

Name _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) What are the purpose and function of the ground plane?

2) Why do AM signals travel farther than FM signals?

3) What is the first step when diagnosing a satellite radio customer complaint?

4) How do you match the impedance of speakers?

5) What two items may need to be added to the wiring of a vehicle to control or reduce radio noise?

Answer Key

Testname: AEEP8_SHORT27

- 1) The ground plane represents one-half of the length of the antenna.
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- 2) AM signals travel longer distances than FM signals because they bounce off the upper atmosphere. FM waves do not reflect back to earth like AM waves.
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- 3) The first step in any diagnosis is to verify the customer complaint (concern). If no satellite service is being received, first check with the customer to verify that the monthly service fee has been paid and the account is up to date. If poor reception is the cause, carefully check the antenna for damage or faults with the lead-in wire. The antennas must be installed on a metal surface to provide the proper ground plane.
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- 4) The impedance is matched by applying Ohms law and arranging the speakers in series or parallel to achieve the proper impedance.
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- 5) A capacitor can be added to the power input to the radio and a braided ground strap can be added to the ground to help reduce radio noise.
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