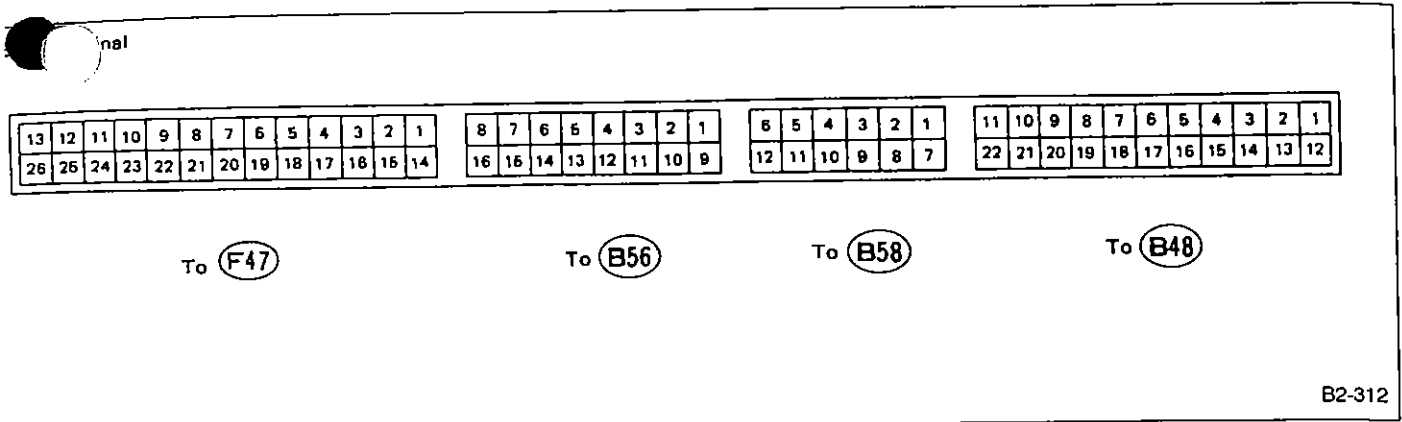


i. Control Unit I/O Signal



B2-312

Fig. 55

| Content                  | Connector No. | Terminal No. | Signal (V) |                 |  | Note                                   |  |                         |
|--------------------------|---------------|--------------|------------|-----------------|--|--|--|-------------------------|
|                          |               |              | lg SW      |                 | Engine ON (Idling)                     |  |  |                         |
|                          |               |              | OFF        | ON (Engine OFF) |  |  |  |                         |
| Crank angle sensor       | Non-TURBO     | Signal (+)   | B56        | 1               | —                                      | 0                                      | *  | *Sensor output waveform |
|                          |               | Signal (-)   | B56        | 2               | —                                      | 0                                      | 0  |                         |
|                          |               | Shield       | B56        | 3               | —                                      | 0                                      | 0  |                         |
|                          | TURBO         | Signal (+)   | B58        | 4               | —                                      | 0                                      | *  | *Sensor output waveform |
|                          |               | Signal (-)   | B58        | 5               | —                                      | 0                                      | 0  |                         |
|                          |               | Shield       | B58        | 6               | —                                      | 0                                      | 0  |                         |
| Cam angle sensor         | Non-TURBO     | Signal (+)   | B58        | 4               | —                                      | 0                                      | *  | *Sensor output waveform |
|                          |               | Signal (-)   | B58        | 5               | —                                      | 0                                      | 0  |                         |
|                          |               | Shield       | B58        | 6               | —                                      | 0                                      | 0  |                         |
|                          | TURBO         | Signal (+)   | B56        | 1               | —                                      | 0                                      | *  | *Sensor output waveform |
|                          |               | Signal (-)   | B56        | 2               | —                                      | 0                                      | 0  |                         |
|                          |               | Shield       | B56        | 3               | —                                      | 0                                      | 0  |                         |
| Air flow sensor          | Power supply  | B48          | 8          | —               | 10 - 13                                | 13 - 14                                | —  |                         |
|                          | Signal        | B48          | 9          | —               | 0 - 0.3                                | 0.8 - 1.2                              | —  |                         |
|                          | GND           | B48          | 10         | —               | 0                                      | 0                                      | —  |                         |
|                          | Shield        | B48          | 19         | —               | 0                                      | 0                                      | —  |                         |
| Throttle sensor          | Signal        | B58          | 2          | —               | Fully closed: 4.7<br>Fully opened: 1.6 | Fully closed: 4.7<br>Fully opened: 1.6 | —  |                         |
|                          | Power supply  | B58          | 3          | —               | 5                                      | 5                                      | —  |                         |
|                          | GND           | B58          | 1          | —               | 0                                      | 0                                      | —  |                         |
|                          | Shield        | B58          | 7          | —               | 0                                      | 0                                      | —  |                         |
| O <sub>2</sub> sensor    | Non-TURBO     | Signal       | B48        | 6               | —                                      | (AT) 0.6<br>(MT) 0                     | Rich mixture: 0.7 (AT), 1.0 (MT)<br>Lean mixture: 0 (AT), 0.2 (MT) |                         |
|                          |               | Shield       | B48        | 17              | —                                      | 0                                      | 0  |                         |
|                          | TURBO         | Signal       | B48        | 6               | —                                      | 0                                      | Rich mixture: 1.0<br>Lean mixture: 0.2                             |                         |
|                          |               | Shield       | B48        | 17              | —                                      | 0                                      | 0  |                         |
| Knock sensor             | Signal        | B56          | 5          | —               | 3 - 4                                  | 3 - 4                                  | —  |                         |
|                          | Shield        | B56          | 4          | —               | 0                                      | 0                                      | —  |                         |
| Water temperature sensor | B48           | 7            | 0          | 0               | 0.7 - 1.0                              | 0.7 - 1.0                              | *After warm-up   |                         |
| Vehicle speed sensor     | B58           | 11           | —          | —               | 0 or 5                                 | 0 or 5                                 | "5" and "0" are repeatedly displayed when vehicle is driven.       |                         |

# FUEL INJECTION SYSTEM

[T600] 2-7

| Content  |              | Connector No. | Terminal No. | Signal (V) |   |   | Note  |
|--|--------------|---------------|--------------|------------|---|---|---|
|  |              |               |              | Ig SW      |   | Engine ON (Idling)  |   |
|  |              |               |              | OFF        | ON (Engine OFF)   |   |   |
| Pressure sensor (TURBO only)                   | Signal       | B48           | 4            | —          | 10 - 13   | 2.4 ↔ 2.7   | —   |
|  | Power supply | B48           | 3            | —          | 5   | 5   | —   |
|  | GND          | B48           | 5            | —          | 0   | 0   | —   |
| Idle switch                                    |              | B56           | 6            | —          | ON:0, OFF:4.6   | ON:0, OFF:4.6   | —   |
| 49-state and Canada/ California identification |              | B56           | 11           | —          | —   | —   | 49-state and Canada:12<br>California:0      |
| Starter switch                                 |              | B56           | 10           | —          | 0   | 0   | Cranking: 10 to 14                          |
| Air conditioner switch                         |              | B56           | 9            | —          | ON:10 - 13, OFF:0   | ON:13 - 14, OFF:0   | —   |
| Ignition switch                                |              | B58           | 12           | 0          | 10 - 13   | 13 - 14   | —   |
| Neutral switch                                 |              | B58           | 10           | —          | [AT] N Range: 0<br>Other: 8, min.<br>[MT] N Position: 8, min.<br>Other: 0 | [AT] N Range: 0<br>Other: 8, min.<br>[MT] N Position: 8, min.<br>Other: 0 | —   |
| Parking switch [AT]                            |              | B58           | 9            | —          | P Range: 0<br>Other: 8, min.  | P Range: 0<br>Other: 8, min.  | —   |
| Test mode connector                            | Non-TURBO    | B56           | 13           | —          | [AT] 10 - 13<br>[MT] 5  | [AT] 13 - 14<br>[MT] 5  | [AT] When connected: 0                      |
|  | TURBO        | B56           | 13           | —          | 5   | 5   | When connected: 0                           |
| Read memory connector                          | Non-TURBO    | B56           | 12           | —          | [AT] 10 - 13<br>[MT] 5  | [AT] 13 - 14<br>[MT] 5  | [AT] When connected: 0                      |
|  | TURBO        | B56           | 12           | —          | 5   | 5   | When connected: 0                           |
| AT/MT identification                           | Non-TURBO    | B48           | 20           | —          | [AT] 0<br>[MT] 5  | [AT] 0<br>[MT] 5  | —   |
|  | TURBO        | B48           | 20           | —          | 5   | 5   | —   |
| Back-up power supply                           |              | B48           | 15           | 10 - 13    | 10 - 13   | 13 - 14   | —   |
| Control unit power supply                      |              | B48           | 2            | 0          | 10 - 13   | 13 - 14   | —   |
|  |              | B48           | 13           | 0          | 10 - 13   | 13 - 14   | —   |
| Ignition control                               | Non-TURBO    | #1, #2        | F47          | 10         | —   | [AT] 0.01 [MT] 0  | —   |
|  |              | #3, #4        | F47          | 9          | —   | [AT] 0.01 [MT] 0  | —   |
|  | TURBO        | #1, #2        | F47          | 10         | —   | 0   | —   |
|  |              | #3, #4        | F47          | 9          | —   | 0   | —   |
| Fuel injector                                  |              | #1            | F47          | 13         | 10 - 13   | 10 - 13   | 13 - 14                                     |
|  |              | #2            | F47          | 12         | 10 - 13   | 10 - 13   | 13 - 14                                     |
|  |              | #3            | F47          | 11         | 10 - 13   | 10 - 13   | 13 - 14                                     |
|  |              | #4            | F47          | 26         | 10 - 13   | 10 - 13   | 13 - 14                                     |
| By-pass air control solenoid valve             | Non-TURBO    | OPEN end      | F47          | 2          | —   | [AT] 7<br>[MT] 12 → *0  | —   |
|  |              | CLOSE end     | F47          | 1          | —   | [AT] 6<br>[MT] 0  | —   |
|  | TURBO        | OPEN end      | F47          | 2          | —   | 0 → *12   | —   |
|  |              | CLOSE end     | F47          | 1          | —   | 12 → *0   | —   |
| Fuel pump relay control                        |              | F47           | 23           | —          | ON: 0<br>OFF: 10 - 13   | 0   | —   |
| Air conditioner cut relay control              |              | F47           | 22           | —          | ON: 0<br>Off: 10 - 13   | ON: 0<br>OFF: 13 - 14   | —   |
| Radiator fan control                           |              | F47           | 17           | —          | ON: 0<br>OFF: 10 - 13   | ON: 0<br>OFF: 13 - 14   | —   |
| Self-shutoff control                           |              | F47           | 5            | —          | 10 - 13   | 13 - 14   | —   |
| Wastegate control (TURBO only)                 |              | F47           | 3            | —          | 10 - 13   | 13 - 14   | —   |
| CHECK ENGINE light                             |              | F47           | 19           | —          | —   | —   | Light "ON": 1, max.<br>Light "OFF": 10 - 14 |

## FUEL INJECTION SYSTEM

| Content                                       | Connector No. | Terminal No. | Signal (V) |                       |                       | Note |
|---|---------------|--------------|------------|-----------------------|-----------------------|------|
|   |               |              | Ig SW      |                       | Engine ON (Idling)    |      |
|   |               |              | OFF        | ON (Engine OFF)       |                       |      |
| Pressure exchange solenoid valve (TURBO only) | F47           | 20           | —          | ON: 0<br>OFF: 10 - 13 | ON: 0<br>OFF: 13 - 14 | —    |
| Engine tachometer output                      | B56           | 16           | —          | —                     | —                     | —    |
| Purge control solenoid valve                  | F47           | 6            | —          | ON: 0<br>OFF: 10 - 13 | ON: 0<br>OFF: 13 - 14 | —    |
| Atmospheric pressure sensor (Non-TURBO only)  | B48           | 16           | —          | —                     | —                     | —    |
| GND (sensors)                                 | B48           | 21           | —          | 0                     | 0                     | —    |
| GND (injectors)                               | F47           | 24           | —          | 0                     | 0                     | —    |
|   | F47           | 25           | —          | 0                     | 0                     | —    |
| GND (ignition system)                         | F47           | 15           | —          | 0                     | 0                     | —    |
| GND (power supply)                            | F47           | 14           | —          | 0                     | 0                     | —    |
| GND (control systems)                         | B48           | 11           | —          | 0                     | 0                     | —    |
|   | B48           | 22           | —          | 0                     | 0                     | —    |
| Select Monitor Signal                         | B56           | 8            | —          | —                     | —                     | —    |
|   | B56           | 7            | —          | —                     | —                     | —    |

∴ For manufacture