

| | | |
|--|---------------------|--------------------------------------|
| Last Modified: 6-27-2019 | 6.8:8.0.48 | Doc ID: RM000001YQB002X |
| Model Year Start: 2006 | Model: IS350 | Prod Date Range: [08/2005 -] |
| Title: NAVIGATION: NAVIGATION SYSTEM: 74-40; Short in Speaker Circuit; 2006 MY IS250 IS350 [08/2005 -] | | |

| | | |
|------------|--------------|---------------------------------|
| DTC | 74-40 | Short in Speaker Circuit |
|------------|--------------|---------------------------------|

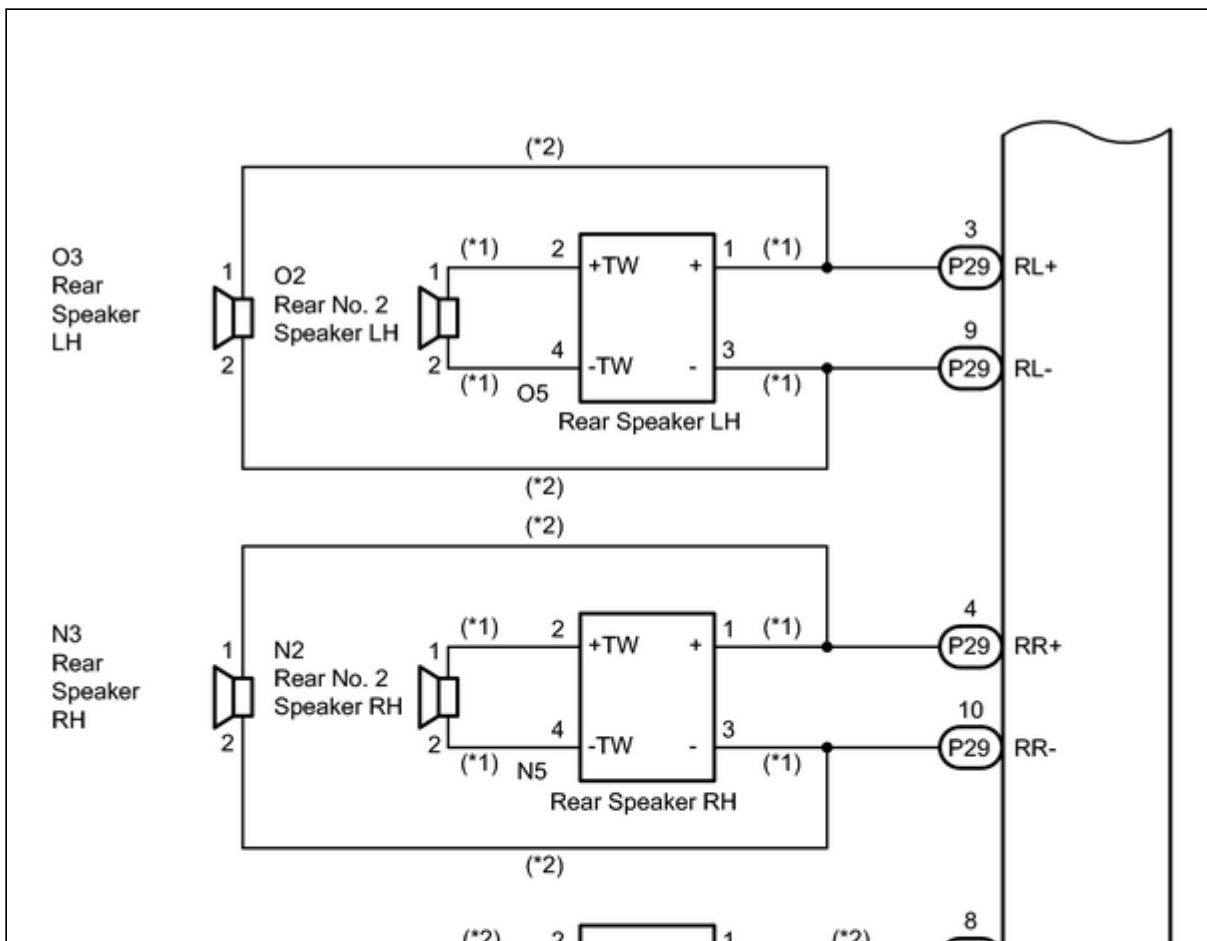
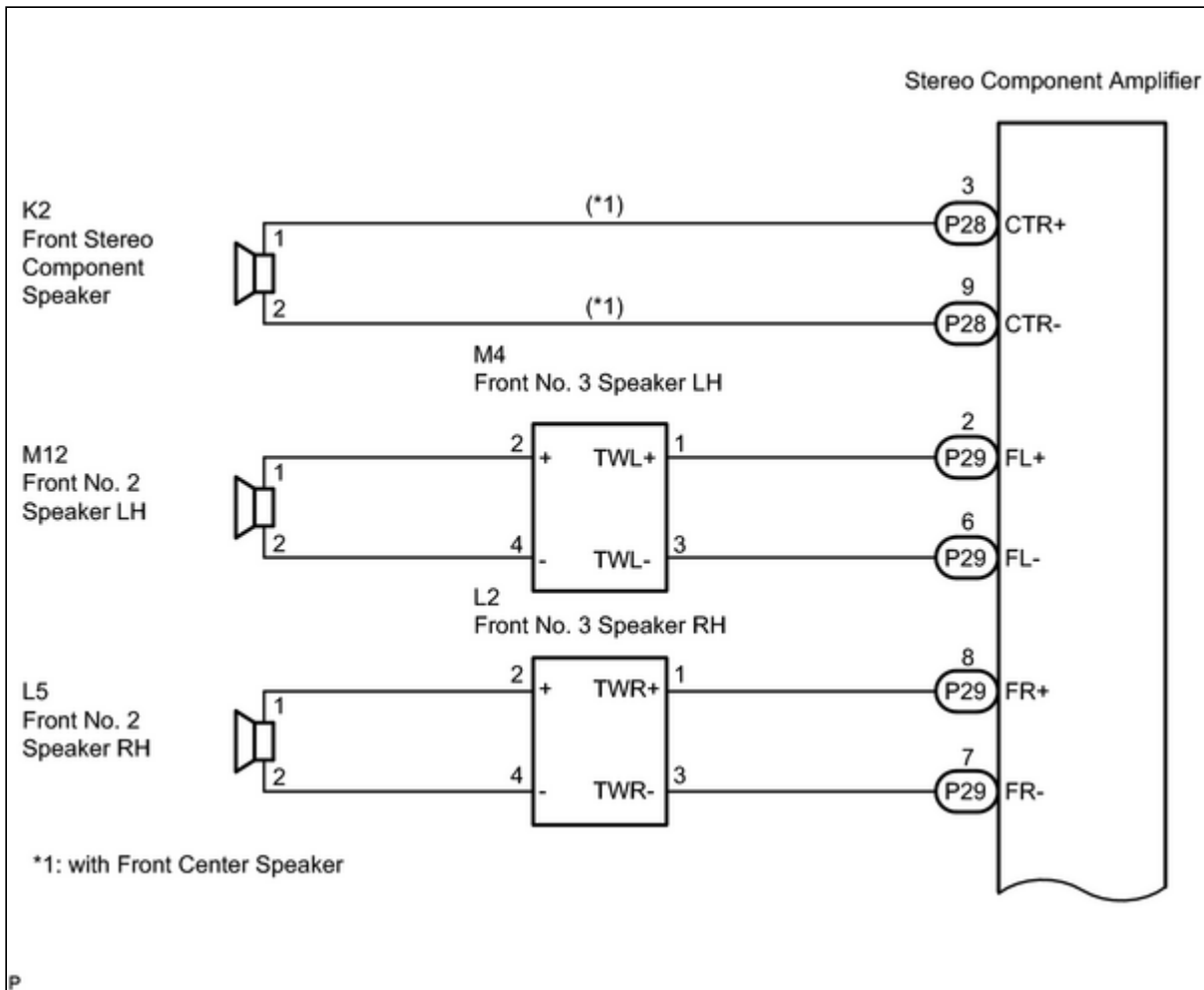
DESCRIPTION

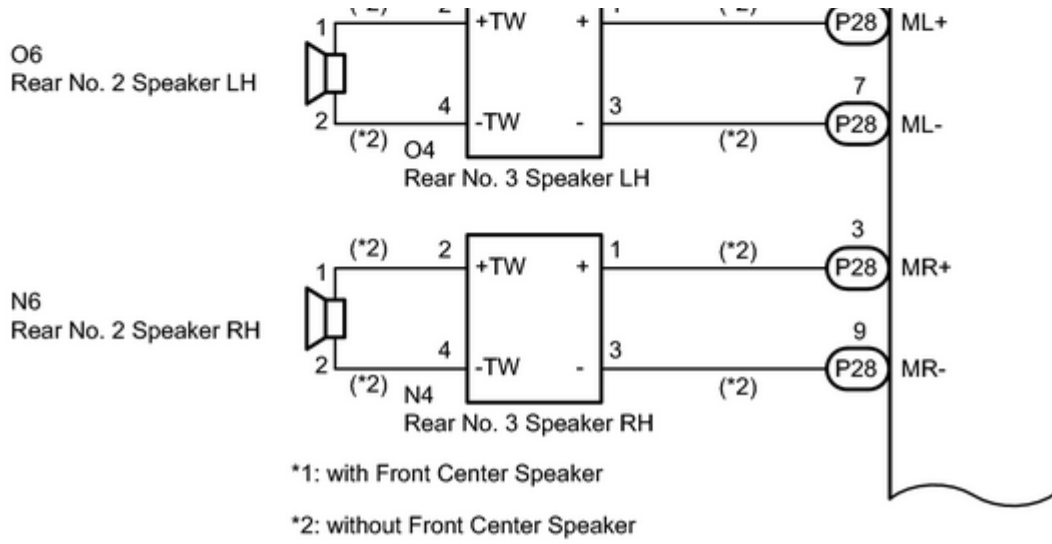
| DTC NO. | DTC DETECTION CONDITION | TROUBLE AREA |
|---------|--|---|
| 74-40 | A short is detected in the speaker output circuit. | <ul style="list-style-type: none"> • Wire harness • Speaker • Stereo component amplifier |

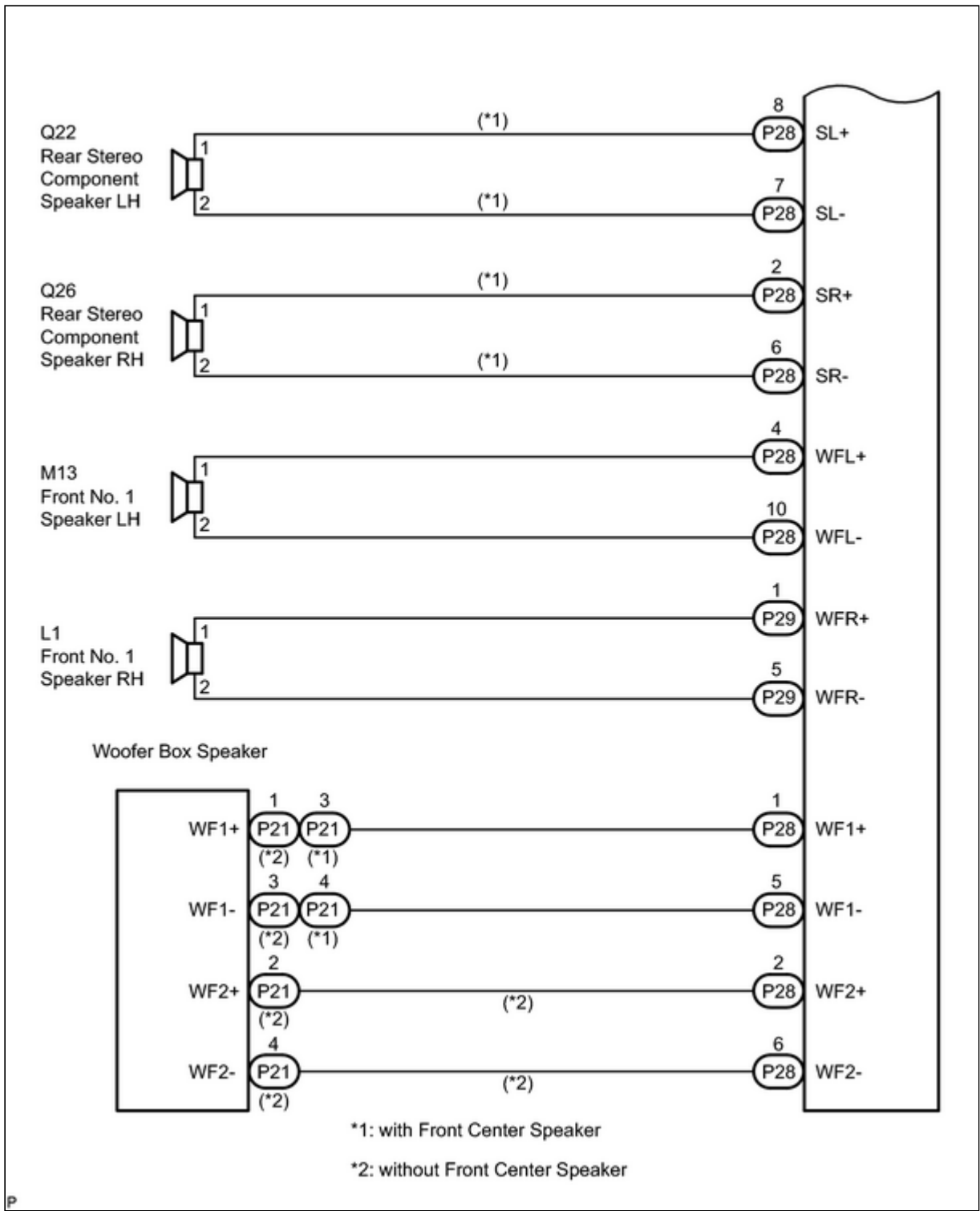
This circuit has a fail-safe function.

- When a short in the speaker circuit is detected, all sound output is stopped.

WIRING DIAGRAM







INSPECTION PROCEDURE

HINT:

After the inspection is completed, clear the DTCs.

PROCEDURE

| | |
|-----------|---|
| 1. | INSPECT STEREO COMPONENT AMPLIFIER |
|-----------|---|

- (a) Disconnect the stereo component amplifier connectors P29 and P28.
- (b) Clear the DTCs and recheck for DTCs.
- (c) Check if DTC 74-40 is output.

OK:

DTC 74-40 is not output.

NG  **REPLACE STEREO COMPONENT AMPLIFIER**

OK



| | |
|-----------|------------------------|
| 2. | CHECK OPERATION |
|-----------|------------------------|

- (a) Reconnect the stereo component amplifier connector P29.
- (b) Check if DTC 74-40 is output.

OK:

DTC 74-40 is not output.

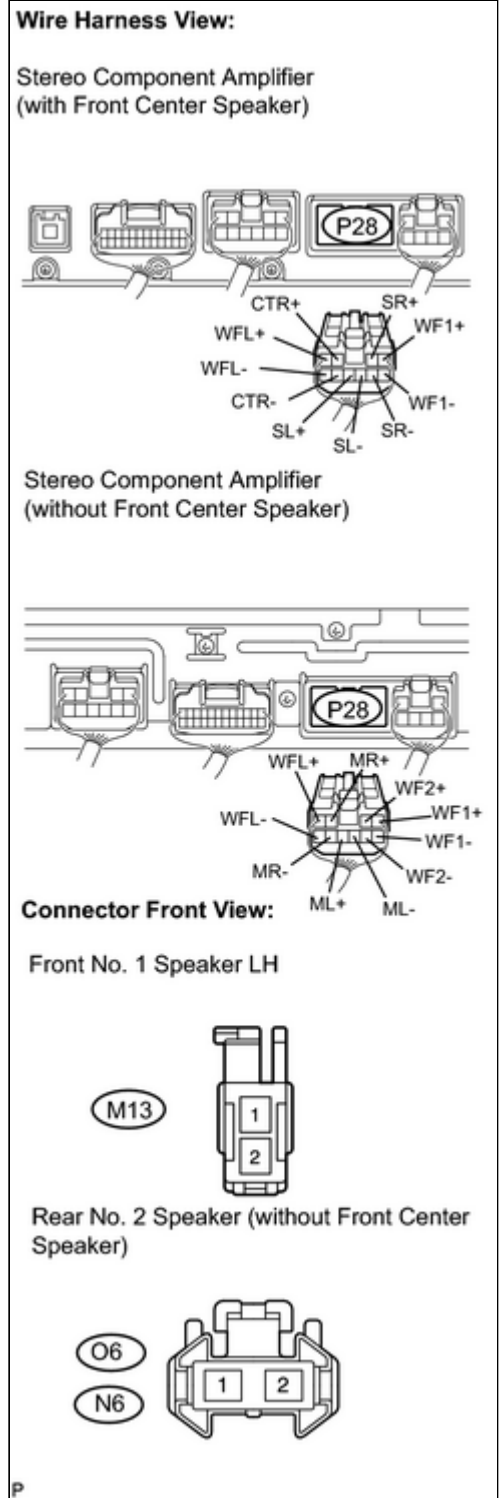
NG  **GO TO STEP 14**

OK



| | |
|-----------|------------------------------------|
| 3. | CHECK HARNESS AND CONNECTOR |
|-----------|------------------------------------|

- (a) Disconnect the connectors shown in the illustration from the stereo component amplifier and speakers.

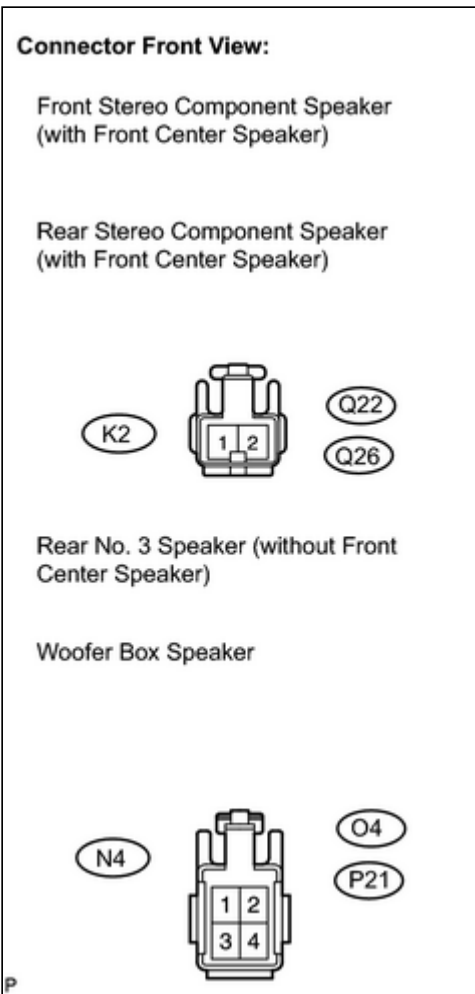


(b) Measure the resistance according to the value(s) in the table below.

Standard resistance:

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|-------------------------|-----------|---------------------|
| CTR+ - Body ground (*1) | Always | 10 kΩ or higher |
| CTR- - Body ground (*1) | Always | 10 kΩ or higher |
| ML+ - Body ground (*2) | Always | 10 kΩ or higher |

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|-------------------------|-----------|---------------------|
| ML- - Body ground (*2) | Always | 10 kΩ or higher |
| O4-2 - Body ground (*2) | Always | 10 kΩ or higher |
| O4-4 - Body ground (*2) | Always | 10 kΩ or higher |
| MR+ - Body ground (*2) | Always | 10 kΩ or higher |
| MR- - Body ground (*2) | Always | 10 kΩ or higher |
| N4-2 - Body ground (*2) | Always | 10 kΩ or higher |
| N4-4 - Body ground (*2) | Always | 10 kΩ or higher |
| SL+ - Body ground (*1) | Always | 10 kΩ or higher |
| SL- - Body ground (*1) | Always | 10 kΩ or higher |
| SR+ - Body ground (*1) | Always | 10 kΩ or higher |
| SR- - Body ground (*1) | Always | 10 kΩ or higher |
| WFL+ - Body ground | Always | 10 kΩ or higher |
| WFL- - Body ground | Always | 10 kΩ or higher |
| WF2+ - Body ground (*2) | Always | 10 kΩ or higher |
| WF2- - Body ground (*2) | Always | 10 kΩ or higher |
| WF1+ - Body ground | Always | 10 kΩ or higher |
| WF1- - Body ground | Always | 10 kΩ or higher |



*1: with Front Center Speaker

*2: without Front Center Speaker

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK
▼

4. INSPECT FRONT NO. 1 SPEAKER (LEFT HAND)

(a) Resistance check.

(1) Measure the resistance between the terminals of the speaker.

Standard resistance:

with Front Center Speaker

6 to 10 Ω

without Front Center Speaker

Approximately 4 Ω

NG REPLACE FRONT NO. 1 SPEAKER (LEFT HAND)

OK

| | |
|-----------|----------------------|
| 5. | CONFIRM MODEL |
|-----------|----------------------|

| RESULT | PROCEED TO |
|------------------------------|------------|
| without Front Center Speaker | A |
| with Front Center Speaker | B |

B **GO TO STEP 10****A**

| | |
|-----------|--|
| 6. | INSPECT REAR NO. 2 SPEAKER (RIGHT HAND) |
|-----------|--|

- (a) Reconnect the stereo component amplifier connector and rear No. 2 speaker connector.
- (b) Check that audio sound can be heard from the speaker.

OK:

Audio sound can be heard.

NG **REPLACE REAR NO. 2 SPEAKER (RIGHT HAND)****OK**

| | |
|-----------|---|
| 7. | INSPECT REAR NO. 2 SPEAKER (LEFT HAND) |
|-----------|---|

- (a) Reconnect the stereo component amplifier connector and rear No. 2 speaker connector.
- (b) Check that audio sound can be heard from the speaker.

OK:

Audio sound can be heard.

NG **REPLACE REAR NO. 2 SPEAKER (LEFT HAND)****OK**

**8. INSPECT REAR NO. 3 SPEAKER (RIGHT HAND)**

- (a) Reconnect the stereo component amplifier connector and rear No. 3 speaker connector.
- (b) Check that audio sound can be heard from the speaker.

OK:

Audio sound can be heard.

NG **REPLACE REAR NO. 3 SPEAKER (RIGHT HAND)**

OK

**9. INSPECT REAR NO. 3 SPEAKER (LEFT HAND)**

- (a) Reconnect the stereo component amplifier connector and rear No. 3 speaker connector.
- (b) Check that audio sound can be heard from the speaker.

OK:

Audio sound can be heard.

OK **GO TO STEP 13**

NG **REPLACE REAR NO. 3 SPEAKER (LEFT HAND)**

10. INSPECT REAR STEREO COMPONENT SPEAKER (LEFT HAND)

- (a) Reconnect the stereo component amplifier connector and rear stereo component speaker connector.
- (b) Check that audio sound can be heard from the speaker.

OK:

Audio sound can be heard.

NG **REPLACE REAR STEREO COMPONENT SPEAKER (LEFT HAND)**

OK



11. INSPECT REAR STEREO COMPONENT SPEAKER (RIGHT HAND)

- (a) Reconnect the stereo component amplifier connector and rear stereo component speaker connector.
- (b) Check that audio sound can be heard from the speaker.

OK:

Audio sound can be heard.

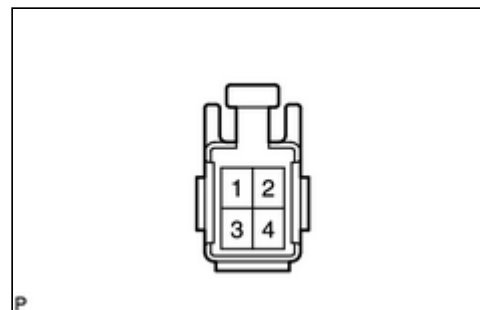
NG ▶ **REPLACE REAR STEREO COMPONENT SPEAKER (RIGHT HAND)****OK****12. INSPECT FRONT STEREO COMPONENT SPEAKER**

- (a) Resistance check.
- (1) Measure the resistance between the terminals of the speaker.

Standard resistance:

7 to 9 Ω **NG** ▶ **REPLACE FRONT STEREO COMPONENT SPEAKER****OK****13. INSPECT WOOFER BOX SPEAKER**

- (a) Resistance check.



- (b) Measure the resistance according to the value(s) in the table below.

NOTICE:

The speaker should not be removed for checking.

Standard resistance:

with Front Center Speaker**without Front Center Speaker**

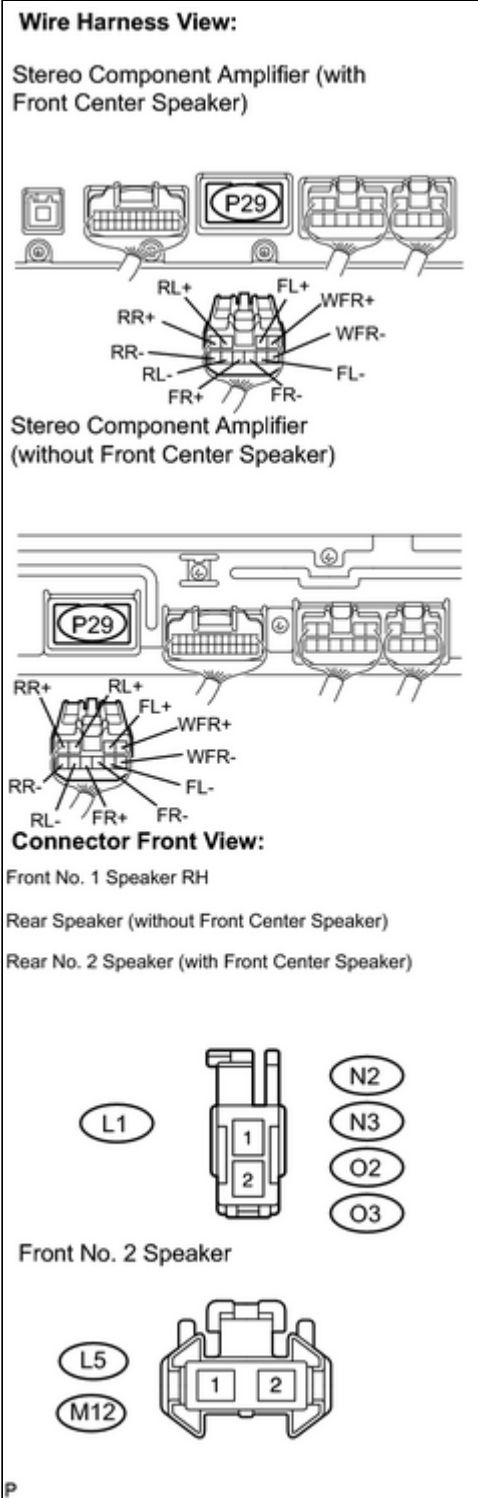
| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|-------------------|-----------|---------------------|
| 3 - 4 | Always | 7 to 8.6 Ω |

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|-------------------|-----------|--------------------------|
| 1 - 3 | Always | Approximately 2 Ω |
| 2 - 4 | Always | Approximately 2 Ω |

NG  **REPLACE WOOFER BOX SPEAKER****OK**

| | |
|------------|------------------------------------|
| 14. | CHECK HARNESS AND CONNECTOR |
|------------|------------------------------------|

- (a) Disconnect the connectors shown in the illustration from the stereo component amplifier and speakers.

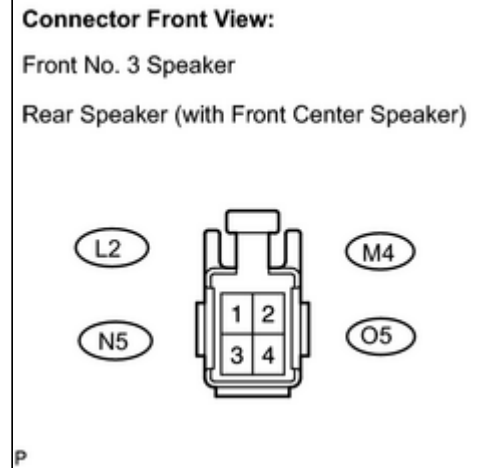


(b) Measure the resistance according to the value(s) in the table below.

Standard resistance:

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|--------------------|-----------|---------------------|
| FL+ - Body ground | Always | 10 kΩ or higher |
| FL- - Body ground | Always | 10 kΩ or higher |
| M4-2 - Body ground | Always | 10 kΩ or higher |

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|-------------------------|-----------|-------------------------|
| M4-4 - Body ground | Always | 10 k Ω or higher |
| FR+ - Body ground | Always | 10 k Ω or higher |
| FR- - Body ground | Always | 10 k Ω or higher |
| L2-2 - Body ground | Always | 10 k Ω or higher |
| L2-4 - Body ground | Always | 10 k Ω or higher |
| RL+ - Body ground | Always | 10 k Ω or higher |
| RL- - Body ground | Always | 10 k Ω or higher |
| O5-2 - Body ground (*1) | Always | 10 k Ω or higher |
| O5-4 - Body ground (*1) | Always | 10 k Ω or higher |
| RR+ - Body ground | Always | 10 k Ω or higher |
| RR- - Body ground | Always | 10 k Ω or higher |
| N5-2 - Body ground (*1) | Always | 10 k Ω or higher |
| N5-4 - Body ground (*1) | Always | 10 k Ω or higher |
| WFR+ - Body ground | Always | 10 k Ω or higher |
| WFR- - Body ground | Always | 10 k Ω or higher |



*1: with Front Center Speaker

NG **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK



15. INSPECT FRONT NO. 1 SPEAKER (RIGHT HAND)

(a) Resistance check.

(1) Measure the resistance between the terminals of the speaker.

Standard resistance:

with Front Center Speaker

6 to 10 Ω

without Front Center Speaker

Approximately 4 Ω

NG **REPLACE FRONT NO. 1 SPEAKER (RIGHT HAND)**

OK




16. INSPECT FRONT NO. 2 SPEAKER (RIGHT HAND)

- (a) Reconnect the stereo component amplifier connector and front No. 2 speaker connector.
- (b) Check that audio sound can be heard from the speaker.

OK:

Audio sound can be heard.

NG  **REPLACE FRONT NO. 2 SPEAKER (RIGHT HAND)****OK****17. INSPECT FRONT NO. 2 SPEAKER (LEFT HAND)**

- (a) Reconnect the stereo component amplifier connector and front No. 2 speaker connector.
- (b) Check that audio sound can be heard from the speaker.

OK:


Audio sound can be heard.

NG  **REPLACE FRONT NO. 2 SPEAKER (LEFT HAND)****OK****18. INSPECT FRONT NO. 3 SPEAKER (RIGHT HAND)**

- (a) Reconnect the stereo component amplifier connector and front No. 3 speaker connector.
- (b) Check that audio sound can be heard from the speaker.

OK:

Audio sound can be heard.

NG  **REPLACE FRONT NO. 3 SPEAKER (RIGHT HAND)****OK****19. INSPECT FRONT NO. 3 SPEAKER (LEFT HAND)**

- (a) Reconnect the stereo component amplifier connector and front No. 3 speaker connector.
- (b) Check that audio sound can be heard from the speaker.

OK:

Audio sound can be heard.

NG  **REPLACE FRONT NO. 3 SPEAKER (LEFT HAND)**

OK



| | |
|------------|----------------------|
| 20. | CONFIRM MODEL |
|------------|----------------------|

| RESULT | PROCEED TO |
|------------------------------|------------|
| with Front Center Speaker | A |
| without Front Center Speaker | B |

B  **GO TO STEP 24**

A




| | |
|------------|--|
| 21. | INSPECT REAR NO. 2 SPEAKER (RIGHT HAND) |
|------------|--|

- (a) Reconnect the stereo component amplifier connector and rear No. 2 speaker connector.
- (b) Check that audio sound can be heard from the speaker.

OK:

Audio sound can be heard.

NG  **REPLACE REAR NO. 2 SPEAKER (RIGHT HAND)**

OK



| | |
|------------|---|
| 22. | INSPECT REAR NO. 2 SPEAKER (LEFT HAND) |
|------------|---|

- (a) Reconnect the stereo component amplifier connector and rear No. 2 speaker connector.
- (b) Check that audio sound can be heard from the speaker.

OK:

Audio sound can be heard.

NG ► REPLACE REAR NO. 2 SPEAKER (LEFT HAND)

OK



| | |
|------------|--|
| 23. | INSPECT REAR SPEAKER (RIGHT HAND) |
|------------|--|

(a) Reconnect the stereo component amplifier connector and rear speaker connector.

(b) Check that audio sound can be heard from the speaker.

OK:

Audio sound can be heard.

NG ► REPLACE REAR SPEAKER (RIGHT HAND)

OK ► REPLACE REAR SPEAKER (LEFT HAND)

| | |
|------------|---|
| 24. | INSPECT REAR SPEAKER (LEFT HAND) |
|------------|---|

(a) Resistance check.

(1) Measure the resistance between the terminals of the speaker.

Standard resistance:

Approximately 4 Ω

NG ► REPLACE REAR SPEAKER (LEFT HAND)

OK ► REPLACE REAR SPEAKER (RIGHT HAND)

