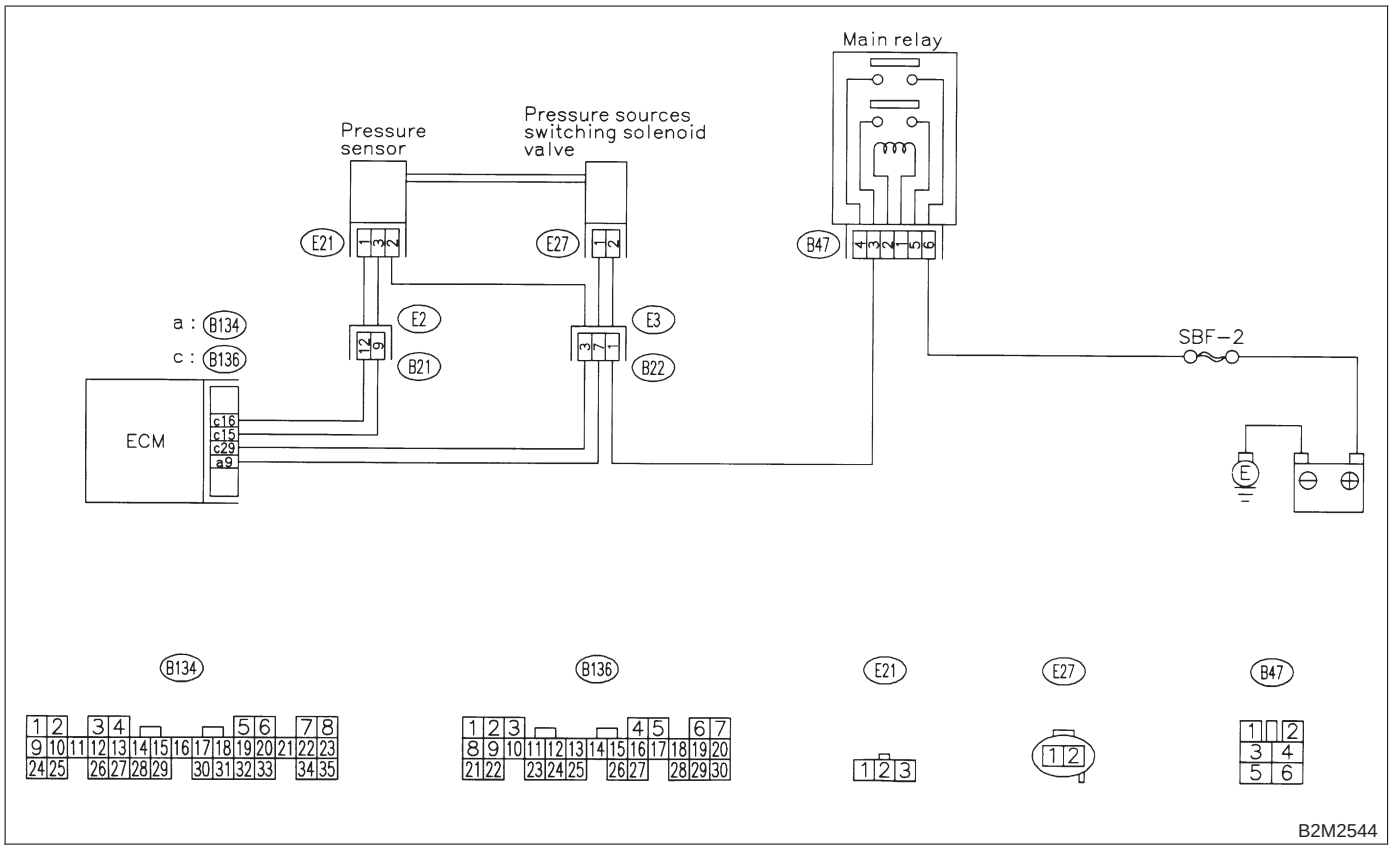
- **WIRING DIAGRAM:**



BU: DTC P1122 — PRESSURE SOURCES SWITCHING SOLENOID VALVE CIRCUIT HIGH INPUT —

NOTE:
Check pressure sources switching solenoid valve circuit.
<Ref. to 2-7 [T14BW0].>

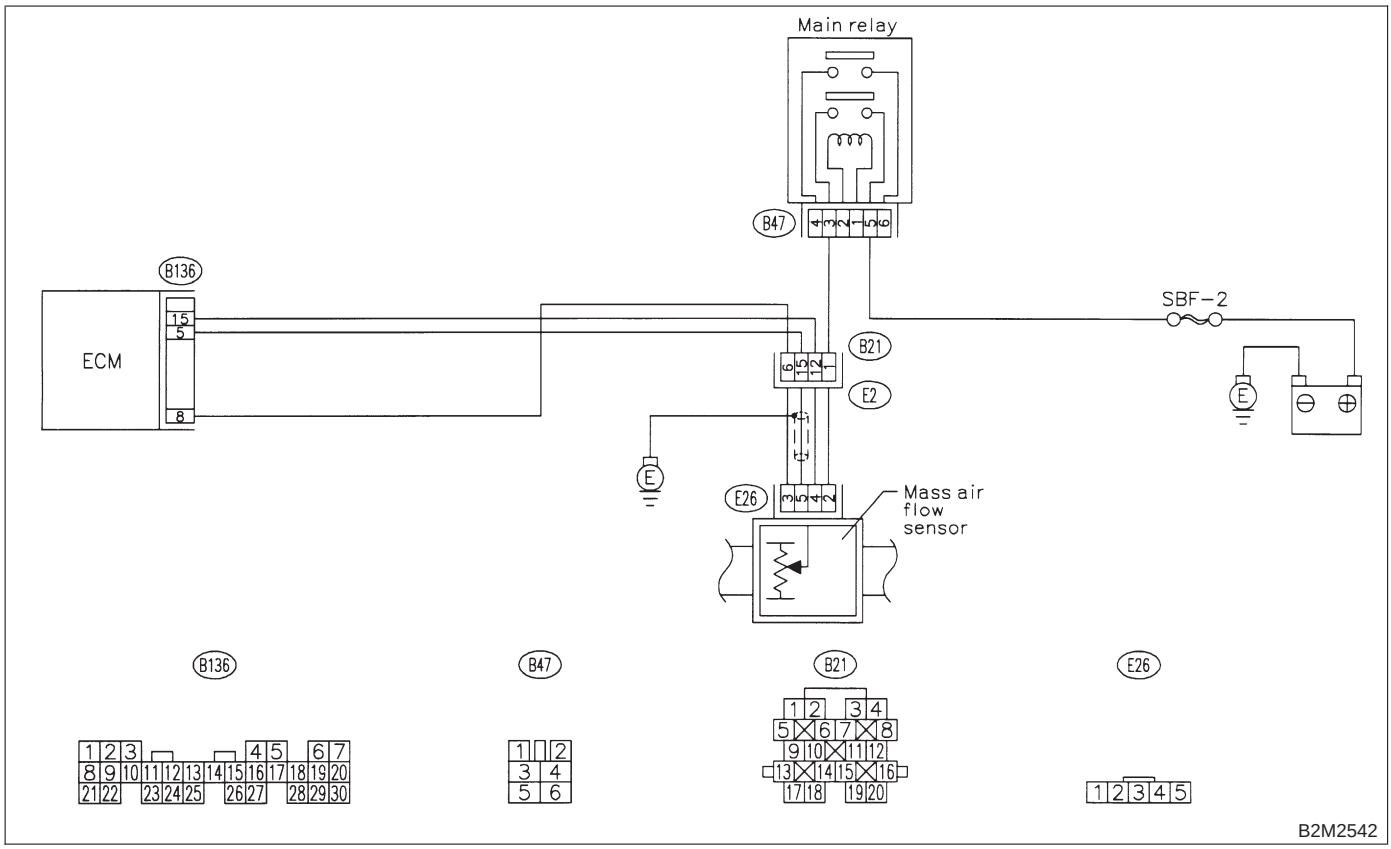
- **WIRING DIAGRAM:**



BV: DTC P1141 — MASS AIR FLOW SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM (LOW INPUT) —

NOTE:
Check mass air flow sensor circuit.
<Ref. to 2-7 [T14BX0].>

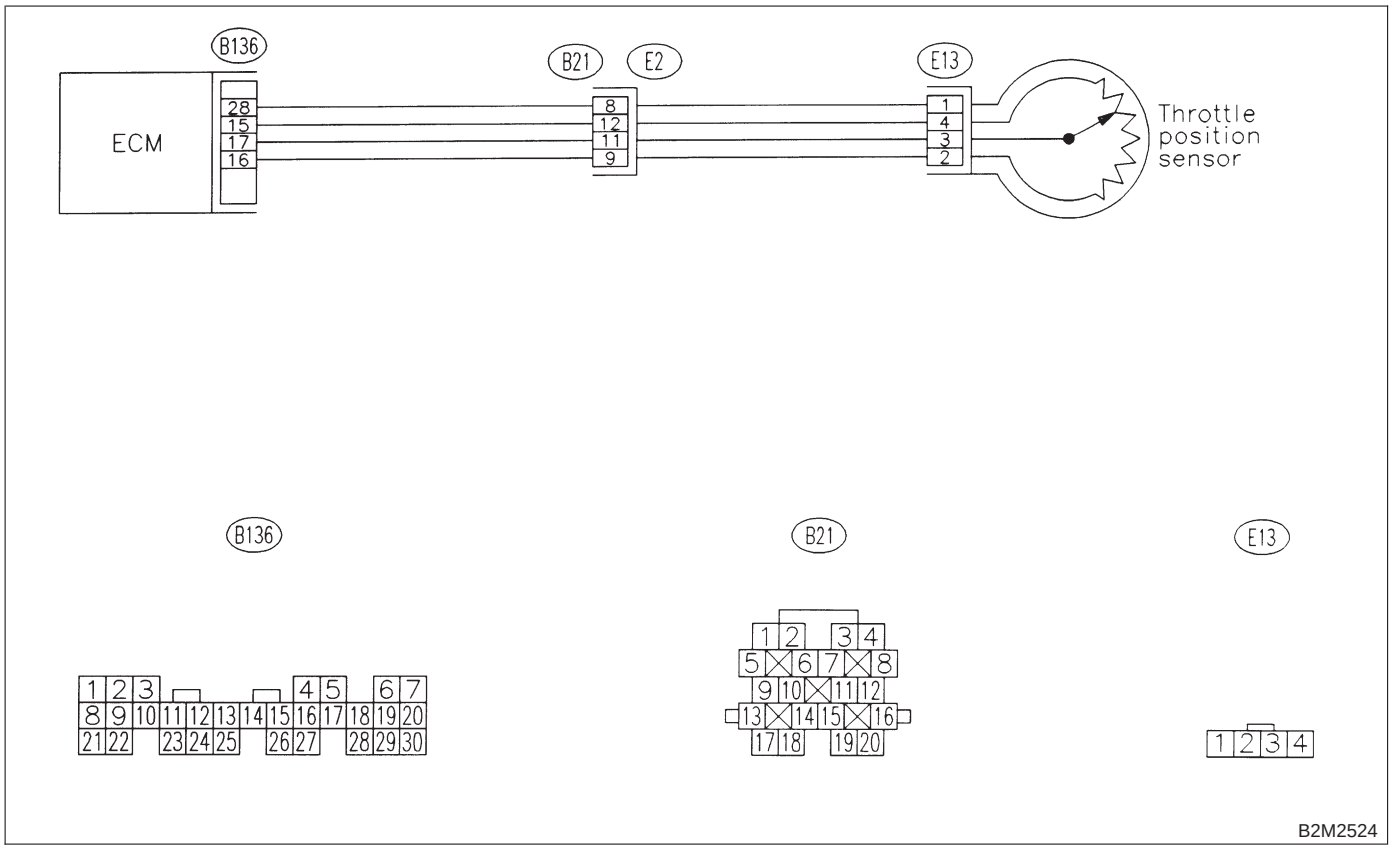
- **WIRING DIAGRAM:**



BW: DTC P1142 — THROTTLE POSITION SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM (LOW INPUT) —

NOTE:
Check throttle position sensor circuit.
<Ref. to 2-7 [T14BY0].>

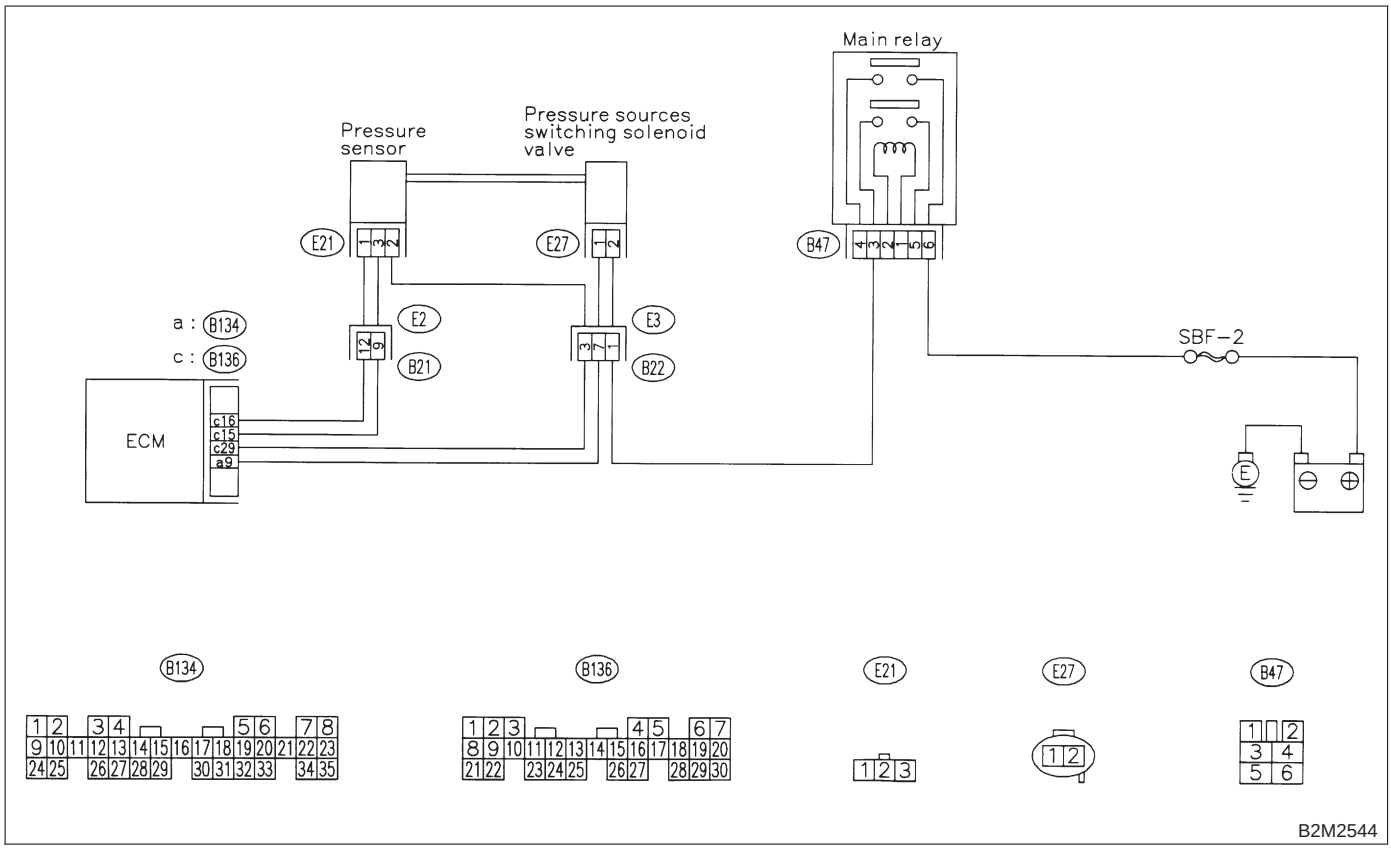
- **WIRING DIAGRAM:**



BX: DTC P1143 — PRESSURE SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM (LOW INPUT) —

NOTE:
Check pressure sensor circuit.
<Ref. to 2-7 [T14BZ0].>

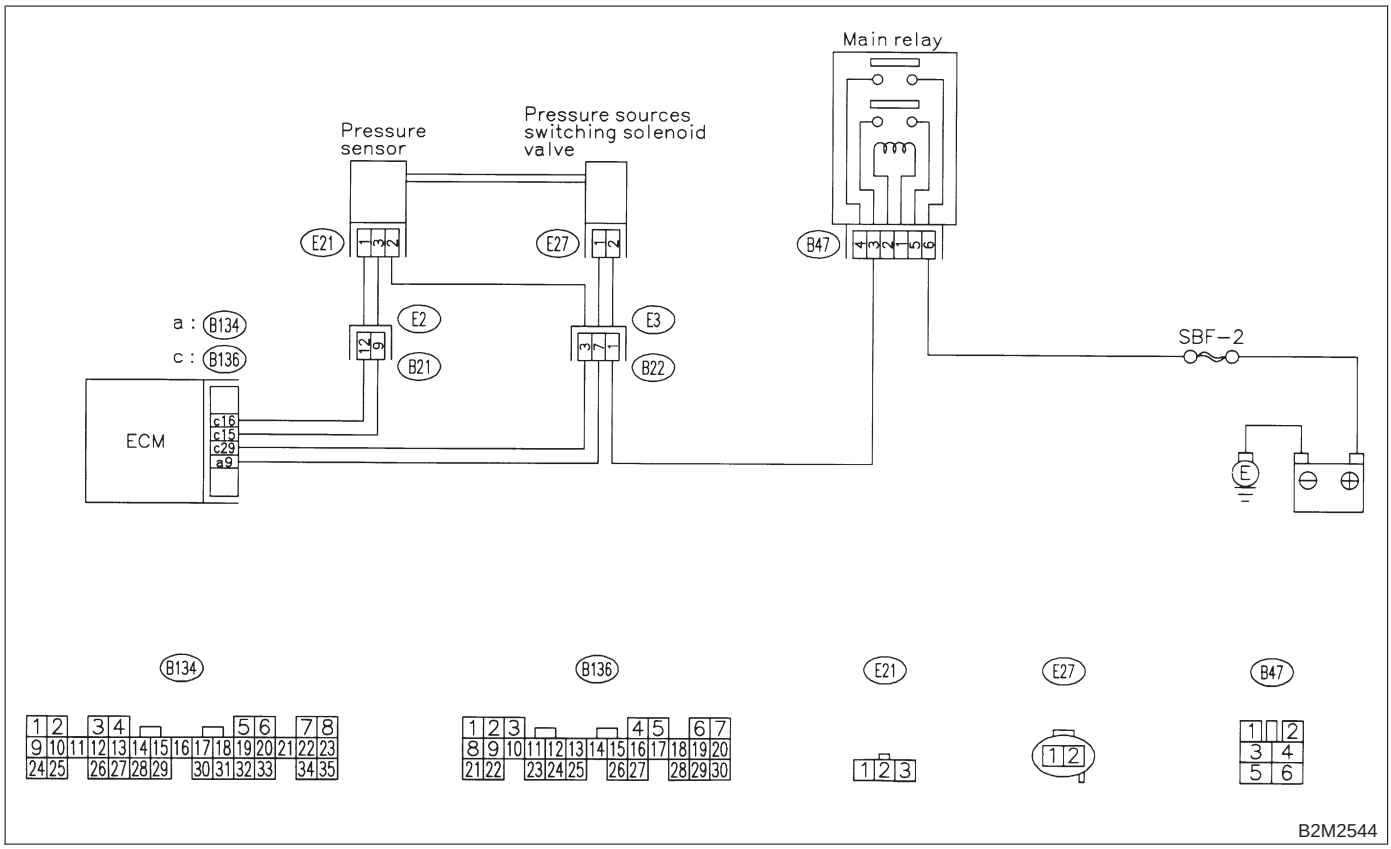
- **WIRING DIAGRAM:**



BY: DTC P1144 — PRESSURE SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM (HIGH INPUT) —

NOTE:
Check pressure sensor circuit.
<Ref. to 2-7 [T14CA0].>

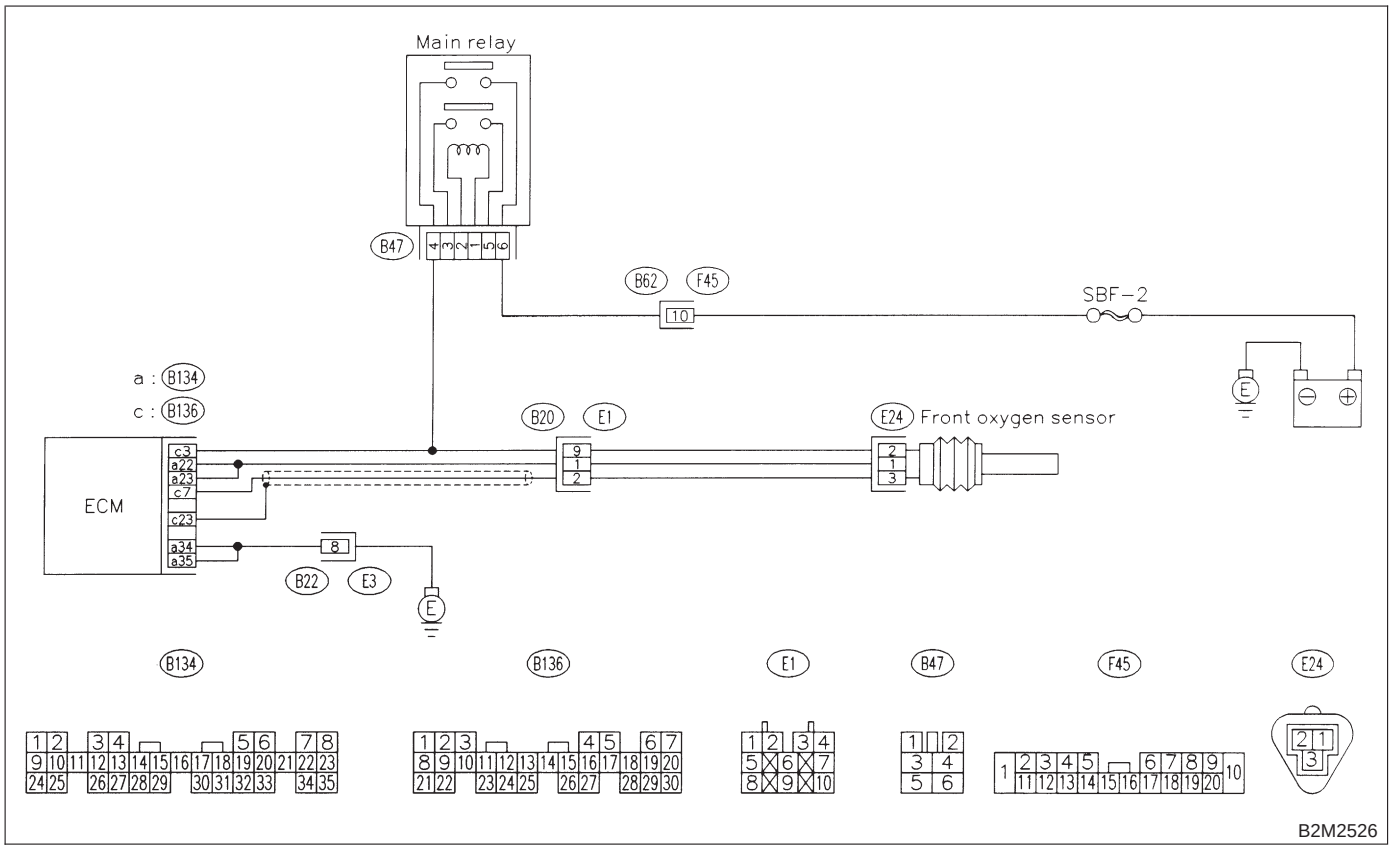
- **WIRING DIAGRAM:**



BZ: DTC P1150 — FRONT OXYGEN SENSOR HEATER CIRCUIT HIGH INPUT —

NOTE:
Check front oxygen sensor circuit.
<Ref. to 2-7 [T14CB0].>

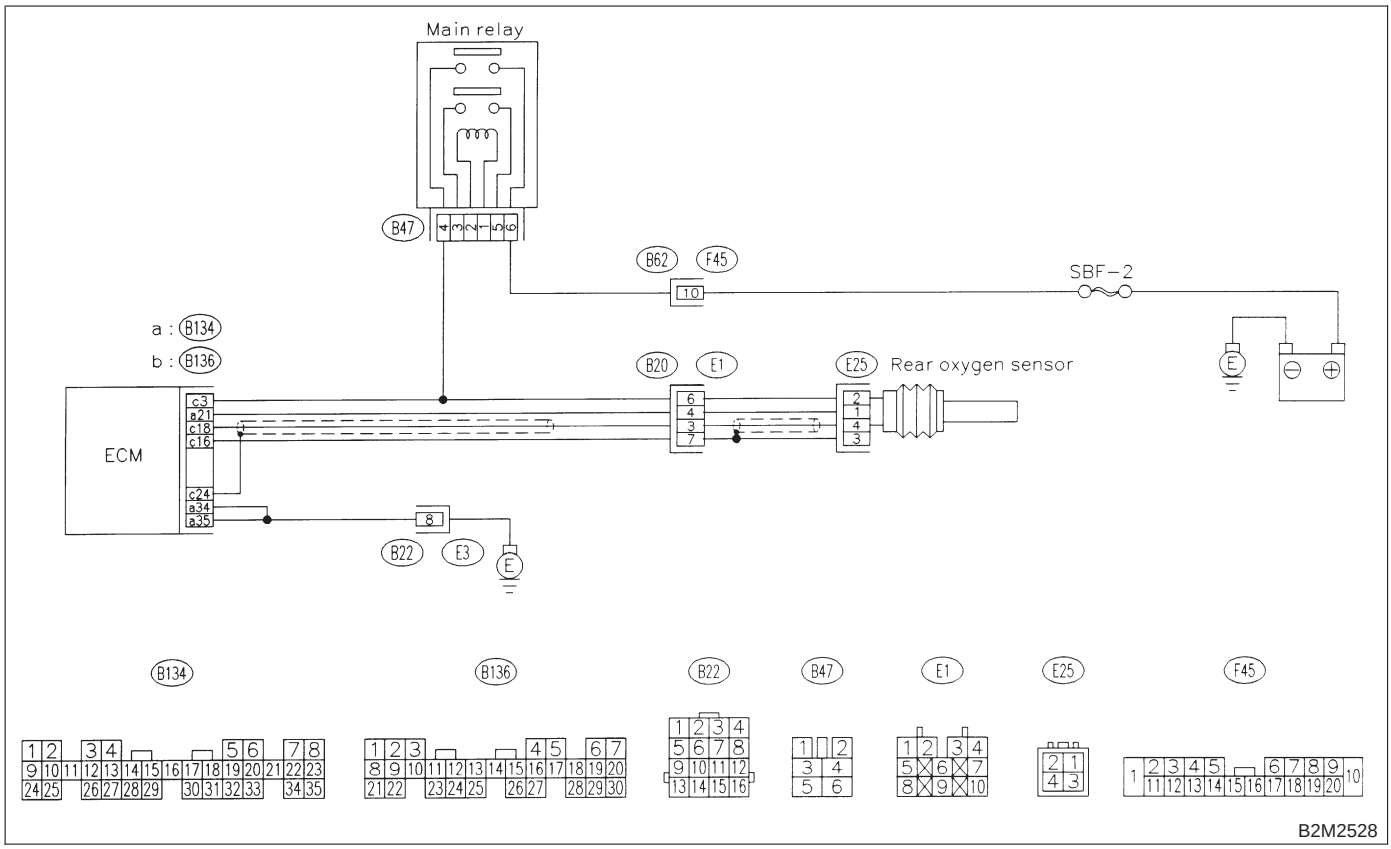
- **WIRING DIAGRAM:**



CA: DTC P1151 — REAR OXYGEN SENSOR HEATER CIRCUIT HIGH INPUT —

NOTE:
Check rear oxygen sensor circuit.
<Ref. to 2-7 [T14CC0].>

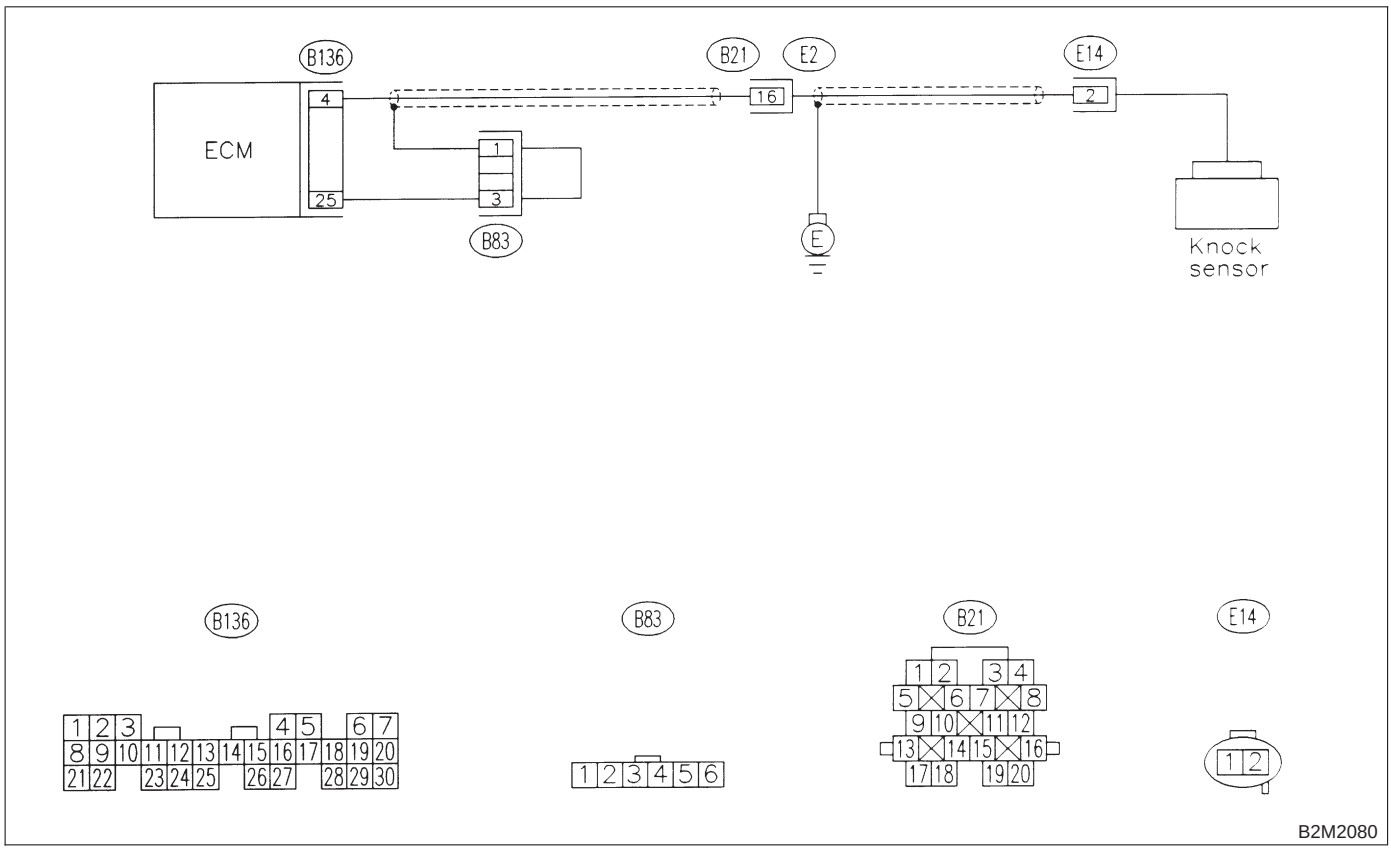
- **WIRING DIAGRAM:**



CB: DTC P1325 — KNOCK SENSOR CIRCUIT LOW INPUT —

NOTE:
Check knock sensor circuit.
<Ref. to 2-7 [T12AC0].>

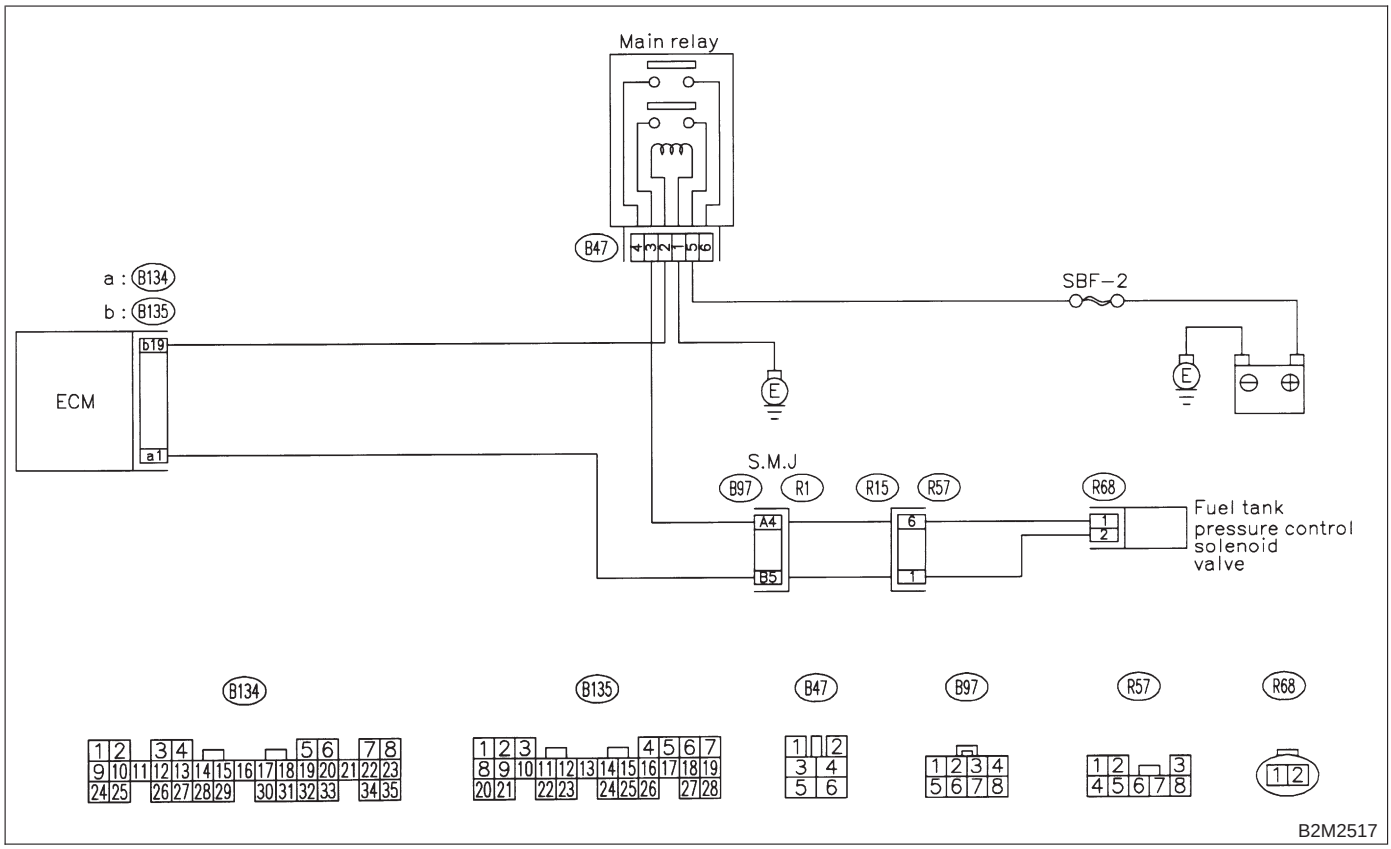
- **WIRING DIAGRAM:**



CC: DTC P1400 — FUEL TANK PRESSURE CONTROL SOLENOID VALVE CIRCUIT LOW INPUT —

NOTE:
Check fuel tnak pressure control solenoid valve circult.
<Ref. to 2-7 [T13CG0].>

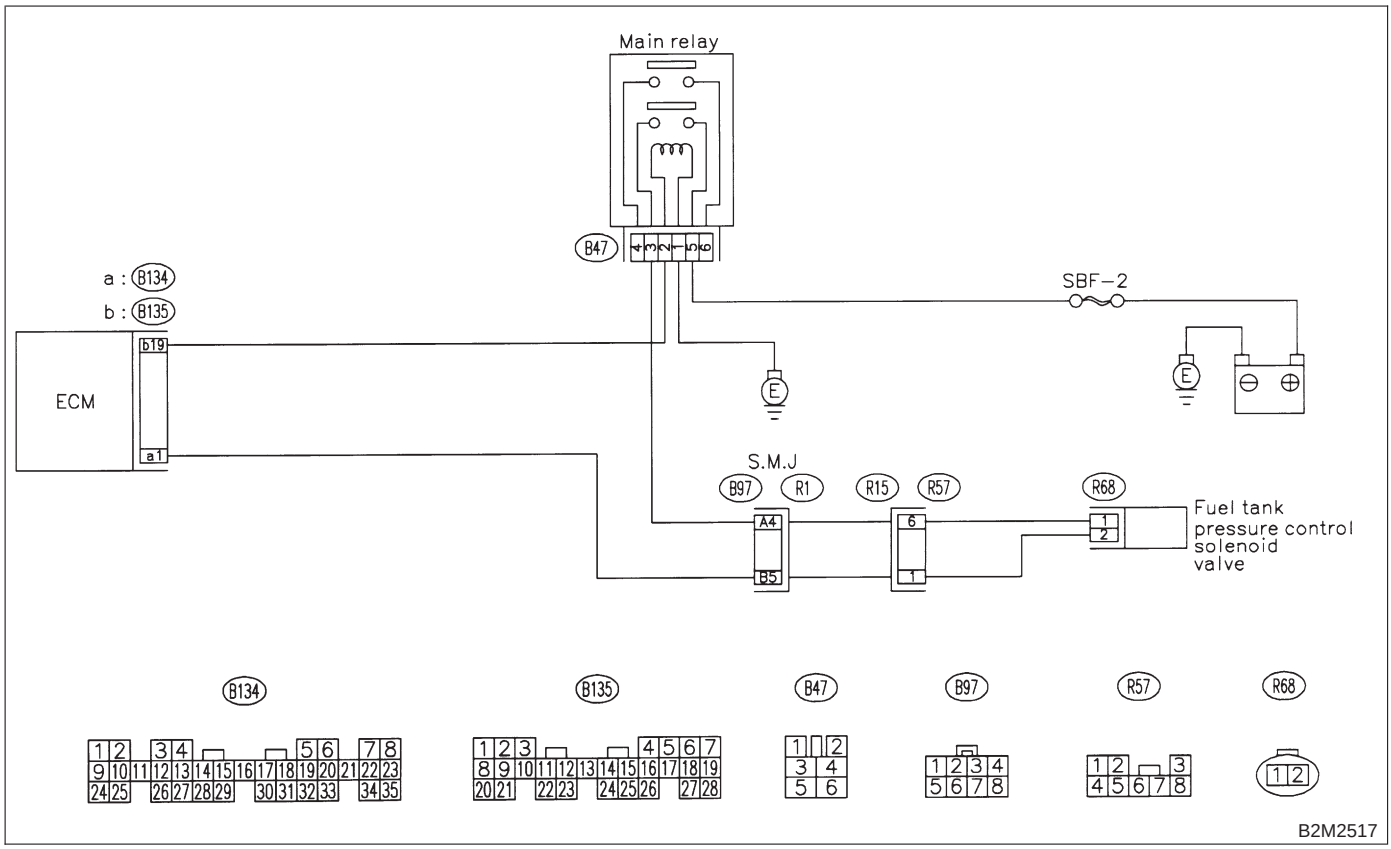
- **WIRING DIAGRAM:**



CD: DTC P1420 — FUEL TANK PRESSURE CONTROL SOLENOID VALVE CIRCUIT HIGH INPUT —

NOTE:
Check fuel tnak pressure control solenoid valve circult.
<Ref. to 2-7 [T13CH0].>

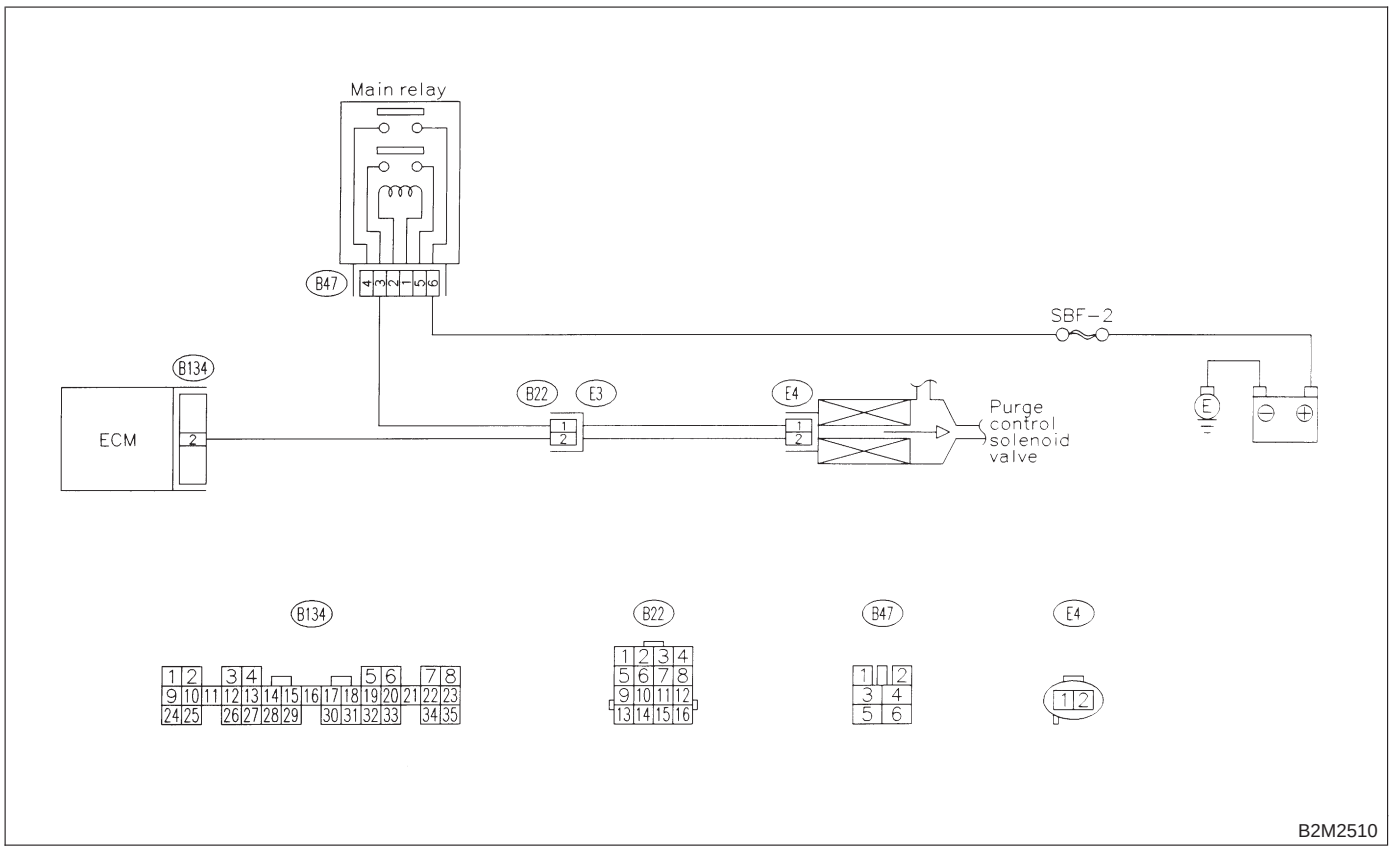
- **WIRING DIAGRAM:**



CE: DTC P1422 — EVAPORATIVE EMISSION CONTROL SYSTEM PURGE CONTROL VALVE CIRCUIT HIGH INPUT —

NOTE:
Check canister purge control system.
<Ref. to 2-7 [T12CK0].>

- **WIRING DIAGRAM:**



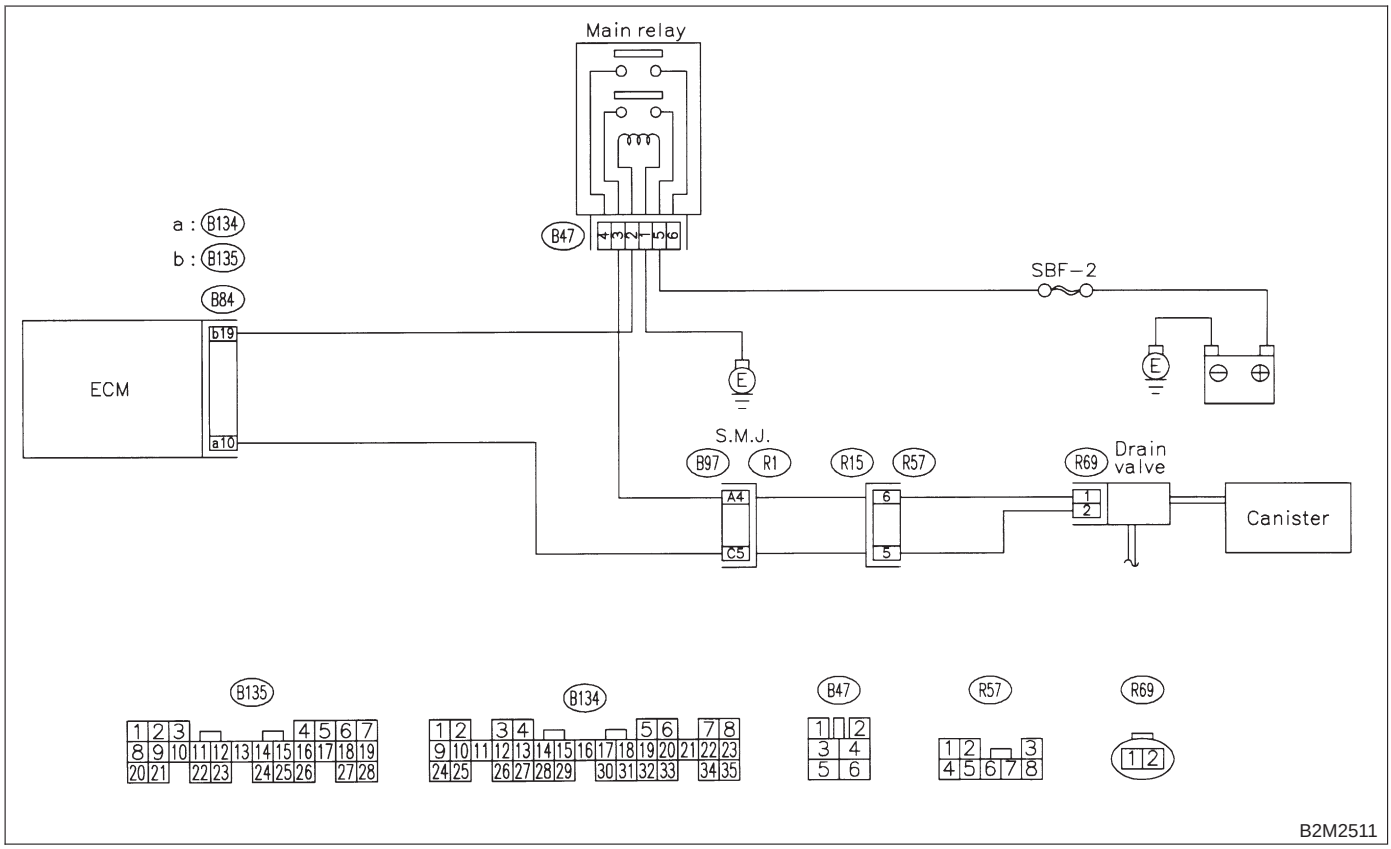
B2M2510

MEMO:

CF: DTC P1423 — EVAPORATIVE EMISSION CONTROL SYSTEM VENT CONTROL HIGH INPUT —

NOTE:
Check drain valve circut.
<Ref. to 2-7 [T13CJ0].>

- **WIRING DIAGRAM:**

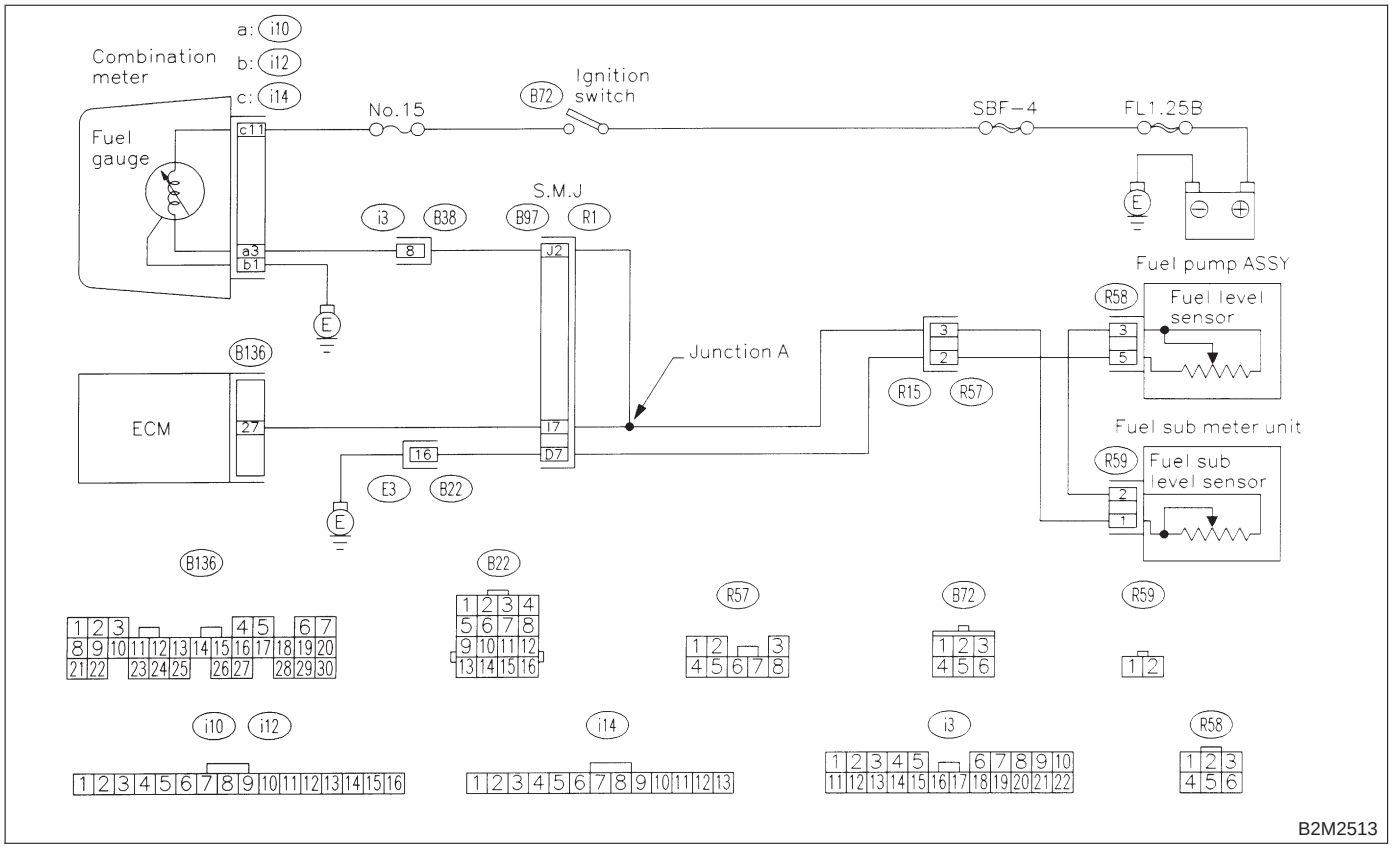


CG: DTC P1442 — FUEL LEVEL SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM 2 —

- **DTC DETECTING CONDITION:**
  - Two consecutive driving cycles with fault

CAUTION:
After repair or replacement of faulty parts, conduct CLEAR MEMORY MODE <Ref. to 2-7 [T3D0].> and INSPECTION MODE <Ref. to 2-7 [T3E0].>.

- **WIRING DIAGRAM:**



15CG1 : CHECK ANY OTHER DTC ON DISPLAY.

CHECK : ***Does the Subaru select monitor or OBD-II general scan tool indicate DTC P0461, P0462 or P0463?***

YES : Inspect DTC P0461, P0462 or P0463 using “15. Diagnostics Chart with Trouble Code for 2200 cc Except California Spec. RHD Vehicles”. <Ref. to 2-7 [T15A0].>

NOTE:
In this case, it is not necessary to inspect this trouble.

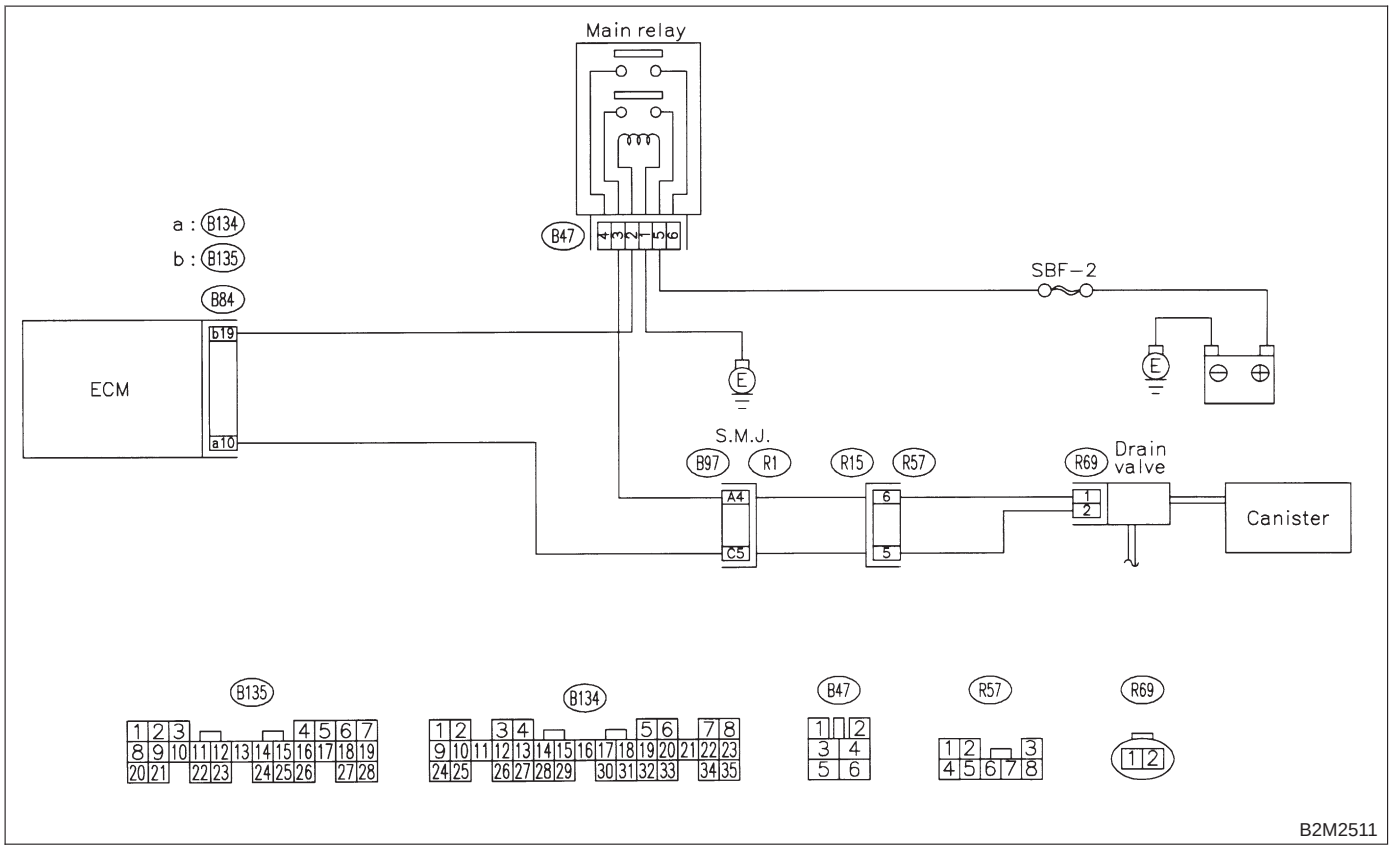
NO : Replace fuel sending unit <Ref. to 2-1 [W12A0].> and fuel sub meter unit <Ref. to 2-1 [W14A0].>.

CH: DTC P1443 — EVAPORATIVE EMISSION CONTROL SYSTEM VENT CONTROL FUNCTION PROBLEM —

- **DTC DETECTING CONDITION:**
  - Immediately after fault occurrence
- **TROUBLE SYMPTOM:**
  - Improper fuel supply

CAUTION:
After repair or replacement of faulty parts, conduct CLEAR MEMORY MODE <Ref. to 2-7 [T3D0].> and INSPECTION MODE <Ref. to 2-7 [T3E0].>.

- **WIRING DIAGRAM:**



15CH1 : CHECK ANY OTHER DTC ON DISPLAY.

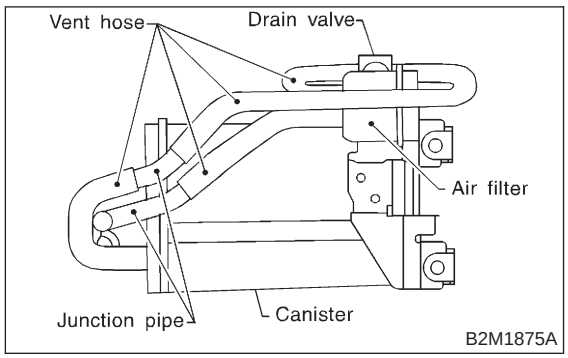
CHECK : ***Is there any other DTC on display?***

YES : Inspect the relevant DTC using “15. Diagnostics Chart with Trouble Code for 2200 cc Except California Spec. RHD Vehicles”. <Ref. to 2-7 [T15A0].>

NO : Go to step **15CH2**.

15CH2 : CHECK VENT LINE HOSES.

Check the following items.
- Clogging of vent hoses between canister and drain valve
- Clogging of vent hose between drain valve and air filter
- Clogging of vent hose between air filter and junction pipe
- Clogging of junction pipe
- Clogging of air filter



CHECK : ***Is there a fault in vent line?***
YES : Repair or replace the faulty part.
NO : Go to step **15CH3**.

15CH3 : CHECK DRAIN VALVE OPERATION.

1) Turn ignition switch to OFF.
2) Connect test mode connector at the lower portion of instrument panel (on the driver's side), to the side of the center console box.
3) Turn ignition switch to ON.

NOTE:
Drain valve operation check can also be executed using Subaru Select Monitor. For the procedure, refer to the "COMPULSORY VALVE OPERATION CHECK MODE". <Ref. to 2-7 [T3F0].>

CHECK : ***Does drain valve produce operating sound?***
YES : Contact with SOA service.

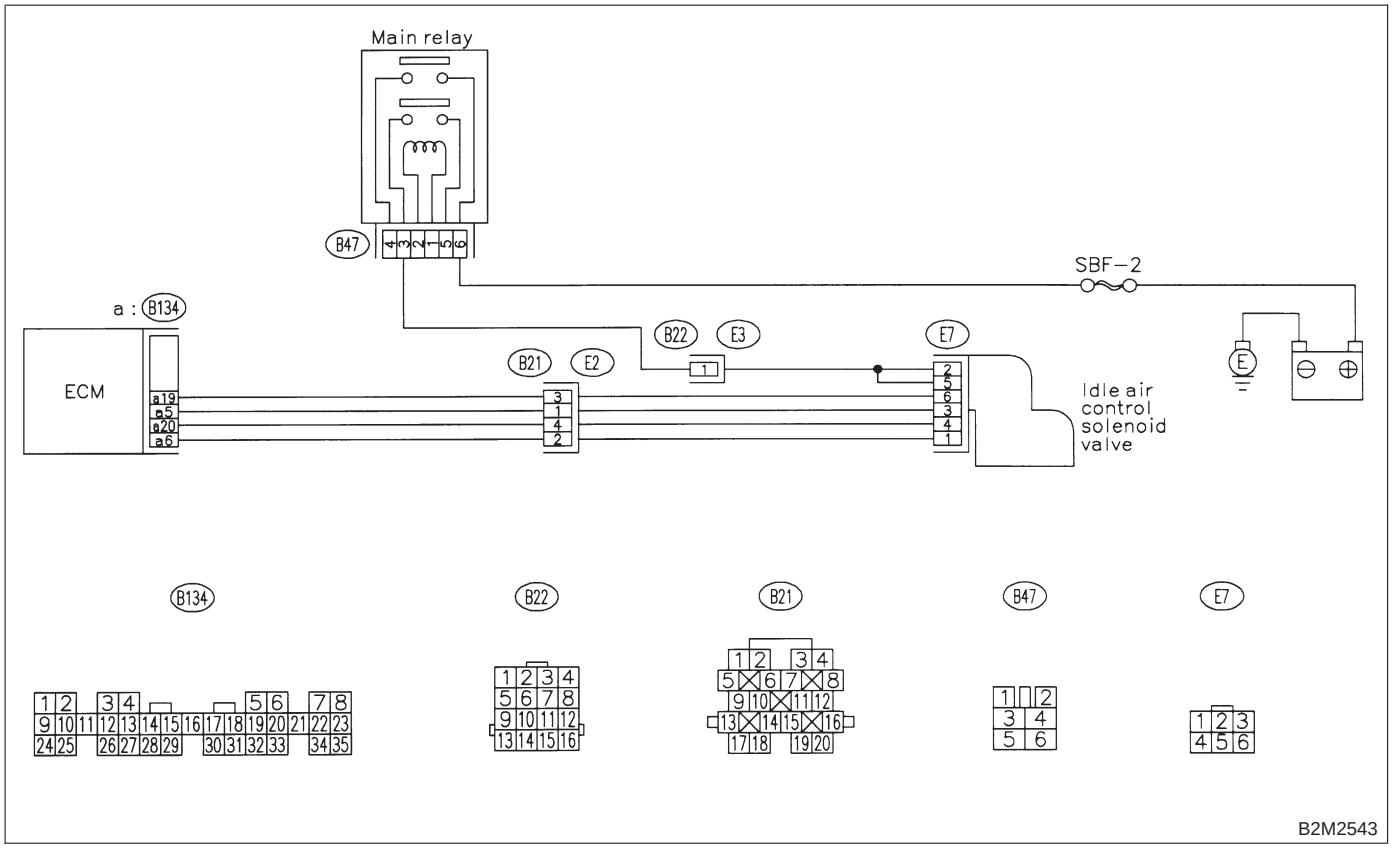
NOTE:
Inspection by DTM is required, because probable cause is deterioration of multiple parts.

NO : Replace drain valve. <Ref. to 2-1 [W17A0].>

CI: DTC P1507 — IDLE CONTROL SYSTEM MALFUNCTION (FAIL-SAFE) —

NOTE:
Check idle air control system.
<Ref. to 2-7 [T14AU0].>

- **WIRING DIAGRAM:**



MEMO:

CJ: DTC P1510 — IDLE AIR CONTROL SOLENOID VALVE SIGNAL 1 CIRCUIT LOW INPUT —

NOTE:
For the diagnostic procedure, refer to 2-7 [T15CP0]. <Ref. to 2-7 [T15CP0].>

CK: DTC P1511 — IDLE AIR CONTROL SOLENOID VALVE SIGNAL 1 CIRCUIT HIGH INPUT —

NOTE:
For the diagnostic procedure, refer to 2-7 [T15CQ0]. <Ref. to 2-7 [T15CQ0].>

CL: DTC P1512 — IDLE AIR CONTROL SOLENOID VALVE SIGNAL 2 CIRCUIT LOW INPUT —

NOTE:
For the diagnostic procedure, refer to 2-7 [T15CP0]. <Ref. to 2-7 [T15CP0].>

CM: DTC P1513 — IDLE AIR CONTROL SOLENOID VALVE SIGNAL 2 CIRCUIT HIGH INPUT —

NOTE:
For the diagnostic procedure, refer to 2-7 [T15CQ0]. <Ref. to 2-7 [T15CQ0].>

CN: DTC P1514 — IDLE AIR CONTROL SOLENOID VALVE SIGNAL 3 CIRCUIT LOW INPUT —

NOTE:
For the diagnostic procedure, refer to 2-7 [T15CP0]. <Ref. to 2-7 [T15CP0].>

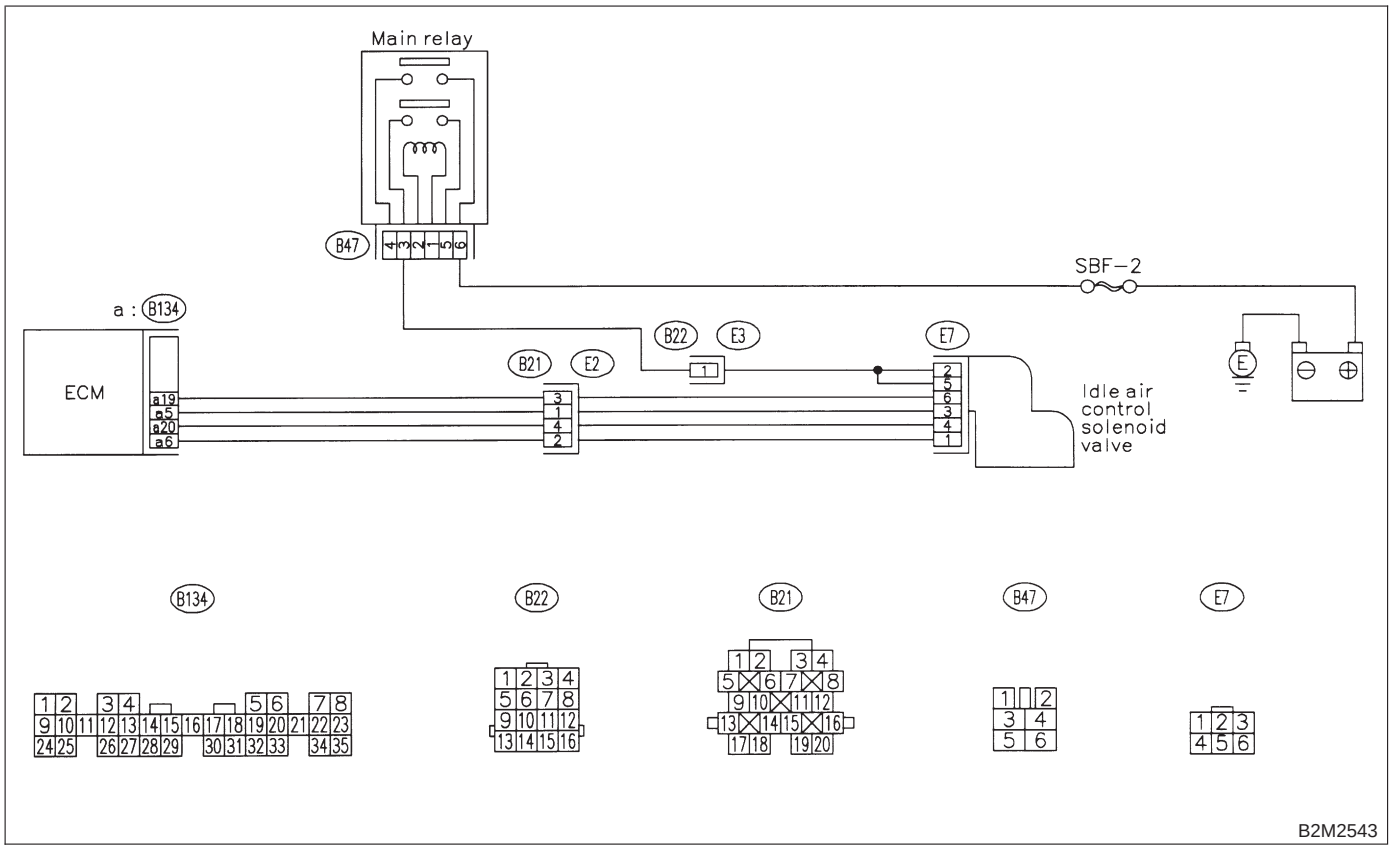
CO: DTC P1515 — IDLE AIR CONTROL SOLENOID VALVE SIGNAL 3 CIRCUIT HIGH INPUT —

NOTE:
For the diagnostic procedure, refer to 2-7 [T15CQ0]. <Ref. to 2-7 [T15CQ0].>

CP: DTC P1516 — IDLE AIR CONTROL SOLENOID VALVE SIGNAL 4 CIRCUIT LOW INPUT —

NOTE:
Check idle air control solenoid valve circuit.
<Ref. to 2-7 [T14CR0].>

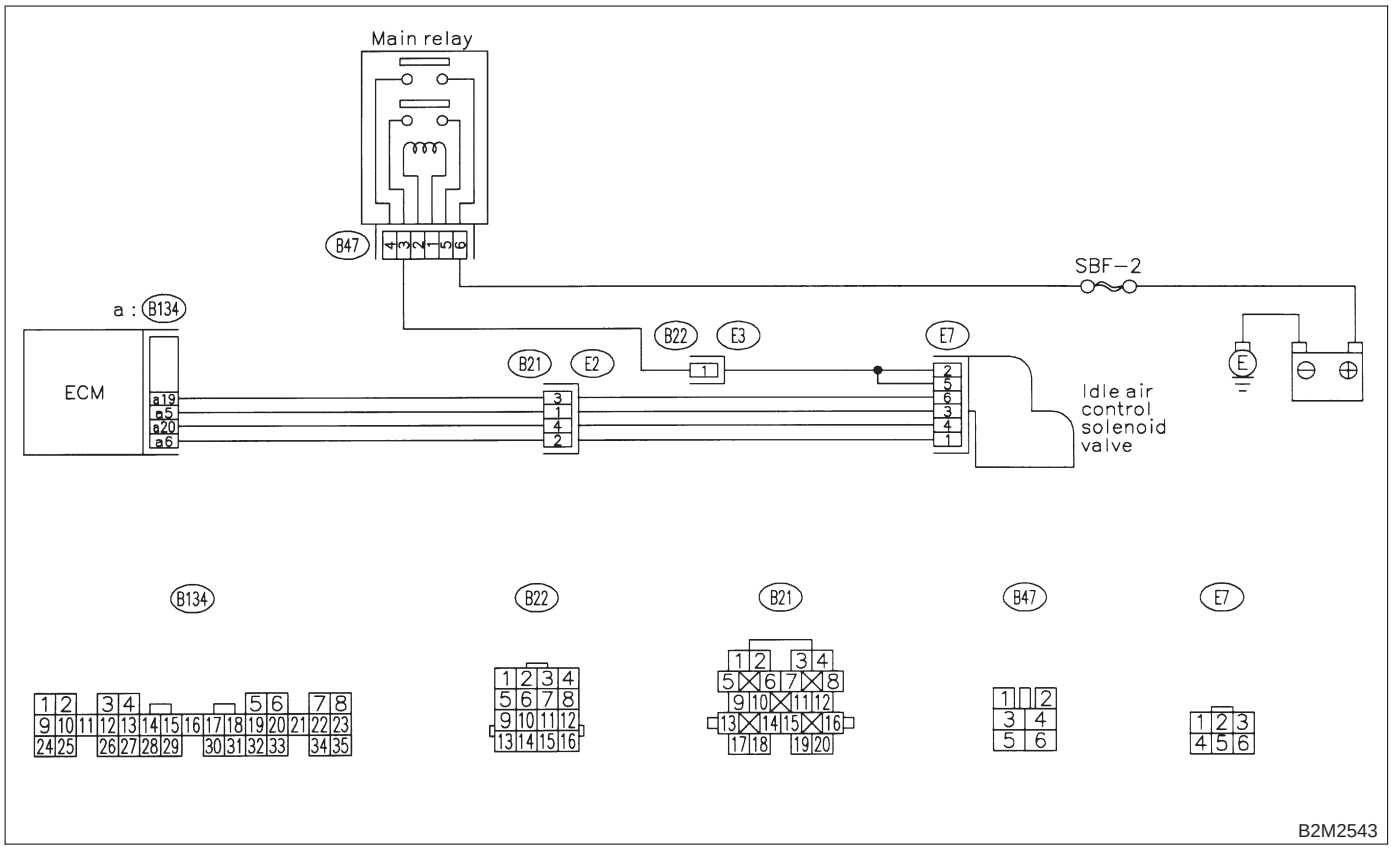
- **WIRING DIAGRAM:**



CQ: DTC P1517 — IDLE AIR CONTROL SOLENOID VALVE SIGNAL 4 CIRCUIT HIGH INPUT —

NOTE:
Check idle air control solenoid valve circuit.
<Ref. to 2-7 [T14CS0].>

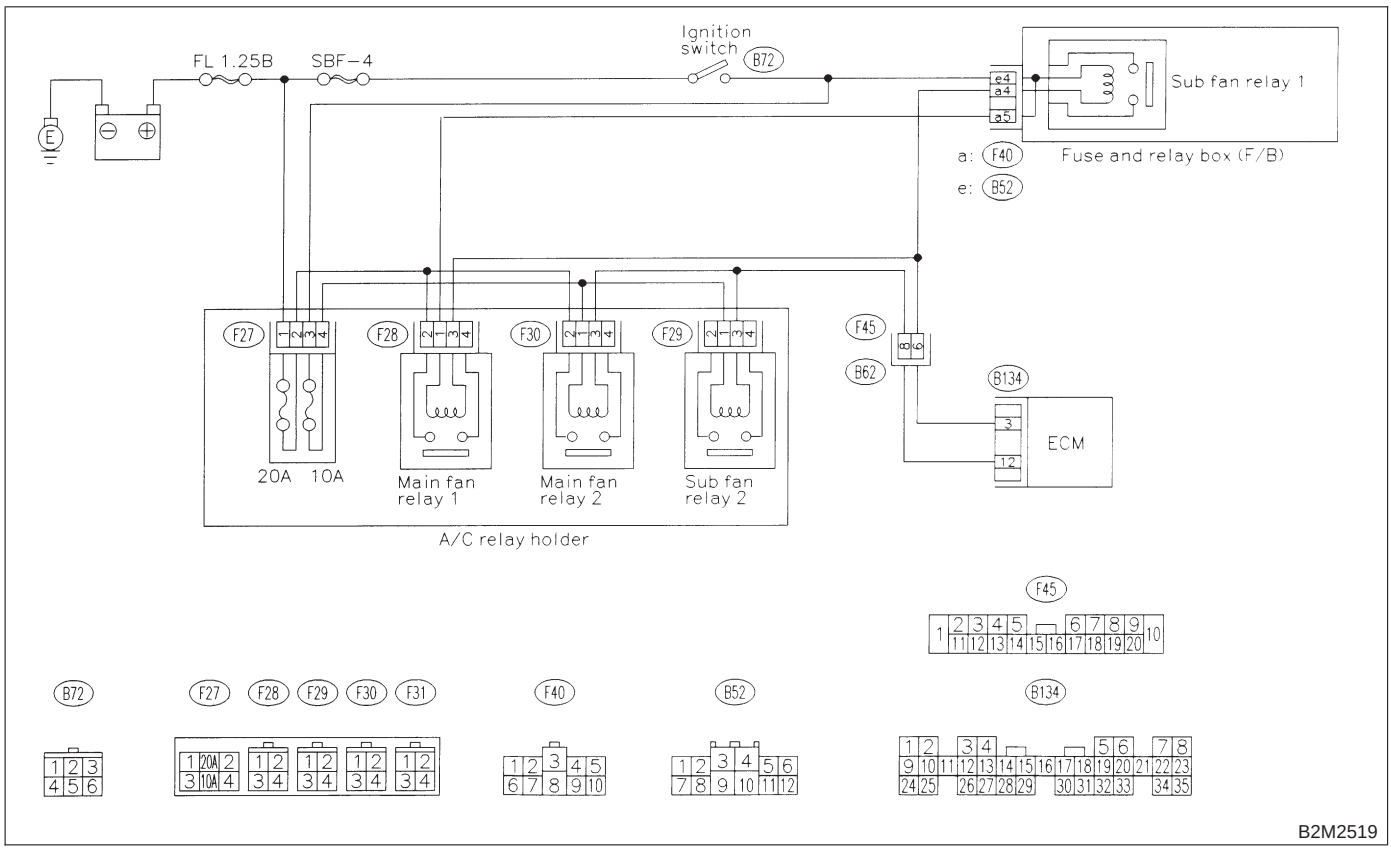
- **WIRING DIAGRAM:**



CR: DTC P1520 — COOLING FAN RELAY 1 CIRCUIT HIGH INPUT —

NOTE:
Check radiator fan relay 1 circuit.
<Ref. to 2-7 [T12CP0].>

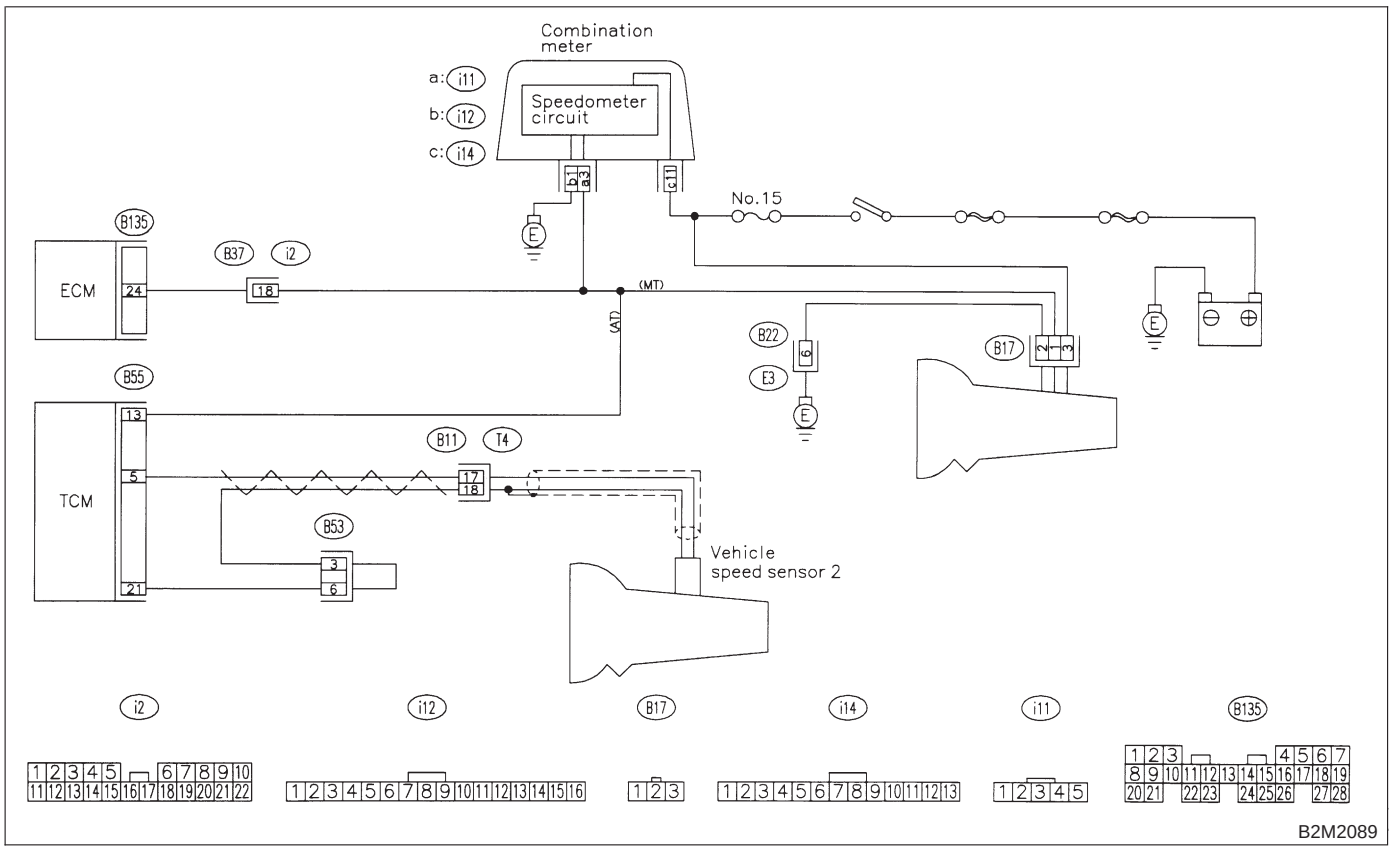
- **WIRING DIAGRAM:**



CS: DTC P1540 — VEHICLE SPEED SENSOR MALFUNCTION 2 —

NOTE:
Check vehicle speed sensor 2 circuit.
<Ref. to 2-7 [T14AS0].>

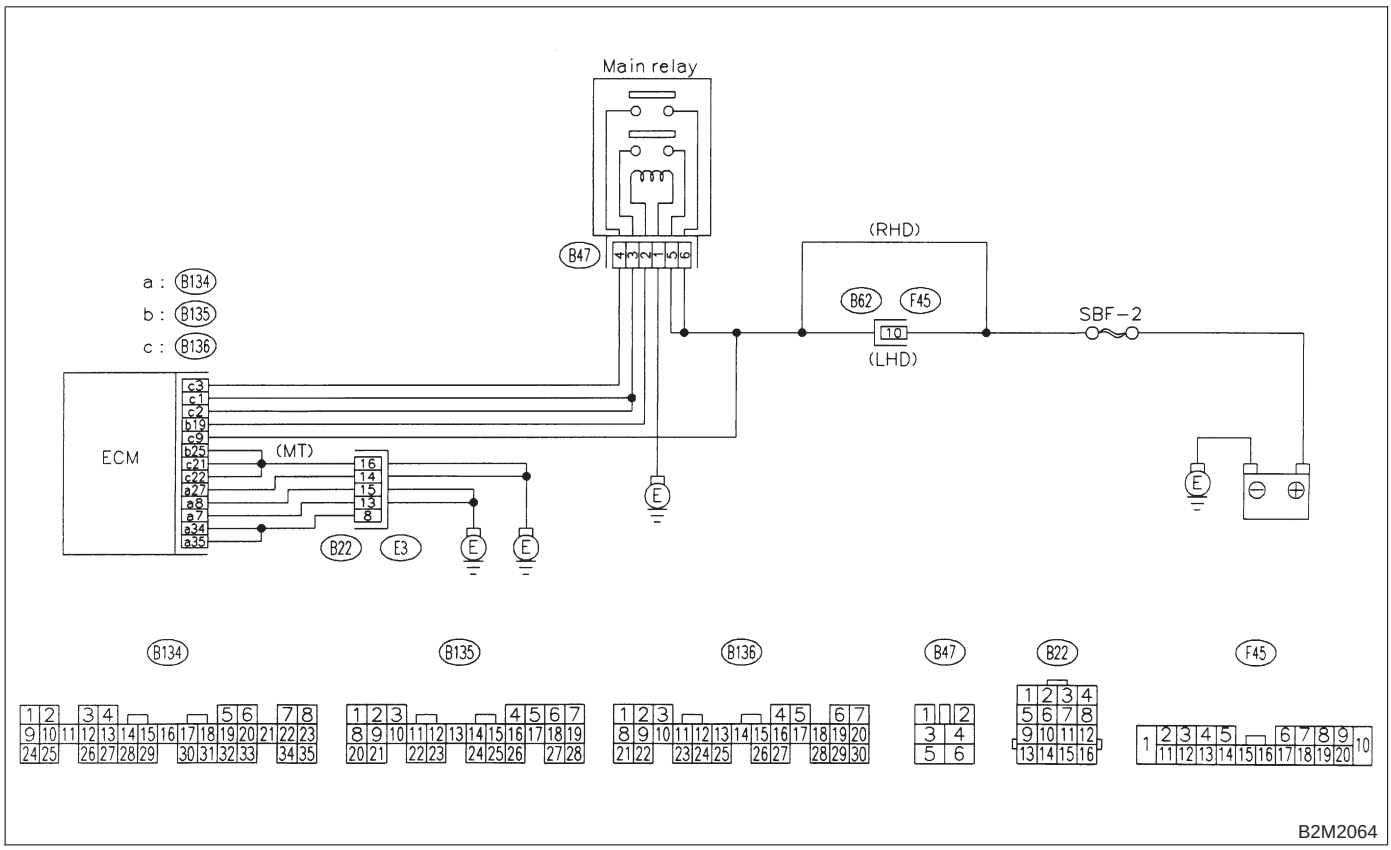
- **WIRING DIAGRAM:**



CT: DTC P1560 — BACK-UP VOLTAGE CIRCUIT MALFUNCTION —

NOTE:
Check back-up voltage circuit.
<Ref. to 2-7 [T12CQ0].>

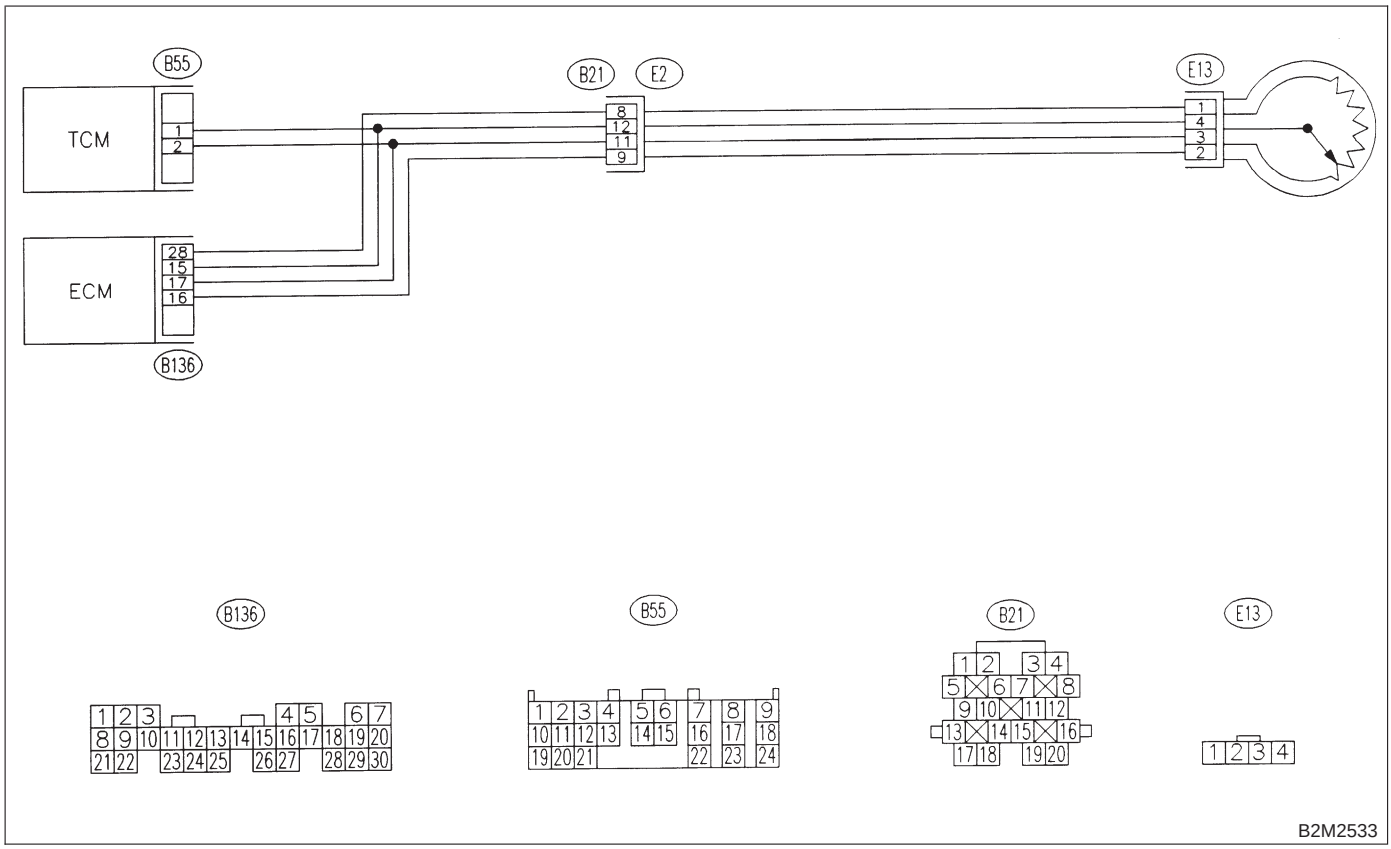
- **WIRING DIAGRAM:**



CU: DTC P1700 — THROTTLE POSITION SENSOR CIRCUIT MALFUNCTION FOR AUTOMATIC TRANSMISSION —

NOTE:
Check throttle position sensor circuit for automatic transmission.
<Ref. to 2-7 [T14CW0].>

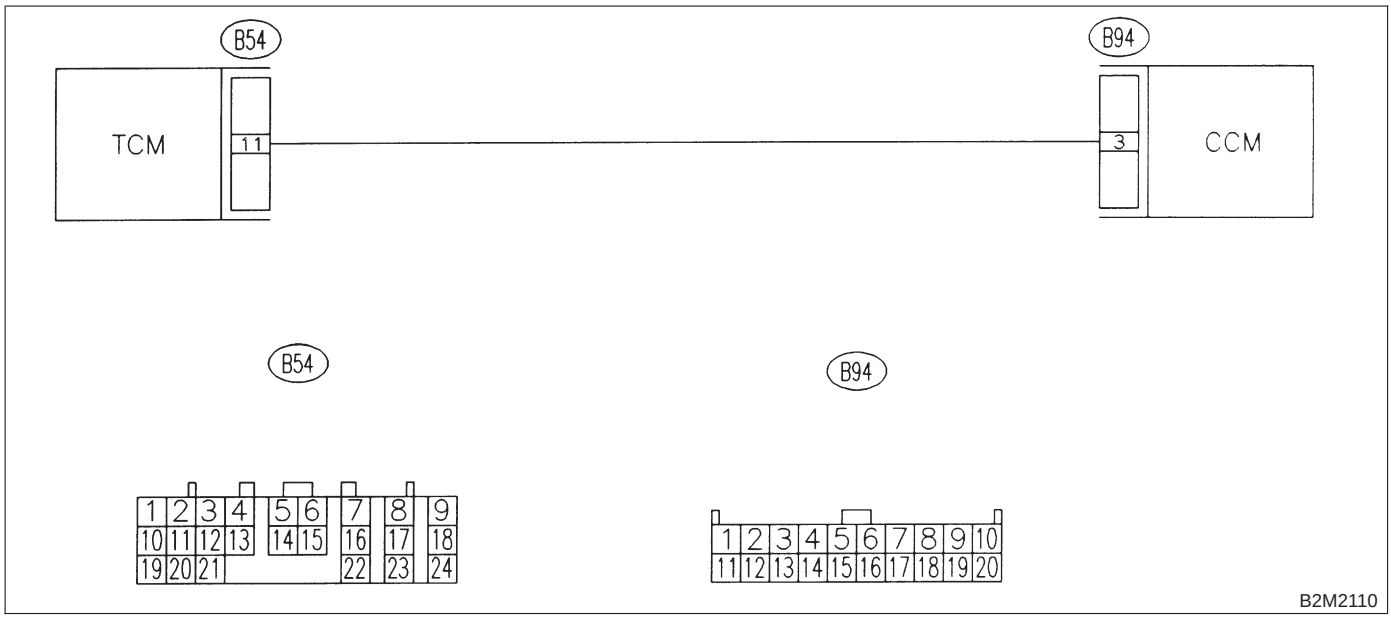
- **WIRING DIAGRAM:**



CV: DTC P1701 — CRUISE CONTROL SET SIGNAL CIRCUIT MALFUNCTION FOR AUTOMATIC TRANSMISSION —

NOTE:
Check cruise control set signal circuit.
<Ref. to 2-7 [T12CS0].>

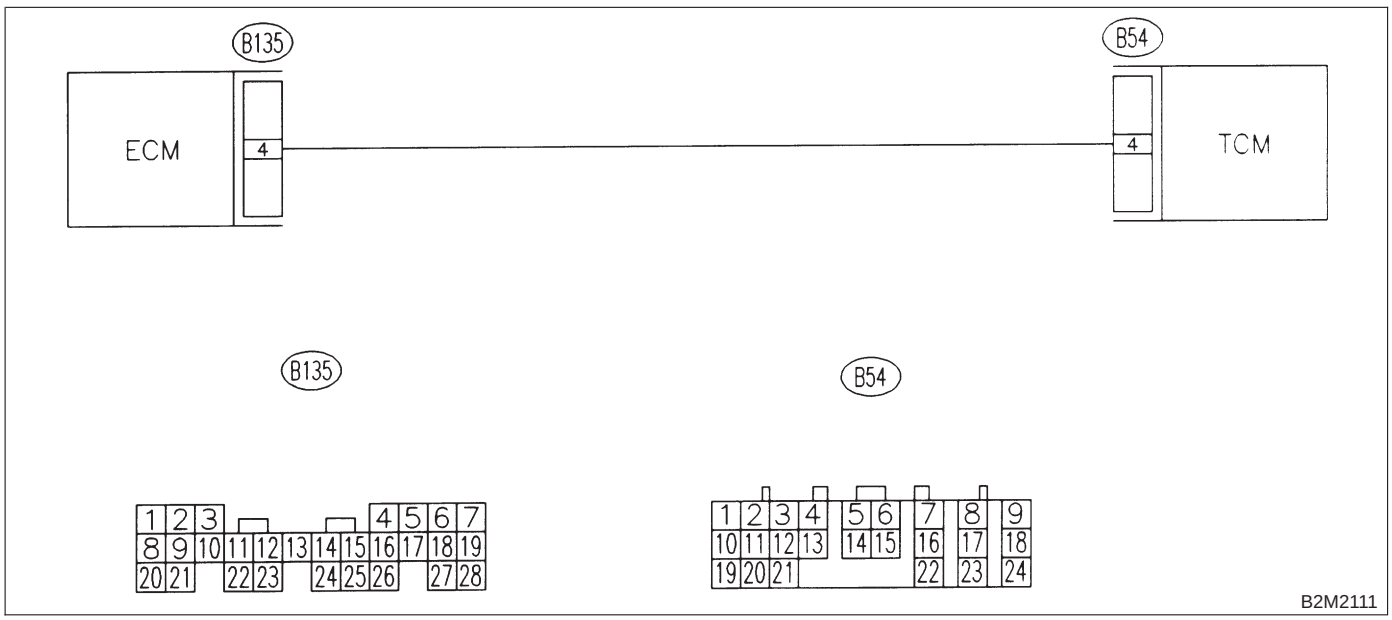
- **WIRING DIAGRAM:**



CW: DTC P1702 — AUTOMATIC TRANSMISSION DIAGNOSIS INPUT SIGNAL CIRCUIT LOW INPUT —

NOTE:
Check automatic transmission diagnosis input signal circuit.
<Ref. to 2-7 [T14CY0].>

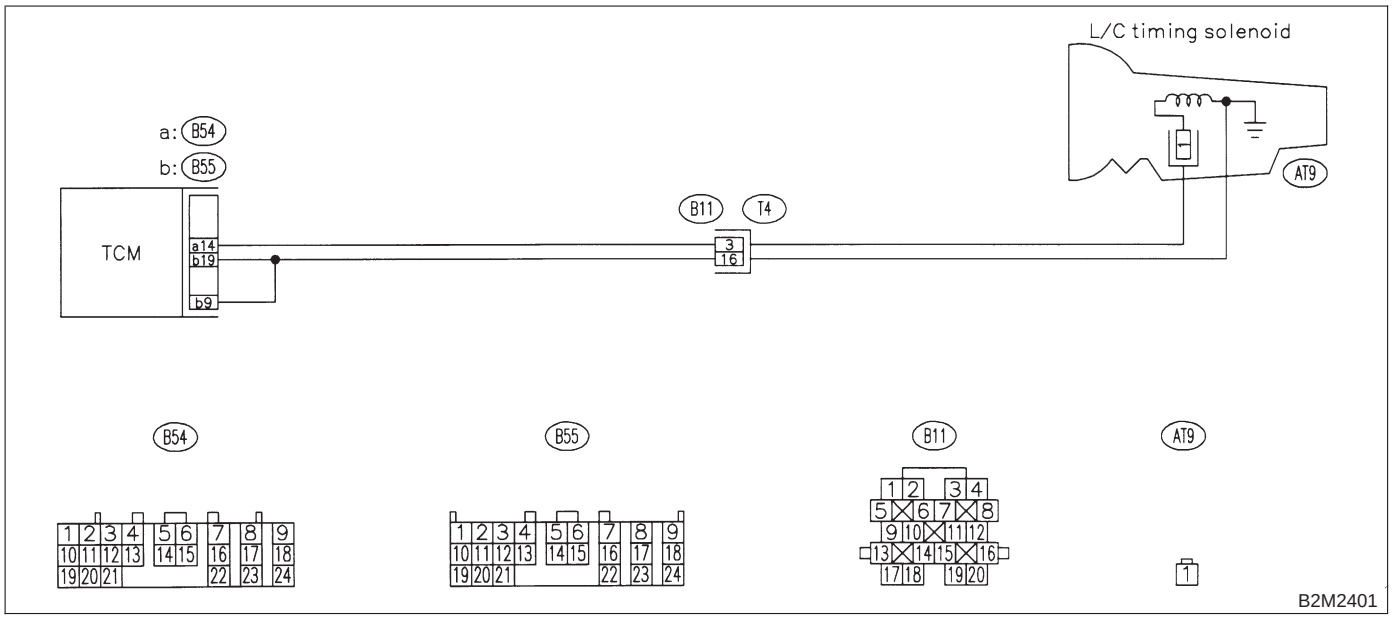
- **WIRING DIAGRAM:**



CX: DTC P1703 — LOW CLUTCH TIMING CONTROL SOLENOID VALVE CIRCUIT MALFUNCTION —

NOTE:
Check low clutch timing control solenoid valve circuit.
<Ref. to 2-7 [T12CU0].>

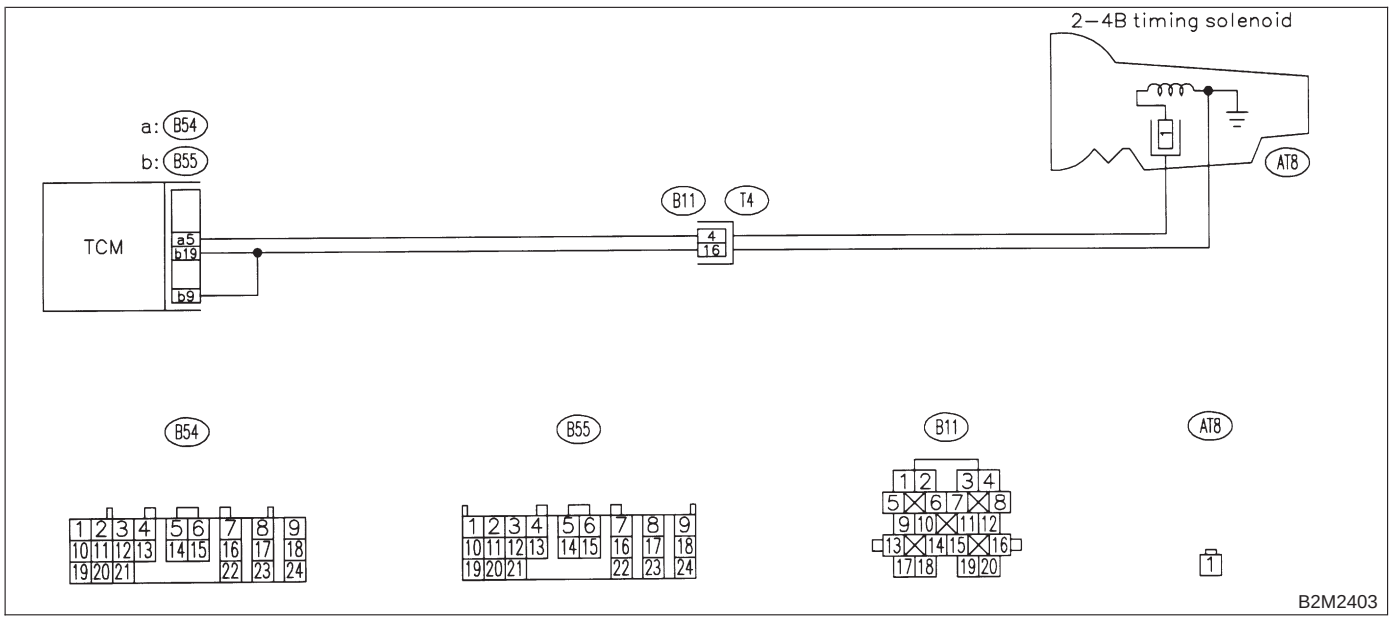
- **WIRING DIAGRAM:**



CY: DTC P1704 — 2-4 BRAKE TIMING CONTROL SOLENOID VALVE CIRCUIT MALFUNCTION —

NOTE:
Check 2-4 brake timing control solenoid valve circuit.
<Ref. to 2-7 [T12CV0].>

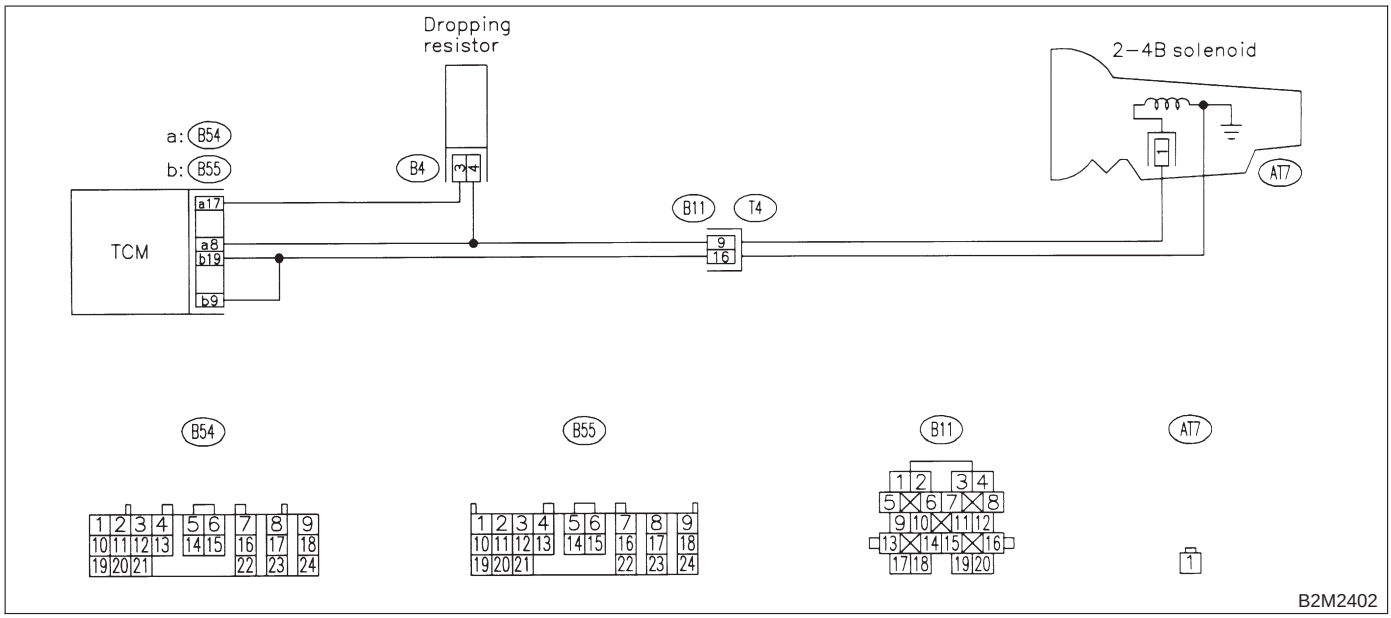
- **WIRING DIAGRAM:**



CZ: DTC P1705 — 2-4 BRAKE PRESSURE CONTROL SOLENOID VALVE (DUTY SOLENOID D) CIRCUIT MALFUNCTION —

NOTE:
Check 2-4 brake pressure control solenoid valve (Duty solenoid D) circuit.
<Ref. to 2-7 [T12CW0].>

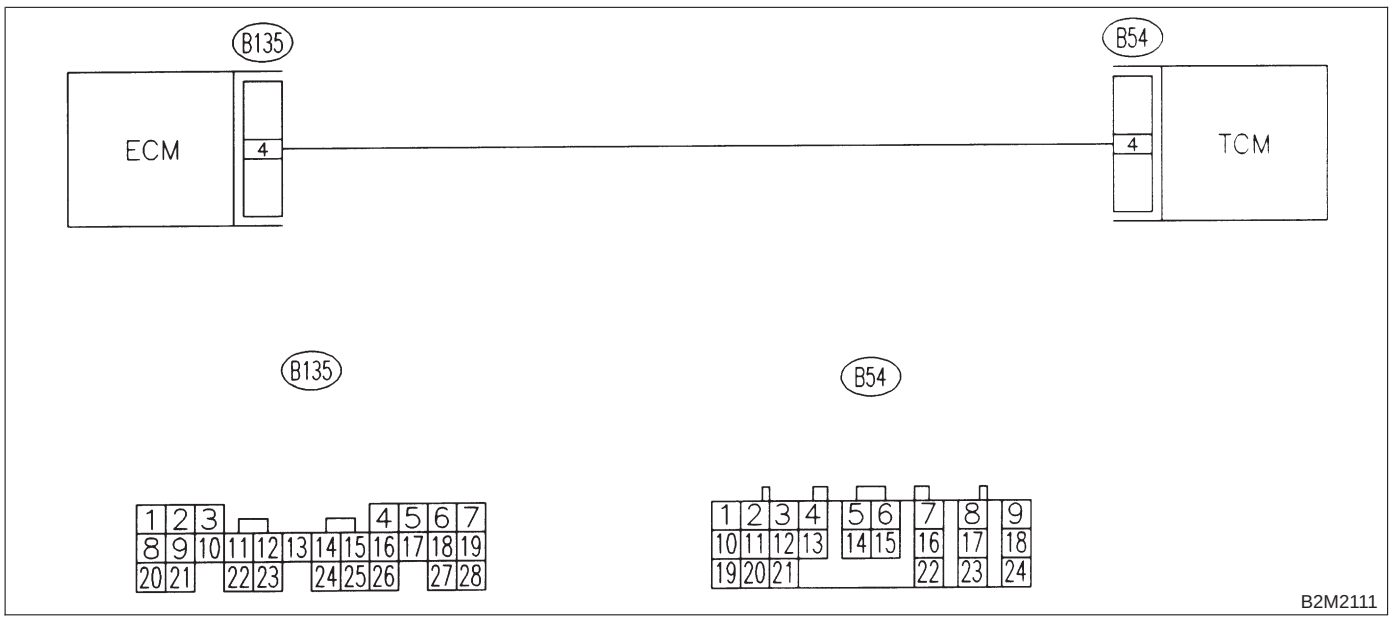
- **WIRING DIAGRAM:**



DA: DTC P1722 — AUTOMATIC TRANSMISSION DIAGNOSIS INPUT SIGNAL CIRCUIT HIGH INPUT —

NOTE:
Check automatic transmission diagnosis input signal circuit.
<Ref. to 2-7 [T14DC0].>

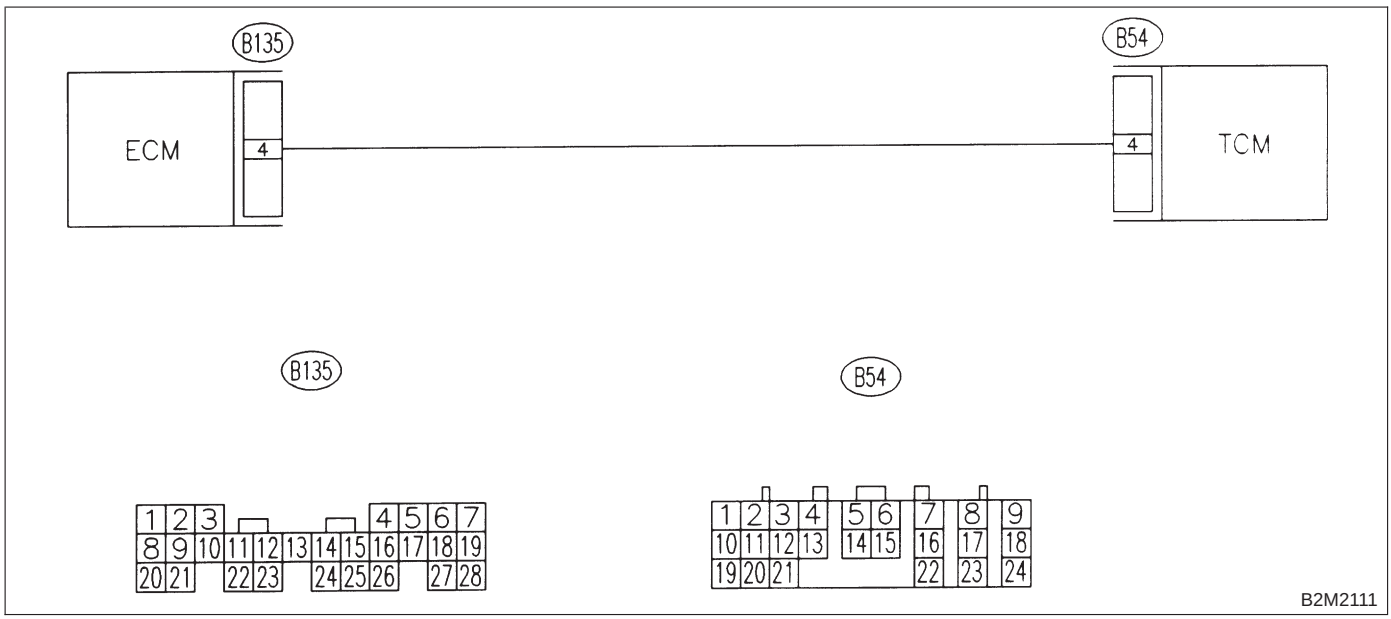
- **WIRING DIAGRAM:**



DB: DTC P1742 — AUTOMATIC TRANSMISSION DIAGNOSIS INPUT SIGNAL CIRCUIT MALFUNCTION —

NOTE:
Check automatic transmission diagnosis input signal circuit.
<Ref. to 2-7 [T14DD0].>

- **WIRING DIAGRAM:**



MEMO: