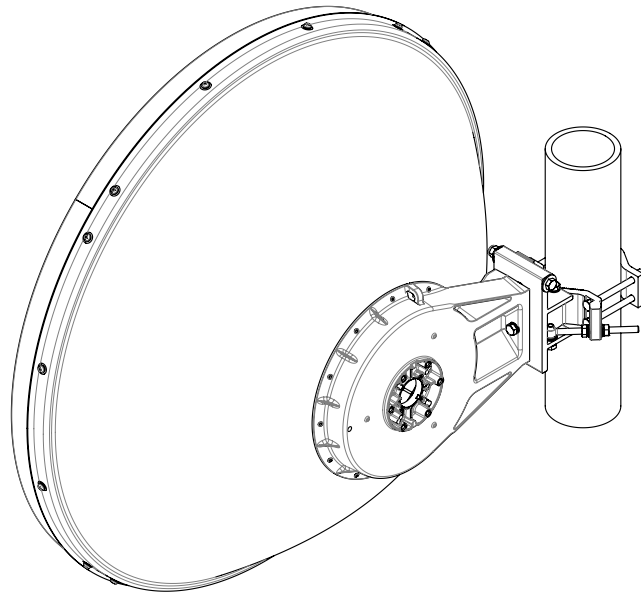


IMPORTANT!
INSTALLATION
INSTRUCTIONS
READ THIS
MANUAL FULLY
BEFORE UNPACKING
AND ASSEMBLING
THE ANTENNA



This document is for the following: VHLP(X)3-*** 0.9m ANTENNA



SAFETY

ANTENNA INSTALLATION, MAINTENANCE OR REMOVAL MUST BE PERFORMED BY QUALIFIED EXPERIENCED INSTALLER.

It is essential that all appropriate national and local safety regulations be strictly observed to ensure the safety of personnel and to prevent damage to the equipment. CommScope cannot accept responsibility for accidents resulting from non-compliance with such regulations.

The Antenna is designed to attach to a vertical tower pipe of diameter 115mm
The mount provides adjustment ranges of $\pm 15^\circ$ fine elevation and $\pm 180^\circ$
($\pm 15^\circ$ Fine) azimuth.

Always read the entire manual before commencing installation.

WARNING

Do not use any installation components (screws, nuts, etc) other than with the equipment or recommended by the supplier

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4	UNPACKING Including Unpacking of antenna parts.
5	MOUNT ATTACHMENT AND ALIGNMENT Including Basic alignment, Attaching the antenna to the pole, Fitting the mount, Elevation alignment, Azimuth alignment and tightening fasteners instruction.
6	TRANSITION POLARISATION ADJUSTMENT
7	GENERAL INFORMATION Including maintenance and cleaning instructions.

INTRODUCTION

This instruction describes how to unpack and adjust a factory assembled VHLP(X)3 antenna.

Mount to the left of the supporting structure. It can also be configured to mount to right - refer to full antenna assembly instructions on CommScope.com

SAFETY INSTRUCTIONS**INTRODUCTION**

This section describes the system used for presenting safety information.



Reduce the risk of accidents by studying all the instructions carefully before you start working.

The safety information in the relevant manuals presupposes that any person performing work on CommScope products or systems has the education, training and competence required to perform the task correctly.

SAFETY REQUIREMENTS

The safety requirements in the following sections must be followed to avoid personal injury and damage to tangible property.

It is the responsibility of the installer to ensure that local regulations and the safety instructions in this manual are known and followed.

SERVICE PERSONNEL

Installation and service must be carried out by authorized personnel having the appropriate technical training and experience necessary to be cognizant of hazards during installation and service, and of measures to minimize any danger to themselves or any other person.

SAFETY REGULATIONS

Use local safety regulations where these are mandatory. The safety instructions in this manual shall be used as a supplement to the local regulations.

In case of conflict between the safety instructions in this manual and the local safety regulations, the local safety regulations shall prevail if these are mandatory. If the local regulations are not mandatory the safety instructions in this manual shall prevail.

INSTALLATION HARDWARE

Do not use any installation components (for example screws and nuts) other than those enclosed with the equipment or recommended by CommScope.



Use protective wear to avoid skin contact with conductive grease. Keep away from mouth. Wash thoroughly after use with liberal amounts of liquid soap and rinse with water. Do not store open near food or food substances.

Contents: Oil, clay & zinc dust.

INSTALLATION PROCEDURES & TOOLS

The installation procedures in this manual must be followed. Make sure that:

- Working instructions are followed.
- Recommended tools are used.
- Adequate safety devices are used.
- The risk of falling and falling objects is known.
- All hardware is tightened to the torques specified $\pm 5\%$. The integrity of the antenna depends on all fasteners being tightened correctly.

ANNUAL INSPECTION

Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment.

SAFETY SYMBOLS & DEFINITIONS

HOISTING



WARNING!

Falling objects can cause accidents.

-
-
- Use only tested and approved hoisting equipment in accordance with the instructions supplied with the equipment. Appropriately trained personnel must operate the hoisting device.
 - Always hoist the equipment in the specified hoisting points.
 - Never walk under hoisted loads.
 - Follow local regulations for safety clothing and safety equipment for hoisting or moving goods.

WORKING AT HEIGHTS



WARNING!

Some working areas involve the risk of accidents caused by falling or by falling objects

Table 1 Supplied Equipment

Item	Qty	Description
A	1	Assembled antenna
B	1	Integration Unit *
C	1 or 2	Flange Hardware Kit *

***Either Item B (Integration Unit) or Item C (Flange Hardware Kit) are supplied.**

Tools

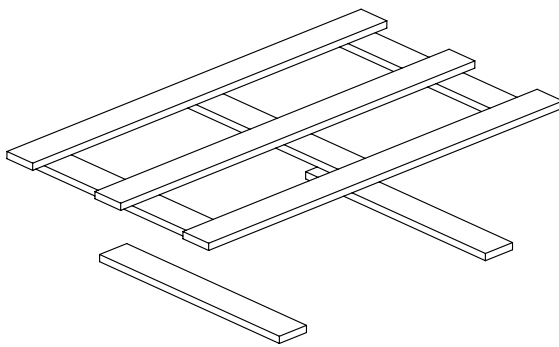
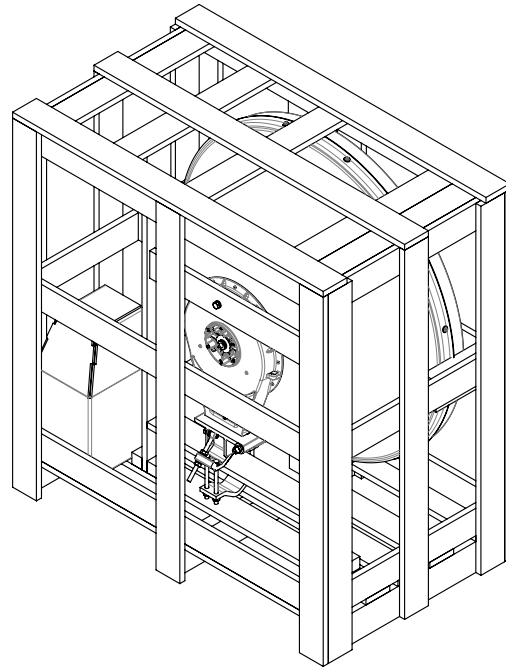
TOOL REQUIREMENTS

Tools Required	Thread Diameter in MM		
	M4	M8	M10
Ring and Open Spanner (A/F)			17mm
Torque Wrench	2.5 - 95Nm		
Sockets (A/F)			17mm
Allen Key (A/F)	3mm	6mm	8mm

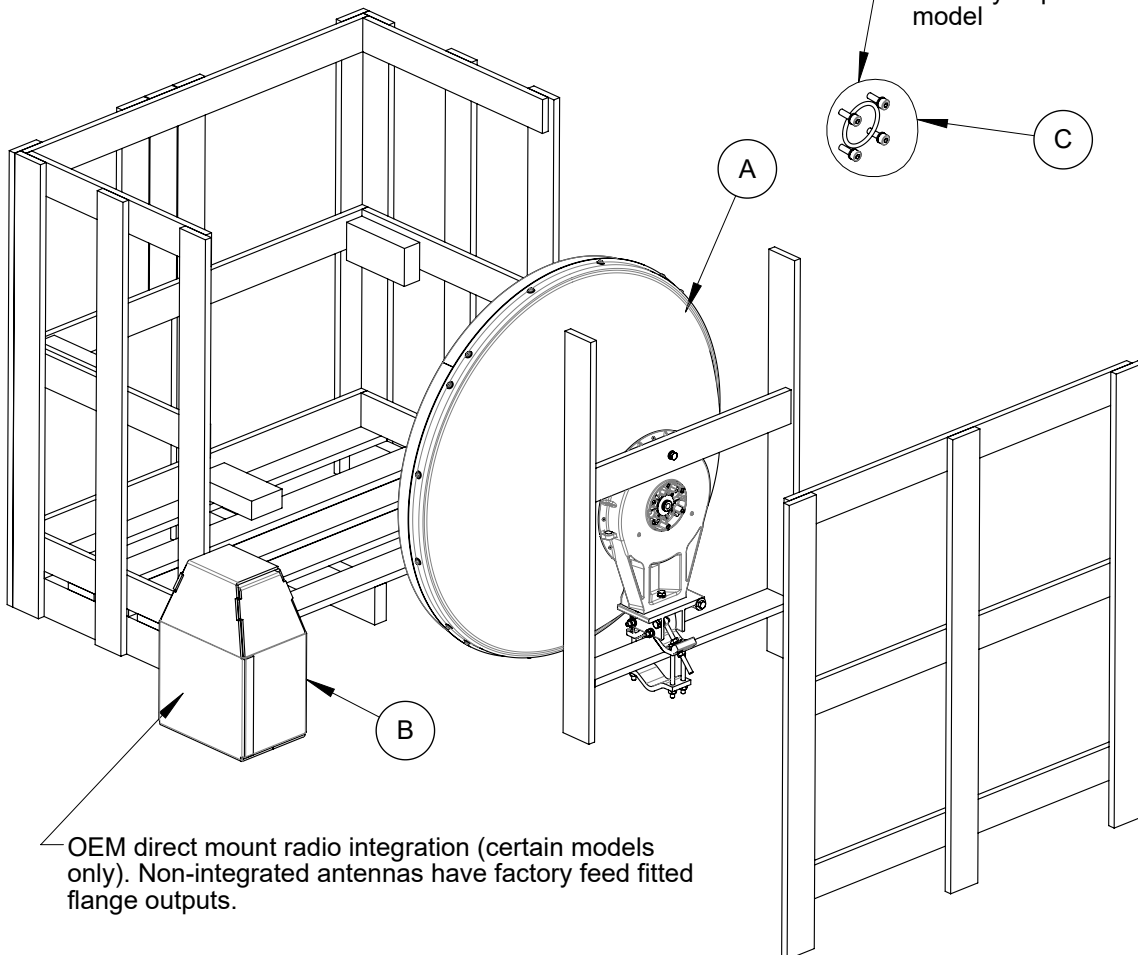
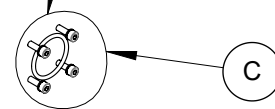
Unpacking



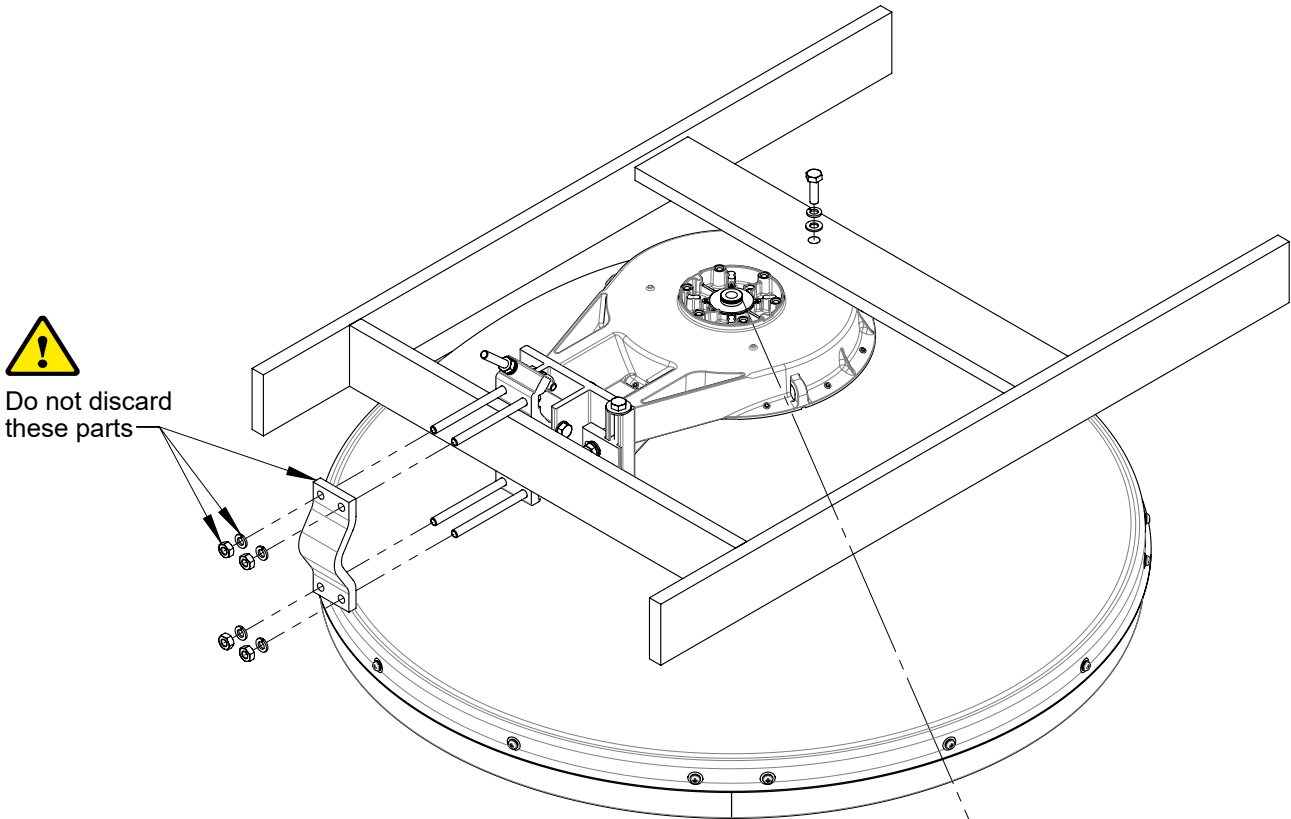
Handle antenna
CAREFULLY at
all times



Non-integrated antennas
supplied flange hardware kit this
will vary dependent on antenna
model



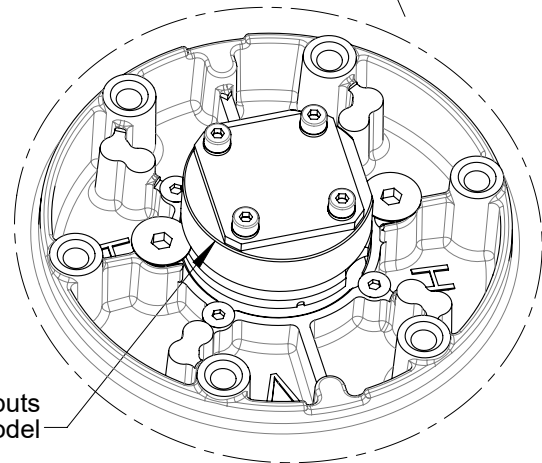
OEM direct mount radio integration (certain models
only). Non-integrated antennas have factory feed fitted
flange outputs.



Do not discard these parts

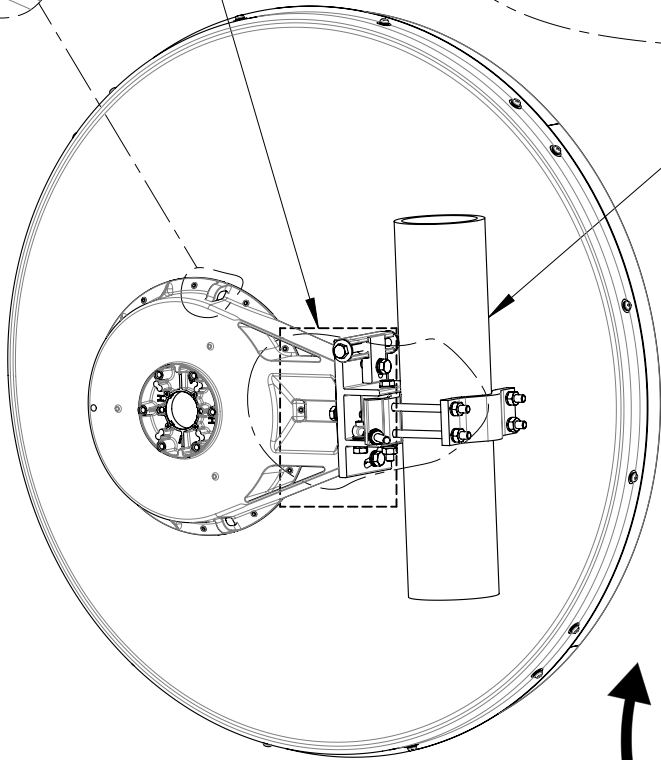
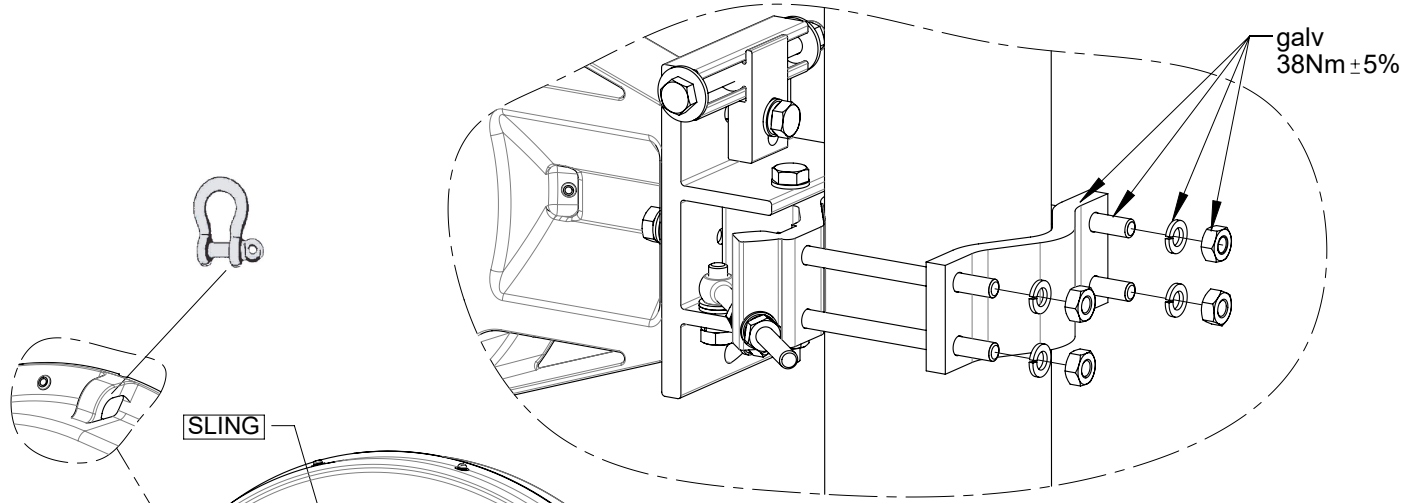


Carefully lay antenna on clear, flat ground.
Then remove brace
Do not apply excessive weight to antenna assembly.



Non-integrated antennas have factory feed fitted flange outputs
this will vary dependent on antenna model

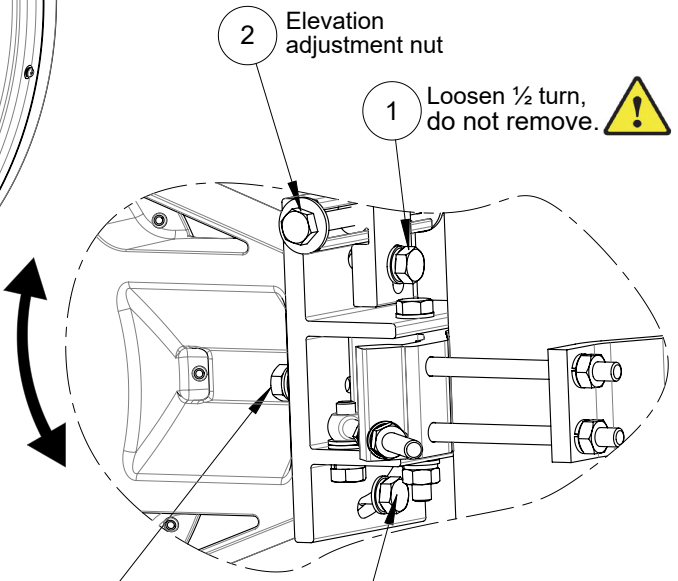
⚠ Where required, fit radio integration unit at this stage - refer to instructions supplied with integration unit.



90-120mm Pole
Secure assembled mount to pole ensuring clamp bolts are seated correctly.

This mount can only be used for pole diameters from 90-120 mm

Pole to be structural engineer approved rigid structural support



NEVER WALK UNDER HOISTED LOADS



Loosen ½ turn, do not remove.

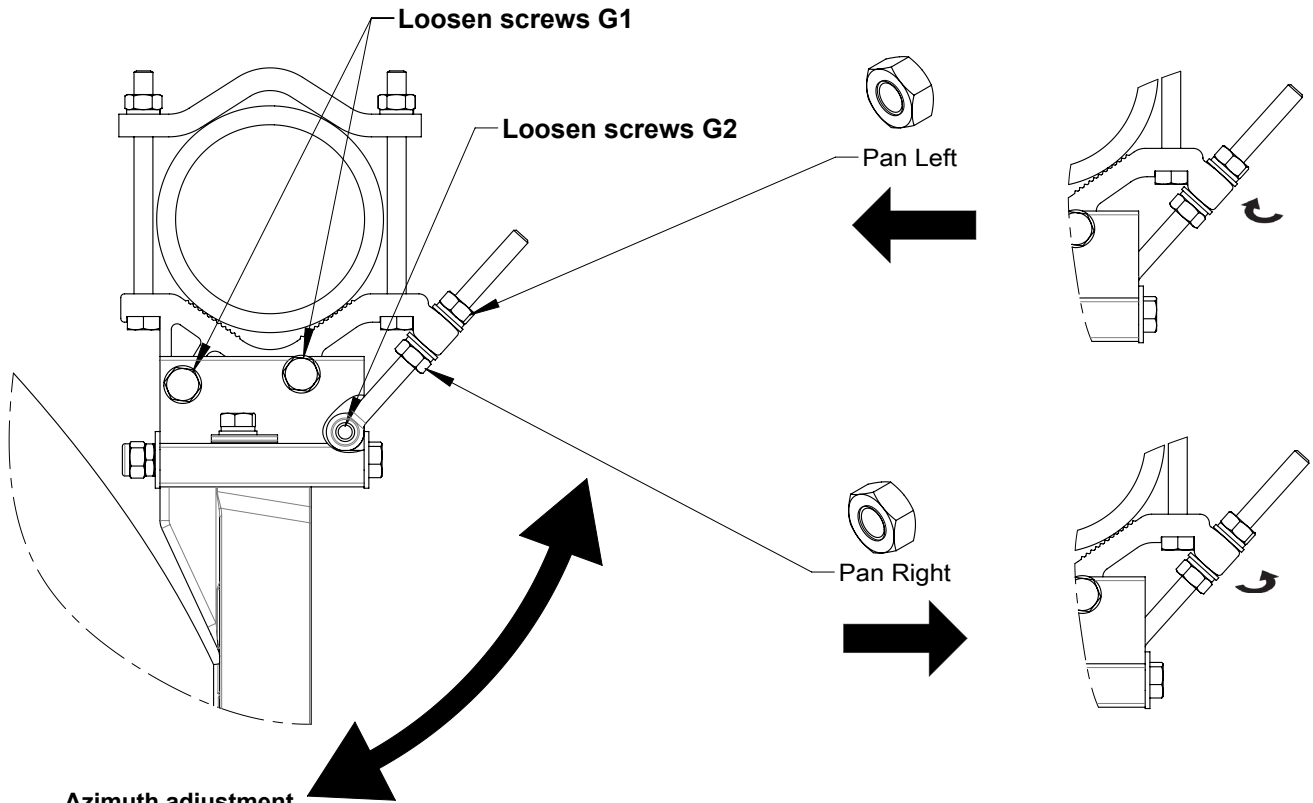
1

1

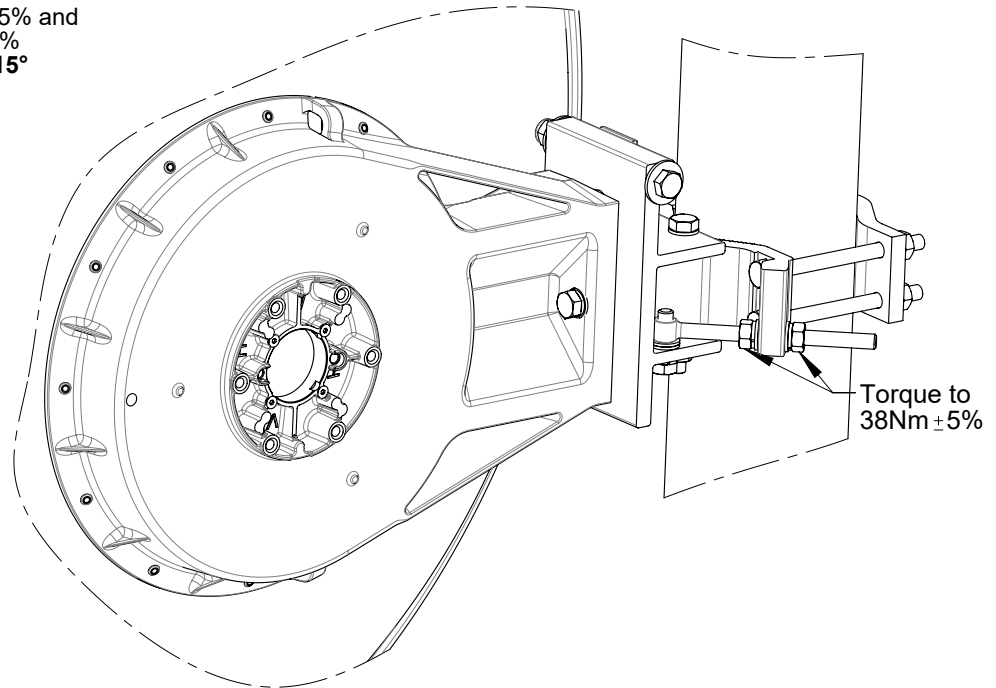
Loosen ½ turn, do not remove. ⚠

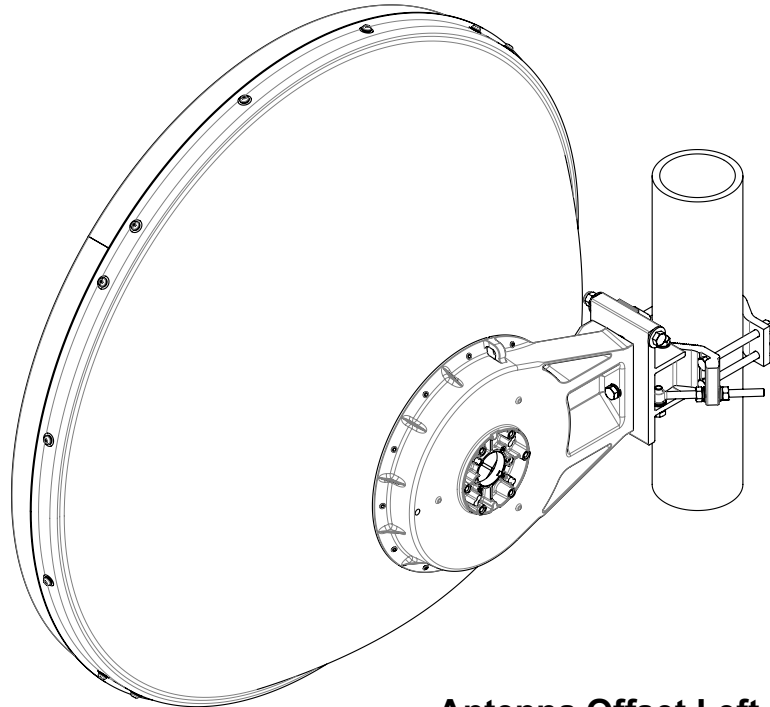


Elevation adjustment
Loosen 3 screws (1).
Adjust elevation by bolt head (2).
On completion tighten screws (1) to 38Nm ± 5%
Adjustment Range ±15°

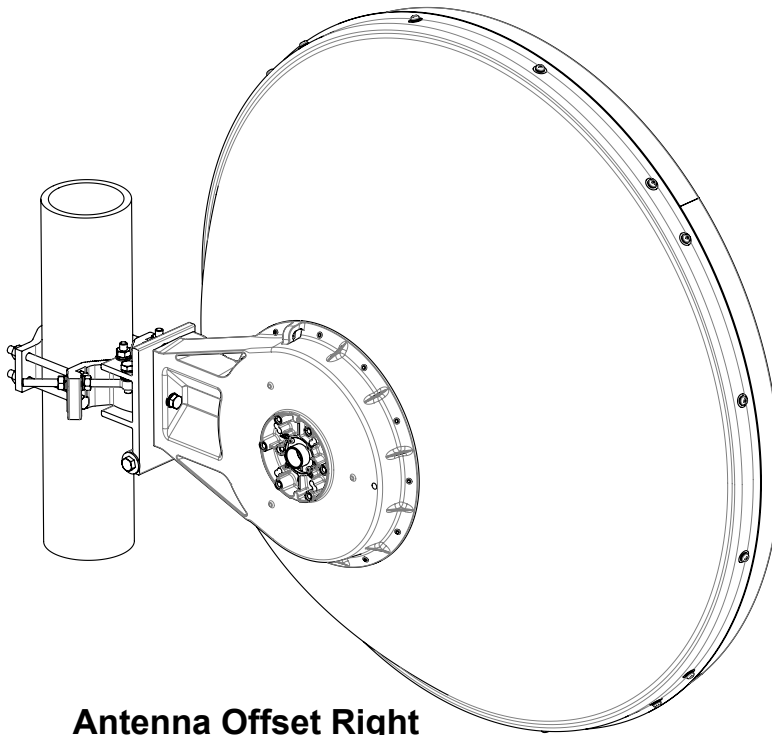


Azimuth adjustment
Adjust eyebolt.
On completion tighten
screws **G1** to $50\text{Nm} \pm 5\%$ and
screw **G2** to $38\text{Nm} \pm 5\%$
Adjustment Range $\pm 15^\circ$





Antenna Offset Left

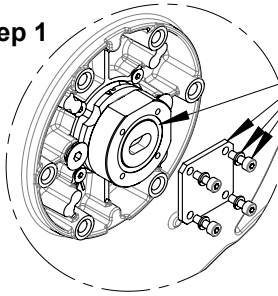


Antenna Offset Right

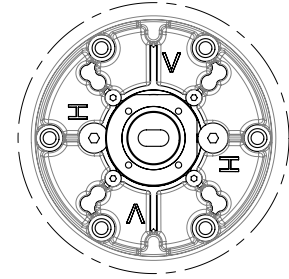
Refer to full antenna assembly instructions on www.commscope.com for details on how to switch mount offset

Single polarisation

Step 1

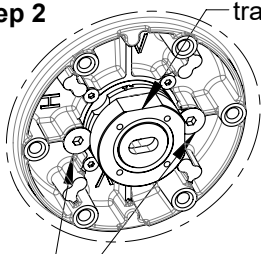


Remove blanking plate, screws, washers o-ring (gasket)



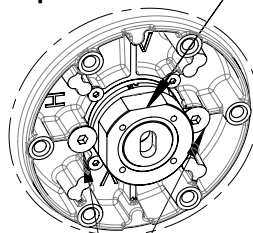
Vertical polarisation

Step 2



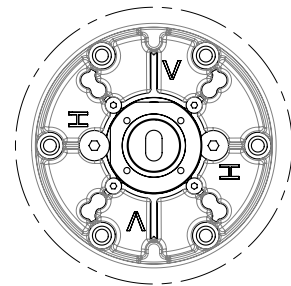
Loose screws $\frac{1}{2}$ a turn to allow transition to rotate

Step 3



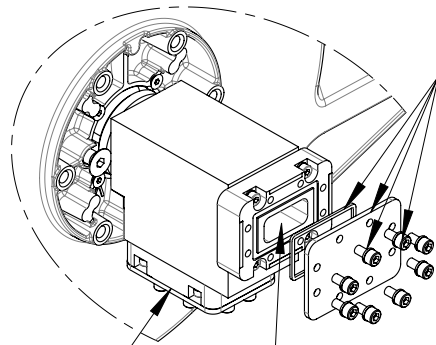
Flat provided to aid fine polarisation adjustment

After fine adjustment, tighten screws to a torque of $10Nm \pm 5\%$



Horizontal polarisation

Dual polarisation



Remove blanking plate, screws, washers o-ring (gasket) before using this polarisation.

Horizontal polarisation

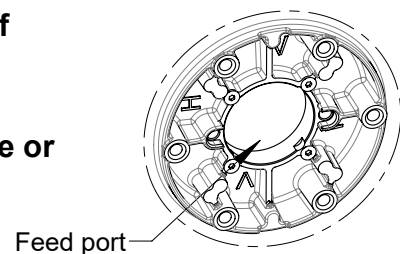
Remove blanking plate, screws washers o-ring (gasket) before using this polarisation.

Vertical polarisation

For OEM direct mount radio integration installation of integration unit see separated INSTALLATION INSTRUCTIONS



Prior to assembly of integration unit, remove any tape or protective cap from feed port



Feed port

7 General Information

7.1 General maintenance

The antenna is designed such that minimal maintenance is required. Other than strong wind conditions the unit is not subject to abnormal forces and regular inspection and maintenance should ensure trouble free operation.

7.2 Cleaning of Antenna

If subsequent cleaning of the antenna is required solvent based solutions must not be used.