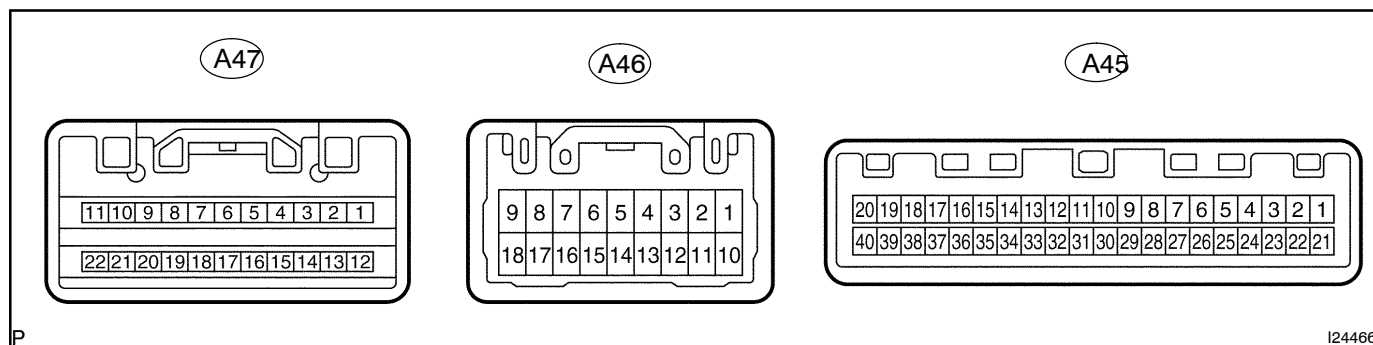


# TERMINALS OF ECU

## FRONT A/C AMPLIFIER



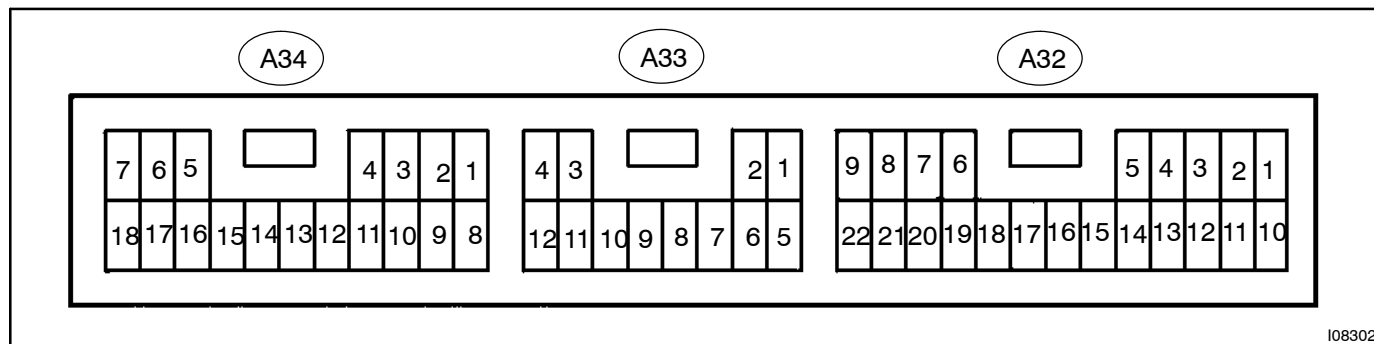
| Symbols (Terminals No.)          | Wiring Color  | Condition                                      | STD Voltage (V) |
|----------------------------------|---------------|------------------------------------------------|-----------------|
| AIF ↔ GND<br>(A45-1 ↔ A47-12)    | G-W ↔ W-B     | IG ON. Air inlet control switch "FRESH"        | Battery voltage |
|                                  |               | IG ON. Air inlet control switch "RECIRC"       | Below 1.0 V     |
| AIR ↔ GND<br>(A45-2 ↔ A47-12)    | LG-B ↔ W-B    | IG ON. Air inlet control switch "RECIRC"       | Battery voltage |
|                                  |               | IG ON. Air inlet control switch "FRESH"        | Below 1.0 V     |
| MRRHR ↔ GND<br>(A45-6 ↔ A47-12)  | R ↔ W-B       | IG ON. Mirror heater switch "OFF"              | Battery voltage |
|                                  |               | IG ON. Mirror heater switch "ON"               | Below 1.0 V     |
| A/CS ↔ GND<br>(A45-7 ↔ A47-12)   | L-B ↔ W-B     | Compressor does not operate                    | Below 1.0 V     |
|                                  |               | Compressor operate                             | Battery voltage |
| FRHR ↔ GND<br>(A45-9 ↔ A47-12)   | Y-R ↔ W-B     | IG ON. Front A/C blower motor does not operate | Battery voltage |
|                                  |               | IG ON. Front A/C blower motor operate          | Below 1.0 V     |
| RDFGR ↔ GND<br>(A45-10 ↔ A47-12) | LG ↔ W-B      | IG ON. Rear defogger switch "OFF"              | Battery voltage |
|                                  |               | IG ON. Rear defogger switch "ON"               | Below 1.0 V     |
| TEO ↔ GND<br>(A45-11 ↔ A47-12)   | P-B ↔ W-B     | Compressor does not operate                    | Battery voltage |
|                                  |               | Compressor operate                             | Below 1.0 V     |
| DEF ↔ GND<br>(A45-12 ↔ A47-12)   | B-W ↔ W-B     | IG ON. Mode control switch "Except DEF"        | Battery voltage |
|                                  |               | IG ON. Mode control switch "DEF"               | Below 0.7 V     |
| F/D ↔ GND<br>(A45-13 ↔ A47-12)   | P-L ↔ W-B     | IG ON. Mode control switch "Except FOOT/DEF"   | Battery voltage |
|                                  |               | IG ON. Mode control switch "FOOT/DEF"          | Below 0.7 V     |
| FOOT ↔ GND<br>(A45-14 ↔ A47-12)  | W ↔ W-B       | IG ON. Mode control switch "Except FOOT/DEF"   | Battery voltage |
|                                  |               | IG ON. Mode control switch "FOOT/DEF"          | Below 0.7 V     |
| B/L ↔ GND<br>(A45-15 ↔ A47-12)   | BR-W ↔ W-B    | IG ON. Mode control switch "Except BI-LEVEL"   | Battery voltage |
|                                  |               | IG ON. Mode control switch "BI-LEVEL"          | Below 0.7 V     |
| FACE ↔ GND<br>(A45-16 ↔ A47-12)  | GR ↔ W-B      | IG ON. Mode control switch "Except FACE"       | Battery voltage |
|                                  |               | IG ON. Mode control switch "FACE"              | Below 0.7 V     |
| FRAMH ↔ GND<br>(A45-21 ↔ A47-12) | P-B ↔ W-B     | IG ON. Temperature control dial "MAX. WARM"    | Battery voltage |
|                                  |               | IG ON. Temperature control dial "MAX. COOL"    | Below 1.0 V     |
| FRAMC ↔ GND<br>(A45-22 ↔ A47-12) | P-G ↔ W-B     | IG ON. Temperature control dial "MAX. COOL"    | Battery voltage |
|                                  |               | IG ON. Temperature control dial "MAX. WARM"    | Below 1.0 V     |
| FRBLW ↔ GND<br>(A45-23 ↔ A47-12) | W-R ↔ W-B     | IG ON. Front A/C blower motor does not operate | Battery voltage |
|                                  |               | IG ON. Front A/C blower motor operate          | Below 1.0 V     |
| HZD ↔ GND<br>(A45-24 ↔ A47-12)   | W (*1) ↔ W-B  | Hazard switch "ON"                             | Continuity      |
| DEFC ↔ GND<br>(A45-27 ↔ A47-12)  | R-L(*1) ↔ W-B | Diff. lock switch "ON"                         | Continuity      |

## DIAGNOSTICS – AIR CONDITIONING SYSTEM

|                                              |                   |                                                                                                                            |                                  |
|----------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| ANTU ↔ GND<br>(A45-28 ↔ A47-12)              | L-Y (*1) ↔ W-B    | Push in antenna up switch                                                                                                  | Continuity                       |
| ANTD ↔ GND<br>(A45-29 ↔ A47-12)              | L-W (*1) ↔ W-B    | Push in antenna down switch                                                                                                | Continuity                       |
| RRMGV ↔ GND<br>(A45-40 ↔ A47-12)             | LG-R ↔ W-B        | IG ON. Rear cooler switch "OFF"                                                                                            | Battery voltage                  |
|                                              |                   | IG ON. Rear cooler switch "ON"                                                                                             | Below 1.0 V                      |
| FRTP ↔ FRSG<br>(A46-5 ↔ A46-18)              | B-Y ↔ Y-G         | IG ON. Temperature control dial "MAX. COOL"                                                                                | Approx. 4.0 V                    |
|                                              |                   | IG ON. Temperature control dial "MAX. WARM"                                                                                | Approx. 1.0 V                    |
| TAM ↔ FRSG<br>(A46-7 ↔ A46-18)               | L-Y ↔ Y-G         | IG ON. Ambient temperature at 25°C (77°F)                                                                                  | 1.35 – 1.75 V                    |
| TS ↔ FRSG<br>(A46-8 ↔ A46-18)                | B-Y ↔ Y-G         | IG ON. Sensor subjected electric light                                                                                     | 0.8 – 4.3 V                      |
|                                              |                   | IG ON. Sensor covered by a cloth                                                                                           | Below 0.8 V                      |
| FRS5 ↔ FRSG<br>(A46-9 ↔ A46-18)              | G-R ↔ Y-G         | Trun ignition switch "ON"                                                                                                  | 5.0 V                            |
|                                              |                   | Trun ignition switch "OFF"                                                                                                 | No voltage                       |
| TPI ↔ FRSG<br>(A46-14 ↔ A46-18)              | L-R ↔ Y-G         | IG ON. Air inlet control switch "FRESH"                                                                                    | Approx. 1.0 V                    |
|                                              |                   | IG ON. Air inlet control switch "RECIRC"                                                                                   | Approx. 4.0 V                    |
| FRTE ↔ FRSG<br>(A46-16 ↔ A46-18)             | GR-B ↔ Y-G        | IG ON. Evaporator temperature at 15°C (59°F)                                                                               | 1.4 – 1.8 V                      |
| FRTR ↔ FRSG<br>(A46-17 ↔ A46-18)             | B ↔ Y-G           | IG ON. Cabin temperature at 25°C (77°F)                                                                                    | 1.8 – 2.2 V                      |
| FRSG ↔ Body ground<br>(A46-18 ↔ Body ground) | Y-G ↔ Body ground | Always                                                                                                                     | Continuity                       |
| ALED ↔ GND<br>(A47-4 ↔ A47-12)               | G-B ↔ W-B         | Compressor operate                                                                                                         | Below 1.0 V                      |
|                                              |                   | Compressor does not operate                                                                                                | No voltage                       |
| TW ↔ GND<br>(A47-5 ↔ A47-12)                 | Y-B ↔ W-B         | IG ON.                                                                                                                     | Pulse generation                 |
| SPD ↔ GND<br>(A47-6 ↔ A47-12)                | V ↔ W-B           | Turn propeller shaft slowly                                                                                                | Pulse generation                 |
| PSW ↔ GND<br>(A47-8 ↔ A47-12)                | L-W ↔ W-B         | A/C refrigerant pressure: less than 0.19 MPa (2.0 kgf/cm <sup>2</sup> )<br>or more than 3.14 MPa (32 Kgf/cm <sup>2</sup> ) | From 10 – 14 V<br>to below 1.0 V |
| +B ↔ GND<br>(A47-11 ↔ A47-12)                | L-W ↔ W-B         | Always                                                                                                                     | Battery voltage                  |
| GND ↔ Body ground<br>(A47-12 ↔ Body ground)  | W-B ↔ Body ground | Always                                                                                                                     | Continuity                       |
| VER5 ↔ GND<br>(A47-14 ↔ A47-12)              | W-B ↔ W-B         | Always                                                                                                                     | Continuity                       |
| VER4 ↔ GND<br>(A47-15 ↔ A47-12)              | W-B ↔ W-B         | Always                                                                                                                     | Continuity                       |
| VER2 ↔ GND<br>(A47-17 ↔ A47-12)              | W-B ↔ W-B         | Always                                                                                                                     | Continuity                       |
| VER1 ↔ Body ground<br>(A47-18 ↔ Body ground) | W-B ↔ Body ground | Always                                                                                                                     | Continuity                       |
| IG ↔ GND<br>(A47-22 ↔ A47-12)                | R-L ↔ W-B         | IG ON. Light control switch "ON"                                                                                           | Battery voltage                  |
|                                              |                   | IG ON. Light control switch "OFF"                                                                                          | No voltage                       |

\*1: w/o Navigation System

## REAR A/C AMPLIFIER



I08302

| Symbols (Terminals No.)          | Wiring Color | Condition                                            | STD Voltage (V)                                 |
|----------------------------------|--------------|------------------------------------------------------|-------------------------------------------------|
| +B ↔ GND<br>(A32-1 ↔ A32-22)     | L-W ↔ W-B    | Always                                               | Battery voltage                                 |
| IG1 ↔ GND<br>(A32-2 ↔ A32-22)    | B-W ↔ W-B    | IG ON.                                               | Battery voltage                                 |
| VMRC ↔ GND<br>(A32-3 ↔ A32-22)   | W-L ↔ W-B    | Rr FACE mode. Rr blower switch: Lo → ME → HI         | 7.2 → 4.2 → 0.5 V                               |
| BLWRC ↔ GND<br>(A32-4 ↔ A32-22)  | R ↔ W-B      | Rr FACE mode. Fr blower switch: OFF → Lo             | Below 1.0 V<br>→ 1.5 – 3.0 V                    |
| S51 ↔ SG1<br>(A32-5 ↔ A32-9)     | R-Y ↔ Y-G    | IG ON.                                               | 4.5 – 5.5 V                                     |
| TPR ↔ SG1<br>(A32-6 ↔ A32-9)     | GR-R ↔ Y-G   | Rr temp. control switch: Max. COOL → Max. HOT        | 4.0 – 1.0 V                                     |
| TER ↔ SG1<br>(A32-7 ↔ A32-9)     | Y ↔ Y-G      | Rr evaporator temp.: 0 °C (32 °F)                    | 2.0 – 2.4 V                                     |
|                                  |              | Rr evaporator temp.: 15 °C (59 °F)                   | 2.0 – 2.4 V                                     |
| TINR ↔ SG1<br>(A32-8 ↔ A32-9)    | GR-G ↔ Y-G   | Rr inlet air temp.: 25 °C (77 °F)                    | 1.5 – 1.9 V                                     |
|                                  |              | Rr inlet air temp.: 40 °C (104 °F)                   | 1.2 – 1.6 V                                     |
| SG1 ↔ GND<br>(A32-9 ↔ A32-22)    | Y-G ↔ W-B    | Always                                               | Continuity                                      |
| MCR ↔ GND<br>(A32-11 ↔ A32-22)   | W-L ↔ W-B    | Rr temp. control switch: Max. HOT → Max. COOL        | Below 1.0 V →<br>Battery voltage for 16<br>sec. |
| MHR ↔ GND<br>(A32-12 ↔ A32-22)   | Y ↔ W-B      | Rr temp. control switch: Max. COOL → Max. HOT        | Below 1.0 V →<br>Battery voltage for 16<br>sec. |
| HRRC ↔ GND<br>(A32-13 ↔ A32-22)  | R-Y ↔ W-B    | Rr FACE mode. Rr blower control switch: OFF → LO     | Battery voltage<br>→ Below 1.0 V                |
| HRRH ↔ GND<br>(A32-14 ↔ A32-22)  | L-B ↔ W-B    | Rr FOOT mode. Rr blower control switch: OFF → LO     | Battery voltage<br>→ Below 1.0 V                |
| VMRH ↔ GND<br>(A32-15 ↔ A32-22)  | R-W ↔ W-B    | Rr FOOT mode. Rr blower control switch: LO → ME → HI | 7.2 → 4.2 → 0.5 V                               |
| BLWRH ↔ GND<br>(A32-16 ↔ A32-22) | R-G ↔ W-B    | Rr FOOT mode. Rr blower control switch: OFF → LO     | Below 1.0 V →<br>1.5 – 3.0 V                    |
| CID ↔ GND<br>(A32-18 ↔ A32-22)   | B ↔ W-B      | IG ON.                                               | Pulse generation                                |
| CSD ↔ GND<br>(A32-19 ↔ A32-22)   | R ↔ W-B      | IG ON.                                               | Pulse generation                                |
| CLK ↔ GND<br>(A32-20 ↔ A32-22)   | W ↔ W-B      | IG ON.                                               | Pulse generation                                |

## DIAGNOSTICS – AIR CONDITIONING SYSTEM

|                                             |                   |                                                                   |                               |
|---------------------------------------------|-------------------|-------------------------------------------------------------------|-------------------------------|
| GND ↔ Body ground<br>(A32-22 ↔ Body ground) | W-B ↔ Body ground | Always                                                            | Continuity                    |
| IG2 ↔ RG<br>(A33-1 ↔ A34-8)                 | L-R ↔ G-W         | IG ON.                                                            | 10 – 14 V                     |
| S52 ↔ SG2<br>(A33-4 ↔ A33-12)               | Y-R ↔ G-Y         | IG ON.                                                            | 4.5 – 5.5 V                   |
| ILL+2 ↔ RG<br>(A33-5 ↔ A34-8)               | G ↔ G-W           | IG ON. Light switch OFF → TAIL                                    | 0 → Below 1.0 V               |
| TRR ↔ SG2<br>(A33-7 ↔ A33-12)               | B ↔ G-Y           | IG ON. Rr room temp.: 25 °C (77 °F)                               | 1.8 – 2.2 V                   |
|                                             |                   | IG ON. Rr room temp.: 40 °C (104 °F)                              | 1.2 – 1.6 V                   |
| TSETR ↔ SG2<br>(A33-8 ↔ A33-12)             | L-O ↔ G-Y         | Rr temp. control switch: Max. COOL → Max. HOT                     | 5.0 → 0 V                     |
| SG2 ↔ SG1<br>(A33-12 ↔ A32-9)               | G-Y ↔ Y-G         | Always                                                            | Continuity                    |
| AUTO-S ↔ RG<br>(A34-1 ↔ A34-8)              | W-G ↔ G-W         | Rr A/C control panel AUTO switch: OFF → ON (during pushed switch) | Battery voltage → Below 1.0 V |
| OFF-S ↔ RG<br>(A34-2 ↔ A34-8)               | Y-B ↔ G-W         | Rr A/C control panel OFF switch: OFF → ON (during pushed switch)  | Battery voltage → Below 1.0 V |
| LO-S ↔ RG<br>(A34-3 ↔ A34-8)                | GR ↔ G-W          | Rr A/C control panel LO switch: OFF → ON (during pushed switch)   | Battery voltage → Below 1.0 V |
| ME-S ↔ RG<br>(A34-4 ↔ A34-8)                | L-Y ↔ G-W         | Rr A/C control panel ME switch: OFF → ON (during pushed switch)   | Battery voltage → Below 1.0 V |
| AUTO-I ↔ GND<br>(A34-5 ↔ A32-22)            | L-R ↔ W-B         | Rr A/C control panel switch: except AUTO → AUTO                   | Battery voltage → Below 1.0 V |
| LO-I ↔ GND<br>(A34-6 ↔ A32-22)              | L-W ↔ W-B         | Rr A/C control panel switch: except LO → LO                       | Battery voltage → Below 1.0 V |
| ME-I ↔ GND<br>(A34-7 ↔ A32-22)              | L ↔ W-B           | Rr A/C control panel switch: except ME → ME                       | Battery voltage → Below 1.0 V |
| RG ↔ GND<br>(A34-8 ↔ A32-22)                | G-W ↔ W-B         | Always                                                            | Continuity                    |
| HI-S ↔ GND<br>(A34-9 ↔ A32-22)              | GR-R ↔ W-B        | Rr A/C control panel HI switch: OFF → (ON during pushed switch)   | Battery voltage → Below 1.0 V |
| FACE-S ↔ GND<br>(A34-10 ↔ A32-22)           | R-L ↔ W-B         | Rr A/C control panel FACE switch: OFF → ON (during pushed switch) | Battery voltage → Below 1.0 V |
| B/L-S ↔ GND<br>(A34-11 ↔ A32-22)            | R-Y ↔ W-B         | Rr A/C control panel B/L switch: OFF → ON (during pushed switch)  | Battery voltage → Below 1.0 V |
| FOOT-S ↔ GND<br>(A34-12 ↔ A32-22)           | R-G ↔ W-B         | Rr A/C control panel FOOT switch: OFF → ON (during pushed switch) | Battery voltage → Below 1.0 V |
| FACE-I ↔ GND<br>(A34-15 ↔ A32-22)           | G ↔ W-B           | Rr A/C control panel switch: except FACE → FACE                   | Battery voltage → Below 1.0 V |
| B/L-I ↔ GND<br>(A34-16 ↔ A32-22)            | W-G ↔ W-B         | Rr A/C control panel switch: except B/L → B/L                     | Battery voltage → Below 1.0 V |
| FOOT-I ↔ GND<br>(A34-17 ↔ A32-22)           | W-R ↔ W-B         | Rr A/C control panel switch: except FOOT → FOOT                   | Battery voltage → Below 1.0 V |
| HI-I ↔ GND<br>(A34-18 ↔ A32-22)             | L ↔ W-B           | Rr A/C control panel switch: except HI → HI                       | Battery voltage → Below 1.0 V |