TERMINALS OF ECU

## 1. INSTRUMENT PANEL JUNCTION BLOCK ASSEMBLY (BODY ECU)

## Front Side:



Back Side:
(B4 B B B B B


E111961E01

| Symbols (Terminal No.) | Wiring Color | Terminal Description | Condition | Specified Condition |
| :--- | :---: | :---: | :---: | :---: |
| ACC, IG (1A-1) - GND1 <br> $(1 F-10)$ | B - W-B (*2) <br> B-W-B (*3) | Battery <br> (Power source circuit) | Always | 10 to 14 V |
| PKB (1C-14) - GND1 (1F- <br> $10)$ | LG - W-B | Parking brake switch | Parking brake is <br> depressed | Below 1 V |
| PKB (1C-14) - GND1 (1F- <br> $10)$ | LG -W-B | Parking brake switch | Parking brake is released | 10 to 14 V |


| Symbols (Terminal No.) | Wiring Color | Terminal Description | Condition | Specified Condition |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \text { HRLY (1D-3) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | GR - W-B | HEAD Relay (HEAD signal) | Light control switch is OFF or TAIL | 10 to 14 V |
| $\begin{aligned} & \text { HRLY (1D-3) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | GR - W-B | HEAD Relay (HEAD signal) | Light control switch is HEAD | Below 1 V |
| $\begin{aligned} & \text { DRL (1D-9) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | P - W-B | DRL Relay (DRL signal) | Ignition switch is ON and engine is running | Below 1 V |
| $\begin{aligned} & \text { DRL (1D-9) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | P - W-B | DRL Relay (DRL signal) | Ignition switch is OFF | 10 to 14 V |
| $\begin{aligned} & \text { BECU (1D-10) - GND1 } \\ & \text { (1F-10) } \end{aligned}$ | L-B - W-B | Battery (B+ circuit) | Always | 10 to 14 V |
| $\begin{aligned} & \text { ALTB (1D-16) - GND1 } \\ & (1 F-10) \end{aligned}$ | W-W-B | Battery (ALT fuse) | Always | 10 to 14 V |
| $\begin{aligned} & \text { MPX1 (1E-7) - GND1 (1F- } \\ & 10) \end{aligned}$ | BR - W-B | Multiplex communication | Ignition switch is OFF | Below 1 V |
| $\begin{aligned} & \text { MPX1 (1E-7) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | BR - W-B | Multiplex communication | Ignition switch is ON | Signal waveform |
| $\begin{aligned} & \text { BECU (1F-1) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | SB - W-B | Overhead ECU (B+ circuit) | Always | 10 to 14 V |
| GND1 (1F-10) - Body ground | W-B - Body ground | Body ground | Always | Below 1 V |
| $\begin{aligned} & \text { HRLY (1H-13) - GND1 } \\ & (1 \mathrm{~F}-10) \end{aligned}$ | R-W-B | Headlight cleaner switch (HEAD signal) | Light control switch is OFF or TAIL | 10 to 14 V |
| $\begin{aligned} & \text { HRLY (1H-13) - GND1 } \\ & (1 \mathrm{~F}-10) \end{aligned}$ | R-W-B | Headlight cleaner switch (HEAD signal) | Light control switch is HEAD | Below 1 V |
| $\begin{aligned} & \text { ILE (1I-10) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | R-W-B | Key cylinder light (Illumination signal) | Ignition key cylinder light is OFF | 10 to 14 V |
| $\begin{aligned} & \text { ILE (11-10) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | $\mathrm{R}-\mathrm{W}-\mathrm{B}$ | Key cylinder light (Illumination signal) | Ignition key cylinder light is ON | Below 1 V |
| $\begin{aligned} & \text { TRLY (1L-3) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | Y - W-B | TAIL relay (TAIL signal) | Light control switch is OFF | Below 1 V |
| $\begin{aligned} & \text { TRLY (1L-3) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | Y - W-B | TAIL relay (TAIL signal) | Light control switch is TAIL and fog light switch is ON | 10 to 14 V |
| $\begin{aligned} & \text { GND2 (1M-9) - GND1 } \\ & (1 \mathrm{~F}-10) \end{aligned}$ | W-B - W-B | Body ground | Always | Below 1 V |
| $\begin{aligned} & \text { HU (1N-2) - GND1 (1F- } \\ & 10) \end{aligned}$ | G - W-B | Headlight dimmer switch (HIGH signal) | Headlight dimmer switch is LOW | 10 to 14 V |
| $\begin{aligned} & \text { HU (1N-2) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | G - W-B | Headlight dimmer switch (HIGH signal) | Headlight dimmer switch is HIGH | Below 1 V |
| $\begin{aligned} & \text { LCTY (10-7) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | $B-W-B$ | Courtesy switch (Rear left door circuit) | Rear left door is open | Below 1 V |
| $\begin{aligned} & \text { LCTY (1O-7) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | $B-W-B$ | Courtesy switch (Rear left door circuit) | Rear left door is closed | Pulse generation (*1) |
| $\begin{aligned} & \text { LSWL (1P-5) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | GR - W-B | Door lock position switch (Rear left door circuit) | Rear left door is in unlock position | Below 1 V |
| $\begin{aligned} & \text { LSWL (1P-5) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | GR - W-B | Door lock position switch (Rear left door circuit) | Rear left door is in lock position | Pulse generation (*1) |
| $\begin{aligned} & \text { ILE (1R-5) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | SB - W-B | Front interior illumination (Illumination signal) | Front interior light is OFF | 10 to 14 V |
| $\begin{aligned} & \text { ILE (1R-5) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | SB - W-B | Front interior illumination (Illumination signal) | Front interior light is ON | Below 1 V |
| $\begin{aligned} & \text { MPX1 (1R-9) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | LG - W-B | Multiplex communication signal | Ignition switch is OFF | Below 1 V |
| $\begin{aligned} & \text { MPX1 (1R-9) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | LG - W-B | Multiplex communication signal | Ignition switch is ON | Signal waveform |
| $\begin{aligned} & \text { HDLO (B7-4) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | SB - W-B | Headlight cleaner relay (DRL signal) | Ignition switch is ON and engine is running | 10 to 14 V |
| $\begin{aligned} & \text { HDLO (B7-4) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | SB - W-B | Headlight cleaner relay (DRL signal) | Ignition switch is OFF | Below 1 V |


| Symbols (Terminal No.) | Wiring Color | Terminal Description | Condition | Specified Condition |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \hline \text { FFGO (B7-7) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | LG - W-B | Front fog relay (Front fog circuit) | Front fog light is OFF | Below 1 V |
| FFGO (B7-7) - GND1 (1F10) | LG - W-B | Front fog relay (Front fog circuit) | Front fog light is ON | 10 to 14 V |
| DCYL (B6-13) - GND1 (1F-10) | SB - W-B | Courtesy light <br> (Front left door circuit) | Front left courtesy light is OFF | 10 to 14 V |
| DCYL (B6-13) - GND1 (1F-10) | SB - W-B | Courtesy light <br> (Front left door circuit) | Front left courtesy light is ON | Below 1V |
| $\begin{aligned} & \text { DCTY (B6-14) - GND1 } \\ & \text { (1F-10) } \end{aligned}$ | L-W-B | Courtesy switch (Front left door circuit) | Front left door is open | Below 1 V |
| $\begin{aligned} & \text { DCTY (B6-14) - GND1 } \\ & \text { (1F-10) } \end{aligned}$ | L-W-B | Courtesy switch (Front left door circuit) | Front left door is closed | 10 to 14 V |
| RCTY (B6-16) - GND1 (1F-10) | GR - W-B | Courtesy switch (Rear right door circuit) | Rear right door is open | Below 1 V |
| RCTY (B6-16) - GND1 (1F-10) | GR - W-B | Courtesy switch (Rear right door circuit) | Rear right door is closed | Pulse generation (*1) |
| $\begin{aligned} & \text { CLTE (B4-4) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | LG - W-B | Automatic light control sensor (Ground circuit) | Always | Below 1 V |
| CLTS (B4-5) - GND1 (1F- 10) | B - W-B | Automatic light control sensor (Signal circuit) | Ignition switch is ON | Below 1 V |
| CLTS (B4-5) - GND1 (1F- <br> 10) | B - W-B | Automatic light control sensor (Signal circuit) | Ignition switch is OFF | 10 to 14 V |
| CLTB (B4-6) - GND1 (1F- 10) | P - W-B | Automatic light control sensor (Power source circuit) | Ignition switch is OFF | 10 to 14 V |
| CLTB (B4-6) - GND1 (1F- <br> 10) | P - W-B | Automatic light control sensor (Power source circuit) | Ignition switch is ON | Below 1 V |
| HF (B4-15) - GND1 (1F- <br> 10) | Y - W-B | Headlight dimmer switch (FLASH signal) | Headlight dimmer switch is OFF | 10 to 14 V |
| $\begin{aligned} & \text { HF (B4-15) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | Y - W-B | Headlight dimmer switch (FLASH signal) | Headlight dimmer switch is FLASH | Below 1 V |
| A (B4-16) - GND1 (1F-10) | BR - W-B | Light control switch <br> (AUTO signal) | Light control switch is OFF | 10 to 14 V |
| A (B4-16) - GND1 (1F-10) | BR - W-B | Light control switch <br> (AUTO signal) | Light control switch is AUTO | Below 1 V |
| $\begin{aligned} & \text { TAIL (B4-17) - GND1 (1F- } \\ & \text { 10) } \end{aligned}$ | O-W-B | Light control switch <br> (TAIL signal) | Light control switch is OFF | 10 to 14 V |
| TAIL (B4-17) - GND1 (1F10) | O-W-B | Light control switch <br> (TAIL signal) | Light control switch is TAIL | Below 1 V |
| FFOG (B4-22) -GND1(1F-10) | P - W-B | Front fog light switch (Front fog light signal) | Fog light switch is OFF | 10 to 14 V |
| FFOG (B4-22) GND1(1F-10) | P - W-B | Front fog light switch (Front fog light signal) | Fog light switch is ON | Below 1 V |
| HEAD (B4-23) - GND1 (1F-10) | V - W-B | Light control switch <br> (HEAD signal) | Light control switch is OFF | Below 1 V |
| HEAD (B4-23) - GND1 (1F-10) | V - W-B | Light control switch <br> (HEAD signal) | Light control switch is HEAD | 10 to 14 V |
| LSWR (B5-5) - GND1 (1F-10) | B - W-B | Door lock position switch (Rear right door circuit) | Rear right door is in unlock position | Below 1 V |
| LSWR (B5-5) - GND1 (1F-10) | B - W-B | Door lock position switch (Rear right door circuit) | Rear right door is in lock position | Pulse generation (*1) |
| $\begin{aligned} & \text { CSPT (B5-14) - GND1 } \\ & (1 \mathrm{~F}-10) \end{aligned}$ | G - W-B | Overhead illumination circuit | Overhead console illumination is OFF | 10 to 14 V |
| $\begin{aligned} & \text { CSPT (B5-14) - GND1 } \\ & (1 \mathrm{~F}-10) \end{aligned}$ | G - W-B | Overhead illumination circuit | Overhead console illumination is ON | Below 1 V |


| Symbols (Terminal No.) | Wiring Color | Terminal Description | Condition | Specified Condition |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \text { FSPT (B5-15) - GND1 } \\ & (1 \mathrm{~F}-10) \end{aligned}$ | LG - W-B | Step light, inside handle illumination circuit | Inside handle illumination and step light are OFF | 10 to 14 V |
| $\begin{aligned} & \text { FSPT (B5-15) - GND1 } \\ & \text { (1F-10) } \end{aligned}$ | LG - W-B | Step light, inside handle illumination circuit | Inside handle illumination and step light are ON | Below 1 V |
| $\begin{aligned} & \text { MPX2 (B5-21) - GND1 } \\ & (1 \mathrm{~F}-10) \end{aligned}$ | GR - W-B | Multiplex communication signal | Ignition switch is OFF | Below 1 V |
| $\begin{aligned} & \text { MPX2 (B5-21) - GND1 } \\ & (1 \mathrm{~F}-10) \end{aligned}$ | GR - W-B | Multiplex communication signal | Ignition switch is ON | Signal waveform |
| PCTY (B5-23) - GND1 (1F-10) | L-W-B | Courtesy switch (Front right door circuit) | Front right door is open | Below 1 V |
| PCTY (B5-23) - GND1 (1F-10) | L-W-B | Courtesy switch (Front right door circuit) | Front right door is closed | 10 to 14 V |
| PCYL (B5-24) - GND1 <br> (1F-10) | SB - W-B | Courtesy light <br> (Front right door circuit) | Front right courtesy light is OFF | 10 to 14 V |
| PCYL (B5-24) - GND1 (1F-10) | SB - W-B | Courtesy light <br> (Front right door circuit) | Front right courtesy light is ON | Below 1 V |
| BCTY (B5-25) - GND1 (1F-10) | P - W-B | Courtesy switch <br> (Back door circuit) | Back door is open | Below 1 V |
| BCTY (B5-25) - GND1 <br> (1F-10) | P - W-B | Courtesy switch <br> (Back door circuit) | Back door is closed | 10 to 14 V |
| $\begin{aligned} & \text { LSWP (B5-27) - GND1 } \\ & (1 \mathrm{~F}-10) \end{aligned}$ | Y - W-B | Door lock position switch (Front light door circuit) | Front right door is in unlock position | Below 1 V |
| $\begin{aligned} & \text { LSWP (B5-27) - GND1 } \\ & (1 \mathrm{~F}-10) \end{aligned}$ | Y - W-B | Door lock position switch (Front light door circuit) | Front right door is in lock position | 10 to 14 V |

*2: w/ Air suspension system
*3: w/o Air suspension system

(a) *1: Oscilloscope wave HINT:

- Gauge set: 5 V/DIV. $5 \mathrm{~ms} /$ DIV
- Condition: Ignition switch ON

2. HEADLIGHT BEAM LEVEL CONTROL ECU

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Symbols (Terminal No.) | Wiring Color | Terminal Description | Condition | Specified Condition |
| GND (H17-1) - Body ground | W-B - Body ground | Body ground | Always | Below 1 V |
| $\begin{aligned} & \text { SPDL (H17-5) - GND } \\ & \text { (H17-1) } \end{aligned}$ | P - W-B | Skid control ECU (Vehicle speed signal) | Drive at about $30 \mathrm{~km} / \mathrm{h}$ (19 mph ) | Pulse generation (*1) |
| $\begin{aligned} & \text { SPDR (H17-6) - GND } \\ & \text { (H17-1) } \end{aligned}$ | O-W-B | Skid control ECU (Vehicle speed signal) | Drive at about $30 \mathrm{~km} / \mathrm{h}$ (19 mph ) | Pulse generation (*1) |


| Symbols (Terminal No.) | Wiring Color | Terminal Description | Condition | Specified Condition |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { HDLP (H17-7) - GND } \\ & \text { (H17-1) } \end{aligned}$ | GR - W-B | Headlight relay (HEAD signal) | Light control switch is OFF | 10 to 14 V |
| $\begin{aligned} & \text { HDLP (H17-7) - GND } \\ & \text { (H17-1) } \end{aligned}$ | GR - W-B | Headlight relay (HEAD signal) | Light control switch is HEAD | Below 1 V |
| RHG (H17-9) - GND (H17- <br> 1) | B - W-B | Headlight beam control actuator RH | Always | Below 1 V |
| RH3 (H17-10) - GND (H17-1) | V - W-B | Headlight beam control actuator RH | Ignition switch is OFF | Below 1 V |
| $\begin{aligned} & \text { RH3 (H17-10) - GND } \\ & \text { (H17-1) } \end{aligned}$ | V - W-B | Headlight beam control actuator RH | Engine running, light control switch in HEAD, vehicle stationary and bounced | Pulse generation (*2) |
| $\begin{aligned} & \text { RH1 (H17-11) - GND } \\ & \text { (H17-1) } \end{aligned}$ | R - W-B | Headlight beam control actuator RH | Ignition switch is OFF | Below 1 V |
| $\begin{aligned} & \text { RH1 (H17-11) - GND } \\ & \text { (H17-1) } \end{aligned}$ | R - W-B | Headlight beam control actuator RH | Engine running, light control switch in HEAD, vehicle stationary and bounced | Pulse generation (*2) |
| $\begin{aligned} & \begin{array}{l} \text { RH4 (H17-12) - GND } \\ \text { (H17-1) } \end{array} \\ & \hline \end{aligned}$ | W - W-B | Headlight beam control actuator RH | Ignition switch is OFF | Below 1 V |
| RH4 (H17-12) - GND (H17-1) | W - W-B | Headlight beam control actuator RH | Engine running, light control switch in HEAD, vehicle stationary and bounced | Pulse generation (*2) |
| $\begin{aligned} & \begin{array}{l} \text { RH2 (H17-13) - GND } \\ \text { (H17-1) } \end{array} \\ & \hline \end{aligned}$ | BR - W-B | Headlight beam control actuator RH | Ignition switch is OFF | Below 1 V |
| $\begin{aligned} & \text { RH2 (H17-13) - GND } \\ & \text { (H17-1) } \end{aligned}$ | BR - W-B | Headlight beam control actuator RH | Engine running, light control switch in HEAD, vehicle stationary and bounced | Pulse generation (*2) |
| $\begin{aligned} & \text { IG (H17-14) - GND (H17- } \\ & \text { 1) } \end{aligned}$ | P - W-B | Ignition <br> (Power source circuit) | Ignition switch OFF | Below 1 V |
| $\begin{aligned} & \text { IG (H17-14) - GND (H17- } \\ & \text { 1) } \end{aligned}$ | P - W-B | Ignition <br> (Power source circuit) | Ignition switch ON | 10 to 14 V |
| $\begin{aligned} & \text { SGR (H17-16) - GND } \\ & \text { (H17-1) } \end{aligned}$ | V - W-B | Height control sensor signal | Always | Below 1 V |
| $\begin{aligned} & \begin{array}{l} \text { SHR (H17-18) - SGR } \\ \text { (H17-16) } \end{array} \end{aligned}$ | W-V | Height control sensor signal | Ignition switch OFF | Below 1 V |
| $\begin{aligned} & \begin{array}{l} \text { SHR (H17-18) - SGR } \\ \text { (H17-16) } \end{array} \end{aligned}$ | W-V | Height control sensor signal | Ignition switch ON, vehicle stationary and bounced | 0.5 to 4.5 V |
| $\begin{aligned} & \begin{array}{l} \text { SBR (H17-20) - SGR } \\ \text { (H17-16) } \end{array} \end{aligned}$ | R - V | Height control sensor signal | Ignition switch OFF | Below 1 V |
| $\begin{aligned} & \begin{array}{l} \text { SBR (H17-20) - SGR } \\ (H 17-16) \end{array} \end{aligned}$ | R-V | Height control sensor signal | Ignition switch ON | 4.5 to 5.5 V |
| $\begin{aligned} & \text { WNG (H17-21) - GND } \\ & \text { (H17-1) } \end{aligned}$ | LG - W-B | Combination meter (Indicator light circuit) | Headlight beam warning light goes off | 10 to 14 V |
| $\begin{aligned} & \text { WNG (H17-21) - GND } \\ & \text { (H17-1) } \end{aligned}$ | LG - W-B | Combination meter (Indicator light circuit) | Headlight beam warning light comes on | Below 1 V |
| $\begin{aligned} & \text { LHG (H17-22) - GND } \\ & \text { (H17-1) } \end{aligned}$ | G - W-B | Headlight beam control actuator LH | Always | Below 1 V |
| $\begin{aligned} & \text { LH3 (H17-23) - GND } \\ & \text { (H17-1) } \end{aligned}$ | Y - W-B | Headlight beam control actuator LH | Ignition switch OFF | Below 1 V |
| $\begin{aligned} & \text { LH3 (H17-23) - GND } \\ & \text { (H17-1) } \end{aligned}$ | Y - W-B | Headlight beam control actuator LH | Engine running, light control switch in HEAD or DRL system ON, vehicle stationary and bounced | Pulse generation (*2) |
| LH1 (H17-24) - GND (H17-1) | O-W-B | Headlight beam control actuator LH | Ignition switch OFF | Below 1 V |


| Symbols (Terminal No.) | Wiring Color | Terminal Description | Condition | Specified Condition |
| :--- | :--- | :--- | :--- | :--- |
| LH1 (H17-24) - GND <br> (H17-1) | O-W-B | Headlight beam control <br> actuator LH | Engine running, light <br> control switch in HEAD or <br> DRL system ON, vehicle <br> stationary and bounced | Pulse generation (*2) |
| LH4 (H17-25) - GND <br> (H17-1) | R-W-B | Headlight beam control <br> actuator LH | Ignition switch OFF | Below 1 V |
| LH4 (H17-25) - GND <br> (H17-1) | R-W-B | Headlight beam control <br> actuator LH | Engine running, light <br> control switch in HEAD or <br> DRL system ON, vehicle <br> stationary and bounced | Pulse generation (*2) |
| LH2 (H17-26) - GND <br> (H17-1) | L-B - W-B | Headlight beam control <br> actuator LH | Ignition switch OFF | Below 1 V |
| LH2 (H17-26) - GND <br> (H17-1) | L-B - W-B | Headlight beam control <br> actuator LH | Engine running, light <br> control switch in HEAD or <br> DRL system ON, vehicle <br> stationary and bounced | Pulse generation (*2) |



1030993


When Motor Operated
(a) *1: Oscilloscope wave

HINT:

- Terminal: SPDL - GND, SPDR - GND
- Gauge set: 5 V/DIV. 2 ms/DIV
- Condition: Drive at about $30 \mathrm{~km} / \mathrm{h}$ ( 19 mph )
(b) *2: Oscilloscope wave HINT:
- Terminal: RH1. RH2. RH3. RH4-GND LH1. LH2.

LH3. LH4-GND

- Gauge set: 5 V/DIV. 10 ms/DIV
- Condition: The DRL system is on with the engine running or the light control switch is in the HEAD position when the vehicle is stationary or being bounced.
If the value is not within the standard range, some defects on the vehicle side are possible. Inspect the fuse, wire harness and connector.

3. AFS ECU

C
B110637E01

| Symbols (Terminal No.) | Wiring Color | Terminal Description | Condition | Specified Condition |
| :---: | :---: | :---: | :---: | :---: |
| E1 (A14-1) - Body ground | W-B - Body ground | Body ground | Always | Below 1 V |
| IG (A14-2) - E1 (A14-1) | P - W-B | Ignition switch (Power source circuit) | Ignition switch OFF | Below 1 V |
| IG (A14-2) - E1 (A14-1) | P - W-B | Ignition switch (Power source circuit) | Ignition switch ON | 10 to 14 V |
| MSW (A14-4) - E1 (A14-1) | LG - W-B | AFS OFF switch | AFS OFF switch is not pressed | 4.5 to 5.5 V |
| MSW (A14-4) - E1 (A14-1) | LG - W-B | AFS OFF switch | AFS OFF switch is pressed | Below 1 V |
| $\begin{aligned} & \text { MPX1 (A14-5) - E1 (A14- } \\ & \text { 1) } \end{aligned}$ | W-W-B | Multiplex communication signal | Ignition switch ON | Signal waveform |
| SS+ (A14-7) - SS- (A14-8) | LG - Y | Steering sensor | Engine idling, slowly turn steering wheel | Pulse generation |
| $\begin{aligned} & \text { SHRL (A14-9) - SGR } \\ & \text { (A14-20) } \end{aligned}$ | GR - V | Height control ECU (Vehicle height signal) | Ignition switch OFF | Below 1 V (*3) |
| $\begin{aligned} & \text { SHRL (A14-9) - SGR } \\ & \text { (A14-20) } \end{aligned}$ | W-V | Height control sensor rear RH <br> (Vehicle height signal) | Ignition switch OFF | Below 1 V |
| $\begin{aligned} & \text { SHRL (A14-9) - SGR } \\ & \text { (A14-20) } \end{aligned}$ | GR - V | Height control ECU (Vehicle height signal) | Ignition switch ON, vehicle stationary and bounced | 0.5 to 4.5 V (*3) |
| $\begin{aligned} & \text { SHRL (A14-9) - SGR } \\ & \text { (A14-20) } \end{aligned}$ | W-V | Height control sensor rear RH <br> (Vehicle height signal) | Ignition switch ON, vehicle stationary and bounced | 0.5 to 4.5 V (*4) |
| $\begin{aligned} & \text { SBR (A14-10) - SGR } \\ & \text { (A14-20) } \end{aligned}$ | R - V | Height control ECU (Vehicle height signal) | Ignition switch OFF | Below 1 V (*3) |
| $\begin{aligned} & \text { SBR (A14-10) - SGR } \\ & \text { (A14-20) } \end{aligned}$ | R - V | Height control sensor rear RH <br> (Vehicle height signal) | Ignition switch OFF | Below 1 V (*4) |
| $\begin{aligned} & \text { SBR (A14-10) - SGR } \\ & \text { (A14-20) } \end{aligned}$ | R - V | Height control ECU (Vehicle height signal) | Ignition switch ON | 4.5 to 5.5 V (*3) |
| $\begin{aligned} & \text { SBR (A14-10) - SGR } \\ & \text { (A14-20) } \end{aligned}$ | R - V | Height control sensor rear RH <br> (Vehicle height signal) | Ignition switch ON | 4.5 to 5.5 V (*4) |
| E1S (A14-11) - Body ground | W-B - Body ground | Body ground | Always | Below 1 V |
| IGS (A14-12) - E1 (A14-1) | P - W-B | Ignition switch (Signal power source) | Ignition switch OFF | Below 1 V |
| IGS (A14-12) - E1 (A14-1) | P - W-B | Ignition switch (Signal power source) | Ignition switch ON | 10 to 14 V |
| WNG (A14-13) - E1 (A14- <br> 1) | B - W-B | Combination meter (Indicator light circuit) | AFS OFF indicator light goes off | 10 to 14 V |
| WNG (A14-13) - E1 (A14- <br> 1) | B - W-B | Combination meter (Indicator light circuit) | AFS OFF indicator light comes on | Below 1 V |
| SGR (A14-20) - E1 (A14- <br> 1) | V-W-B | Height control ECU (Vehicle height signal) | Always | Below 1 V (*3) |
| $\begin{aligned} & \text { SGR (A14-20) - E1 (A14- } \\ & \text { 1) } \end{aligned}$ | V-W-B | Height control sensor rear RH <br> (Vehicle height signal) | Always | Below 1 V (*4) |
| $\begin{aligned} & \text { SHFL (A15-2) - SGR } \\ & \text { (A14-20) } \end{aligned}$ | G - V | Height control ECU (Vehicle height signal) | Ignition switch OFF | Below 1 V (*3) |
| $\begin{aligned} & \text { SHFL (A15-2) - SGR } \\ & \text { (A14-20) } \end{aligned}$ | G - V | Height control ECU (Vehicle height signal) | Ignition switch ON, vehicle stationary and bounced | 0.5 to 4.5 V (*3) |
| $\begin{aligned} & \text { SPDL (A15-6) - E1 (A14- } \\ & \text { 1) } \end{aligned}$ | P - W-B | Skid control ECU (Vehicle speed signal) | Drive at about $30 \mathrm{~km} / \mathrm{h}$ (19 mph) | Pulse generation (*1) |
| SPDR (A15-7) - E1 (A14- <br> 1) | O-W-B | Skid control ECU (Vehicle speed signal) | Drive at about 30 km/h (19 mph) | Pulse generation (*1) |
| $\begin{aligned} & \text { SBLR (A15-9) - SBGR } \\ & \text { (A15-10) } \end{aligned}$ | L-B | Headlight swivel ECU RH | Ignition switch OFF | Below 1 V |


| Symbols (Terminal No.) | Wiring Color | Terminal Description | Condition | Specified Condition |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { SBLR (A15-9) - SBGR } \\ & \text { (A15-10) } \end{aligned}$ | $L-B$ | Headlight swivel ECU RH | Ignition switch ON | Signal waveform |
| $\begin{aligned} & \text { IGSR (A15-12) - E1 (A14- } \\ & \text { 1) } \end{aligned}$ | R - W-B | Headlight swivel ECU RH | Ignition switch OFF | Below 1 V |
| $\begin{aligned} & \text { IGSR (A15-12) - E1 (A14- } \\ & \text { 1) } \end{aligned}$ | R - W-B | Headlight swivel ECU RH | Ignition switch ON | 10 to 14 V |
| LR1+ (A15-13) - E1 (A14- 1) | B - W-B | Headlight leveling actuator RH | Ignition switch OFF | Below 1 V |
| LR1+ (A15-13) - E1 (A141) | B - W-B | Headlight leveling actuator RH | Engine running, light control switch in HEAD, vehicle stationary and bounced | Pulse generation (*2) |
| LR1- (A15-14) - E1 (A14- 1) | LG - W-B | Headlight leveling actuator RH | Ignition switch OFF | Below 1 V |
| LR1- (A15-14) - E1 (A141) | LG - W-B | Headlight leveling actuator RH | Engine running, light control switch in HEAD, vehicle stationary and bounced | Pulse generation (*2) |
| LR2+ (A15-15) - E1 (A14- <br> 1) | V - W-B | Headlight leveling actuator RH | Ignition switch OFF | Below 1 V |
| LR2+ (A15-15) - E1 (A141) | V - W-B | Headlight leveling actuator RH | Engine running, light control switch in HEAD, vehicle stationary and bounced | Pulse generation (*2) |
| LR2- (A15-16) - E1 (A14- <br> 1) | W - W-B | Headlight leveling actuator RH | Ignition switch OFF | Below 1 V |
| LR2- (A15-16) - E1 (A141) | W-W-B | Headlight leveling actuator RH | Engine running, light control switch in HEAD, vehicle stationary and bounced | Pulse generation (*2) |
| $\begin{aligned} & \text { SBLL (A15-25) - SBGL } \\ & \text { (A15-26) } \end{aligned}$ | P - BR | Headlight swivel ECU LH | Ignition switch OFF | Below 1 V |
| $\begin{aligned} & \text { SBLL (A15-25) - SBGL } \\ & \text { (A15-26) } \end{aligned}$ | P-BR | Headlight swivel ECU LH | Ignition switch ON | Signal waveform |
| $\begin{aligned} & \text { IGSL (A15-28) - E1 (A14- } \\ & \text { 1) } \end{aligned}$ | Y - W-B | Headlight swivel ECU LH | Ignition switch OFF | Below 1 V |
| $\begin{aligned} & \text { IGSL (A15-28) - E1 (A14- } \\ & \text { 1) } \end{aligned}$ | Y - W-B | Headlight swivel ECU LH | Ignition switch ON | 10 to 14 V |
| $\begin{aligned} & \text { LL1+ (A15-29) - E1 (A14- } \\ & \text { 1) } \end{aligned}$ | W-W-B | Headlight leveling actuator LH | Ignition switch OFF | Below 1 V |
| $\begin{aligned} & \text { LL1+ (A15-29) - E1 (A14- } \\ & \text { 1) } \end{aligned}$ | W-W-B | Headlight leveling actuator LH | Engine running, light control switch in HEAD, vehicle stationary and bounced | Pulse generation (*2) |
| LL1- (A15-30) - E1 (A14-1) | $\mathrm{O}-\mathrm{W}-\mathrm{B}$ | Headlight leveling actuator LH | Ignition switch OFF | Below 1 V |
| LL1- (A15-30) - E1 (A14-1) | O-W-B | Headlight leveling actuator LH | Engine running, light control switch in HEAD, vehicle stationary and bounced | Pulse generation (*2) |
| LL2+ (A15-31) - E1 (A14- 1) | GR - W-B | Headlight leveling actuator LH | Ignition switch OFF | Below 1 V |
| LL2+ (A15-31) - E1 (A14- <br> 1) | GR - W-B | Headlight leveling actuator LH | Engine running, light control switch in HEAD, vehicle stationary and bounced | Pulse generation (*2) |
| LL2- (A15-32) - E1 (A14-1) | $B-W-B$ | Headlight leveling actuator LH | Ignition switch OFF | Below 1 V |


| Symbols (Terminal No.) | Wiring Color | Terminal Description | Condition | Specified Condition |
| :--- | :--- | :--- | :--- | :--- |
| LL2- (A15-32) - E1 (A14-1) | B-W-B | Headlight leveling actuator <br> LH | Engine running, light <br> control switch in HEAD, <br> vehicle stationary and <br> bounced | Pulse generation (*2) |
| ESR (A15-11) - P GND <br> (H10-4) | W-B - W-B | Headlight swivel ECU RH <br> earth circuit | Always | Below 1 V (*4) |
| ESL (A15-11) - P GND <br> (H6-4) | W-B - W-B | Headlight swivel ECU LH <br> earth circuit | Always | Below 1 V (*4) |


(a) *1: Oscilloscope wave HINT:

- Terminal: SPDL - GND, SPDR - GND
- Gauge set: 5 V/DIV. 2 ms/DIV
- Condition: Drive at about $30 \mathrm{~km} / \mathrm{h}$ ( 19 mph )
(b) *2: Oscilloscope wave HINT:
- Terminal: LR1+. LR1-. LR2+. LH2-- GND LL1+. LL1-. LL2+. LL2- - GND
- Gauge set: 5 V/DIV. 10 ms / DIV
- Condition: The DRL system is on with the engine running or the light control switch is in the HEAD position when the vehicle is stationary or being bounced.
If the value is not within the standard range, some defects on the vehicle side are possible. Inspect the fuse, wire harness and connector.


## DTC CHECK / CLEAR

## 1. DTC CHECK

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Read DTCs by following the prompts on the tester screen.
HINT:
Refer to the intelligent tester operator's manual for further details.
2. DTC CLEAR
(a) DTCs can be erased by operating the intelligent tester.
HINT:
Refer to the intelligent tester operator's manual for further details.

