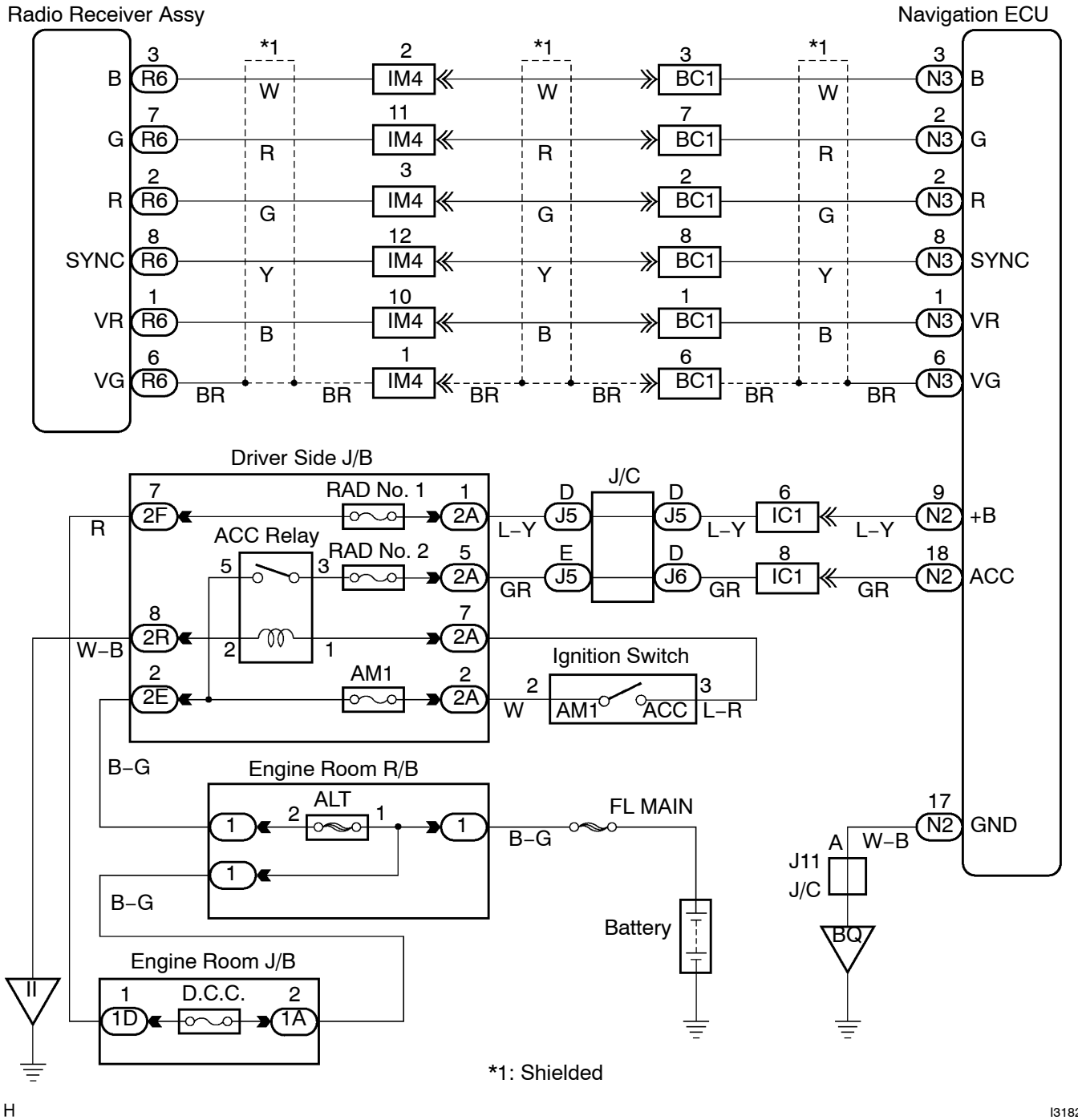
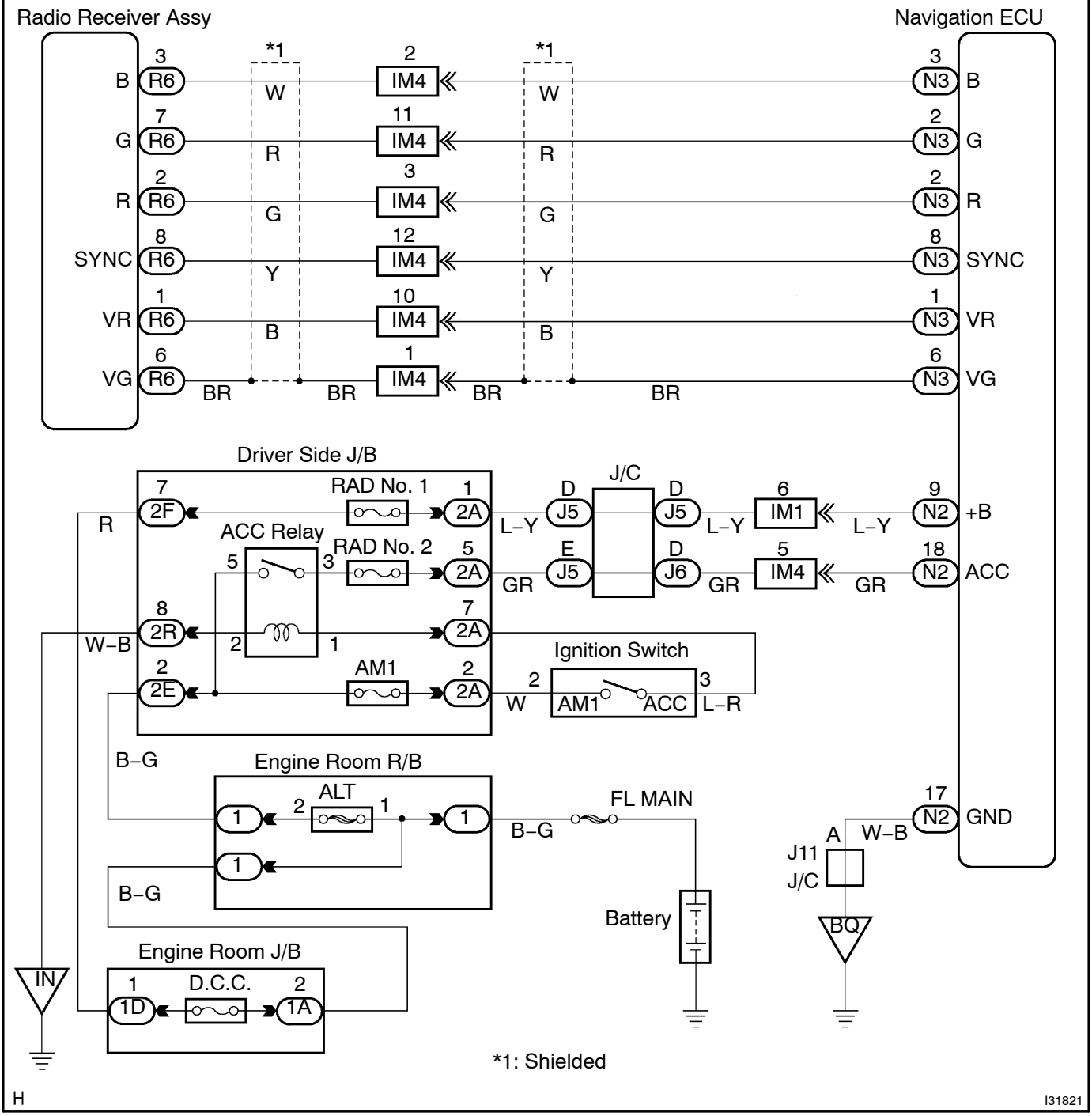
# COLOR ON NAVIGATION SCREEN IS UNUSUAL (RGB SIGNAL ERROR)

## WIRING DIAGRAM

LHD models:



RHD models:


Radio Receiver Assy
Navigation ECU
B
G
R
SYNC
VR
VG
R6
IM4
N3
*1
W
R
G
Y
B
BR
Driver Side J/B
RAD No. 1
RAD No. 2
ACC Relay
AM1
2F
2R
2E
2A
J/C
J5
J6
IM1
IM4
N2
L–Y
GR
+B
ACC
Ignition Switch
AM1
ACC
L–R
W–B
B–G
Engine Room R/B
ALT
FL MAIN
Battery
GND
J11
J/C
BQ
Engine Room J/B
D.C.C.
1D
1A
IN
*1: Shielded
H
I31821

## INSPECTION PROCEDURE

| 1 | DISPLAY CHECK MODE(COLOR BAR CHECK) |
|---|---|

(a) Perform dispay check mode.
(1) Start the diagnosis system and perform display color bar check of display check mode.
**Standard: Color bar check is normally**

**NG** → **CHECK AND REPLACE RADIO RECEIVER ASSY**

**OK**

| 2 | NAVIGATION CHECK MODE(NAVI COLOR BAR CHECK) |
|---|---|

(a) Perform navigation check mode.
(1) Start the diagnosis system and perform navigation color bar check of navigation check mode.
**Standard: Color bar check is normally**

**NG** → **Go to step 4**

**OK**

| 3 | CHECK SETTING(NAVIGATION SETTING) |
|---|---|

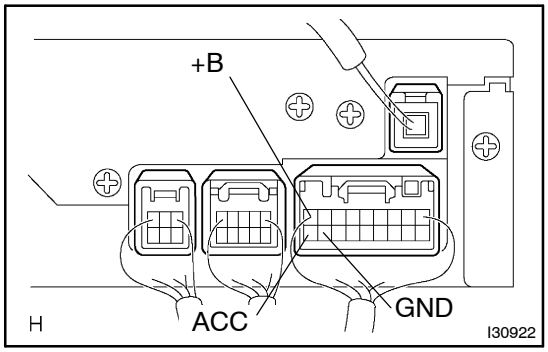
(a) Check the color settings of each daytime screen/night screen at the ”Navigation setting” on the menu.
**Standard: Color setting is normally**

**NG** → **CHECK AND REPLACE NAVIGATION ECU**

**OK**

**NORMAL**

## 4 INSPECT NAVIGATION ECU(+B, ACC, GND)




(a) Remove the navigation ECU with connectors with still connected.

(b) Check voltage.

(1) Measure voltage between terminals +B, ACC and GND of navigation ECU at each conditions, as shown in the chart.

**Standard:**

| Terminal | Condition | Voltage (v) |
|---|---|---|
| +B ⇔ GND | Constant | 10 – 14 V |
| ACC ⇔ GND | Turn ignition switch ACC | 10 – 14 V |

(c) Check continuity.

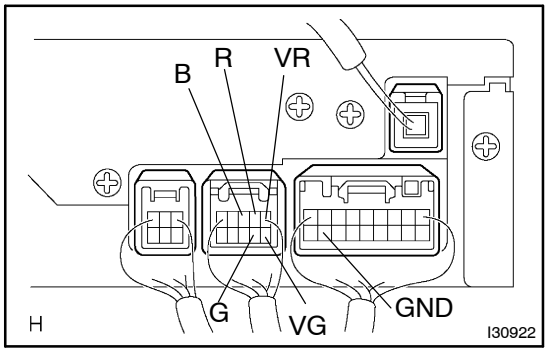
(1) Check that the continuity exists between terminal GND of navigation ECU and body ground.

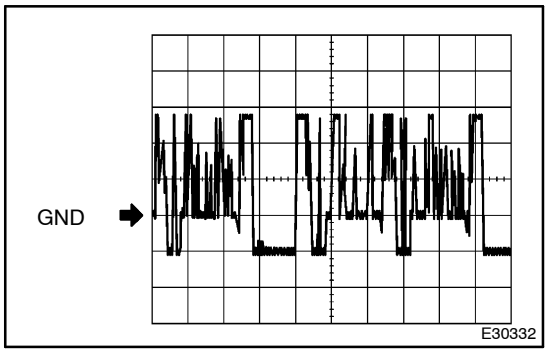
**Standard: Continuity exists.**

**NG** → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

**OK**

## 5 INSPECT NAVIGATION ECU(R, G, B, VR, VG)




(a) Check continuity.

(1) Check that the continuity exists between each terminals, as shown in the chart.

**Standard:**

| Terminal | Condition | Specified condition |
|---|---|---|
| VR ⇔ Body ground | Constant | Continuity |
| VG ⇔ Body ground | Constant | Continuity |

(b) Check signal waveform.

(1) Using an oscilloscope, check signal waveform between terminals R, G, B and GND of navigation ECU.

| Item | Contents |
|---|---|
| Tool setting | 200 mV/ DIV, 10 μs/ DIV |
| Condition | Navigation display is displayed |

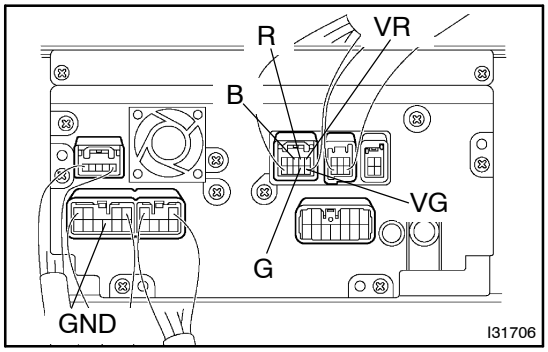
HINT:

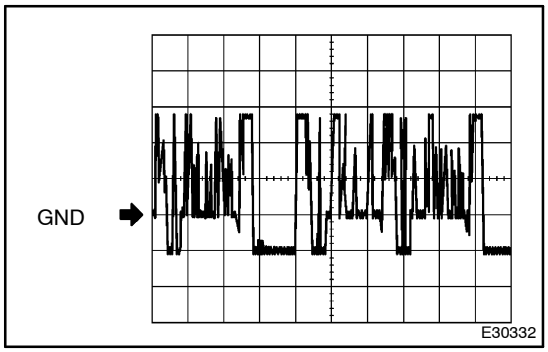
Signal wave from is shown in the chart.

**NG** → **CHECK AND REPLACE NAVIGATION ECU**

**OK**

## 6 INSPECT RADIO RECEIVER ASSY(R, G, B, VR, VG)




(a) Check continuity.

(1) Check that the continuity exists between each terminals, as shown in the chart.

**Standard:**

| Terminal | Condition | Specified condition |
|---|---|---|
| VR ⇔ Body ground | Constant | Continuity |
| VG ⇔ Body ground | Constant | Continuity |

(b) Check signal waveform.

(1) Using an oscilloscope, check signal waveform between terminals R, G, B and GND of radio receiver assy.

| Item | Contents |
|---|---|
| Tool setting | 200 mV/ DIV, 10 μs/ DIV |
| Condition | Navigation display is displayed |

HINT:

Signal wave from is shown in the chart.

**NG** → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

**OK**

**CHECK AND REPLACE RADIO RECEIVER ASSY**