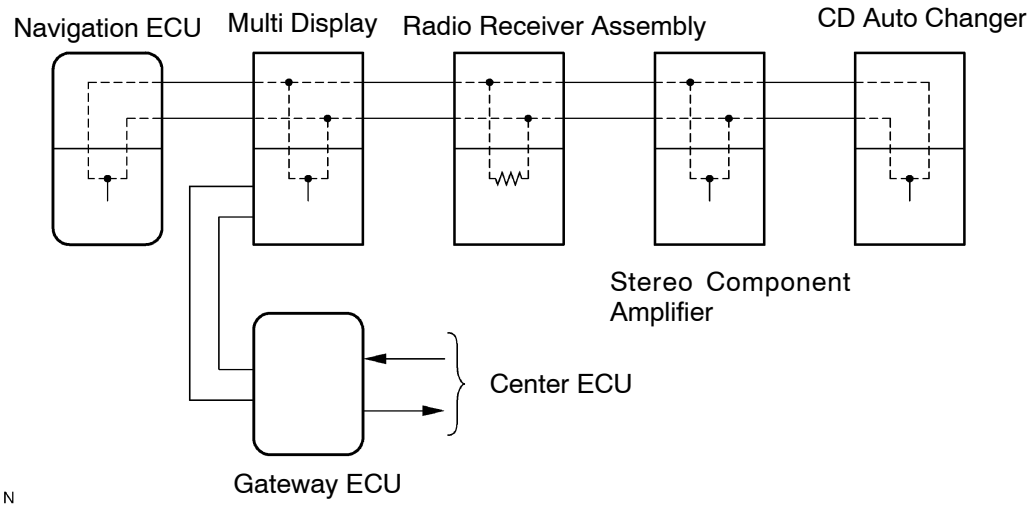
DI89U–02

AVC–LAN (Communication bus) Circuit

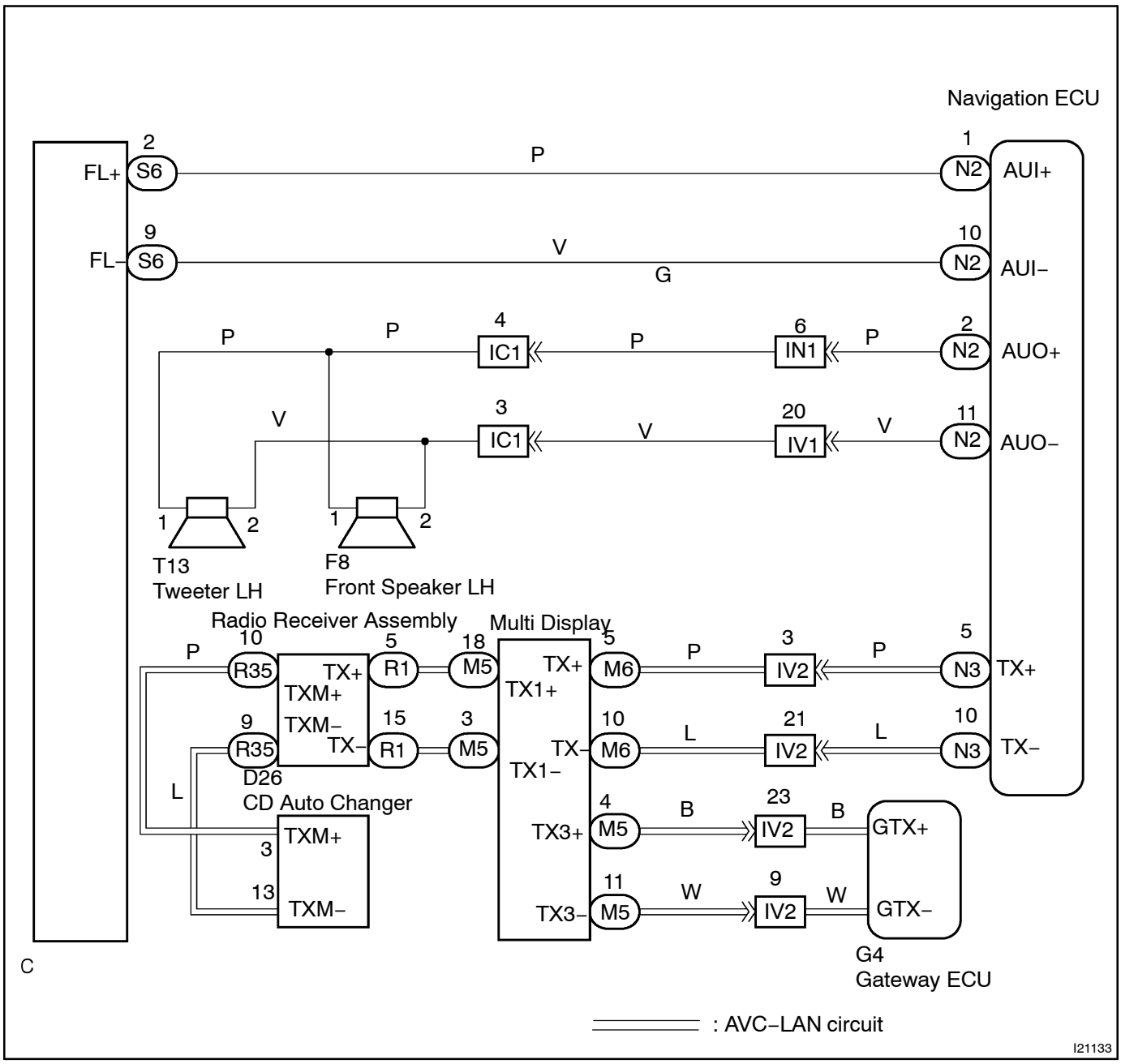
CIRCUIT DESCRIPTION

Each unit of 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, 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 radio receiver assembly has a terminator necessary for transmitting the communication.
multi display is connected between navigation ECU and radio receiver assembly, navigation system has the structure that makes communication impossible without navigation ECU, multi display or radio receiver assembly.

AVC–LAN



WIRING DIAGRAM



INSPECTION PROCEDURE

1	**Disconnect the connector ”D26” 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 ”S6” 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 "S6" 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 "R1" connector of the radio receiver assembly, 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 radio receiver assembly and stereo component amplifier.

NG

5	Check wire harness and connector between radio receiver assembly and multi display (See page IN–34).

NG	Repair or replace wire harness or connector between radio receiver assembly and multi display.

OK

6	Check wire harness and connector between multi display and navigation ECU. (See page IN–34)

NG → Repair or replace wire harness or connector between multi display and navigation ECU.

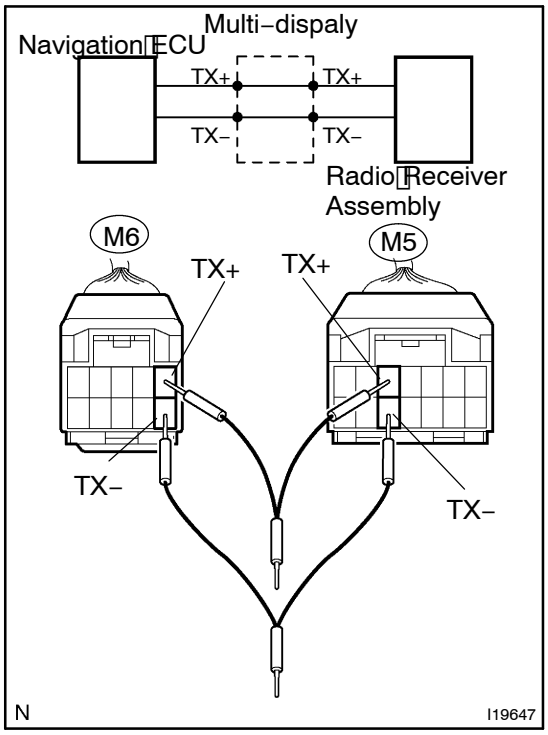
OK

7	Check wire harness and connector between multi display and gateway ECU. (See page IN–34)

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 ”M5” 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 multi–display.

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.

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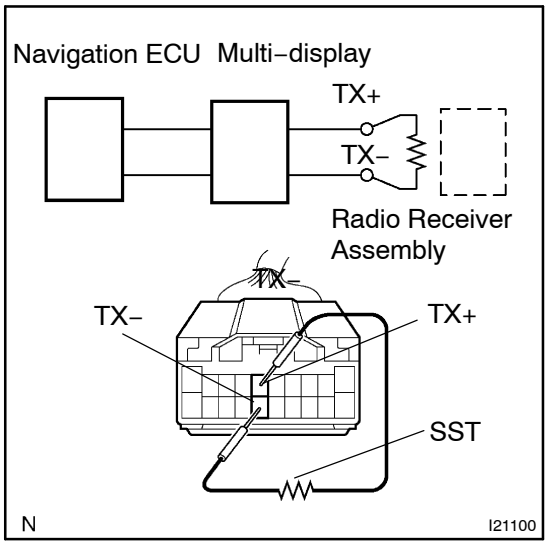
9	Skip Audio head unit and check AVC–LAN.



PREPARATION:

(a) Connect multi display connector.
(b) Disconnect Audio head unit "R1" connector.
(c) Using SST (Navigation Check Wire P/N 09843–18050), connect the terminal TX+ to terminal TX– of "R1" connector of radio receiver assembly.

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 radio receiver assembly.

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Replace the navigation ECU.