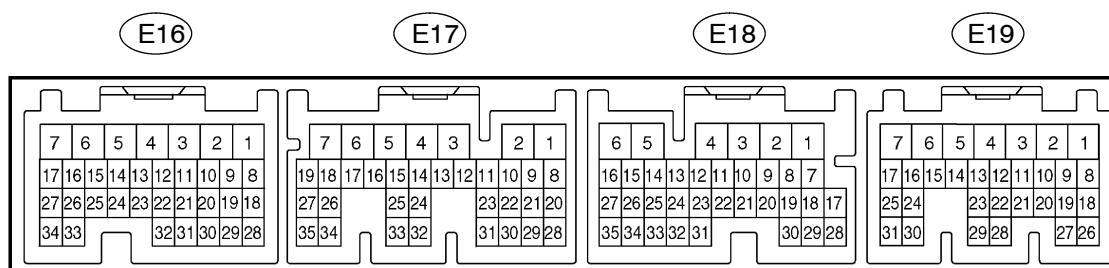


# TERMINALS OF ECU

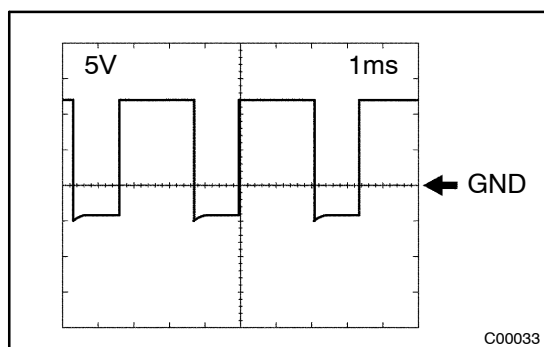


Y

D13110

| Symbols (Terminals No.)       | Wiring Color | Condition                                                | STD Voltage (V)              |
|-------------------------------|--------------|----------------------------------------------------------|------------------------------|
| P (E18-7) – E1 (E16-1)        | G-W – BR     | IG switch ON and shift lever P range                     | 10 – 14                      |
|                               |              | IG switch ON and shift lever other than P range          | Below 1                      |
| N (E18-13) – E1 (E16-1)       | G-R – BR     | IG switch ON and shift lever N range                     | 10 – 14                      |
|                               |              | IG switch ON and shift lever other than N range          | Below 1                      |
| L4 (E19-16) – E1 (E16-1)      | B-L ↔ BR     | IG switch ON and Transfer shift lever L range            | Below 1.5                    |
|                               |              | IG switch ON and Transfer shift lever other than L range | 9 – 14                       |
| SNWI (E19-2) – E1 (E16-1)     | L-R ↔ BR     | IG switch ON                                             | 9 – 14                       |
|                               |              | IG switch ON and Press continuously 2nd start switch     | Below 1                      |
| L (E18-8) – E1 (E16-1)        | R-L ↔ BR     | IG switch ON and shift lever L range                     | 9 – 14                       |
|                               |              | IG switch ON and shift lever other than L range          | Below 1.5                    |
| 2 (E18-9) – E1 (E16-1)        | G-B ↔ BR     | IG switch ON and shift lever 2 and L range               | 9 – 14                       |
|                               |              | IG switch ON and shift lever other than 2 and L range    | Below 1.5                    |
| D (E18-10) – E1 (E16-1)       | G-Y ↔ BR     | IG switch ON and shift lever D and 4 range               | 9 – 14                       |
|                               |              | IG switch ON and shift lever other than D and 4 range    | Below 1.5                    |
| R (E18-11) – E1 (E16-1)       | R-B ↔ BR     | IG switch ON and shift lever R range                     | 9 – 14                       |
|                               |              | IG switch ON and shift lever other than R range          | Below 1.5                    |
| STP (E18-19) – E1 (E16-1)     | G-W ↔ BR     | Brake pedal is depressed                                 | 7.5 – 14                     |
|                               |              | Brake pedal is released                                  | Below 1.5                    |
| 3 (E18-20) – E1 (E16-1)       | G ↔ BR       | IG switch ON and shift lever 3 range                     | 9 – 14                       |
|                               |              | IG switch ON and shift lever other than 3 range          | Below 1.5                    |
| 4 (E18-23) – E1 (E16-1)       | G-R ↔ BR     | IG switch ON and shift lever 4 range                     | 9 – 14                       |
|                               |              | IG switch ON and shift lever other than 4 range          | Below 1.5                    |
| PWR (E19-13) – E1 (E16-1)     | L-W ↔ BR     | IG switch ON and Pattern select switch "PWR" OFF         | 9 – 14                       |
|                               |              | IG switch ON and Pattern select switch "PWR" ON          | Below 1                      |
| TFN (E19-14) – E1 (E16-1)     | Y-G ↔ BR     | IG switch ON and Transfer shift lever N range            | Below 1.5                    |
|                               |              | IG switch ON and Transfer shift lever other than N range | 9 – 14                       |
| SLU+ (E17-15) – SLU- (E17-14) | P-G ↔ B      | Engine idle speed                                        | Pulse generation 2 reference |
| S2 (E17-12) – E1 (E16-1)      | W ↔ BR       | IG switch ON                                             | Below 1.5                    |
|                               |              | 2nd or 3rd gear                                          | 9 – 14                       |
|                               |              | 1st, 4th or 5th gear                                     | Below 1.5                    |
| S1 (E17-13) – E1 (E16-1)      | R ↔ BR       | IG switch ON                                             | 9 – 14                       |
|                               |              | 1st or 2nd gear                                          | 9 – 14                       |
|                               |              | 3rd, 4th or 5th gear                                     | Below 1.5                    |

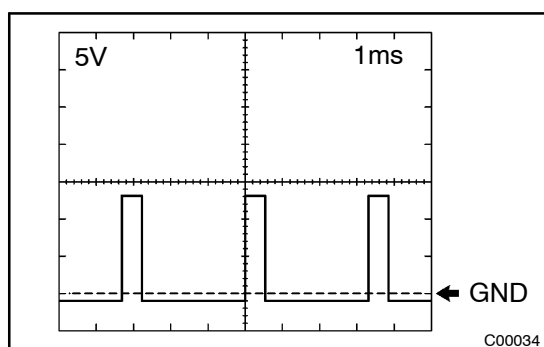
|                                                       |            |                                                       |                              |
|-------------------------------------------------------|------------|-------------------------------------------------------|------------------------------|
| SLT <sup>+</sup> (E16-17) – SLT <sup>-</sup> (E16-16) | G-W ↔ G-B  | Engine is idling                                      | Pulse generation 1 reference |
| SR (E17-11) – E1 (E6-1)                               | G ↔ BR     | IG switch ON                                          | Below 1.5                    |
|                                                       |            | 5th gear                                              | 9 – 14                       |
|                                                       |            | 1st gear                                              | Below 1                      |
| SL2 <sup>+</sup> (E17-17) – SL2 <sup>-</sup> (E17-16) | P-B ↔ P-L  | Engine idle speed                                     | Pulse generation 3 reference |
| SL1 <sup>+</sup> (E17-19) – SL1 <sup>-</sup> (E17-18) | R-L ↔ R-W  | Engine idle speed                                     | Pulse generation 4 reference |
| OIL2 (E16-32) – E2 (E16-28)                           | L ↔ BR-W   | ATF temperature: 115°C (239°F) or more                | Below 1.5                    |
| SP2 <sup>+</sup> (E17-27) – SP2 <sup>-</sup> (E17-35) | R ↔ G      | Engine is running                                     | Pulse generation 6 reference |
| NT <sup>+</sup> (E17-26) – NT <sup>-</sup> (E17-34)   | L ↔ W      | Engine is idling                                      | Pulse generation 5 reference |
| OIL (E16-30) – E2 (E16-28)                            | G-Y ↔ BR-W | ATF temperature: 115°C (239°F) or more                | Below 1.5                    |
| NSW (E17-8) – E1 (E16-1)                              | B-W ↔ BR   | IG switch ON and shift lever P and N range            | Below 1.5                    |
|                                                       |            | IG switch ON and shift lever other than P and N range | 9 – 14                       |



Pulse generation 1

**Reference:**

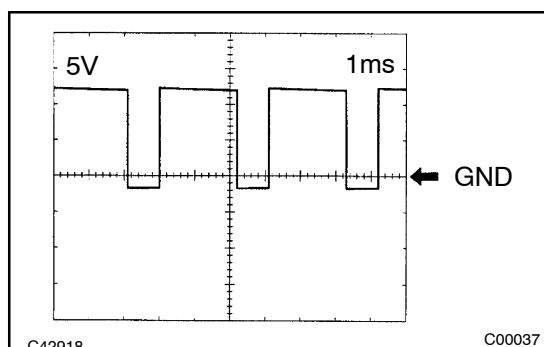
| Item              | Condition                           |
|-------------------|-------------------------------------|
| Terminal          | SLT <sup>+</sup> – SLT <sup>-</sup> |
| Tool setting      | 5V/DIV, 1ms/DIV                     |
| Vehicle condition | Engine idle speed                   |



Pulse generation 2

**Reference:**

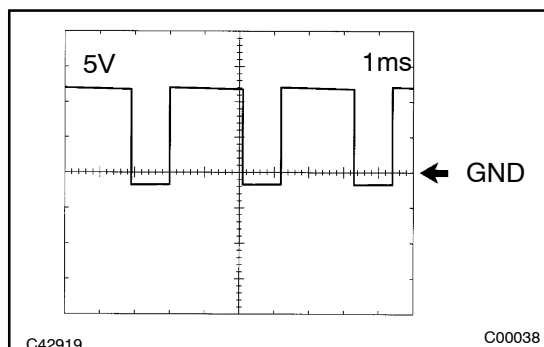
| Item              | Condition                           |
|-------------------|-------------------------------------|
| Terminal          | SLU <sup>+</sup> – SLU <sup>-</sup> |
| Tool setting      | 5V/DIV, 1ms/DIV                     |
| Vehicle condition | Engine idle speed                   |



Pulse generation 3

**Reference:**

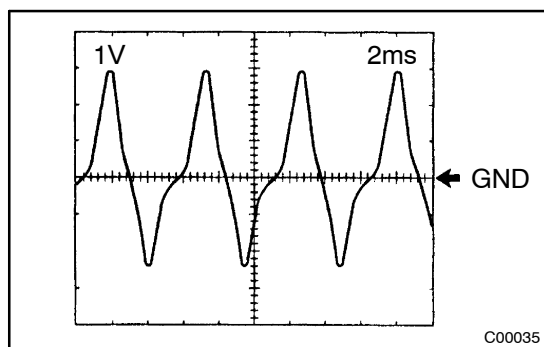
| Item              | Condition                           |
|-------------------|-------------------------------------|
| Terminal          | SL2 <sup>+</sup> – SL2 <sup>-</sup> |
| Tool setting      | 5V/DIV, 1ms/DIV                     |
| Vehicle condition | Engine idle speed                   |



## Pulse generation 4

**Reference:**

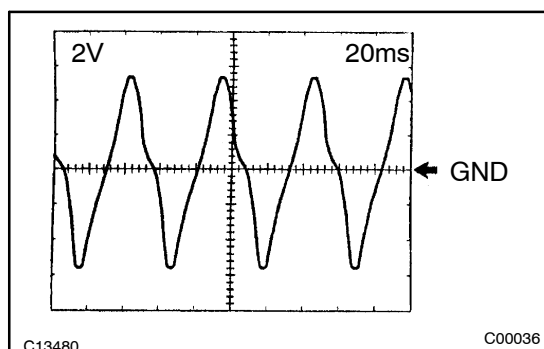
| Item              | Condition         |
|-------------------|-------------------|
| Terminal          | SL1+ – SL1–       |
| Tool setting      | 5V/DIV, 1ms/DIV   |
| Vehicle condition | Engine idle speed |



## Pulse generation 5

**Reference:**

| Item              | Condition         |
|-------------------|-------------------|
| Terminal          | NT+ – NT–         |
| Tool setting      | 1V/DIV, 2ms/DIV   |
| Vehicle condition | Engine idle speed |



## Pulse generation 6

**Reference:**

| Item              | Condition                      |
|-------------------|--------------------------------|
| Terminal          | SP2+ – SP2–                    |
| Tool setting      | 2V/DIV, 20ms/DIV               |
| Vehicle condition | Vehicle speed 20 km/h (12 mph) |