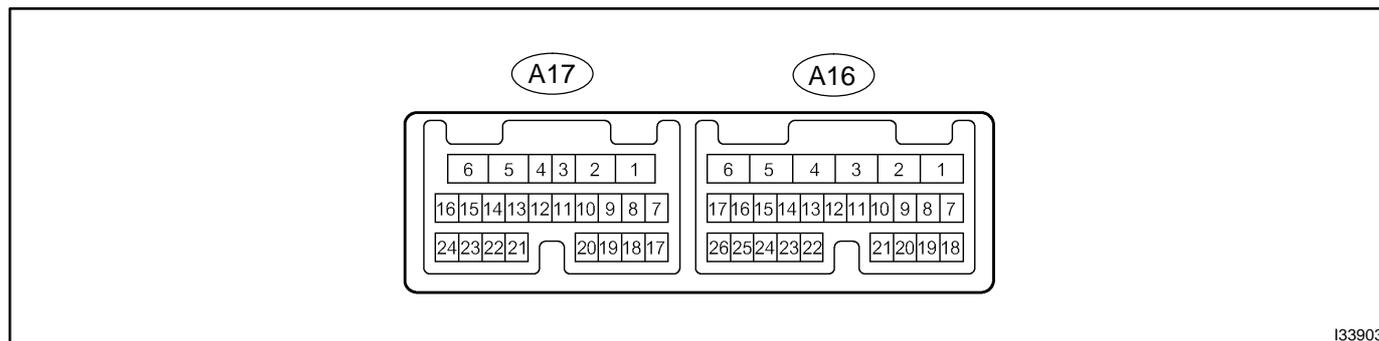


TERMINALS OF ECU

Air conditioning amplifier:



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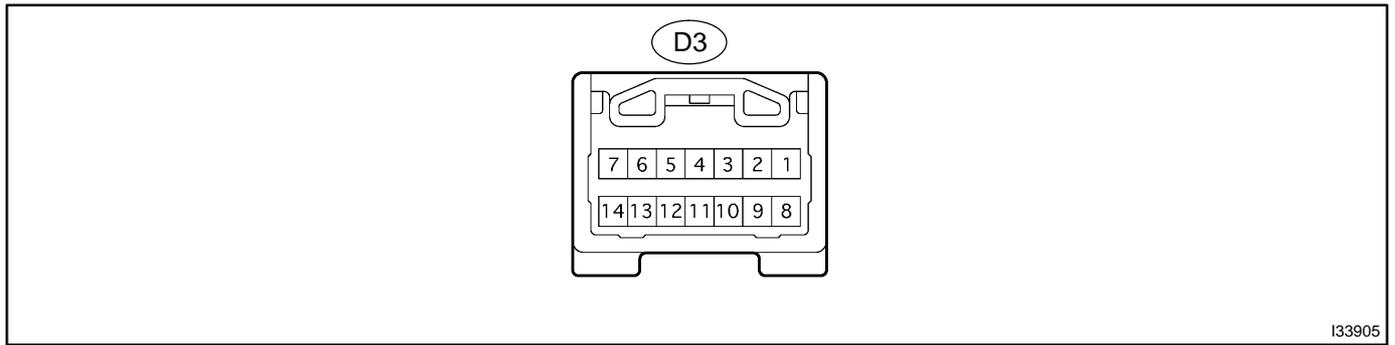
| Symbols (Terminals No.) | Wiring Color | Condition | STD Voltage (V) |
|--|-------------------|---|--|
| IG ⇔ GND (A16-1 ⇔ A16-5) | Y-R ⇔ W-B | Ignition switch: ON | 10 - 14 V |
| +B ⇔ GND (A16-2 ⇔ A16-5) | W-R ⇔ W-B | Always | 10 - 14 V |
| BLW ⇔ GND (A16-3 ⇔ A16-5) | LG-B ⇔ W-B | Ignition switch: ON Blower motor: Operating | Pulse generation (*3) |
| LIN1 (A16-4) | L-B | Heater control panel communication circuit | - |
| GND ⇔ Body ground (A16-5 ⇔ Body ground) | W-B ⇔ Body ground | Always | Continuity |
| TWI ⇔ GND (A16-7 ⇔ A16-5) | L-B ⇔ W-B | Ignition switch: ON | Pulse generation (*4) |
| SPD ⇔ GND (A16-8 ⇔ A16-5) | V-R ⇔ W-B | Ignition switch: ON Turn propeller shaft slowly | 0 ⇔ 4.5 - 5.5 V (Voltage is generated intermittently) |
| TSDR ⇔ S5 (A16-12 ⇔ A17-1) (*1) | R ⇔ P (*1) | Ignition switch: ON Solar sensor subject to electric light | 4.0 - 5.5 V |
| | | Ignition switch: ON Solar sensor covered by a cloth | Below 1.0 V |
| TS ⇔ S5 (A16-12 ⇔ A17-1) (*2) | V-G ⇔ P (*2) | Ignition switch: ON Solar sensor subject to electric light | 4.0 - 5.5 V |
| | | Ignition switch: ON Solar sensor covered by a cloth | Below 1.0 V |
| TR ⇔ SG (A16-15 ⇔ A16-6) | V-Y ⇔ Y-G | Ignition switch: ON Room temp.: 25 °C (77 °F) | 1.35 - 1.75 V |
| | | Ignition switch: ON Room temp.: 40 °C (104 °F) | 0.85 - 1.25 V |
| TPI ⇔ SG (A16-16 ⇔ A16-6) | P-B ⇔ Y-G | Ignition switch: ON Set air intake: RECIRCULATION | 3.5 - 4.5 V |
| | | Ignition switch: ON Set air intake: FRESH | 0.5 - 1.8 V |
| TPO ⇔ SG (A16-17 ⇔ A16-6) | LG-R ⇔ Y-G | Ignition switch: ON Set air flow: FACE | 3.5 - 4.5 V |
| | | Ignition switch: ON Set air flow: DEF | 0.5 - 1.8 V |
| ACLD ⇔ GND (A16-18 ⇔ A16-5) | B-R ⇔ W-B | Start engine Blower speed: LO Magnetic clutch: Engaged | 10 - 14 V |
| | | Start engine Blower speed: LO Magnetic clutch: Not engaged | Below 1.0 V |
| HR ⇔ GND (A16-21 ⇔ A16-5) | L ⇔ W-B | Ignition switch: ON Blower switch: ON | Below 1.0 V |
| | | Ignition switch: ON Blower switch: OFF | 10 - 14 V |
| TAM ⇔ SG (A16-22 ⇔ A16-6) | GR ⇔ Y-G | Ignition switch: ON Ambient temp.: 25 °C (77 °F) | 1.35 - 1.75 V |
| | | Ignition switch: ON Ambient temp.: 40 °C (104 °F) | 0.85 - 1.25 V |
| TPPA ⇔ SG (A16-23 ⇔ A16-6) (*1) | L-W ⇔ Y-G | Ignition switch: ON Set passenger side temp.: Max COLD | 3.5 - 4.5 V |
| | | Ignition switch: ON Set passenger side temp.: Max HOT | 0.5 - 1.5 V |
| TE ⇔ SG (A16-24 ⇔ A16-6) | G ⇔ Y-G | Ignition switch: ON Evaporator temp.: 0 °C (32 °F) | 2.0 - 2.4 V |
| | | Ignition switch: ON Evaporator temp.: 15 °C (59 °F) | 1.4 - 1.8 V |
| TPDR ⇔ SG (A16-25 ⇔ A16-6) (*1) | L-O ⇔ Y-G | Ignition switch: ON Set (driver side *1) temp.: Max COLD | 3.5 - 4.5 V |
| | | Ignition switch: ON Set (driver side *1) temp.: Max HOT | 0.5 - 1.5 V |

| Symbols (Terminals No.) | Wiring Color | Condition | STD Voltage (V) |
|--------------------------------------|--------------|--|-----------------|
| TP ⇔ SG (A16-25 ⇔ A16-6) (*2) | L-O ⇔ Y-G | Ignition switch: ON Set (driver side *1) temp.: Max COLD | 3.5 - 4.5 V |
| | | Ignition switch: ON Set (driver side *1) temp.: Max HOT | 0.5 - 1.5 V |
| TSPA ⇔ S5 (A16-26 ⇔ A17-1) (*1) | B-O ⇔ P | Ignition switch: ON Solar sensor subject to electric light | 4.0 - 5.5 V |
| | | Ignition switch: ON Solar sensor covered by a cloth | Below 1.0 V |
| S5 ⇔ SG (A17-1 ⇔ A16-6) | P ⇔ Y-G | Ignition switch: ON | 4.5 - 5.5 V |
| AOF ⇔ GND (A17-3 ⇔ A16-5) | LG-R ⇔ W-B | Ignition switch: ON Set air flow: FACE | 10 - 14 V |
| | | Ignition switch: ON Set air flow: Except FACE | Below 1.0 V |
| AOD ⇔ GND (A17-4 ⇔ A16-5) | LG ⇔ W-B | Ignition switch: ON Set air flow: DEF | 10 - 14 V |
| | | Ignition switch: ON Set air flow: Except DEF | Below 1.0 V |
| AIR ⇔ GND (A17-5 ⇔ A16-5) | P-L ⇔ W-B | Ignition switch: ON Set air intake: RECIRCULATION | 10 - 14 V |
| | | Ignition switch: ON Set air intake: FRESH | Below 1.0 V |
| THE ⇔ GND (A17-7 ⇔ A16-5) | GR-G ⇔ W-B | Start engine Blower speed: LO Magnetic clutch: Engaged | 10 - 14 V |
| | | Start engine Blower speed: LO Magnetic clutch: Not engaged | Below 1.0 V |
| PSW ⇔ GND (A17-9, ⇔ A16-5) | LG-R ⇔ W-B | Start engine Operate A/C system Refrigerant pressure: Abnormal pressure (More than 3,140 kPa and less than 196 kPa) | Below 1.0 V |
| | | Start engine Operate A/C system Refrigerant pressure: Normal pressure (Less than 3,140 kPa and less than 196 kPa) | 10 - 14 V |
| AMHDR ⇔ GND (A17-14 ⇔ A16-5) (*1) | V-W ⇔ W-B | Ignition switch: ON Set (driver side *1) temp.: Max. HOT | 10 - 14 V |
| | | Ignition switch: ON Set (driver side *1) temp.: Max. COLD | Below 1.0 V |
| AMH ⇔ GND (A17-14 ⇔ A16-5) (*2) | V-W ⇔ W-B | Ignition switch: ON Set (driver side *1) temp.: Max. HOT | 10 - 14 V |
| | | Ignition switch: ON Set (driver side *1) temp.: Max. COLD | Below 1.0 V |
| AMHPA ⇔ GND (A17-16 ⇔ A16-5) (*1) | L-R ⇔ W-B | Ignition switch: ON Set passenger temp.: Max. HOT | 10 - 14 V |
| | | Ignition switch: ON Set passenger side temp.: Max. COLD | Below 1.0 V |
| ACS ⇔ GND (A17-17 ⇔ A16-5) | BR-B ⇔ W-B | Ignition switch: ON A/C switch: ON | 10 - 14 V |
| | | Ignition switch: ON A/C switch: OFF | Blow 1.0 V |
| DMOT (A17-19) | BR-B | Multiplex communication circuit | - |
| DMIN (A17-20) | W-L | Multiplex communication circuit | - |
| AMCDR ⇔ GND (A17-23 ⇔ A16-5) (*1) | V-R ⇔ W-B | Ignition switch: ON Set (driver side *1) temp.: Max. COLD | 10 - 14 V |
| | | Ignition switch: ON Set (driver side *1) temp.: Max. HOT | Below 1.0 V |
| AMC ⇔ GND (A17-23 ⇔ A16-5) (*2) | V-R ⇔ W-B | Ignition switch: ON Set (driver side *1) temp.: Max. COLD | 10 - 14 V |
| | | Ignition switch: ON Set (driver side *1) temp.: Max. HOT | Below 1.0 V |
| AMCPA ⇔ GND (A17-24 ⇔ A16-5) (*1) | L-Y ⇔ W-B | Ignition switch: ON Set passenger temp.: Max. COLD | 10 - 14 V |
| | | Ignition switch: ON Set passenger side temp.: Max. HOT | Below 1.0 V |

(*1): Limited grade

(*2): SR-5 grade

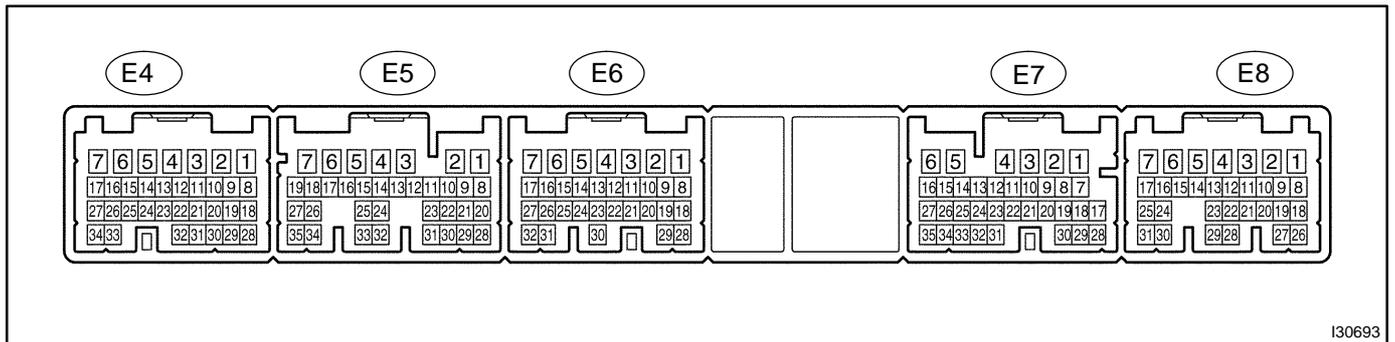
Air conditioning contol assy:



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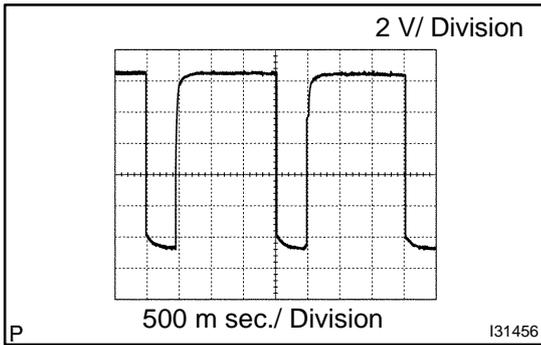
| Symbols (Terminals No.) | Wiring Color | Condition | STD Voltage (V) |
|---|-------------------|-------------------------------------|-----------------|
| B ↔ GND (D3-1 ↔ D3-7) | R ↔ W-B | Always | 10 - 14 V |
| IG+ ↔ GND (D3 -2 ↔ D3-7) | Y-R ↔ W-B | Ignition switch: ON | 10 - 14 V |
| | | Ignition switch: Except ON | Below 1.0 V |
| ACC ↔ GND (D3-8 ↔ D3-7) | GR ↔ W-B | Ignition swtich: ACC | 10 - 14 V |
| | | Ignition switch: Except ACC | Below 1.0 V |
| GND ↔ Body ground (D3-7 ↔ Body ground) | W-B ↔ Body ground | Always | Continuity |
| LIN-B (D3-14) | L-B | A/C amplifier communication circuit | - |

ECM:

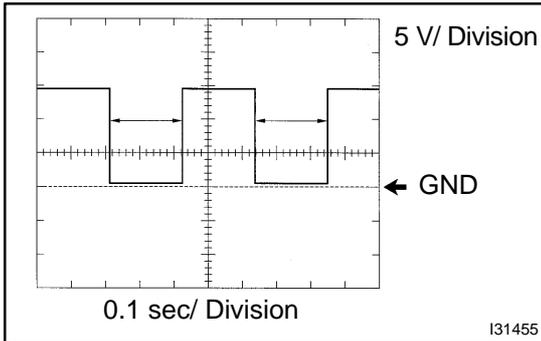


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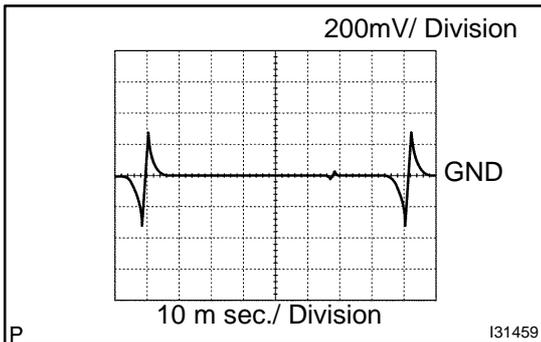
| Symbols (Terminals No.) | Wiring Color | Condition | STD Voltage (V) |
|------------------------------|--------------|--|-----------------------|
| THWO ↔ E1 (E7-14 ↔ E6-1) | L-B ↔ BR | Engine running: Idle speed | Pulse generation (*4) |
| LCKI ↔ E1 (E6-23 ↔ E6-1) | R-Y ↔ BR | Engine running: Idle speed A/C system: Operating Magnitic clutch: Engaged | Pulse generation (*5) |
| ACMG ↔ E1 (E7-2 ↔ E6-1) | B-Y ↔ BR | Engine running: Idle speed A/C system: Operating Magnitic clutch: Engaged | Below 1.0 V |
| | | Engine running: Idle speed A/C system: Operating Magnitic clutch: Not engaged | 10 - 14 V |
| A/C S ↔ E1 (E7-31 ↔ E6-1) | BR-B ↔ BR | Engine running: Idle speed A/C system: Operating Magnitic clutch: Engaged | Below 1.0 V |
| | | Engine running: Idle speed A/C system: Operating Magnitic clutch: Not engaged | 10 - 14 V |
| THE ↔ E1 (E7-32 ↔ E6-1) | GR-G ↔ BR | Engine running: Idle speed A/C system: Operating Magnitic clutch: Engaged | 1.3 - 2.6 V |
| | | Engine running: Idle speed A/C system: Operating Magnitic clutch: Not engaged | 3.7 - 4.5 V |
| ACLD ↔ E1 (E7-33 ↔ E6-1) | B-R ↔ BR | Engine running: Idle speed A/C system: Operating Magnitic clutch: Engaged | 10 - 14 V |
| | | Engine running: Idle speed A/C system: Operating Magnitic clutch: Not engaged | Below 1.0 V |



(*3): Oscilloscope waveform:
 Terminal to be measured: BLC of A/C amplifier
 Setting for measurement: 2 V DIV 500 m sec./DIV
 Conditon: Ignition switch ON



(*4): Oscilloscope waveform:
 Terminal to be measured:
 TW2 of A/C amplifier and TWHO of ECM
 Setting for measurement: 5 V DIV 0.1 sec./DIV
 Conditon: Ignition switch ON



(*5): Oscilloscope waveform:
 Terminal to be measured: LCKI of A/C amplifier and ECM
 Setting for measurement: 200 mV DIV 10 m sec./DIV
 Conditon: Ignition switch ON