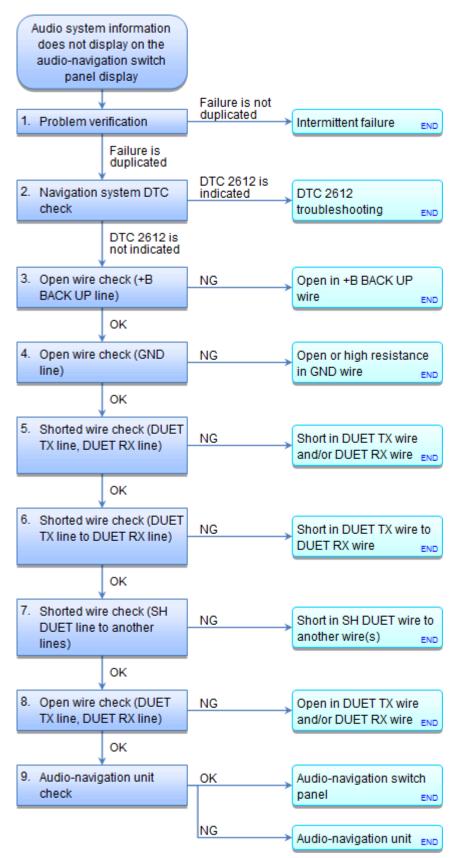
Audio System Symptom Troubleshooting - Audio system information does not display on the audio-navigation switch panel display



Audio system information does not display on the audio-navigation switch panel display

NOTE:

- Check the vehicle battery condition first.
- Check the connectors for poor connections or loose terminals.
- 1. Problem verification:
 - -1. Press the engine start/stop button to select the ON mode.
 - -2. Check if clock information appears on the audio-navigation switch panel display.

Is there clock information displayed?

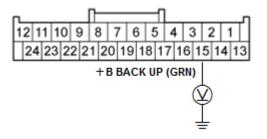
- YES Intermittent failure, the system is OK at this time.
- NO The failure is duplicated, go to step 2.
- 2. Navigation system DTC check:
 - -1. Check for hard error codes.

Is DTC 2612 (Sub Display Diag) indicated?

- YES Go to DTC 2612 troubleshooting.
- NO Go to step 3.
- 3. Open wire check (+B BACK UP line):
 - -1. Press the engine start/stop button to select the OFF mode.
 - -2. Measure the voltage between test points 1 and 2.

| Test condition | OFF mode |
|----------------|--|
| Test circuit | +B BACK UP |
| Test point 1 | Audio-navigation switch panel 24P connector No. 15 (GRN) |
| Test point 2 | Body ground |

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



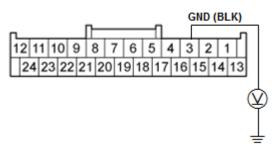
Wire side of female terminals

Is there battery voltage?

- YES The +B BACK UP wire is not open. Go to step 4.
- ^{NO} Repair an open in the wire between the No. A29 (10 A) fuse in the under-hood fuse/relay box and the audio-navigation switch panel.■
- 4. Open wire check (GND line):
 - -1. Press the engine start/stop button to select the ON mode.

 -2. Measure the voltage between test points 1 and 2. Test condition ON mode Test circuit GND Test point 1 <u>Audio-navigation switch panel 24P connector No. 3 (BLK)</u> Test point 2 Body ground

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Wire side of female terminals

Is there less than 0.2 V?

- YES The GND wire is not open. Go to step 5.
- ^{NO} Repair an open or high resistance in the wire between the audio-navigation switch panel and body ground (G503).■
- 5. Shorted wire check (DUET TX line, DUET RX line):
 - -1. Press the engine start/stop button to select the OFF mode.
 - -2. Disconnect the following connectors. <u>Audio-navigation switch panel 24P connector</u> <u>Audio-navigation unit connector E (36P)</u>
 - -3. Check for continuity between test points 1 and 2. Test condition OFF mode Audio-navigation switch panel 24P connector: disconnected Audio-navigation unit connector E (36P): disconnected Test circuit DUET TX Test point 1 Audio-navigation unit connector E (36P) No. 36 (GRN) Test point 2 Body ground Test circuit DUET RX Audio-navigation unit connector E (36P) No. 18 (RED) Test point 1 Test point 2 Body ground

AUDIO-NAVIGATION UNIT CONNECTOR E (36P)

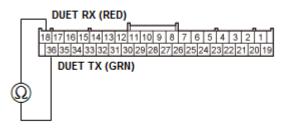
| 11 | DUET | 15 14 | RED | 2 11 1 | 0 9 | 8 | 7 6 | 4 | 3 | 2 | 1 |
|----|------|-------|-----|--------|-----|---|-----|-------|---|---|---|
| | | ттх | (GR | N) | | | | | | | |

Wire side of female terminals

Is there continuity?

- YES There is a short to body ground in the wire(s) between the audio-navigation unit and the audio-navigation switch panel. Replace the affected shielded harness.
- NO The DUET TX and the DUET RX wires are not shorted to ground. Go to step 6.
- 6. Shorted wire check (DUET TX line to DUET RX line):
 - -1. Check for continuity between test points 1 and 2. Test condition OFF mode Audio-navigation switch panel 24P connector: disconnected Audio-navigation unit connector E (36P): disconnected DUET TX, DUET RX Test point 1 Test point 2 Audio-navigation unit connector E (36P) No. 36 (GRN) Audio-navigation unit connector E (36P) No. 18 (RED)

AUDIO-NAVIGATION UNIT CONNECTOR E (36P)



Wire side of female terminals

Is there continuity?

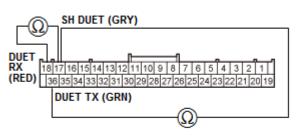
- YES There is a short in the wires between the audio-navigation unit and the audionavigation switch panel. Replace the affected shielded harness.■
- NO The DUET TX and the DUET RX wires are not shorted. Go to step 7.
- 7. Shorted wire check (SH DUET line to another lines):
 - -1. Check for continuity between test points 1 and 2. Test condition OFF mode Audio-navigation switch panel 24P connector: disconnected

Audio-navigation switch parter 241 connector, disconnected Audio-navigation unit connector E (36P): disconnected

| Test circuit | SH DUET, DUET TX |
|--------------|--|
| Test point 1 | Audio-navigation unit connector E (36P) No. 17 (GRY) |
| Test point 2 | Audio-navigation unit connector E (36P) No. 36 (GRN) |
| Test circuit | SH DUET, DUET RX |

Test point 1Audio-navigation unit connector E (36P) No. 17 (GRY)Test point 2Audio-navigation unit connector E (36P) No. 18 (RED)

AUDIO-NAVIGATION UNIT CONNECTOR E (36P)



Wire side of female terminals

Is there continuity?

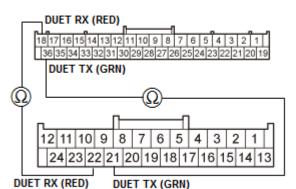
- YES There is a short in the wires between the audio-navigation unit and the audionavigation switch panel. Replace the affected shielded harness.■
- NO The SH DUET wire is OK. Go to step 8.

8. Open wire check (DUET TX line, DUET RX line):

-1. Check for continuity between test points 1 and 2.

| Test condition | OFF mode |
|----------------|--|
| | Audio-navigation switch panel 24P connector: disconnected Audio-navigation unit connector E (36P): disconnected |
| Test circuit | DUET TX |
| Test point 1 | Audio-navigation unit connector E (36P) No. 36 (GRN) |
| Test point 2 | Audio-navigation switch panel 24P connector No. 21 (GRN) |
| Test circuit | DUET RX |
| Test point 1 | Audio-navigation unit connector E (36P) No. 18 (RED) |
| Test point 2 | Audio-navigation switch panel 24P connector No. 22 (RED) |

AUDIO-NAVIGATION UNIT CONNECTOR E (36P) Wire side of female terminals



AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR Wire side of female terminals

Is there continuity?

- YES The DUET TX and the DUET RX wires are OK. Go to step 9.
- NO There is an open in the wire(s) between the audio-navigation unit and the audionavigation switch panel. Replace affected shielded harness.■

9. Audio-navigation unit check:

- -1. Substitute a known-good audio-navigation switch panel.
- -2. Reconnect all the connectors, and recheck.

Does the symptom go away?

- YES Replace the original audio-navigation switch panel.■
- NO Replace the audio-navigation unit.