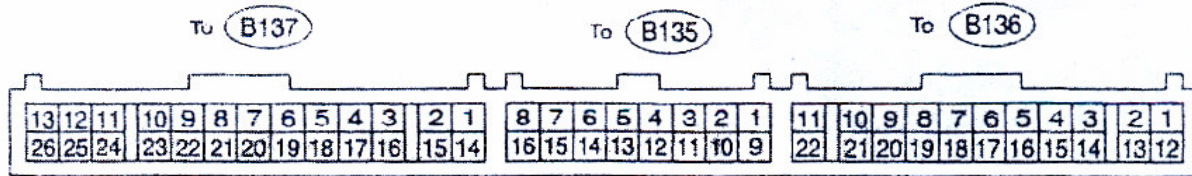


5. Control Module I/O Signal



B2M0219F

| Content | Connector No. | Terminal No. | Signal (V) | | Note | |
|-----------------------------------|---------------|--------------|-----------------------|--|--|------------------------|
| | | | Ignition SW | Engine ON (Idling) | | |
| | | | ON (Engine OFF) | | | |
| Crankshaft position sensor | Signal (+) | B136 | *1 | 0 | ±6 | Sensor output waveform |
| | Signal (-) | B136 | 9 | 0 | 0 | — |
| | Shield | B136 | 13 | 0 | 0 | — |
| Camshaft position sensor | Signal (+) | B136 | *2 | 0 | ±6 | Sensor output waveform |
| | Signal (-) | B136 | 9 | 0 | 0 | — |
| | Shield | B136 | 13 | 0 | 0 | — |
| Mass air flow sensor | Signal | B136 | 6 | 0 — 0.3 | 0.8 — 1.2 | — |
| | Shield | B136 | 13 | 0 | 0 | — |
| | GND | B136 | 7 | 0 | 0 | — |
| Throttle position sensor | Signal | B136 | 16 | Fully closed: 0.5 ± 0.3 Fully opened: 4.3 ± 0.3 | | — |
| | Power supply | B136 | 14 | 5 | 5 | — |
| | GND | B136 | 13 | 0 | 0 | — |
| Oxygen sensor | Signal | B136 | 5 | 0 | Rich mixture: 0.7 Lean mixture: 0 | |
| | Shield | B136 | 13 | 0 | 0 | — |
| Engine coolant temperature sensor | Signal | B136 | 3 | 0.6 — 1.0 | 0.6 — 1.0 | After warm-up |
| | GND | B136 | 13 | 0 | 0 | — |
| Vehicle speed sensor 2 | B135 | 3 | 0 or 5 | 0 or 5 | "5" and "0" are repeatedly displayed when vehicle is driven. | |
| Starter switch | B135 | 2 | 0 | 0 | Cranking: 10 to 14 | |
| A/C switch | B135 | 10 | ON: 10 — 13 OFF: 0 | ON: 13 — 14 OFF: 0 | — | |
| Ignition switch | B136 | 11 | 10 — 13 | 13 — 14 | — | |
| Neutral position switch (MT) | B135 | 9 | | ON: 5 OFF: 0 | Switch is ON when gear is in neutral position. | |
| Park/Neutral position switch (AT) | B135 | 9 | | ON: 0 OFF: 5 | Switch is ON when shift lever is in "P" or "N" position. | |
| Test mode connector | B136 | 21 | 5 | 5 | When connected: 0 | |

- *1. With immobiliser: 8
Without immobiliser: 10
*2. With immobiliser: 10
Without immobiliser: 8

FUEL INJECTION SYSTEM [TURBO MODEL]

[T500] 2-7c

5. Control Module I/O Signal

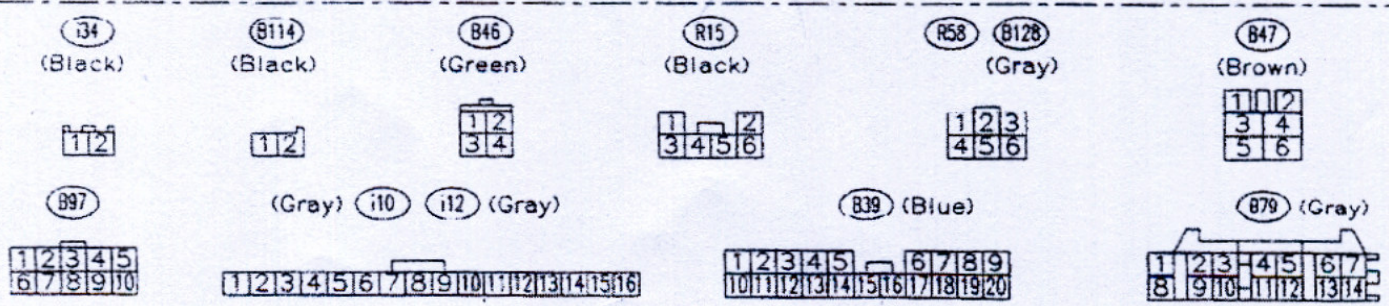
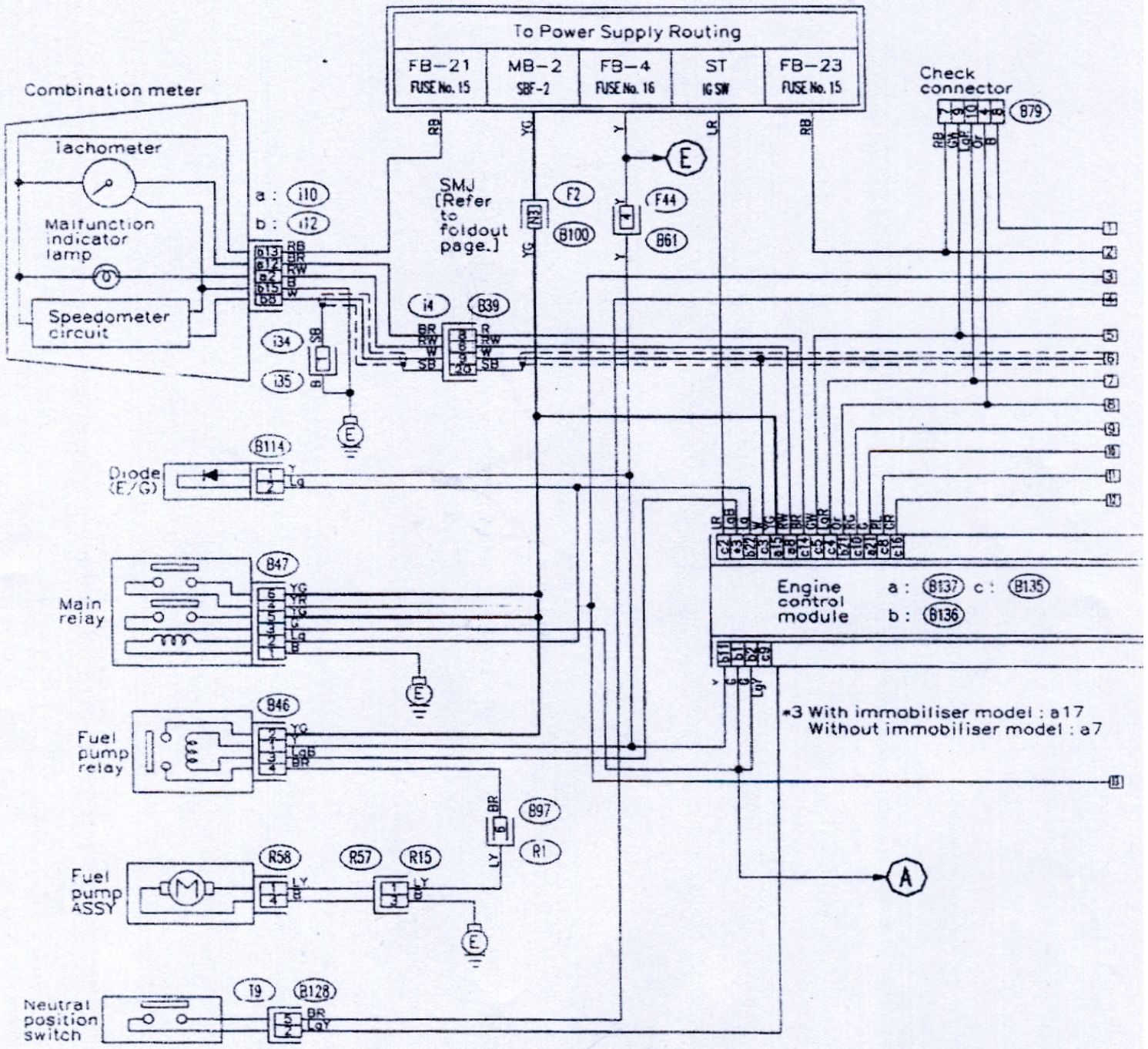
| Content | Connector No. | Terminal No. | Signal (V) | | Note | |
|---|---------------|--------------|-----------------------|-----------------------|---|----------|
| | | | Ignition SW | Engine ON (Idling) | | |
| | | | ON (Engine OFF) | | | |
| Read memory connector | B136 | 20 | 5 | 5 | When connected: 0 | |
| Back-up power supply | B137 | 15 | 10 — 13 | 13 — 14 | — | |
| Control unit power supply | B136 | 1 | 10 — 13 | 13 — 14 | — | |
| | | 2 | | | | |
| Ignition control | # 1, # 2 | B137 | 10 | 0 | 3.4, max. | — |
| | # 3, # 4 | B137 | 9 | 0 | 3.4, max. | — |
| Fuel injector | # 1 | B137 | 26 | 10 — 13 | 13 — 14 | Waveform |
| | # 2 | B137 | 13 | 10 — 13 | 13 — 14 | Waveform |
| | # 3 | B137 | 12 | 10 — 13 | 13 — 14 | Waveform |
| | # 4 | B137 | 11 | 10 — 13 | 13 — 14 | Waveform |
| Idle air control solenoid valve | OPEN end | B137 | 2 | — | 1, max. — 13, min. | Waveform |
| | CLOSE end | B137 | 1 | — | 13, min. — 1, max. | Waveform |
| Torque control signal*4 | B135 | 11 | 0 | 5 | — | |
| Fuel pump relay control | B137 | *3 | ON: 0 OFF: 10 — 13 | 0 | — | |
| A/C relay control | B137 | 21 | ON: 0 OFF: 10 — 13 | ON: 0 OFF: 13 — 14 | — | |
| Radiator fan relay 1 control | B135 | 8 | ON: 0 OFF: 10 — 13 | ON: 0 OFF: 13 — 14 | — | |
| Radiator fan relay 2 control | B135 | 16 | ON: 0 OFF: 10 — 13 | ON: 0 OFF: 13 — 14 | — | |
| Self-shutoff control | B136 | 22 | 10 — 13 | 13 — 14 | — | |
| Malfunction indicator lamp | B137 | 8 | — | — | Light "ON": 1, max. Light "OFF": 10 — 14 | |
| Engine speed output | B135 | 14 | — | 0 — 13, min. | Waveform | |
| Knock sensor | Signal | B136 | 4 | 2.8 | 2.8 | — |
| | Shield | B136 | 13 | 0 | 0 | — |
| Wastegate control | B137 | 3 | 10 — 13 | 13 — 14 | — | |
| Pressure sources switching solenoid valve | B137 | 6 | 10 — 13 | 13 — 14 | — | |
| Purge control solenoid valve | B135 | 15 | ON: 0 OFF: 10 — 13 | ON: 0 OFF: 13 — 14 | — | |
| GND (sensors) | B136 | 13 | 0 | 0 | — | |
| GND (injectors) | B137 | 25 | 0 | 0 | — | |
| GND (ignition system) | B137 | 24 | 0 | 0 | — | |
| GND (power supply) | B137 | 14 | 0 | 0 | — | |
| GND (control systems) | B136 | 12 | 0 | 0 | — | |
| Select monitor signal | B135 | 4 | — | — | — | |
| | | 5 | — | — | — | |

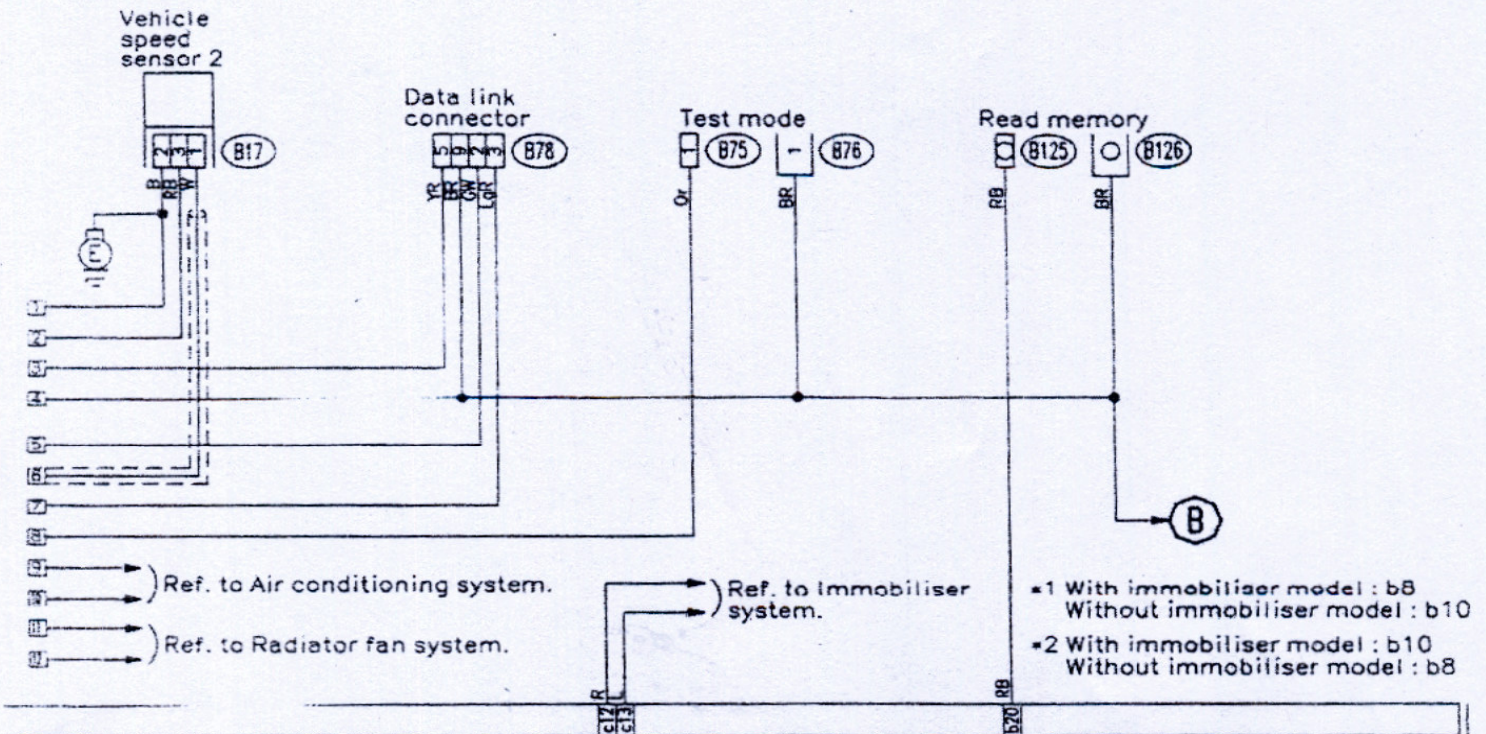
*3: With immobiliser: 17
Without immobiliser: 7

*4: AT model only

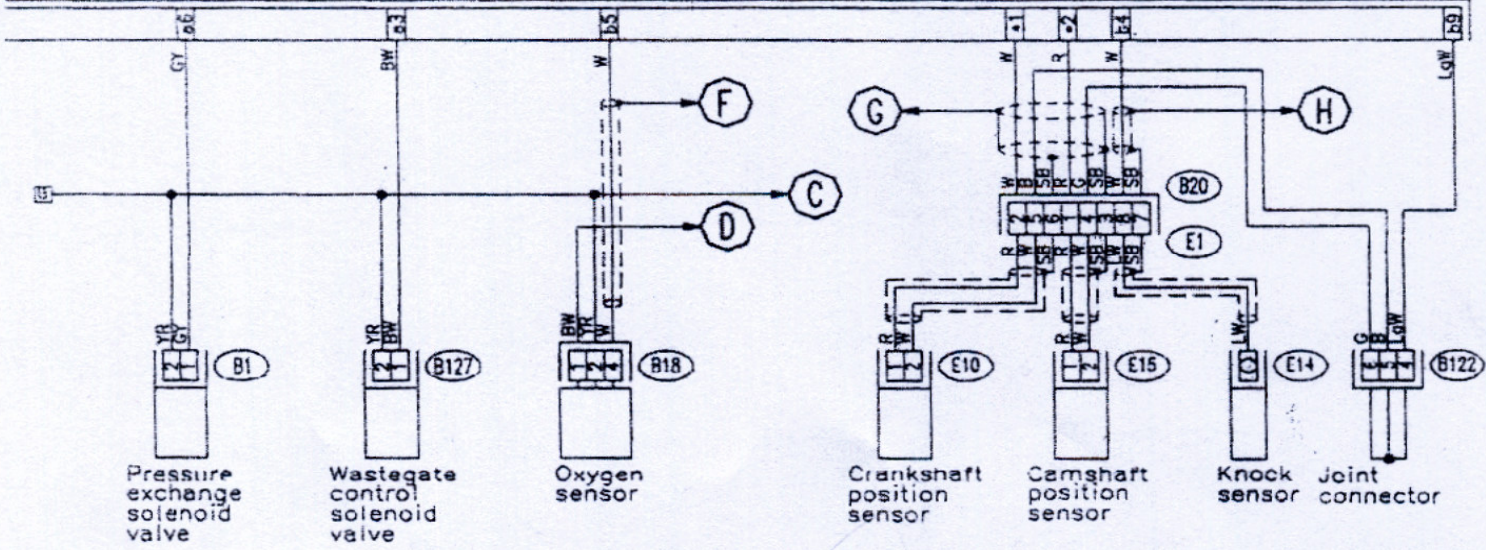
12. ENGINE ELECTRICAL SYSTEM

• LHD turbo model



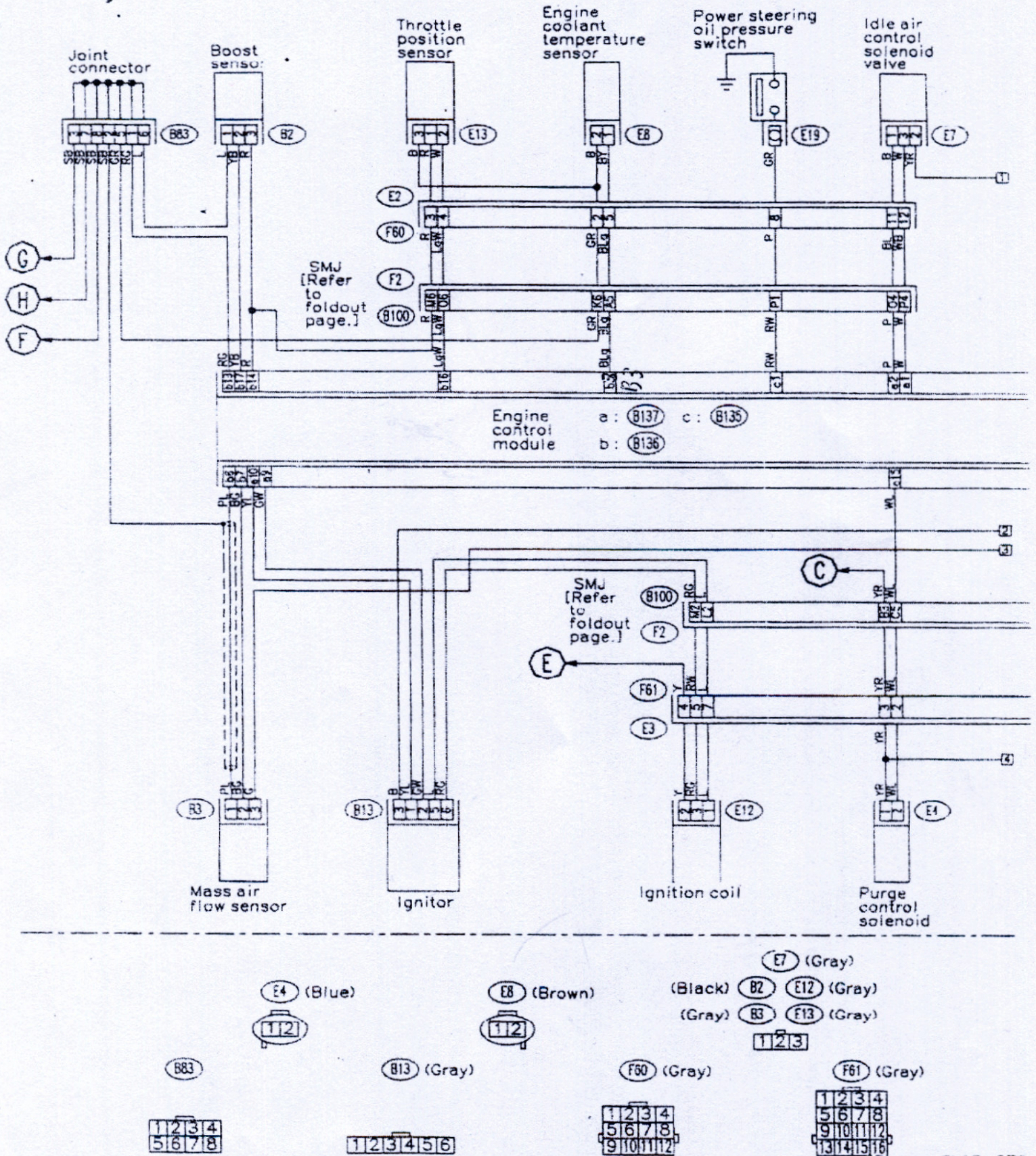


Engine control module
a : (B137) c : (B135)
b : (B136)

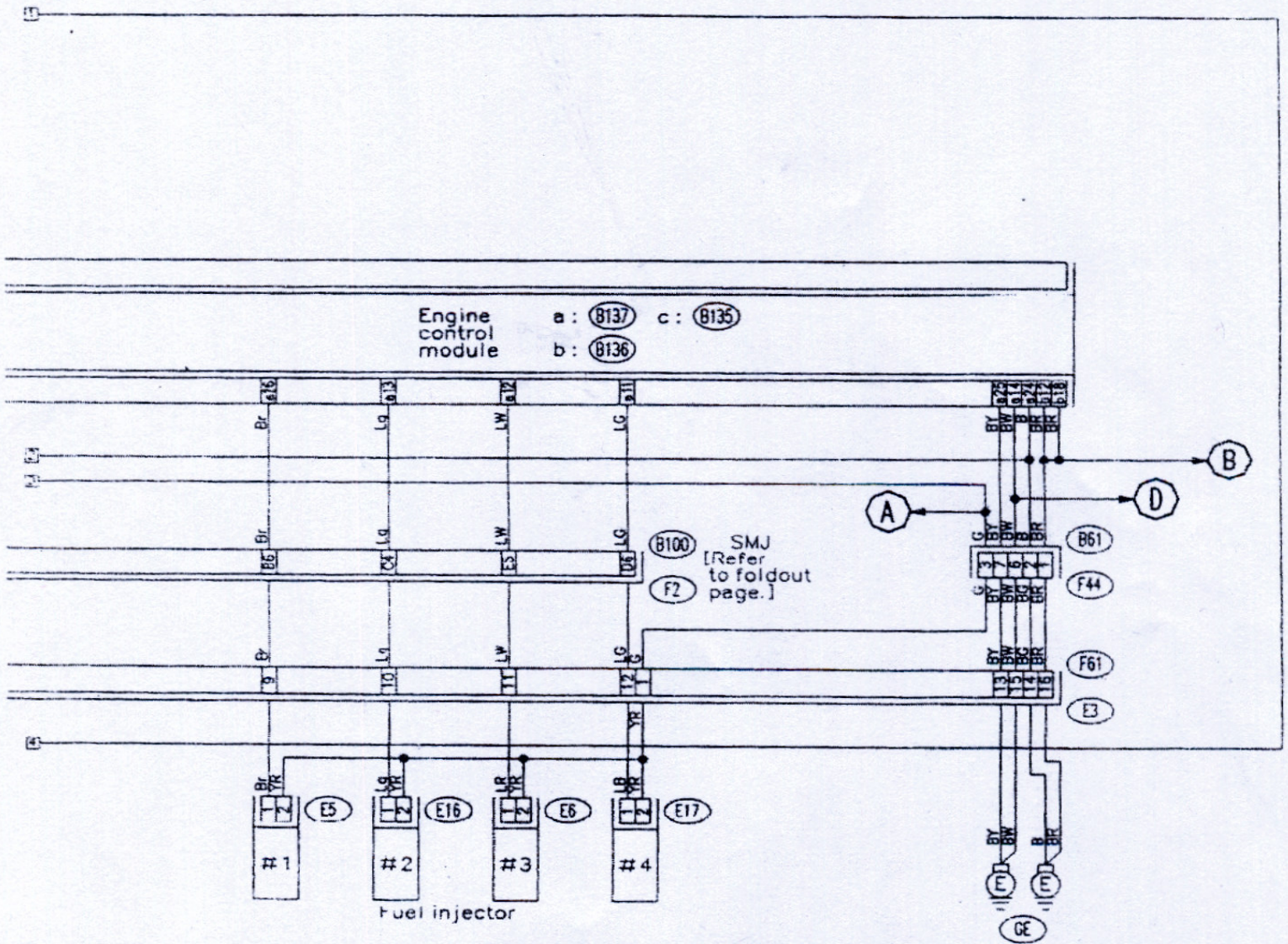


- (E10) (Gray)
- (B1) (Brown)
- (E15) (Light gray)
- (E1) (Gray)
- (B127) (Black)
- (B75) (Green)
- (B76) (Green)
- (B135) (Yellow)
- (B17) (Black)
- (B18) (Gray)
- (B136) (Yellow)
- (B122)
- (B78) (Yellow)
- (B137) (Yellow)

WIRING DIAGRAM



WIRING DIAGRAM



(Light gray) (E5) (Eb) (Dark gray)
(Light gray) (E16) (E17) (Dark gray)

(F44)

