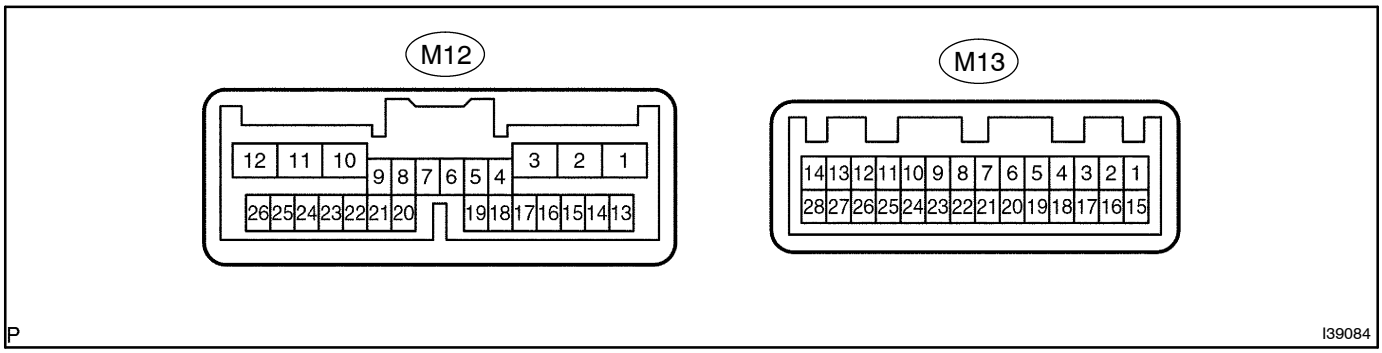
05HBM–01

TERMINALS OF ECU

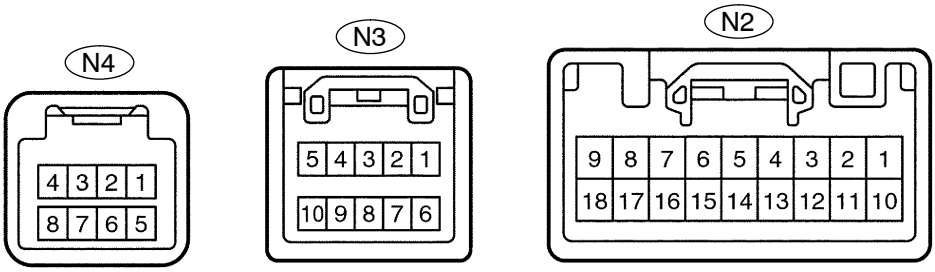
1. MULTI–DISPLAY ASSY:



Symbols (Terminals No.)	Wiring Color	Terminal Description	Condition	Specification
SGND (M13–3) – Body ground	BR – Body ground	Ground	Always	Below 1 V
MIN+ (M13–4) – GND1 (M12–3)	G – BR	Microphone voice signal	See ”microphone check”	–
MIN– (M13–5) – Body ground	R – Body ground	Microphone voice signal	See ”microphone check”	–
MACC (M13–6) – GND1 (M12–3)	BR – BR	Microphone Accessory	Power Switch OFF → ON (IG)	Below 1 V → 5 V
SLD (M13–20) – Body ground	Shielded – Body ground	Shielded ground	Always	Below 1 V
MCO+ (M13–18) – GND1 (M12–3)	R – BR	Microphone voice signal	See ”microphone check”	–
MCO– (M13–19) – GND1 (M12–3)	G – BR	Microphone voice signal	See ”microphone check”	–
SLD (M13–20) – Body ground	Shielded – Body ground	Shielded ground	Always	Below 1 V
IVO+ (M13–21) – GND1 (M12–3)	B – BR	Telephone voice signal (bluetooth)	See ”microphone check”	–
IVO– (M13–22) – GND1 (M12–3)	W – BR	Telephone voice signal (bluetooth)	See ”microphone check”	–
VR (M13–23) – GND1 (M12–3)	Y – BR	Video return signal	Power Switch OFF	Below 1 V
R (M13–24) – GND1 (M12–3)	B – BR	Display signal (red)	Navigation display is on	–
G (M13–25) – GND1 (M12–3)	W – BR	Display signal (green)	Navigation display is on	–
B (M13–26) – GND1 (M12–3)	R – BR	Display signal (blue)	Navigation display is on	–
SYNC (M13–27) – GND1 (M12–3)	G – BR	Display signal (synchronize)	Navigation display is on	–
VG (M13–28) – Body ground	Shielded – Body ground	Shielded ground	Always	Below 1 V
ILL+ (M12–1) – GND1 (M12–3)	G – BR	Illumination (rheostat) signal	Power Switch OFF → ON (IG)	Below 1 V → 10 to 14 V
ILL– (M12–2) – Body ground	W–B – Body ground	Illumination (rheostat) signal	Power Switch OFF → ON (IG)	Below 1 V → 10 to 14 V
GND1 (M12–3) – Body ground	BR – Body ground	Ground	Always	Below 1 V
TC (M12–7) – GND1 (M12–3)	P – BR	Diagnosis ON signal	Power Switch ON (IG)	9 to 14 V
IG (M12–10) – GND1 (M12–3)	B – BR	Ignition (ON)	Power Switch OFF → ON (IG)	Below 1 V → 10 to 14 V

ACC (M12–11) – GND1 (M12–3)	GR – BR	Accessory (ON)	Power Switch OFF → ON (ACC) or ON (IG)	Below 1 V → 10 to 14 V
+B1 (M12–12) – GND1 (M12–3)	Y – BR	Battery	Always	10 to 14 V
PKB (M12–16) – GND1 (M12–3)	R – BR	Parking brake signal	Turn parking brake switch ON → OFF	Below 1 V → 10 to 14 V
TX2+ (M12–18) – GND1 (M12–3)	P – BR	AVC–LAN communication signal	Power Switch ON (IG)	2 to 3 V
TX2– (M12–19) – GND1 (M12–3)	W – BR	AVC–LAN communication signal	Power Switch ON (IG)	2 to 3 V
SPD (M12–25) – GND1 (M12–3)	V – BR	Speed signal from combination meter	See ”vehicle signal check mode”	–

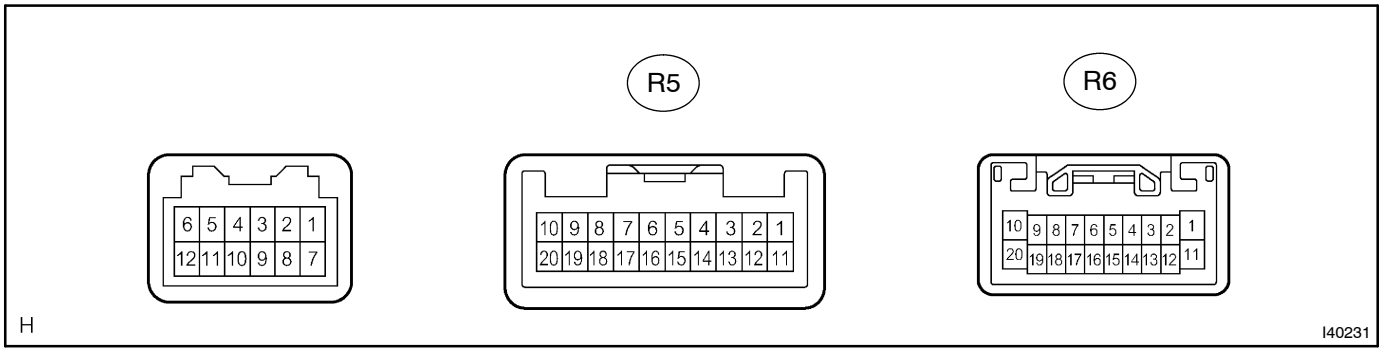
2. NAVIGATION ECU:



Symbols (Terminals No.)	Wiring Color	Terminal Description	Condition	Specification
AUI+ (N2–1) – GND1 (N2–17)	P – W–B	Sound signal (input)	Audio system is playing	–
AUO+ (N2–2) – GND1 (N2–17)	P – W–B	Sound signal (output)	Audio system is playing	–
SLD1 (N2–3) – Body ground	BR – Body ground	Shielded ground	Always	Below 1.0 V
SPD (N2–5) – GND1 (N2–17)	V – W–B	Speed signal from combination meter	See ”Vehicle Signal Check Mode” (see page 05–1554)	–
+B (N2–9) – GND1 (N2–17)	SB – W–B	Battery	Always	10 to 14 V
AUI– (N2–10) – GND1 (N2–17)	V – W–B	Sound signal (input)	Audio system is playing	–
AUO– (N2–11) – GND1 (N2–17)	V – W–B	Sound signal (output)	Audio system is playing	–
VOI+ (N2–12) – SLD1 (N2–3)	B – Body ground	Telephone voice signal (bluetooth)	See ”microphone check”	–
VOI– (N2–13) – SLD1 (N2–3)	W – Body ground	Telephone voice signal (bluetooth)	See ”microphone check”	–
REV (N2–14) – GND1 (N2–17)	R – W–B	Reverse signal from combination meter	See ”Vehicle Signal Check Mode” (see page 05–1554)	–
MUT2 (N2–15) – GND1 (N2–17)	W – W–B	Mute signal	Audio system is playing → Changing	Above 3.5 V → Below 1 V
GND1 (N2–17) – Body ground	W–B – Body ground	Ground	Always	Below 1 V
ACC (N2–18) – GND1 (N2–17)	GR – W–B	Accessory (ON)	Power Switch OFF → ON (ACC) or ON (IG)	Below 1 V → 10 – 14 V
VR (N3–1) – GND1 (N2–17)	Y – W–B	Video return signal	Power Switch OFF	Below 1 V
R (N3–2) – GND1 (N2–17)	B – W–B	Display signal (red)	Navigation display is on	–
B (N3–3) – GND1 (N2–17)	G – W–B	Display signal (blue)	Navigation display is on	–

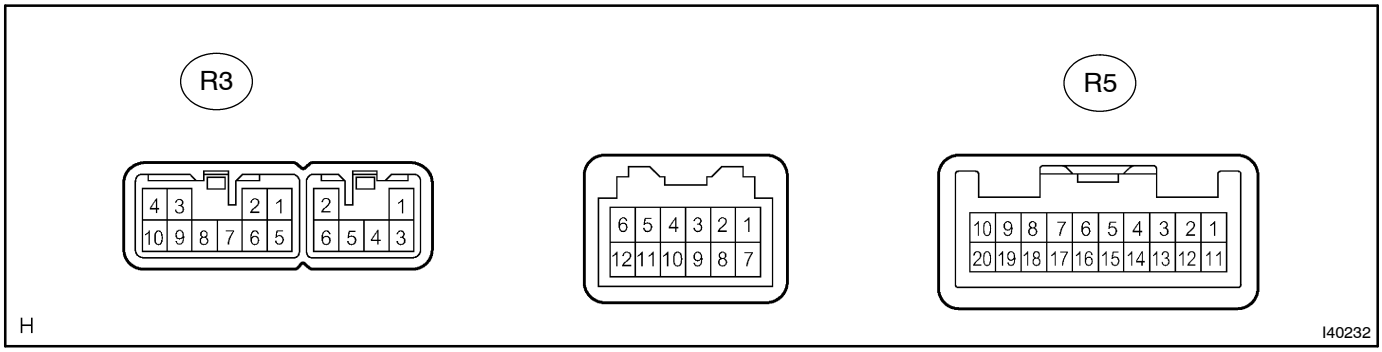
TX+ (N3–5) – GND1 (N2–17)	W – W–B	AVC–LAN communication signal	Power Switch ON (IG)	2 to 3 V
VG (N3–6) – Body ground	Shielded – Body ground	Shielded ground	Always	Below 1 V
G (N3–7) – GND1 (N2–17)	W – W–B	Display signal (green)	Navigation display is on	–
SYNC (N3–8) – GND1 (N2–17)	G – W–B	Display signal (synchronize)	Navigation display is on	–
TX– (N3–10) – GND1 (N2–17)	P – W–B	AVC–LAN communication signal	Power Switch ON (IG)	2 to 3 V
MIC+ (N4–3) – GND1 (N2–17)	R – W–B	Microphone voice signal	See ”microphone check”	–
MIC– (N4–5) – GND1 (N2–17)	G – W–B	Microphone voice signal	See ”microphone check”	–
SNSE (N4–7) – Body ground	W–B – Body ground	Ground	Always	Below 1 V

3. RADIO RECEIVER ASSY (SEPARATE TYPE AMPLIFIER):



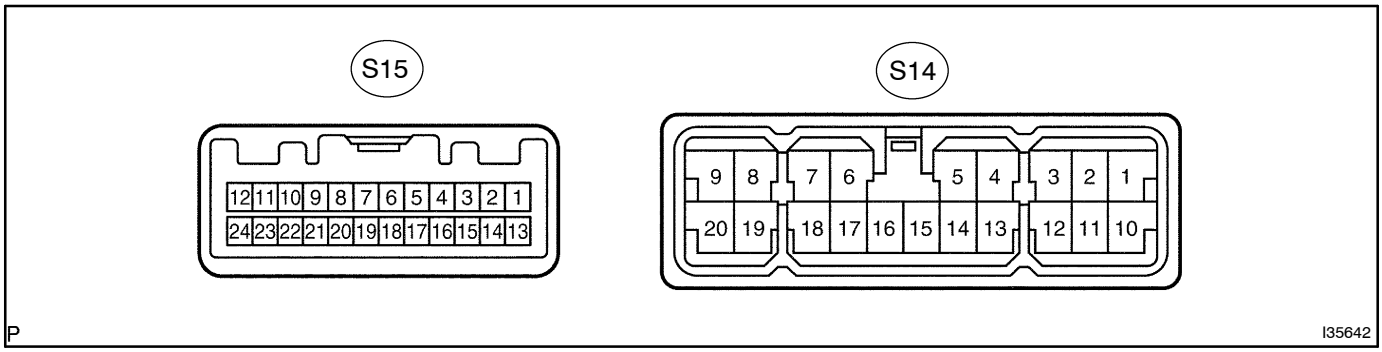
Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specification
TX+ (R5–9) – GND (R6–20)	P – BR	AVC–LAN communication signal	Power Switch ON (ACC)	2 to 3 V
TX– (R5–10) – GND (R6–20)	W – BR	AVC–LAN communication signal	Power Switch ON (ACC)	2 to 3 V
TX+ (R6–5) – GND (R6–20)	P – BR	AVC–LAN communication signal	Power Switch ON (ACC)	2 to 3 V
TX– (R6–15) – GND (R6–20)	O – BR	AVC–LAN communication signal	Power Switch ON (ACC)	2 to 3 V
GND (R6–20) – Body ground	BR – Body ground	Ground	Always	Below 1 Ω

4. RADIO RECEIVER ASSY (BUILT–IN TYPE AMPLIFIER):



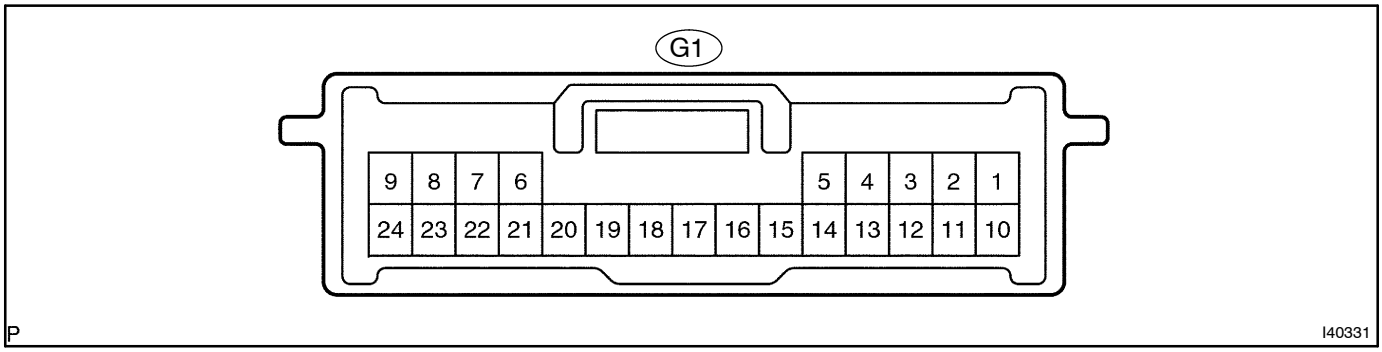
Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specification
TX1+ (R5–9) – GND (R3–7)	P – BR	AVC–LAN communication signal	Power Switch ON (ACC)	2 to 3 V
TX1– (R5–10) – GND (R3–7)	W – BR	AVC–LAN communication signal	Power Switch ON (ACC)	2 to 3 V
GND (R3–7) – Body ground	BR – Body ground	Ground	Always	Below 1 Ω

5. STEREO COMPONENT AMPLIFIER ASSY:



Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specification
GND (S14–16) – Body ground	W–B – Body ground	Ground	Always	Below 1 Ω
TX– (S15–7) – GND (S14–16)	O – W–B	AVC–LAN communication signal	Power Switch ON (ACC)	2 to 3 V
TX+ (S15–8) – GND (S14–16)	P – W–B	AVC–LAN communication signal	Power Switch ON (ACC)	2 to 3 V

6. GATEWAY ECU:



Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specification
GTX+ (G1–6) – GND (G1–24)	B – W–B	AVC–LAN communication signal	Power Switch ON (ACC)	2 to 3 V
GTX– (G1–21) – GND (G1–24)	W – W–B	AVC–LAN communication signal	Power Switch ON (ACC)	2 to 3 V
GND (G1–24) – Body ground	W–B – Body ground	Ground	Always	Below 1 Ω