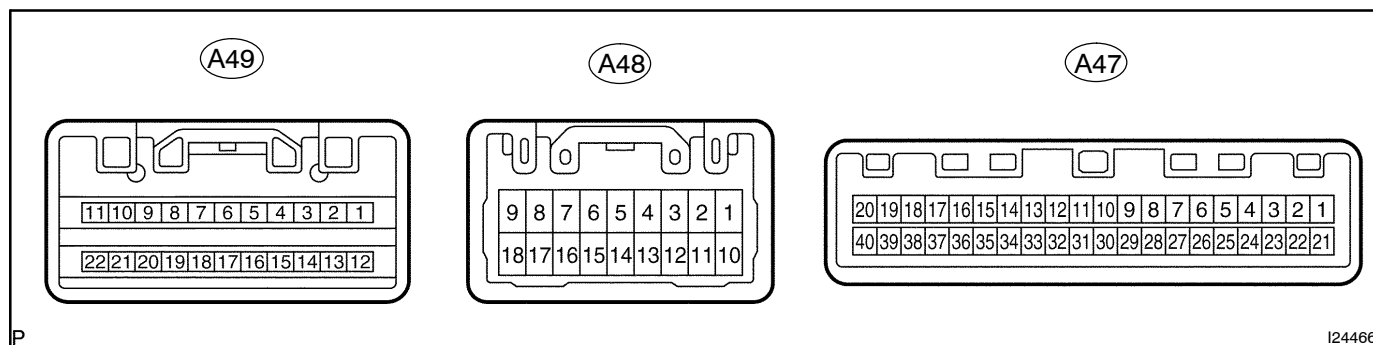


TERMINALS OF ECU

FRONT A/C AMPLIFIER



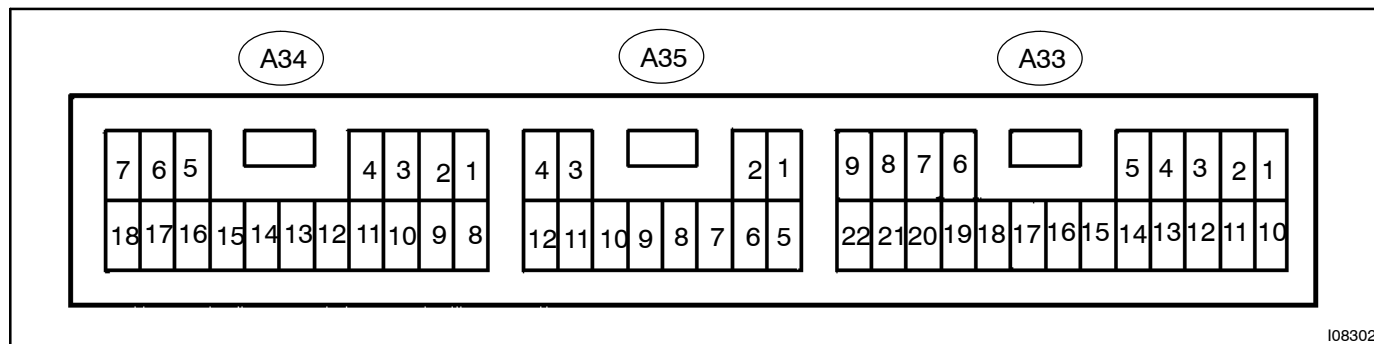
Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
AIF ↔ GND (A47-1 ↔ A49-12)	G-W ↔ W-B	IG ON. Air inlet control switch "FRESH"	Battery voltage
		IG ON. Air inlet control switch "RECIRC"	Below 1.0 V
AIR ↔ GND (A47-2 ↔ A49-12)	LG-B ↔ W-B	IG ON. Air inlet control switch "RECIRC"	Battery voltage
		IG ON. Air inlet control switch "FRESH"	Below 1.0 V
MRRHR ↔ GND (A47-6 ↔ A49-12)	R ↔ W-B	IG ON. Mirror heater switch "OFF"	Battery voltage
		IG ON. Mirror heater switch "ON"	Below 1.0 V
A/CS ↔ GND (A47-7 ↔ A49-12)	L-B ↔ W-B	Compressor does not operate	Below 1.0 V
		Compressor operate	Battery voltage
FRHR ↔ GND (A47-9 ↔ A49-12)	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 (A47-10 ↔ A49-12)	LG ↔ W-B	IG ON. Rear defogger switch "OFF"	Battery voltage
		IG ON. Rear defogger switch "ON"	Below 1.0 V
TEO ↔ GND (A47-11 ↔ A49-12)	P-B ↔ W-B	Compressor does not operate	Battery voltage
		Compressor operate	Below 1.0 V
DEF ↔ GND (A47-12 ↔ A49-12)	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 (A47-13 ↔ A49-12)	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 (A47-14 ↔ A49-12)	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 (A47-15 ↔ A49-12)	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 (A47-16 ↔ A49-12)	GR ↔ W-B	IG ON. Mode control switch "Except FACE"	Battery voltage
		IG ON. Mode control switch "FACE"	Below 0.7 V
FRAMC ↔ GND (A47-22 ↔ A49-12)	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 (A47-23 ↔ A49-12)	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
DEFC ↔ GND (A47-27 ↔ A49-12)	R-L(*1) ↔ W-B	Diff. lock switch "ON"	Continuity
RRMGV ↔ GND (A47-40 ↔ A49-12)	LG-R ↔ W-B	IG ON. Rear cooler switch "OFF"	Battery voltage
		IG ON. Rear cooler switch "ON"	Below 1.0 V
DGS1 ↔ FRSG (A48-4 ↔ A48-18)	Y-R ↔ Y-G	After continuing to turn ignition switch ON for more than 120 seconds, check voltage: 10 – 35 °C (50 – 95 °F)	1.0 – 4.5 V

DIAGNOSTICS – AIR CONDITIONING SYSTEM

FRTP ↔ FRSG (A48-5 ↔ A48-18)	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 (A48-7 ↔ A48-18)	L-Y ↔ Y-G	IG ON. Ambient temperature at 25°C (77°F)	1.35 – 1.75 V
TS ↔ FRSG (A48-8 ↔ A48-18)	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 (A48-9 ↔ A48-18)	G-R ↔ Y-G	Turn ignition switch "ON"	5.0 V
		Turn ignition switch "OFF"	No voltage
TPI ↔ FRSG (A48-14 ↔ A48-18)	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 (A48-16 ↔ A48-18)	GR-B ↔ Y-G	IG ON. Evaporator temperature at 15°C (59°F)	1.4 – 1.8 V
FRTR ↔ FRSG (A48-17 ↔ A48-18)	B ↔ Y-G	IG ON. Cabin temperature at 25°C (77°F)	1.8 – 2.2 V
FRSG ↔ Body ground (A48-18 ↔ Body ground)	Y-G ↔ Body ground	Always	Continuity
ALED ↔ GND (A49-4 ↔ A49-12)	G-B ↔ W-B	Compressor operate	Below 1.0 V
		Compressor does not operate	No voltage
TW ↔ GND (A49-5 ↔ A49-12)	Y-B ↔ W-B	IG ON.	Pulse generation
SPD ↔ GND (A49-6 ↔ A49-12)	V ↔ W-B	Turn propeller shaft slowly	Pulse generation
PSW ↔ GND (A49-8 ↔ A49-12)	L-W ↔ W-B	A/C refrigerant pressure: less than 0.19 MPa (2.0 kgf/cm ²) or more than 3.14 MPa (32 Kgf/cm ²)	From 10 – 14 V to below 1.0 V
ILL+ ↔ GND (A49-10 ↔ A49-12)	G ↔ W-B	IG ON. Light control switch "TAIL"	Battery voltage
		IG ON. Light control switch "OFF"	No voltage
+B ↔ GND (A49-11 ↔ A49-12)	L-W ↔ W-B	Always	Battery voltage
GND ↔ Body ground (A49-12 ↔ Body ground)	W-B ↔ Body ground	Always	Continuity
VER4 ↔ GND (A49-15 ↔ A49-12)	W-B ↔ W-B	Always	Continuity
VER2 ↔ GND (A49-17 ↔ A49-12)	W-B ↔ W-B	Always	Continuity
VER1 ↔ Body ground (A49-18 ↔ Body ground)	W-B ↔ Body ground	Always	Continuity
ILL- ↔ GND (A49-19 ↔ A49-12)	W-G ↔ W-B	IG ON. Light control switch "TAIL"	Below 1.0 V
		IG ON. Light control switch "OFF"	No voltage
IG ↔ GND (A49-22 ↔ A49-12)	R-L ↔ W-B	IG ON. Light control switch "ON"	Battery voltage
		IG ON. Light control switch "OFF"	No voltage

*1: w/o LEXUS Navigation System

REAR A/C AMPLIFIER



I08302

Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
+B ↔ GND (A33-1 ↔ A33-22)	L-W ↔ W-B	Always	Battery voltage
IG ↔ GND (A33-2 ↔ A33-22)	B-W ↔ W-B	IG ON.	Battery voltage
VMC ↔ GND (A33-3 ↔ A33-22)	W-L ↔ W-B	Rr FACE mode. Rr blower switch: Lo → ME → HI	7.2 → 4.2 → 0.5 V
BLWC ↔ GND (A33-4 ↔ A33-22)	R ↔ W-B	Rr FACE mode. Fr blower switch: OFF → Lo	Below 1.0 V → 1.5 – 3.0 V
S5 ↔ SG (A33-5 ↔ A33-9)	R-Y ↔ Y-G	IG ON.	4.5 – 5.5 V
TPH ↔ SG (A33-6 ↔ A33-9)	GR-R ↔ Y-G	Rr temp. control switch: Max. COOL → Max. HOT	4.0 – 1.0 V
TEC ↔ SG (A33-7 ↔ A33-9)	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
TINH ↔ SG (A33-8 ↔ A33-9)	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
SG ↔ GND (A33-9 ↔ A33-22)	Y-G ↔ W-B	Always	Continuity
MCH ↔ GND (A33-11 ↔ A33-22)	W-L ↔ W-B	Rr temp. control switch: Max. HOT → Max. COOL	Below 1.0 V → Battery voltage for 16 sec.
MHH ↔ GND (A33-12 ↔ A33-22)	Y ↔ W-B	Rr temp. control switch: Max. COOL → Max. HOT	Below 1.0 V → Battery voltage for 16 sec.
HRC ↔ GND (A33-13 ↔ A33-22)	R-Y ↔ W-B	Rr FACE mode. Rr blower control switch: OFF → LO	Battery voltage → Below 1.0 V
HRH ↔ GND (A33-14 ↔ A33-22)	L-B ↔ W-B	Rr FOOT mode. Rr blower control switch: OFF → LO	Battery voltage → Below 1.0 V
VMH ↔ GND (A33-15 ↔ A33-22)	R-W ↔ W-B	Rr FOOT mode. Rr blower control switch: LO → ME → HI	7.2 → 4.2 → 0.5 V
BLWH ↔ GND (A33-16 ↔ A33-22)	R-G ↔ W-B	Rr FOOT mode. Rr blower control switch: OFF → LO	Below 1.0 V → 1.5 – 3.0 V
CID ↔ GND (A33-18 ↔ A33-22)	B ↔ W-B	IG ON.	Pulse generation
CSD ↔ GND (A33-19 ↔ A33-22)	R ↔ W-B	IG ON.	Pulse generation
CLKF ↔ GND (A33-20 ↔ A33-22)	W ↔ W-B	IG ON.	Pulse generation

DIAGNOSTICS – AIR CONDITIONING SYSTEM

GND ↔ Body ground (A33-22 ↔ Body ground)	W-B → Body ground	Always	Continuity
IG+ ↔ RG (A35-1 ↔ A34-8)	L-R ↔ G-W	IG ON.	10 – 14 V
ILL- ↔ RG (A35-5 ↔ A34-8)	G ↔ G-W	IG ON. Light switch OFF → TAIL	0 → Below 1.0 V
TR ↔ SGND (A35-7 ↔ A35-12)	B ↔ G-Y	IG ON. Rr room temperature: 25°C (77°F)	1.8 – 2.2 V
		IG ON. Rr room temperature: 40°C (104°F)	1.2 – 1.6 V
TSET ↔ SGND (A35-8 ↔ A35-12)	L-O ↔ G-Y	Rr temp. control switch: Max. COOL → Max. HOT	5.0 → 0 V
SGND ↔ SG (A35-12 ↔ A33-9)	G-Y ↔ Y-G	Always	Continuity
RRAT ↔ RG (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
RRAO ↔ RG (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
RRLO ↔ RG (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
RRME ↔ RG (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
ATIN ↔ GND (A34-5 ↔ A33-22)	L-R ↔ W-B	Rr A/C control panel switch: except AUTO → AUTO	Battery voltage → Below 1.0 V
LOIN ↔ GND (A34-6 ↔ A33-22)	L-W ↔ W-B	Rr A/C control panel switch: except LO → LO	Battery voltage → Below 1.0 V
MEIN ↔ GND (A34-7 ↔ A33-22)	L ↔ W-B	Rr A/C control panel switch: except ME → ME	Battery voltage → Below 1.0 V
RG ↔ GND (A34-8 ↔ A33-22)	G-W ↔ W-B	Always	Continuity
RRHI ↔ GND (A34-9 ↔ A33-22)	GR-R ↔ W-B	Rr A/C control panel HI switch: OFF → ON (during pushed switch)	Battery voltage → Below 1.0 V
FACE ↔ GND (A34-10 ↔ A33-22)	R-L ↔ W-B	Rr A/C control panel FACE switch: OFF → ON (during pushed switch)	Battery voltage → Below 1.0 V
B/L ↔ GND (A34-11 ↔ A33-22)	R-Y ↔ W-B	Rr A/C control panel B/L switch: OFF → ON (during pushed switch)	Battery voltage → Below 1.0 V
FOOT ↔ GND (A34-12 ↔ A33-22))	R-G ↔ W-B	Rr A/C control panel FOOT switch: OFF → ON (during pushed switch)	Battery voltage → Below 1.0 V
FCIN ↔ GND (A34-15 ↔ A33-22)	G ↔ W-B	Rr A/C control panel switch: except FACE → FACE	Battery voltage → Below 1.0 V
BLIN ↔ GND (A34-16 ↔ A33-22)	W-G ↔ W-B	Rr A/C control panel switch: except B/L → B/L	Battery voltage → Below 1.0 V
FTIN ↔ GND (A34-17 ↔ A33-22)	W-R ↔ W-B	Rr A/C control panel switch: except FOOT → FOOT	Battery voltage → Below 1.0 V
HIIN ↔ GND (A34-18 ↔ A33-22)	L ↔ W-B	Rr A/C control panel switch: except HI → HI	Battery voltage → Below 1.0 V