DI876–01

AVC–LAN (Communication bus) Circuit

CIRCUIT DESCRIPTION

Each unit of LEXUS navigation system connected with AVC–LAN (communication bus) transfers the signal of each switch by communication.

When +B short and GND short occur in this AVC–LAN, LEXUS navigation system will not function normally as the communication is discontinued.

In this AVC–LAN, multi display becomes the master of the communication, and the audio head unit has a resistance necessary for transmitting the communication.

Multi display is connected between Navigation ECU and Audio head unit, LEXUS navigation system has the structure that makes communication impossible without Navigation ECU, or Audio head unit.

AVC–LAN

I21092

WIRING DIAGRAM

I21091
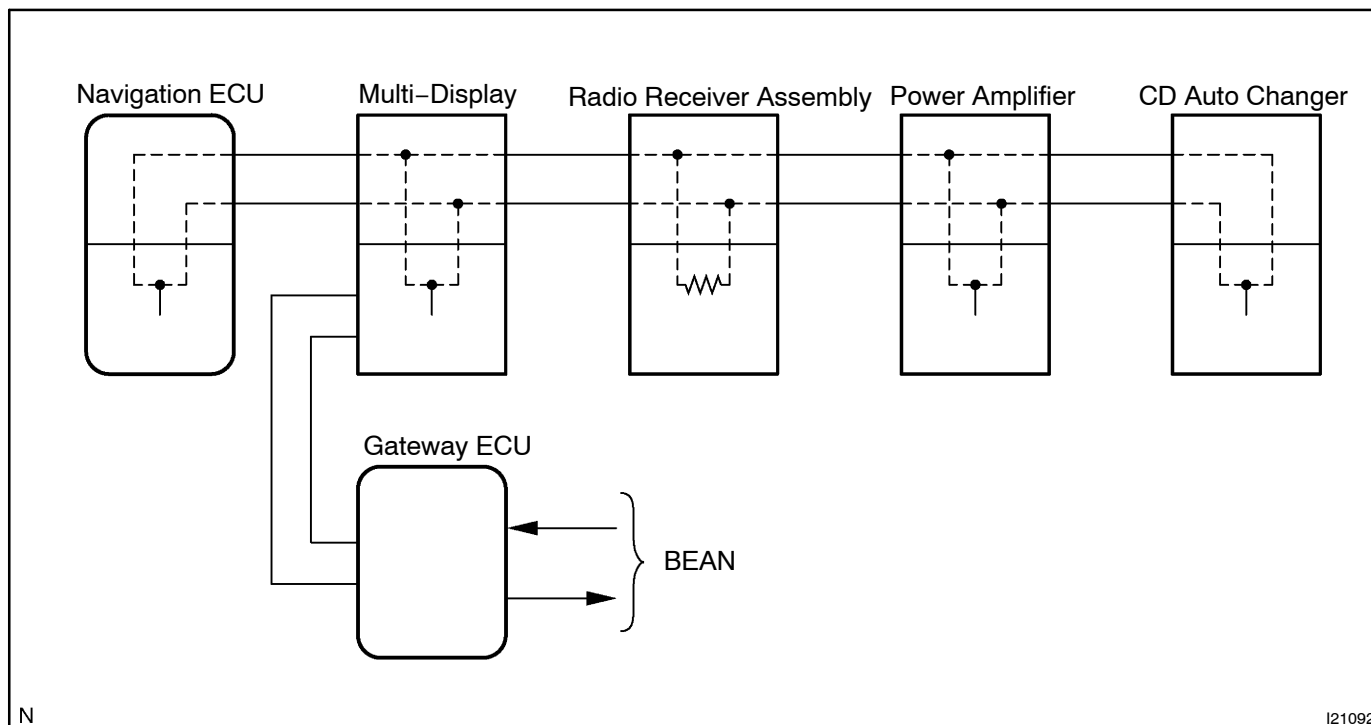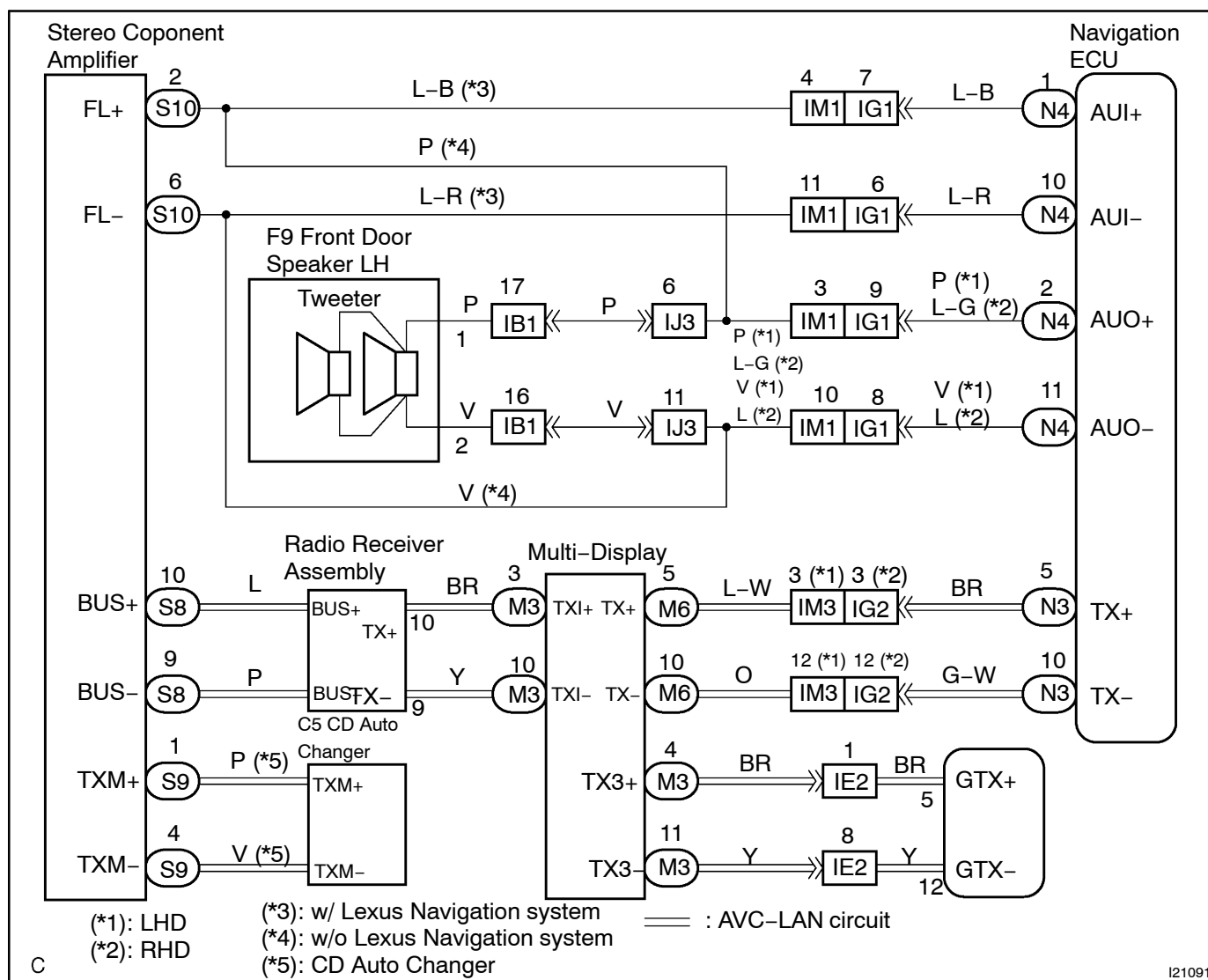
INSPECTION PROCEDURE

1	Disconnect the connector of CD auto changer and check if AVC–LAN will be recovered normally.

CHECK:
Check that the display will change by pressing either of the Panel switch or Touch switch on the display.

HINT:
It can be judged that AVC–LAN is recovered if the display is changed.

OK ⟩ Replace the CD auto changer.

NG

2	Disconnect the "S8" connector of the stereo component amplifier, check if AVC–LAN will be recovered normally.

CHECK:
Check that the display will change by pressing either of the Panel switch or Touch switch on the display.
HINT:
It can be judged that AVC–LAN is recovered if the display is changed.

OK ⟩ **Repair or replace wire harness or connector between stereo component amplifier and CD auto changer.**

NG

3	Disconnect the "S9" connector of the stereo component amplifier, check if AVC–LAN will be recovered normally.

CHECK:
Check that the display will change by pressing either of the Panel switch or Touch switch on the display.
HINT:
It can be judged that AVC–LAN is recovered if the display is changed.

OK ⟩ **Replace the stereo component amplifier.**

NG

| 4 | Disconnect the "R2" connector of the audio head unit, check if AVC–LAN will be recovered normally. |

CHECK:
Check that the display will change by pressing either of the Panel switch or Touch switch on the display.
HINT:
It can be judged that AVC–LAN is recovered if the display is changed.

OK \ **Repair or replace wire harness or connector between Audio head unit and stereo component amplifier.**

NG

| 5 | Check wire harness and connector between audio head unit and multi display (See page IN–30) |

NG \ **Repair or replace wire harness or connector between audio head unit and multi display.**

OK

| 6 | Check wire harness and connector between multi display and navigation ECU. (See page IN–30) |

NG \ **Repair or replace wire harness or connector between multi display and navigation ECU.**
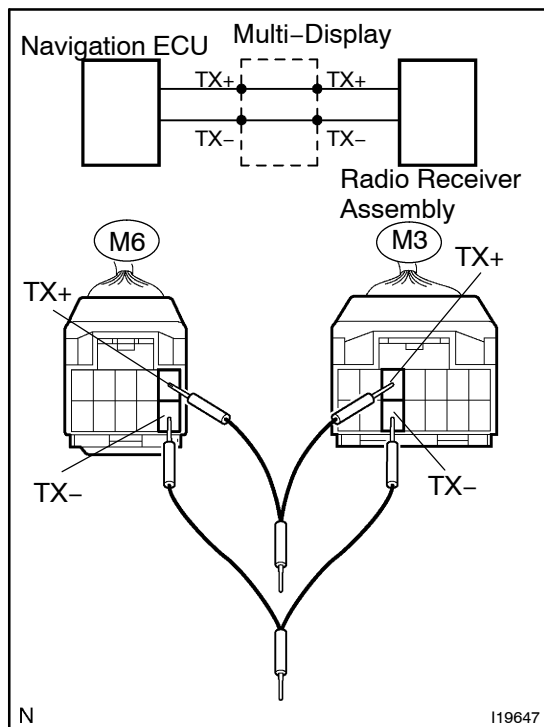
OK

| 7 | Check wire harness and connector between multi display and gateway ECU. (See page IN–30) |

NG \ **Repair or replace wire harness or connector between multi display and gateway ECU.**

OK

8	Skip multi display and check AVC–LAN.

PREPARATION:

(a) Connect all the connectors except "M3" and "M6" of the multi display..

(b) Using 2 SSTs (Diagnosis check wire P/N 09893–12040), connect the terminal TX+ of connector "M3" and TX+ of connector "M6", the terminal TX– of connector "M3" and TX– of connector "M6" respectively of Display ECU.
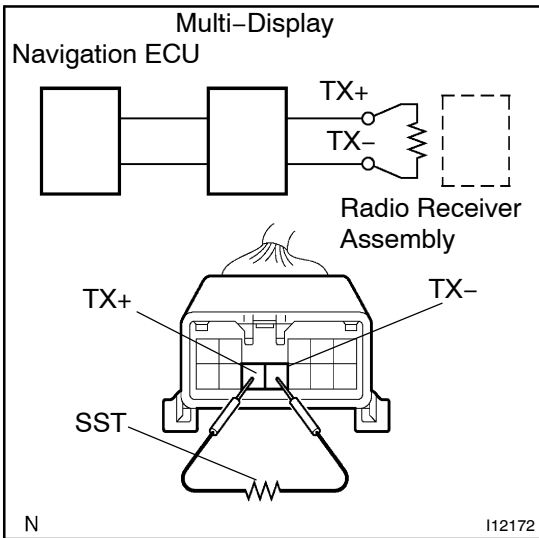
CHECK:

Operate audio head unit (CD, Cassette tape, etc.) and check that the sound comes out from the speaker.

(Check that AVC–LAN is recovered.)

OK >	Replace the Display ECU.

NG

9	Skip Audio head unit and check AVC–LAN.

Multi–Display
Navigation ECU

TX+
TX–

Radio Receiver
Assembly

TX+   TX–

SST

N   I12172

PREPARATION:
(a)   Connect multi display connector.
(b)   Disconnect Audio head unit "R3" connector.
(c)   Using SST (Navigation Check Wire P/N 09843–18050), connect the terminal TX+ to terminal TX– of "R3" connector of Audio head Unit.

CHECK:
Operate the panel switch and the touch switch of the display and check that the navigation functions.
(Check that AVC–LAN is recovered.)

> OK **Replace the audio head unit.**

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Replace the navigation ECU.