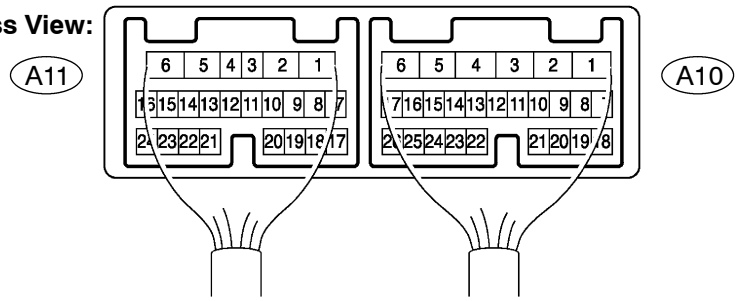
05CZU–02

TERMINALS OF ECU

1. AIR CONDITIONING AMPLIFIER

Air Conditioning Amplifier
Connector Wire Harness View:



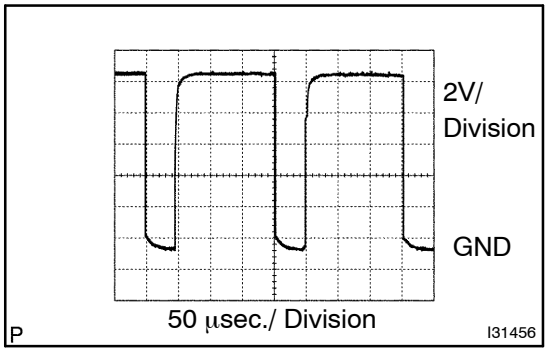
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HINT:
Check from the rear of the connector with connected to the air conditioning amplifier.

Symbols (Terminal No.)	Wiring color	Terminal Description	Condition	Specification
AIR (A11–22) – GND (A11–1)	G – W–B	Recirculation/Fresh switch signal	Power switch: ON Recirculation/Fresh switch: FRESH → RECIRC	Below 1.0 → 10 to 14 V
AIF (A11–23) – GND (A11–1)	P – W–B	Recirculation/Fresh switch signal	Power switch: ON Recirculation/Fresh switch: RECIRC → FRESH	Below 1.0 → 10 to 14 V
AOF (A11–16) – GND (A11–1)	B – W–B	Mode switch signal	Power switch: ON Mode switch: DEF → FACE	Below 1.0 → 10 to 14 V
AOD (A11–24) – GND (A11–1)	Y – W–B	Mode switch signal	Power switch: ON Mode switch: FACE → DEF	Below 1.0 → 10 to 14 V
TPI (A10–19) – SGTPI (A10–4)	V – L	Recirculation/Fresh switch signal	Power switch: ON Recirculation/Fresh switch: RECIRC → FRESH	4.0 → 1.0 V
TPM (A10–18) – SGTPM (A10–23)	LG – P	Mode switch signal	Power switch: ON Mode switch: FACE → DEF	4.0 → 1.0 V
TP (A10–20) – SGTP (A10–14)	L – LG	Temperature switch signal	Power switch: ON Temperature switch: Max. COOL→ Max. HOT	4.0 → 1.0 V
SGTE (A10–5) – Body ground	Y – Body ground	Ground for evaporator temperature sensor	Always	Below 1.0 Ω
TE (A10–7) – SGTE (A10–5)	B – Y	Evaporator temperature sensor signal	Power switch: ON Evaporator temperature: 0 °C (32 °F)	2.0 to 2.4 V
TE (A10–7) – SGTE (A10–5)	B – Y	Evaporator temperature sensor signal	Power switch: ON Evaporator temperature: 15 °C (59 °F)	1.4 to 1.8 V
S5TPI (A10–3) – SGTPI (A10–4)	B–L	Power supply for air inlet damper position sensor	Power switch: ON	4.5 to 5.5 V
AMC (A11–19) – GND (A11–1)	B – W–B	Temperature switch	Power switch: ON Temperature switch: Max. HOT→ Max. COOL	Below 1.0 → 10 to 14 V
AMH (A11–17) – GND (A11–1)	R – W–B	Temperature switch	Power switch: ON Temperature switch: Max. COOL→ Max. HOT	Below 1.0 → 10 to 14 V
SGTPI (A10–4) – Body ground	L – Body ground	Ground for air inlet damper position sensor	Always	Below 1.0 Ω
SGTPM (A10–23) – Body ground	P – Body ground	Ground for air outlet damper position sensor	Always	Below 1.0 Ω
SGTP (A10–14) – Body ground	LG – Body ground	Ground for air mix damper position sensor	Always	Below 1.0 Ω

Symbols (Terminal No.)	Wiring color	Terminal Description	Condition	Specification
S5TPM (A10–11) – SGTPM (A10–23)	O – P	Power supply for air outlet damper position sensor signal	Power switch: ON	4.5 to 5.5 V
S5TP (A10–13) – SGTP (A10–14)	P – LG	Power supply for air mix damper position sensor signal	Power switch: ON	4.5 to 5.5 V
IG (A11–5) – GND (A11–1)	B – W–B	Power switch signal	Power switch: LOCK or ACC → ON	0 → 10 to 14 V
+B (A11–6) – GND (A11–1)	Y – W–B	Back–up power source	Always	10 to 14 V
MPX+ (A11–3) – GND (A11–1)	B – W–B	Terminal for BEAN	Engine idling after engine warmed up	Pulse generation
MPX2+ (A11–11) – GND (A11–1)	GR – W–B	Terminal for BEAN	Engine idling after engine warmed up	Pulse generation
GND (A11–1) – Body ground	W–B – Body ground	Ground for main power supply	Always	Below 1.0 Ω
BLW (A11–2) – GND (A11–1)	W – W–B	Blower switch signal	Power switch: ON Blower switch: ON	Pulse generation (see waveform 1)
S5TS (A10–12) – GND (A11–1)	GR – W–B	Solar sensor	Power switch: ON Solar sensor covered with a cloth → Solar sensor exposed to electric light	Below 0.8 → 0.8 to 4.3 V
HR (A11–7) – GND (A11–1)	B – W–B	Blower switch signal	Power switch: ON Blower switch: OFF → ON	10 to 14 → Below 1.0 V
TR (A10–8) – SGTR (A10–22)	B – W	Room temperature sensor signal	Power switch: ON Cabin temperature: 25 → 40 °C (77 → 104 °F)	1.8 to 2.2 → 1.2 to 1.6 V
SGTR (A10–22) – Body ground	W – Body ground	Ground for room temperature sensor	Always	Below 1.0 Ω
ST1 (A10–2) – SGST (A10–15)	BR–G	Steering pad switch signal	Power switch: ON Steering pad switch: Fr.DEF → Rr.DEF → Recirculation → OFF	Below 0.3 → 0.8 to 1.5 → 2.0 to 2.9 → above 4.6 V
ST2 (A10–1) – SGST (A10–15)	LG–G	Steering pad switch signal	Power switch: ON Steering pad switch: AUTO → TEMP+ → TEMP– → OFF	Below 0.3 → 0.8 to 1.5 → 2.0 to 2.9 → above 4.6 V
SGST (A10–15) – Body ground	G – Body ground	Ground for steering pad switch	Always	Below 1.0 V
PSW (A10–6) – GND (A11–1)	R – W–B	Pressure switch signal	Power switch: ON Refrigerant pressure: Normal → More than 1,520 kPa (15.5 kgf/cm 2,220 psi)	Below 1.0 → 10 to 14 V
RH (A10–9) – GND (A11–1)	R – W–B	Humidity sensor signal	Power switch: ON Room humidity: 40 → 60 %	2.0 → 2.5 V
S5RM (A10–10) – GND (A11–1)	G – W–B	Power supply for humidity sensor	Power switch: ON	4.5 to 5.5 V
HTR0 (A10–17) – GND (A11–1)	BR – W–B	PTC heater signal	Power switch: ON Temperature switch: Max. HOT Coolant temperature: Below 55°C Blower switch: LO → OFF	Below 1.0 → 10 to 14 V
HTR2 (A10–25) – GND (A11–1)	P – W–B	PTC heater signal	Power switch: ON Temperature switch: Max. HOT Coolant temperature: Below 55°C Blower switch: LO → OFF	Below 1.0 → 10 to 14 V
IDH (A11–18) – GND (A11–1)	V – W–B	DC/DC converter signal	Power switch: ON (Voltage normal → over voltage)	10 to 14 → Below 1.0 V



waveform 1:

Measure the waveform between terminal BLW (A11–2) of A/C amplifier and body ground.

OK:

Waveform operate as shown in the illustration.

HINT:

- The correct waveform is shown in the illustration.
- Waveform cycle varies with the blower level.