

A997-0084 Revision K, October 2016

**T-126-GL Mounting Kit For Panel Antennas
With 976mm (38.4”) Bracket Spacing**

General

This instruction sheet contains all necessary information required to assist in the correct installation for Panel Antennas of 250mm (9.8”) width or greater to a 60 – 115 (2.4”- 4.5”) diameter pipe when using the mounting kit with clamp bracket or 88 - 90mm (3.5”) diameter (80NB) pipe when using the mounting kit with u-bolt. This T-126-GL kit with u-bolts has been designed for minimal protrusion from behind the mounting pole to allow for limited azimuth panning of the antenna using the RRM kits fitted with OEM equipment mounted directly behind the antenna mounts.

Following symbols can be found next to text outlining important information.



Please follow the procedure marked with this symbol precisely. Non-compliance may lead to damage of the product.

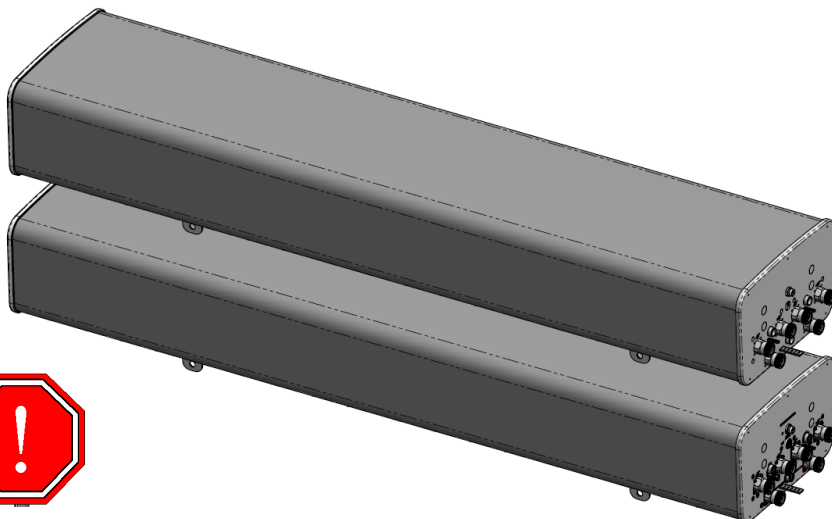


Handy tips when installing product.

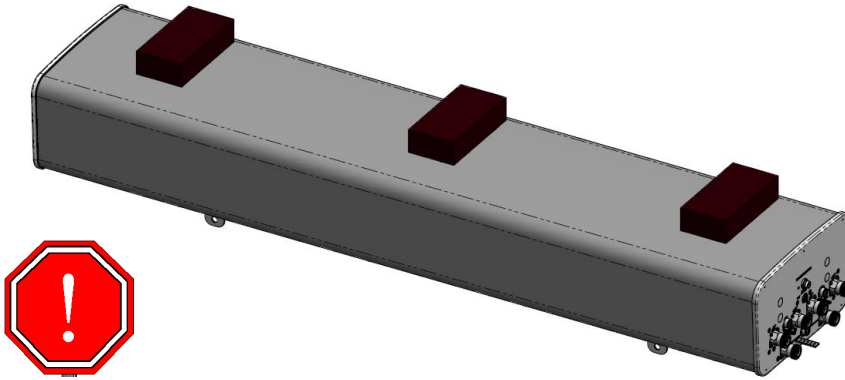
Unpacking

Make sure that the antenna and the accessory items listed below are provided and have not been damaged during transport.

- Antenna
- Mounting kit (mounting kit components for each configurations are shown in Figure 3, 4, 5 & 6).
- Hex key 6mm AF (supplied with adjustable downtilt antennas only).



**DO NOT STACK
UNPACKED
ANTENNAS**



**DO NOT PLACE
POINT LOADS ON
ANTENNA RADOME**

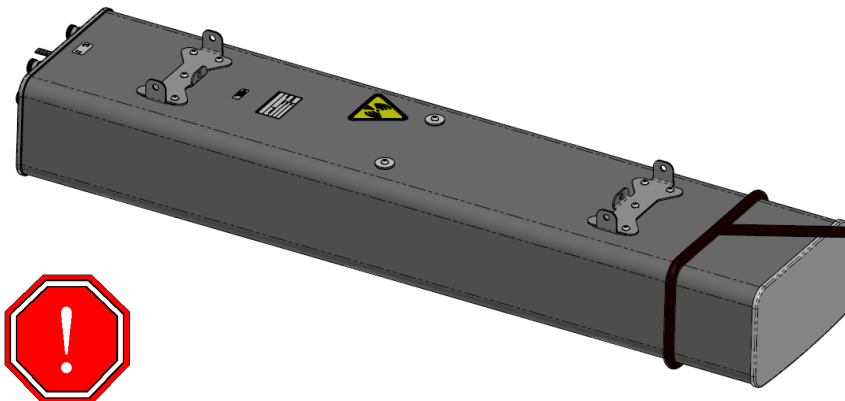
Installation Instructions



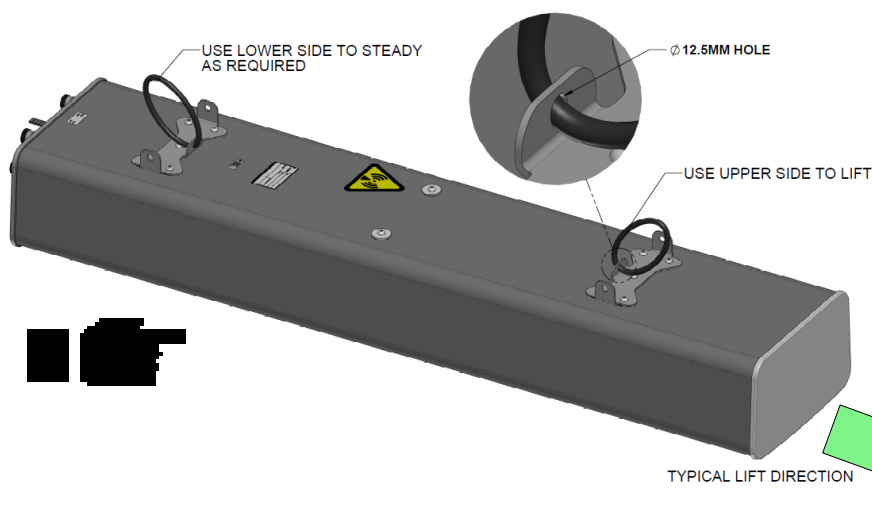
Ensure a torque spanner is used when tightening fasteners, see the mounting kit diagrams on the following pages for the correct torque recommendations.



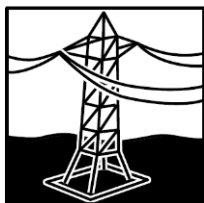
Ensure antenna is installed with the connectors at the bottom.



**DO NOT USE ROPE
OR CHAIN OR SLING
ATTACHMENT
AROUND ANTENNA
FOR LIFTING**



**USE MOUNTING
BRACKETS FOR
LIFTING AS
SHOWN**



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.

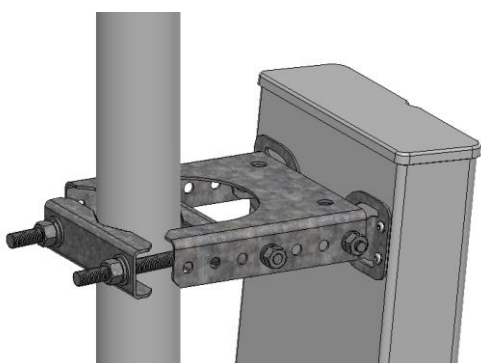
Installation Instructions – Adjustable Downtilt Mounting Kit T-126-GL, Bracket Spacing 976mm (38.4")

Assemble mounting kits as per Figure 3, 4, 5 & 6 of this document.

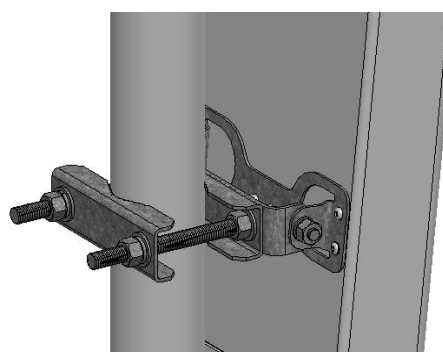
1. Attach the mounting kit assembly to the antenna, before trying to clamp the brackets to the pole.
2. Downtilt angles of 0° through to 12° in 2° increments can be obtained with the correct adjustment of the tilt arm bracket.
 - 2°- 12° downtilt can be achieved by aligning the corresponding hole in the tilt arm to the pivot bracket which mates against the mounting pole, as shown in Figure 7. The first vacant hole is for 2° downtilt, with each consecutive hole resulting in an increased inclination of 2°.
 - For finer downtilt angle adjustments the distance in between the top and bottom mounting bracket on the pole can be adjusted.
 - For 0° downtilt the tilt arm may be stowed as show in Figure 7.
 - Inclinator or other angular measuring devices may be used to verify downtilt angle as required.



The clamp brackets can clamp pipe diameters between 50 mm (2") & 115mm (4.5"). For typical installations of antennas up to 1575mm (62") long the minimum recommended pipe diameter is 60mm (2.4"). For antennas over 1575mm (62") long the minimum recommended pipe diameter is 75mm (3").

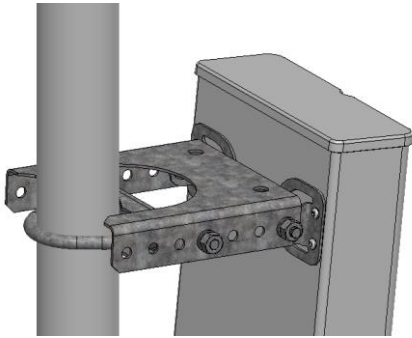


Upper Mounting Bracket Assembly
(To Suit Pipes OD 60-115 mm)

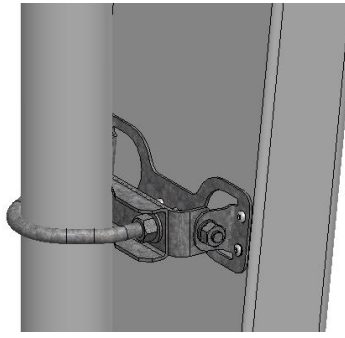


Lower Mounting Bracket Assembly
(To Suit Pipes OD 60-115 mm)

Figure 1: Correctly Assembled Mounting Kit Using Clamp Bracket for Adjustable Downtilt Antenna



Upper Mounting Bracket Assembly
(To Suit Pipes OD 88-90 mm (80 NB))



Lower Mounting Bracket Assembly
(To Suit Pipes OD 88-90 mm (80 NB))

Figure 2: Correctly Assembled Mounting Kit Using U-bolt for Mechanically Adjustable Downtilt Antenna

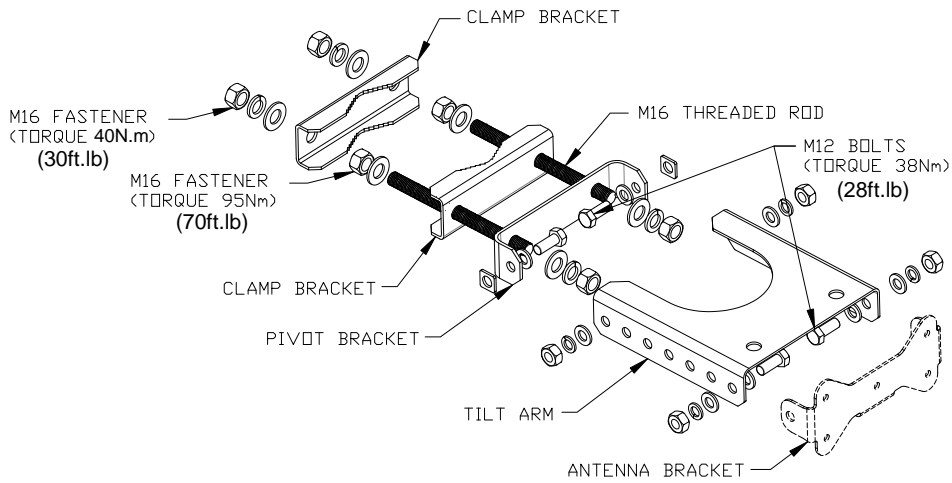


Figure 3: Exploded Assembly for Upper Mounting Bracket using Clamp Bracket

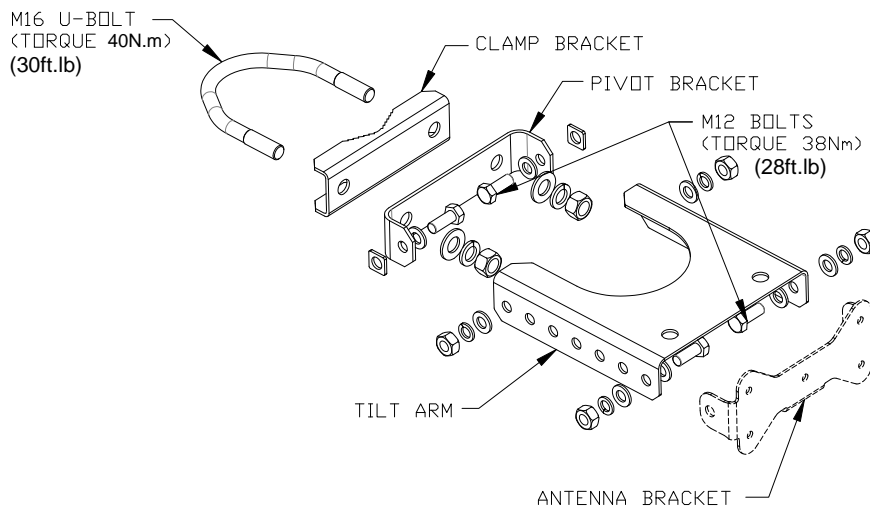


Figure 4: Exploded Assembly for Upper Mounting Bracket using U-bolt

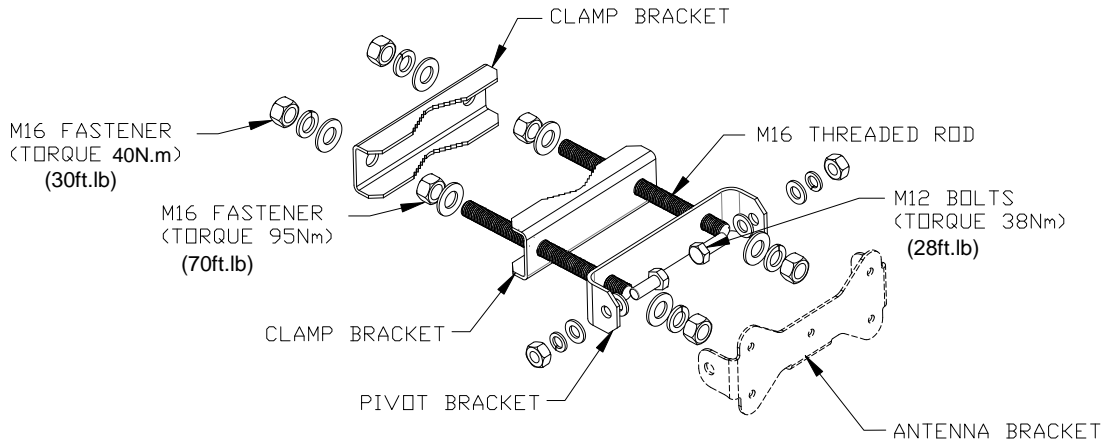


Figure 5: Exploded Assembly for Lower Mounting Bracket using Clamp Bracket
 (This configuration should also be used for the upper Mounting Bracket when 0° tilt is required)

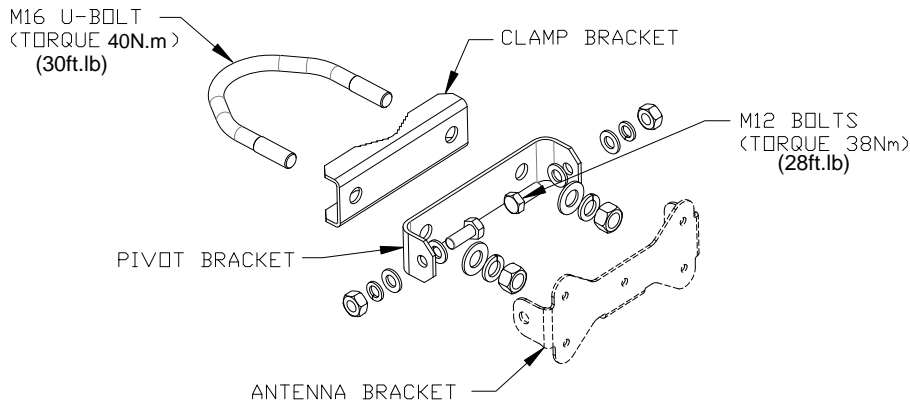


Figure 6: Exploded Assembly for Lower Mounting Bracket using U-bolt
 (This configuration should also be used for the upper Mounting Bracket when 0° tilt is required)

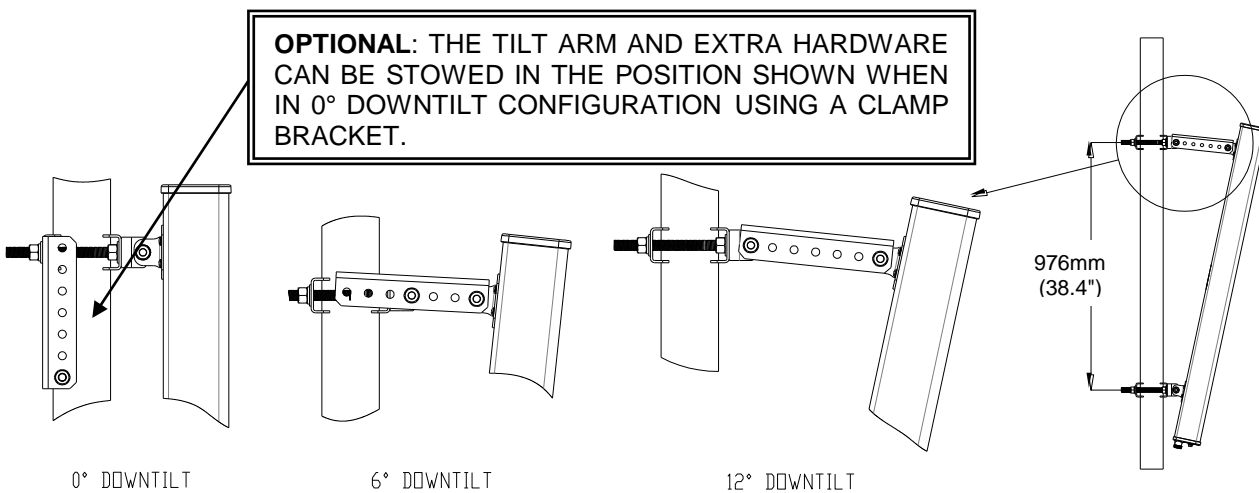


Figure 7: Upper Bracket Placement for Various Downtilts

Operation of Antennas

Fixed Downtilt Antennas

The beam downtilt is factory set.

Manual Electrically Adjustable Downtilt Antennas

The beam downtilt below the horizon is adjusted by rotating the hex socket located at the bottom of the antenna - Figure 8). Turning the hex socket in a clockwise direction increases the beam downtilt below the horizon. Turning the hex socket in an anti-clockwise direction decreases the beam downtilt below the horizon. Beam downtilt setting in degrees below boresight can be read off the scale at the base of the antenna. The downtilt setting is read from the face of the antenna base plate at the point where the scale protrudes.

AISG Compliant Remotely Adjustable Downtilt Antennas

AISG Compliant antennas are compatible with AISG compliant control unit equipment. For operation of downtilt using AISG compliant controllers see the controller documentation.



WARNING: During downtilt adjustment ensure the hex socket is not turned past the minimum and maximum positions as shown on the downtilt indicator scale. Forcing the hex adjustment beyond this point may lead to damage of the downtilt mechanism. **Using power drills and electric screwdrivers to adjust downtilt may also lead to damage of the downtilt mechanism.**

Remote Electrical Tilt Connection

The AISG connector fitted to the antenna is designed to accept any AISG compliant cable assembly. After ensuring both connectors are dry, push in the mating connector, then hand tighten.



Using excessive torque may damage the AISG connection in the antenna.

RF Cable Connection



The RF female connectors fitted to the antenna are designed to fit jumper cables with a corresponding male connector. After ensuring both mating connectors are dry push the male connector in and tighten the connector coupling to the correct torque setting. If needed or as required by local procedures a weatherproofing kit may then be fitted to the connection. If the RF connectors are tightened beyond the recommend torque the RF connection to the antenna may be damaged.

ADJUSTING MECHANICAL DOWN TILT AFTER INSTALLATION T-126-GL



1. Use a tether to secure the antenna's hoisting eye to the mounting structure. The tether can be a rope, wire rope, chain, or similar material. The tether should be short enough to prevent the antenna from tilting beyond its maximum downtilt range. This will prevent the antenna from tilting away from the mounting structure when the adjusting bolts are removed.



Installed cables or the antenna may be damaged if they are allowed to strike the mounting structure when the antenna mechanical downtilt is changed.

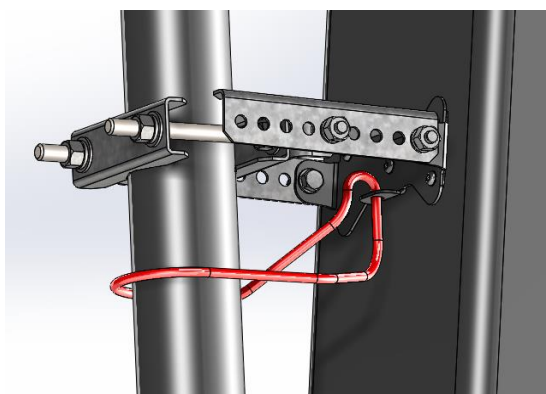


Figure 10: Upper Mounting Bracket Assembly

2. Loosen the fasteners holding the bottom antenna bracket to the bottom pivot bracket. Do not remove them.

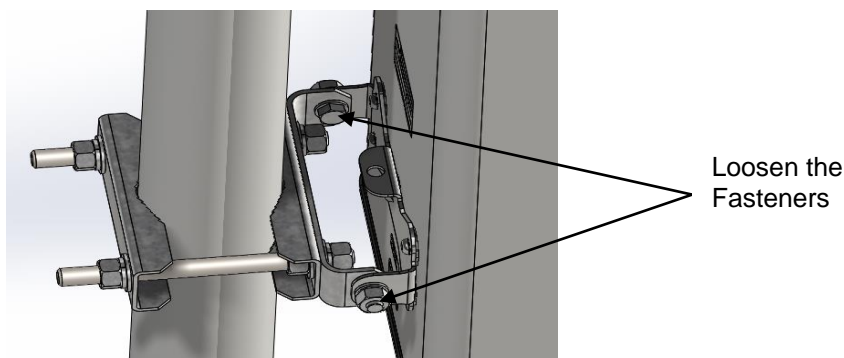


Figure 11: Lower Mounting Bracket Assembly

3. Remove the M12 bolts, washers, and nuts from the pivot bracket. The antenna may tilt down to the extent allowed by the tether installed in step 1.

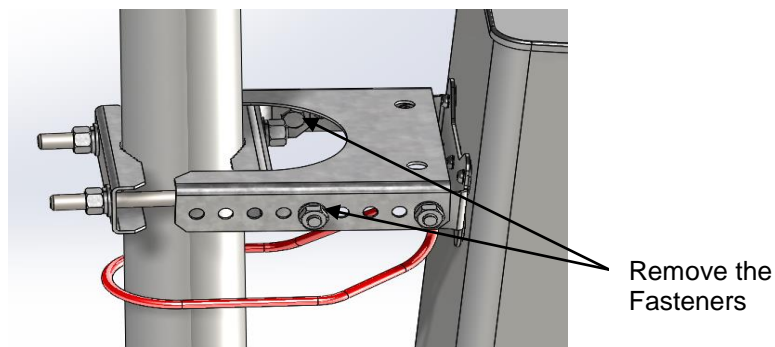


Figure 12: Upper Mounting Bracket Assembly

4. The desired downtilt angle may be obtained with the correct adjustment of the tilt arm bracket. See the installation instructions above for detailed information.
5. Adjust the antenna downtilt to the desired angle and reinstall the M12 bolts, washers, and nuts between the upper pivot bracket and the tilt arm.
6. Tighten all four M12 nuts to 38Nm (28 ft.lb).
7. Remove the tether.