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<u>AV-534, & AV-534L</u> <u>VHF Communications Antenna for General Aviation</u>

Frequency Range: 118-137 MHz

Model AV-534 antenna does not include the required coax cable, but does include two solder lugs for cable installation. Model AV-534L antenna includes an 8' coax cable with the shield and center conductor solder lugs attached and a BNC type connector on the other end.

Installation Instructions

1.) Metal Skin Aircraft

Determine the desired mounting location on the aircraft. Keep in mind that the antenna should be located at least two feet away from other antennas and reflective surfaces on the airframe (e.g., vertical stabilizer, landing gear, etc.). A good electrical connection must exist between the antenna mounting hardware and the metal frame or skin of the aircraft

2.) Composite or Wood Aircraft

Determine the desired mounting location using the guidelines discussed above. Create a "ground plane" on the inside of the aircraft skin by preparing (2) 48 inch long light gage copper wires perpendicular to each other and intersecting at their mid point (forming an X). Strip away insulation at this intersection if using insulated wire. Locate this on the inside of the aircraft skin where the antenna will be mounted externally. Run the wires forward, aft and side to side along the inside wall and secure in place. Attach the (X) intersecting point to the "SHIELD" solder lug, making a good electrical connection. This concept is similar to a communications antenna which you would see at an airport terminal building; a vertical radiator with (4) ground plane "radials" equally spaced around the base.

- 3.) Drill a .531 (17/32) diameter mounting hole in desired location.
- 4.) Place a #10 flat washer, gasket (fiber), insulator (upper) and gasket (fiber) on threaded end of antenna rod. (See illustration).
- 5.) Insert antenna rod with components into the mounting hole of the aircraft skin.
- 6.) Place remaining components and hardware onto threaded end of antenna rod as shown in illustration.
- 7.) Tighten hex nuts securely. Note: Be sure to attach the shield and center conductor as shown in illustration.

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