Fine Adjustment Pole Mount Installation Guide

(Used for MM Wave Antennas)

an INFINITE company

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IMPORTANT!

Please read instructions through completely before beginning installation. Caution should be used. Qualified persons experienced with antenna assembly and installation are required for installation.

DISCLAIMER

Radio Waves Inc. disclaims any responsibility or liability for damage or injury resulting from incorrect or unsafe installation practices.

Your Pole Mount Kit is shipped to you in one box containing the following components:

1. Antenna assembly
2. Pole mount kit

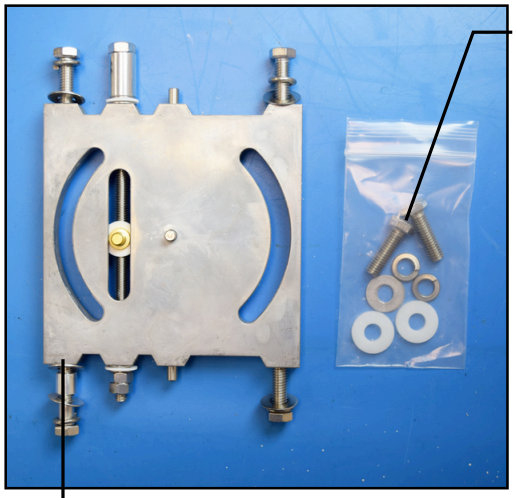
Note: Options and accessories are shipped separately and include separate installation guides. Check the packing slip.

Tools Required:

1. 9/16” Open/box wrench or deep socket wrench
2. Torque wrench with appropriate sockets
3. 3/16” Allen wrench or socket

NOTE: The pictures provided in this document are for illustrative purposes only and may not be identical to your antenna system.

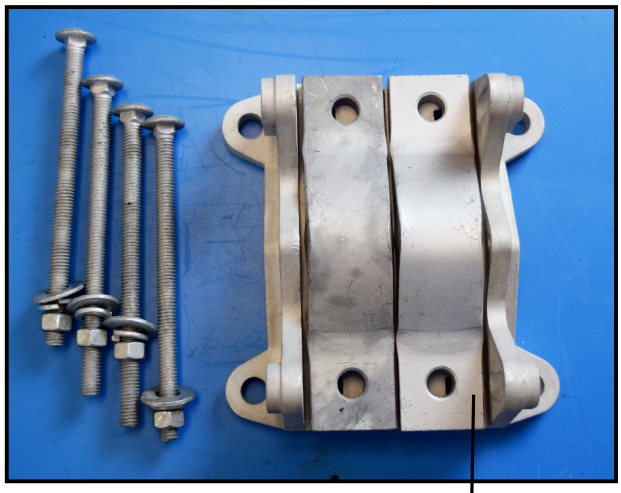
Mounting Kit Component Identification:



Antenna Hardware Kit (attaches antenna to mounting plate)

Antenna mounting plate with associated hardware

Azimuth Adjust Bolt

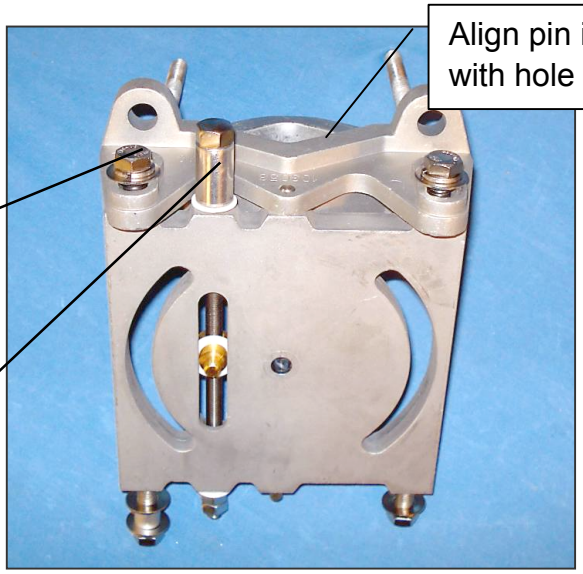


Pole mount components and hardware

5/16-18 Shoulder screw and Bellville washers for center

Assembly of the Mount Kit:

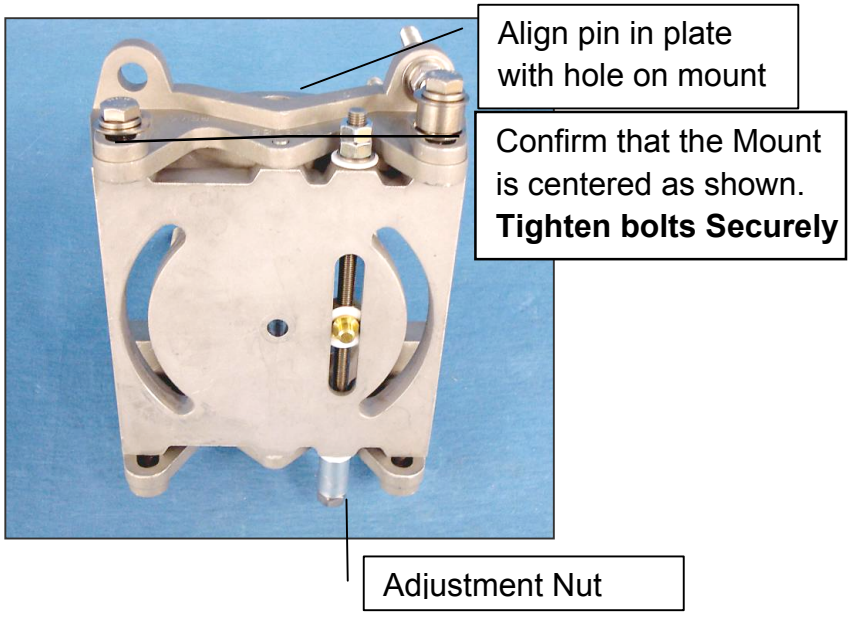
1. Attach the upper pole mount to top of antenna mounting plate using 3/8-16 hardware supplied with plate.



NOTES:

- **Right hand offset is shown, for Left hand offset rotate mounting plate 180º. (See step 3 for photo).**
- **Adjustments to the antenna may be necessary for Left hand offset mounting, refer to additional instructions for your antenna model.**

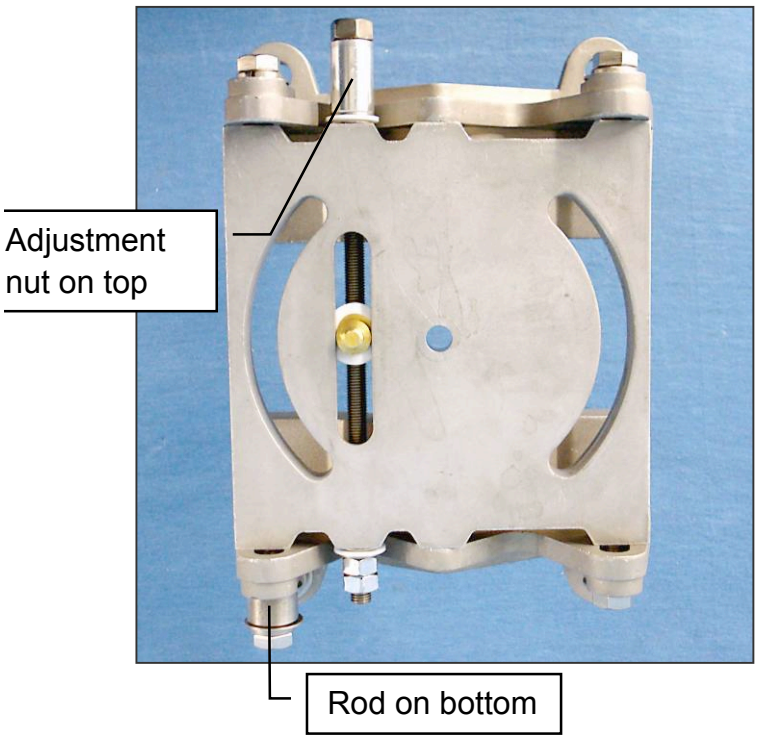
2. Attach the lower pole mount to opposite side of plate as shown using 3/8-16 hardware supplied with plate



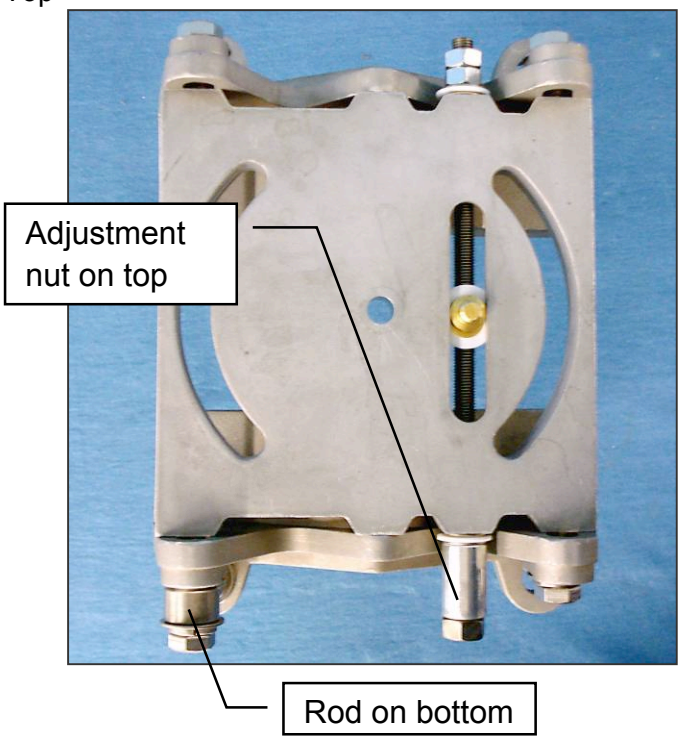
Hardware sequence: Flat washer (between mount and rod), bushing (fits inside rod end), flat washer, lock washer, bolt.

3. Completed assembly views.

Top



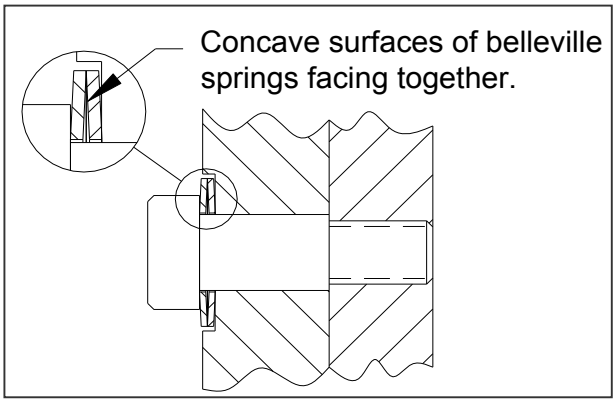
Right hand offset

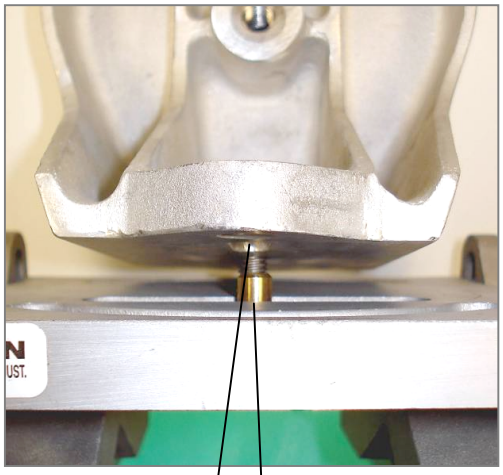


Left hand offset

Attach Pole Mount to Antenna

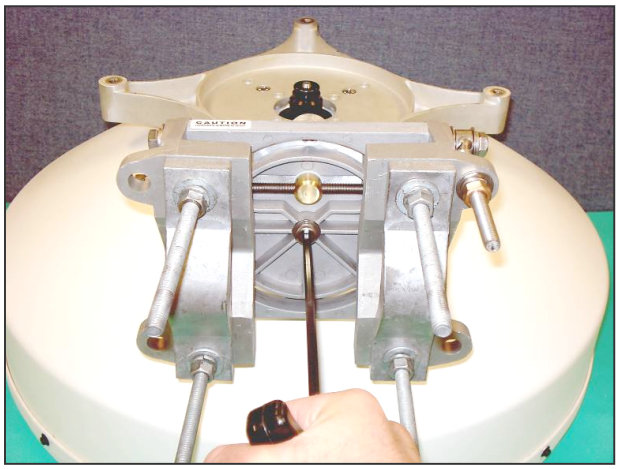
1. Attach center pivot. Use 5/16-18 shoulder screw and (2) Belleville spring washers





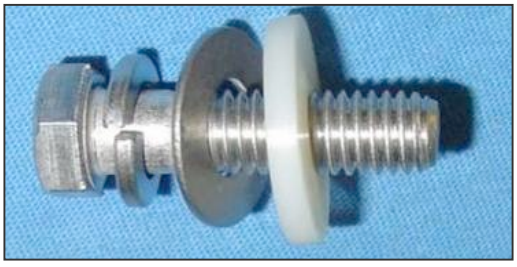
Thread shoulder screw into center threaded hole

Guide brass pin into slot while tightening shoulder screw

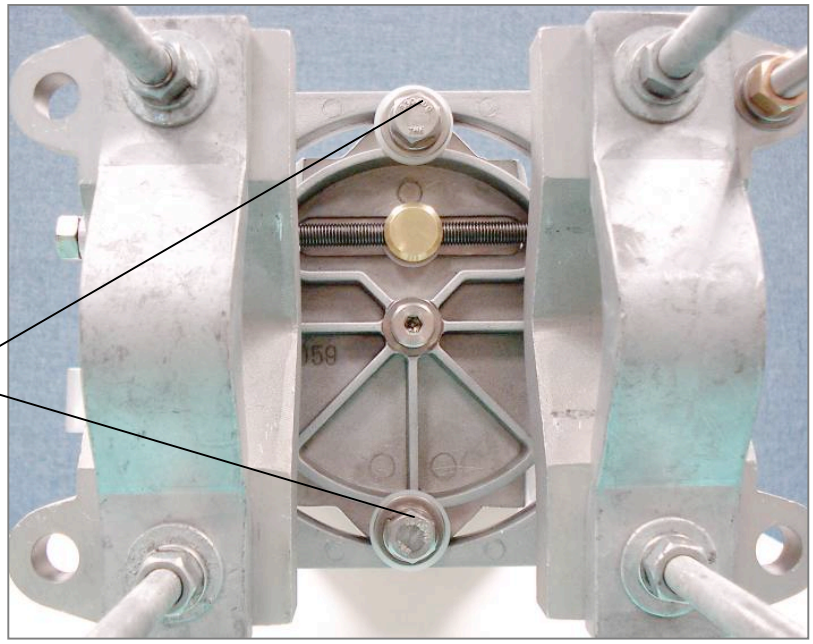


Fully tighten shoulder screw until seated Torque to 12 ft/lb (16 N/m)

2. Install (2) 3/8-16 bolts (with washers as shown) through mounting plate and into antenna. Tighten securely. Antenna is now attached to mount.

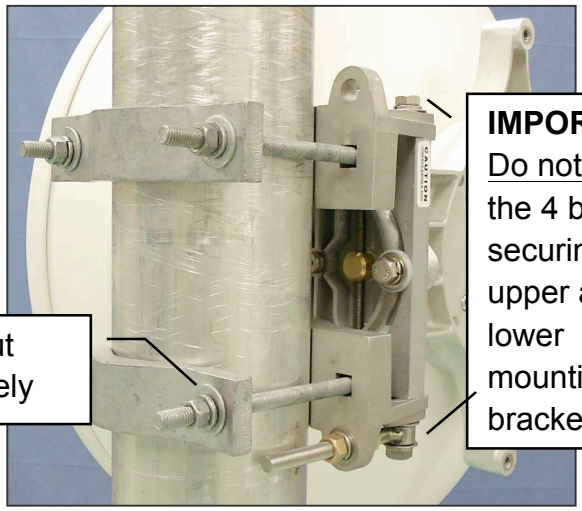


3/8-16 Screw (2x)



Mounting on Pole

1. Fasten the assembled Mount to a maximum 4.5" OD mounting pipe using pole mounts as shown. Position so that face of mounting plate is parallel to desired beam path.



Adjustments:

Azimuth Adjustment:

1. Loosen the 4 Azimuth Lock Bolts so mounting plate can move.

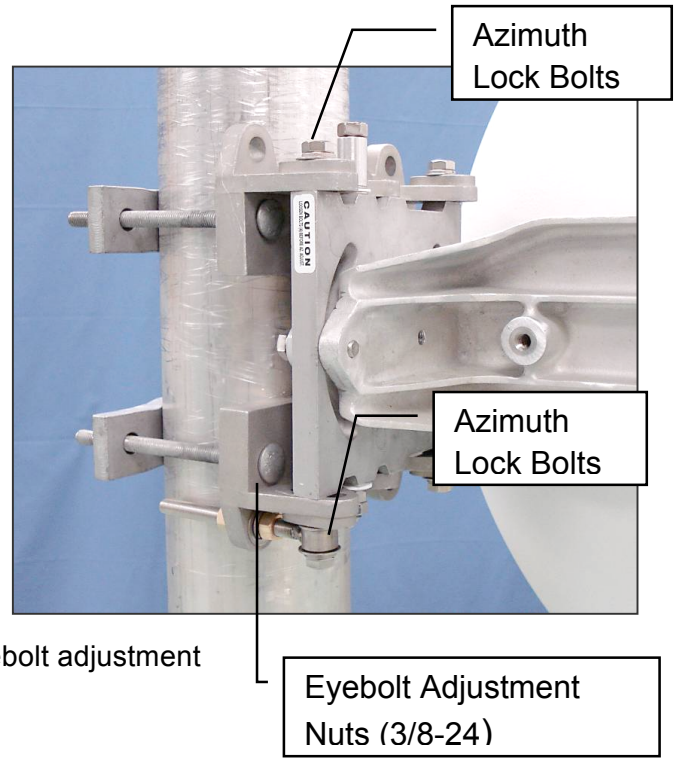
Caution: Failure to loosen bolts before adjusting will result in damage to mount.

2. Adjust mounting plate using eyebolt and nuts to drive antenna to required location. Monitor RCL (Receive Carrier Level) and adjust per radio manufacturer's instructions. Verify antenna is adjusted on main beam by passing through main beam and out to left and right 1st sidelobe. Return antenna to main beam RCL.

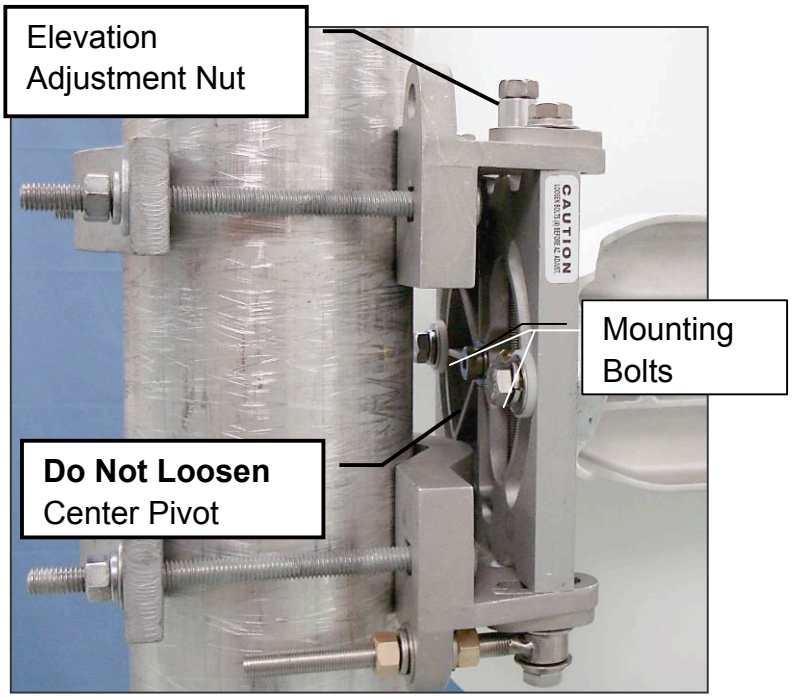
3. Securely tighten the 4 Az. Lock Bolts.

4. After tightening Az. Lock Bolts, Securely tighten eyebolt adjustment nuts.

5. Re-check Azimuth and adjust if necessary



Elevation Adjustment:



1. Loosen (2) Antenna Mounting Bolts **slightly** so antenna is able to move. Loosening bolts excessively will cause difficulty during adjustment. **Do not loosen** center pivot shoulder screw.

   Caution: Failure to loosen bolts before adjusting will result in damage to mount.

2. Rotate Elevation Adjustment Nut as required to set elevation. Monitor RCL (Receive Carrier Level) and adjust per radio manufacturers instructions. Verify antenna is adjusted on main beam by passing through main beam and out to upper and lower 1st sidelobe. Return antenna to main beam RCL.

   NOTE: Adjustment is smoother when adjusting beam upward. (Drive antenna down past desired location and adjust while driving antenna up.)

3. Tighten mounting bolts securely after elevation is set.

4. Re-check Elevation and adjust if necessary.

Final Inspection:

When the antenna orientation is satisfactory, re-check all 3/8" hardware and torque to **20 ft-lb (27 N-m)**

After the Installation:

Inspection of the antenna should be performed at least once a year to check its condition and to ensure safe operation and maintenance.

SAFETY INFORMATION

This Information May Save You From Death or Injury

Do not attempt to install or dismantle any Radio Waves Inc. products until you have read and understood the information and instructions in this document.

Installations: Only trained professional installers should be used to install or dismantle antennas, mounts, and related hardware. It is the responsibility of the installer to be sure that all building and safety codes are met and that the installation is complete and secure.

Lightning Protection: All antennas and related hardware must be attached to and connected correctly to a properly grounded structure. It is the responsibility of the installer to be sure that the installation is completed in accordance with all applicable grounding and safety codes.

Electrocution Hazard: Do not install or dismantle Radio Waves Inc. products near any type of power line. Should your antenna or related hardware come in contact with power lines you **could be killed!** Be sure your installation is out of falling distance of any overhead wires-including the lead to any building or structure.

NEVER OPERATE OR LOCATE THIS OR ANY EQUIPMENT NEAR POWER LINES.

Electrocution Hazard: Portable or Mobile Installation.

If you are installing a Radio Waves Inc. component or part on a portable or mobile platform such as a Portable Tripod, Mast, Truck, or Van, be sure all safety procedures are followed and that operators have been properly trained. No one should be allowed to operate or set up the equipment that has not been properly trained.

Radio Waves Inc. is a component supplier and is not the system designer and has no control over how its products are used and installed. It is the responsibility of the System Designer, Van Manufacturer and Owner / Operator to be sure that the overall system is built in accordance with all applicable design and safety standards and procedures and that the operators have been properly trained.

NEVER OPERATE OR LOCATE THIS OR ANY EQUIPMENT NEAR POWER LINES.