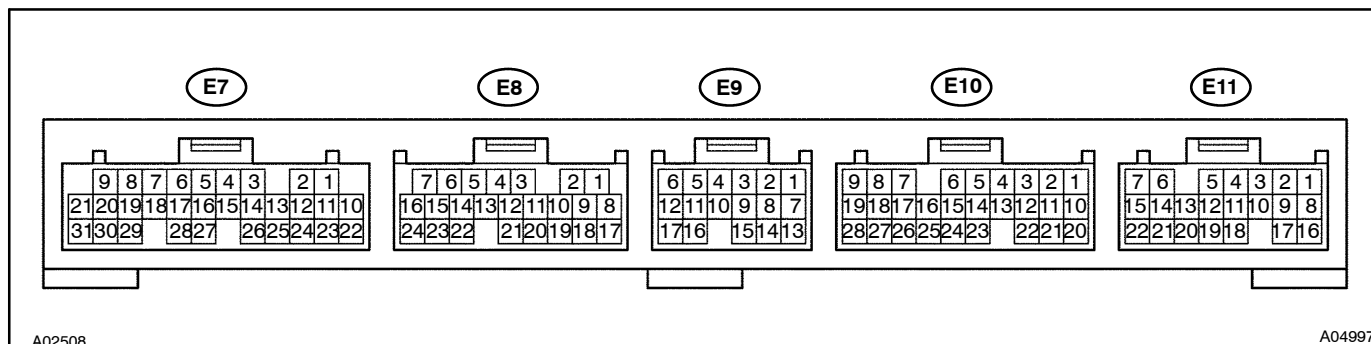


# TERMINALS OF ECU



| Symbols (Terminals No.)  | Wiring Color   | Condition   | STD Voltage (V)      |
|--|--|---|----------------------|
| BATT (E11-1) - E1 (E8-17)  | B-R ↔ BR   | Always  | 9 - 14               |
| +BM (E11-7) - E1 (E8-17)   | Y-B ↔ BR   |   |                      |
| IGSW (E11-9) - E1 (E8-17)  | B-R ↔ BR   | IG switch ON  | 9 - 14               |
| +B (E11-16) - E1 (E8-17)   | B-Y ↔ BR   |   |                      |
| +B1 (E11-8) - E1 (E8-17)   | B-Y ↔ BR   |   |                      |
| MREL (E11-5)*3 - E1 (E8-17)<br>MREL (E11-10)*4 - E1 (E8-17)  | B-W ↔ BR   | IG switch ON  | 9 - 14               |
| VC (E8-2) - E2 (E8-18)   | L-R ↔ BR-W   | IG switch ON  | 4.5 - 5.5            |
| VG (E8-10) - EVG (E8-19)   | L-Y ↔ G-W  | Idling, P or N position, A/C switch OFF                           | 0.5 - 3.0            |
| THA (E8-22) - E2 (E8-18)   | Y-B ↔ BR-W   | Idling, Intake air temp. 20°C (68°F)                              | 0.5 - 3.4            |
| THW (E8-14) - E2 (E8-18)   | G-B ↔ BR-W   | Idling, Water temp. 80°C (176°F)                                  | 0.2 - 1.0            |
| VTA (E8-13) - E2 (E8-18)   | R-Y ↔ BR-W   | IG switch ON<br>Accelerator pedal released                        | 0.4 - 1.0            |
|  |  | IG switch ON<br>Accelerator pedal depressed                       | 3.2 - 4.8            |
| VTA2 (E8-20) - E2 (E8-18)  | Y-B ↔ BR-W   | IG switch ON<br>Accelerator pedal released                        | 2.0 - 2.9            |
|  |  | IG switch ON<br>Accelerator pedal depressed                       | 4.7 - 5.1            |
| VPA (E8-21) - E2 (E8-18)   | R ↔ BR-W   | IG switch ON<br>Accelerator pedal released                        | 0.3 - 0.9            |
|  |  | IG switch ON<br>Accelerator pedal depressed                       | 3.2 - 4.8            |
| VPA2 (E8-9) - E2 (E8-18)   | R-B ↔ BR-W   | IG switch ON<br>Accelerator pedal released                        | 1.8 - 2.7            |
|  |  | IG switch ON<br>Accelerator pedal depressed                       | 4.7 - 5.1            |
| OXL1 (E8-12)*1 - E1 (E8-17)<br>OXL1 (E8-12)*3 - E1 (E8-17)<br>OXL2 (E10-18)*1 - E1 (E8-17)<br>OXL2 (E10-16)*3 - E1 (E8-17)<br>OXR1 (E8-11)*1 - E1 (E8-17)<br>OXR1 (E8-11)*3 - E1 (E8-17)<br>OXR2 (E10-27)*1 - 1 (E8-17)<br>OXR2 (E10-15)*3 - 1 (E8-17) | B ↔ BR<br>B ↔ BR<br>B ↔ BR<br>B ↔ BR<br>W ↔ BR<br>W ↔ BR<br>W ↔ BR<br>W ↔ BR | Maintain engine speed at 2,500 rpm for 2 minutes after warming up | Pulse generation (★) |

## DIAGNOSTICS - ENGINE

| Symbols (Terminals No.)  | Wiring Color   | Condition  | STD Voltage (V)                    |
|--|--|--|------------------------------------|
| HTL (E8-4)*1 - E1 (E8-17)<br>HTL (E8-5)*3 - E1 (E8-17)<br>HTL2 (E8-24)*3 - E1 (E8-17)<br>HTL2 (E10-8)*2 - E1 (E8-17)<br>HTR (E8-3) - E1 (E8-17)<br>HTR2 (E10-7)*2 - E1 (E8-17)<br>HTR2 (E10-23)*3 - E1 (E8-17)                       | R ↔ BR<br>R ↔ BR<br>L ↔ BR<br>L ↔ BR<br>Y ↔ BR<br>R-B ↔ BR<br>R-B ↔ BR                   | IG switch ON   | 9 - 14                             |
| #1 (E8-5) - E01 (E7-21)<br>#2 (E8-6) - E01 (E7-21)<br>#3 (E7-1) - E01 (E7-21)<br>#4 (E7-2) - E01 (E7-21)<br>#5 (E7-3) - E01 (E7-21)<br>#6 (E7-4) - E01 (E7-21)<br>#7 (E7-5) - E01 (E7-21)<br>#8 (E7-6) - E01 (E7-21)                 | Y ↔ W-B<br>B ↔ W-B<br>L ↔ W-B<br>R ↔ W-B<br>G ↔ W-B<br>R-L ↔ W-B<br>W ↔ W-B<br>B-W ↔ W-B | IG switch ON<br><br>Idling   | 9 - 14<br><br>Pulse generation (★) |
| KNKL (E7-18) - E1 (E8-17)<br>KNKR (E7-17) - E1 (E8-17)   | B ↔ BR<br>W ↔ BR   | Maintain engine speed at 4,000 rpm after warming up  | Pulse generation (★)               |
| G2 (E7-10)*3 - G- (E7-24)*3<br>G2 (E7-10)*4 - NE- (E7-22)*4<br>NE+ (E7-23) - NE- (E7-22)   | R ↔ G<br>L ↔ G   | Idling   | Pulse generation (★)               |
| PRG (E8-7) - E1 (E8-17)  | L-B ↔ BR   | IG switch ON   | 9 - 14                             |
| SPD (E10-15)*2 - E1 (E8-17)<br>SPD (E10-5)*3 - E1 (E8-17)  | V ↔ BR   | IG switch ON<br>Rotate driving wheel slowly  | Pulse generation (★)               |
| CL+ (E7-29) - CL- (E7-24)*2<br>CL+ (E7-29) - CL- (E7-19)*3   | G ↔ L  | Idling   | Pulse generation (★)               |
| M+ (E7-8) - E1 (E8-17)<br>M- (E7-7) - E1 (E8-17)   | R ↔ BR<br>W ↔ BR   | Idling   | Pulse generation (★)               |
| DI (E11-4)*1 - E1 (E8-17)  | G-R ↔ BR   | IG switch ON   | 9 - 14                             |
| FPC (E11-5)*2 - E1 (E8-17)<br>FPC (E11-6)*3 - E1 (E8-17)   | G-W ↔ BR   | IG switch ON   | 0 - 3.0                            |
| IGT1 (E7-11) - E1 (E8-17)<br>IGT2 (E7-12) - E1 (E8-17)<br>IGT3 (E7-13) - E1 (E8-17)<br>IGT4 (E7-14) - E1 (E8-17)<br>IGT5 (E7-15) - E1 (E8-17)<br>IGT6 (E7-16) - E1 (E8-17)<br>IGT7 (E7-25) - E1 (E8-17)<br>IGT8 (E7-26) - E1 (E8-17) | B ↔ BR<br>R ↔ BR<br>L ↔ BR<br>G ↔ BR<br>Y ↔ BR<br>B-Y ↔ BR<br>B-L ↔ BR<br>L-B ↔ BR       | Idling   | Pulse generation (★)               |
| IGF1 (E7-27) - E1 (E8-17)<br>IGF2 (E7-28) - E1 (E8-17)   | B-W ↔ BR   | IG switch ON<br>Idling   | 4.5 - 5.5<br>Pulse generation (★)  |
| STP (E11-15)*3 - E1 (E8-17)<br>STP (E10-6)*4 - E1 (E8-17)  | G-W ↔ BR   | Brake pedal is depressed<br>Brake pedal is released  | 7.5 - 14<br>Below 1.5              |
| STA (E10-7)*3 - E1 (E8-17)<br>STA (E10-17)*4 - E1 (E8-17)  | B-R ↔ BR   | Shift lever position P or N position, ignition switch START  | 6.0 or more                        |
| NSW (E11-2)*3, *5 - E1 (E8-17)<br>NSW (E10-20)*4, *5 - E1 (E8-17)  | B-W ↔ BR   | IG switch ON<br>Other shift position in "P", "N" position<br>IG switch ON<br>Shift position in "P", "N" position | 9 - 14<br>0 - 3.0                  |
| W (E10-23)*3 - E1 (E8-17)<br>W (E11-6)*4 - E1 (E8-17)  | W ↔ BR   | Idling<br>IG switch ON   | 9 - 14<br>Below 3.0                |

| Symbols (Terminals No.)                                      | Wiring Color | Condition                                 | STD Voltage (V)  |
|--|--------------|---|------------------|
| ACT (E11-22)*3 – E1 (E8-17)                                  | L-B ↔ BR     | A/C switch OFF                            | Below 3.0        |
| ACT (E10-13)*4 – E1 (E8-17)                                  |              | A/C switch ON at idling                   | 9 – 14           |
| AC1 (E11-21)*3 – E1 (E8-17)                                  | W-G ↔ BR     | A/C switch ON at idling                   | Below 3.0        |
| A/C (E10-25)*4 – E1 (E8-17)                                  |              | A/C switch OFF                            | 7.5 – 14         |
| ST1- (E11-10) – E1 (E8-17)                                   | R-G ↔ BR     | IG switch ON, Brake pedal is depressed    | Below 1.5        |
|  |              | IG switch ON, Brake pedal is released     | 7.5 – 14         |
| SIL (E11-17)*3 – E1 (E8-17)<br>SIL (E11-11)*4 – E1 (E8-17)   | V-W ↔ BR     | During transmission                       | Pulse generation |
| ELS (E10-12) – E1 (E8-17)                                    | G-W ↔ BR     | Taillight switch ON, Defogger switch ON   | 7.5 – 14         |
|  |              | Taillight switch OFF, Defogger switch OFF | 0 – 1.5          |
| TACH (E10-4)*3 – E1 (E8-17)<br>TACH (E10-16)*4 – E1 (E8-17)  | B ↔ BR       | Idling                                    | Pulse generation |
| KSW (E11-11)*3 – E1 (E8-17)                                  | R-B ↔ BR     | At the time of inserting the key          | Below 1.5        |
| KSW (E11-20)*4 – E1 (E8-17)                                  |              | In the condition without the key inserted | 4 – 5            |
| RXCK (E11-13) – E1 (E8-17)                                   | V-G ↔ BR     | At the time of inserting the key          | Pulse generation |
| CODE (E11-14)*3 – E1 (E8-17)<br>CODE (E11-12)*4 – E1 (E8-17) | L-B ↔ BR     | At the time of inserting the key          | Pulse generation |
| TXCT (E11-12)*3 – E1 (E8-17)<br>TXCT (E11-14)*4 – E1 (E8-17) | R-Y ↔ BR     | At the time of inserting the key          | Pulse generation |

\*1: Only for Europe, Turkey, Russia, Saudi Arabia

\*2: Only for Russia, Saudi Arabia

\*3: Only for Europe, Turkey

\*4: Except Europe, Turkey

\*5: A/T

\*6: M/T

★: See Pub. No. RM630E