Radio Broadcast cannot be Received or Poor Reception

INSPECTION PROCEDURE

1 CHECK RADIO RECEIVER

(a) Check the radio's automatic station search function.
(1) Check the radio's automatic station search function by activating it.
OK:
The radio's automatic station search function works properly.

OK → **REPLACE RADIO RECEIVER**

NG

2 CONFIRM MODEL

Result

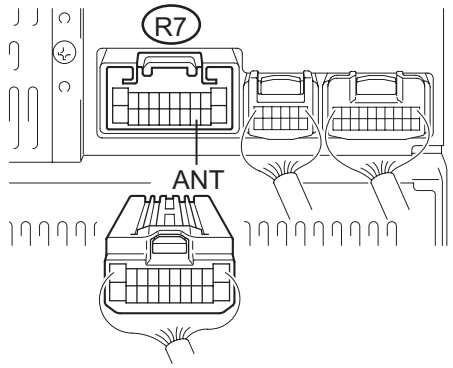
Result	Proceed to
10 Speaker System	A
6 Speaker System	B

B → **Go to step 9**

A

3 INSPECT RADIO RECEIVER ASSEMBLY

Wire Harness View (10 Speaker System):



(a) Disconnect the radio receiver connector R7.
(b) Measure the voltage according to the value(s) in the table below.
Standard voltage

Tester Connection	Condition	Specified Condition
ANT - Body ground	Ignition SW ON Radio SW ON	10 to 14 V

NG → **REPLACE RADIO RECEIVER**

OK

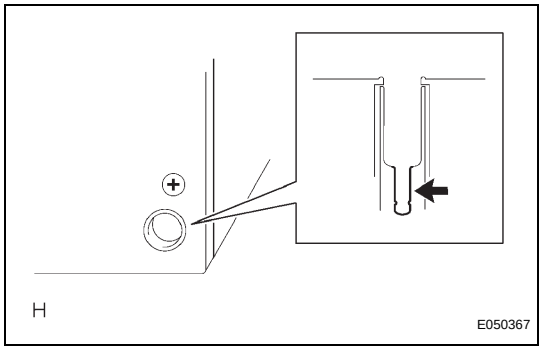
4	CHECK OPTIONAL COMPONENTS

(a) Check optional components (sun-shade film, telephone antenna, etc.).
  (1) Check if any optional components, such as sunshade film or telephone antenna that may decrease reception capacity, are installed.
  OK:
  Optional components are installed.
  NOTICE:
  Do not remove any optional components installed by the customer without his or her consent.

OK → **REMOVE OPTIONAL COMPONENTS AND CHECK AGAIN (SEE NOTICE ABOVE)**

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5	CHECK RADIO RECEIVER



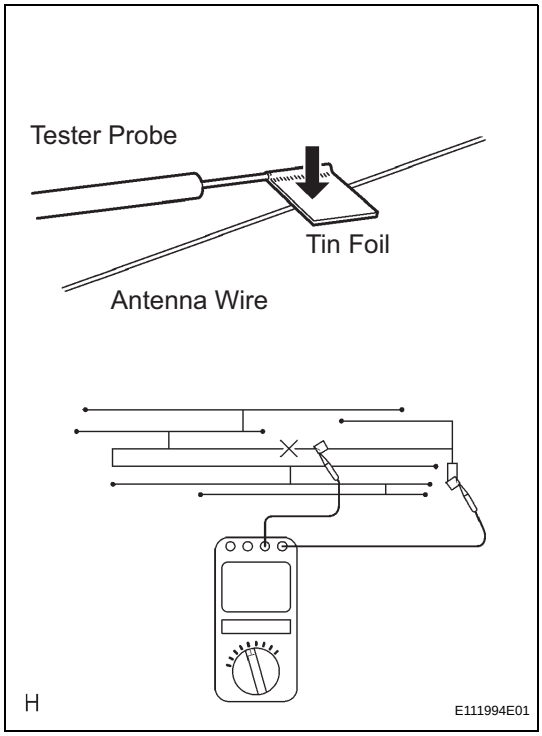
(a) Preparation for check
  (1) Remove the antenna plug from the radio receiver.
(b) Check for noise
  (1) Turn the ignition switch to the ACC position with the radio receiver connector connected.
  (2) Turn the radio on and put into AM mode.
  (3) Place a screwdriver, thin wire, or other metal object on the radio receiver's antenna jack and check that noise can be heard from the speaker.
  OK:
  Noise occurs.

NG → **REPLACE RADIO RECEIVER**

OK

AV

6	CHECK GLASS ANTENNA



(a) Check for continuity of the antenna.
HINT:
Check for continuity at the center of each antenna wire as shown in the illustration.
NOTICE:
When cleaning the glass, wipe it in the direction of the wire with a soft dry cloth. Take care not to damage the wire. Do not use detergents or glass cleaners with abrasive ingredients. When measuring voltage, wrap a piece of tin foil around the tip of the negative probe and press the foil against the wire with your finger, as shown in the illustration.
OK:
There is continuity in the antenna.

NG → **REPAIR GLASS ANTENNA**

OK

AV

7	CHECK ANTENNA CORD

(a) Remove the antenna plug of the radio receiver and antenna.
(b) Measure the resistance between the antenna and radio receiver to check for an open circuit in the antenna cord.
Standard resistance:
Below 1 Ω
(c) Measure the resistance between the antenna cord and body ground to check for a short circuit in the antenna cord.
Standard resistance:
10 kΩ or higher

NG → **REPLACE ANTENNA CORD**

OK

8	REPLACE AMPLIFIER ANTENNA ASSEMBLY

(a) Replace the amplifier antenna and check if radio broadcasts can be received normally.
OK:
Radio broadcasts can be received.

OK → **NORMAL OPERATION**

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REPLACE RADIO RECEIVER

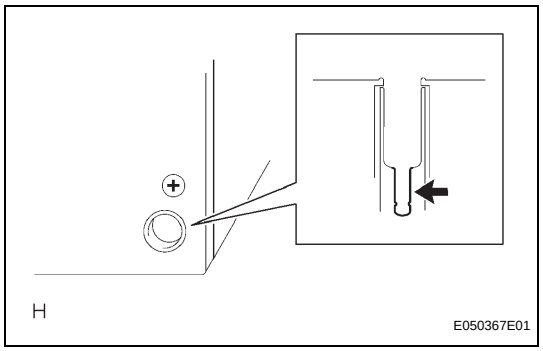
9	CHECK OPTIONAL COMPONENTS

(a) Check optional components (sun-shade film, telephone antenna, etc.).
  (1) Check if any optional components, such as sun-shade film or telephone antenna that may decrease reception capacity, are installed.
  OK:
  Optional components are installed.
  NOTICE:
  Do not remove any optional components installed by the customer without his or her consent.

OK → **REMOVE OPTIONAL COMPONENTS AND CHECK AGAIN (SEE NOTICE ABOVE)**

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10	CHECK RADIO RECEIVER



(a) Preparation for check
  (1) Remove the antenna plug from the radio receiver.
(b) Check for noise
  (1) Turn the ignition switch on (ACC) with the radio receiver connector connected.
  (2) Turn the radio on and put into AM mode.
  (3) Place a screwdriver, thin wire, or other metal object on the radio receiver's antenna jack and check that noise can be heard from the speaker.
  OK:
  Noise occurs.

NG → **REPLACE RADIO RECEIVER**

OK

11	CHECK RADIO ANTENNA CORD

(a) Remove the antenna plug of the radio receiver and antenna.
(b) Measure the resistance between the antenna and radio receiver to check for an open circuit in the radio antenna cord.
  Standard resistance:
  Below 1 Ω

AV

(c) Measure the resistance between the radio antenna cord and body ground to check for a short circuit in the antenna cord.
Standard resistance:
10 kΩ or higher

NG → **REPLACE ANTENNA CORD**

OK

12	REPLACE ANTENNA POLE

(a) Replace antenna pole and check that it operated normally.
OK:
The antenna pole operates normally.

OK → **NORMAL OPERATION**

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REPLACE RADIO RECEIVER