

095136-000 Revision W, May 2016

**Mounting Kit for Fiberglass Antennas
DB5091-3**

GENERAL INFORMATION

1. After removing the antenna from the shipping package, inspect contents to make sure all parts are on hand and that there is no physical damage.
2. Inspect the antenna output connection to determine that it matches with the end of the station transmission line.
3. Check the antenna label to verify that the frequency to which the antenna has been tuned matches the frequency on which the radio system is to operate.

INSTALLATION INSTRUCTIONS

1. Attach the heavy duty mounting clamps on the antenna only at the positions labeled:

ATTACH MOUNTING CLAMP HERE

For maximum strength, the mounting clamps should be mounted as far apart as is safely possible.

2. Remove the rubber boot before installation (Figure 1).
3. Pre-assemble as much of the mounting hardware as possible to the antenna while on the ground. If hoisting the antenna to the top of the tower or structure, attach a rope to the mounting hardware at the bottom of the antenna and then make a slip knot loop of the rope at the top of the antenna. The slip knot loop will keep the antenna vertical when hoisting the antenna. For safety, an additional rope can be attached to the bottom of the antenna and be used as a guide by someone else on the ground.
4. Securely attach the antenna to the cell site support. Tighten all hardware using the following torque: 1/2-13 = 516 LBS-IN (58 N-M).
5. Remove and discard the cap plug from the antenna connector.
6. For standard upright mounting (connector end down), remove the drain plug from the connector end of the antenna (labeled "A" in Figure 1), leaving the spike end (labeled "B" in Figure 1) plugged.
For installing an antenna in an inverted position (connector end up), ensure that the drain hole at the connector end (labeled "A" in Figure 1) is plugged and the drain hole on the spike end (labeled "B" in Figure 1) is open.

CAUTION: Electrical downtilt models must not be mounted in the inverted position. Doing so will cause the beamtilt to be incorrectly directed upward.

7. After the jumper is attached to the antenna, the connection should be sealed to protect against moisture. Make certain the open drain hole is not covered.

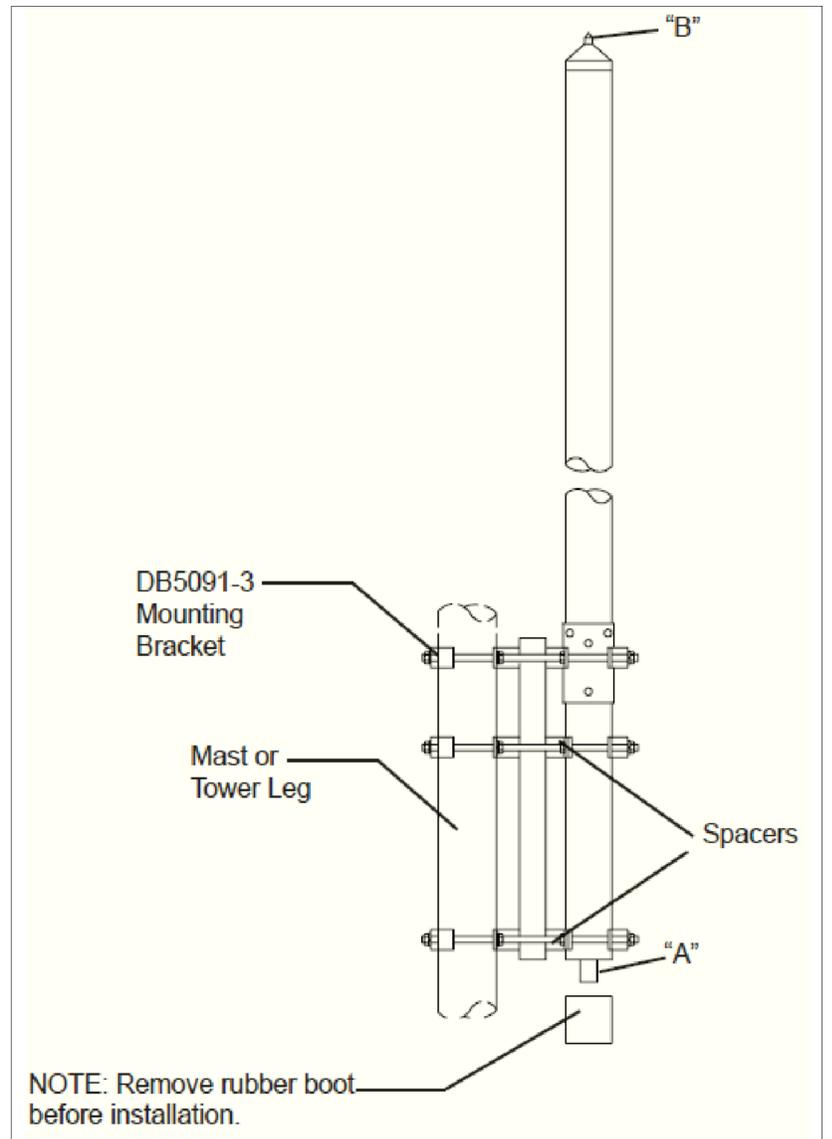


Figure 1. Antenna Using DB5091-3 Mounting Kit.

WARNING!

In the event that a tower top mounting configuration raises the top of the antenna more than 20 feet above the tower top, refer to Section 17 of FAA rules for special lighting requirements.

Installation of any antenna near power lines is dangerous. For your safety, follow the antenna installation procedures.

POST INSTALLATION INSTRUCTIONS

1. A check of the antenna VSWR, as measured at the antenna, is recommended at this time. Note this measurement carefully and record it for future reference.
2. Connect the station transmission line to the antenna jumper. (Make the connection tight but do not apply heavy force with pliers.)
3. Carefully seal the connection to avoid moisture problems. Failure to weatherproof the cable connection will result in improper operation of the antenna.
4. Secure the feeder cable and antenna pigtail to the tower in a position that will best prevent physical damage and stress to the cable.
5. After completing the antenna and transmission line installation, make a careful visual inspection to ensure that:
 - All mechanical connections are secure;
 - The open drain hole is clear so moisture can drain from the antenna;
 - The antenna is mounted to the tower with sufficient physical clearance;
 - All connections have been carefully sealed to prevent moisture problems.



Do not install near power lines. Power lines, telephone lines, and guy wires look the same. Assume any wire or line can electrocute you.



Do not install on a wet or windy day or when lightning or thunder is in the area. Do not use metal ladder.



Wear shoes with rubber soles and heels. Wear protective clothing including a long-sleeved shirt and rubber gloves.

SAFETY NOTICE

The installation, maintenance, or removal of an antenna requires qualified, experienced personnel. CommScope installation instructions are written for such installation personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment.

CommScope disclaims any liability or responsibility for the results of improper or unsafe installation practices.

It is recommended that transmit power be turned off when the field installation is performed. Follow all applicable safety precautions as shown on this page.