
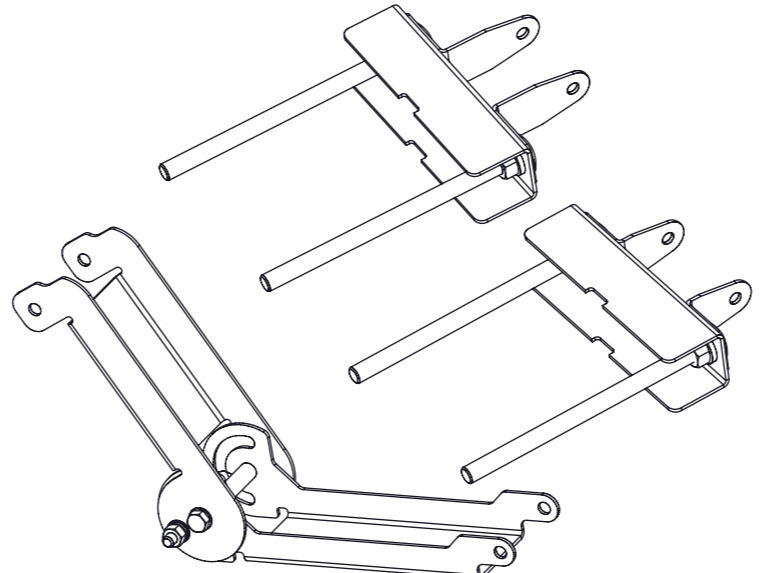
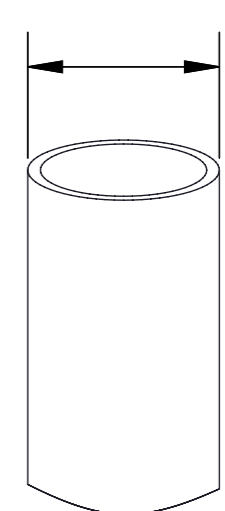
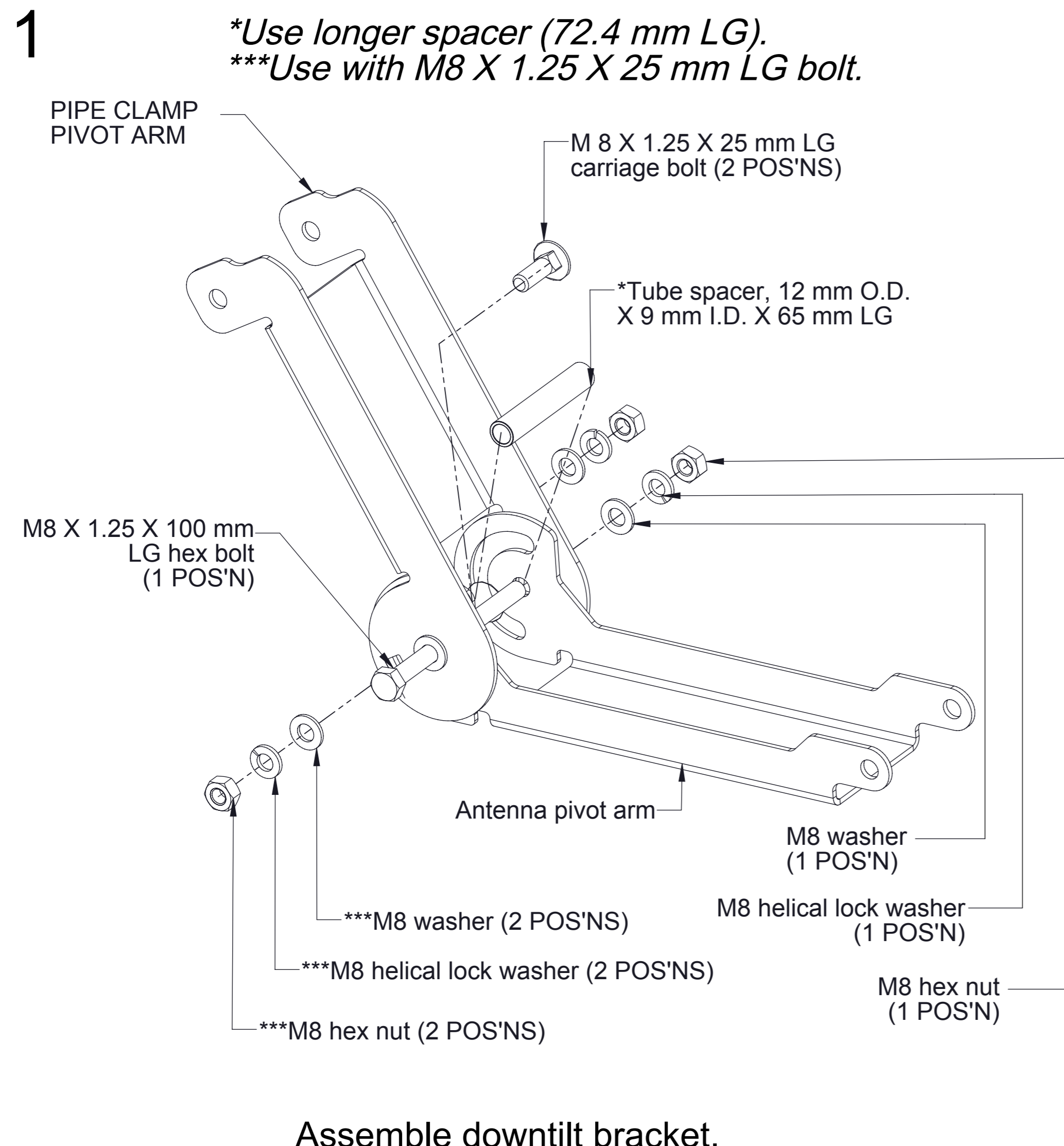


650930 Revision E, May 2016
Downtilt Mounting Kit
HB65-OFFSET-MNT

<p>Tools Required:</p> <p>13 mm 13 mm 19 mm 19 mm Inclinometer</p> 		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Qty.</th> <th>P/N</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>650928-1</td> <td>DOWNTILT SUB ASSEMBLY</td> </tr> <tr> <td>1</td> <td>650927-1</td> <td>BOTTOM BRACKET</td> </tr> <tr> <td>1</td> <td>650926-1</td> <td>TOP BRACKET ASSY</td> </tr> </tbody> </table>	Qty.	P/N	Description	1	650928-1	DOWNTILT SUB ASSEMBLY	1	650927-1	BOTTOM BRACKET	1	650926-1	TOP BRACKET ASSY	 <p>Kit fits pipe diameters 60 mm to 115 mmO.D.</p>
Qty.	P/N	Description													
1	650928-1	DOWNTILT SUB ASSEMBLY													
1	650927-1	BOTTOM BRACKET													
1	650926-1	TOP BRACKET ASSY													

1

**Use longer spacer (72.4 mm LG).*
****Use with M8 X 1.25 X 25 mm LG bolt.*



PIPE CLAMP
PIVOT ARM

M 8 X 1.25 X 25 mm LG carriage bolt (2 POS'NS)

*Tube spacer, 12 mm O.D. X 9 mm I.D. X 65 mm LG

M8 X 1.25 X 100 mm LG hex bolt (1 POS'N)

Antenna pivot arm

M8 washer (1 POS'N)

***M8 washer (2 POS'NS)

***M8 helical lock washer (2 POS'NS)

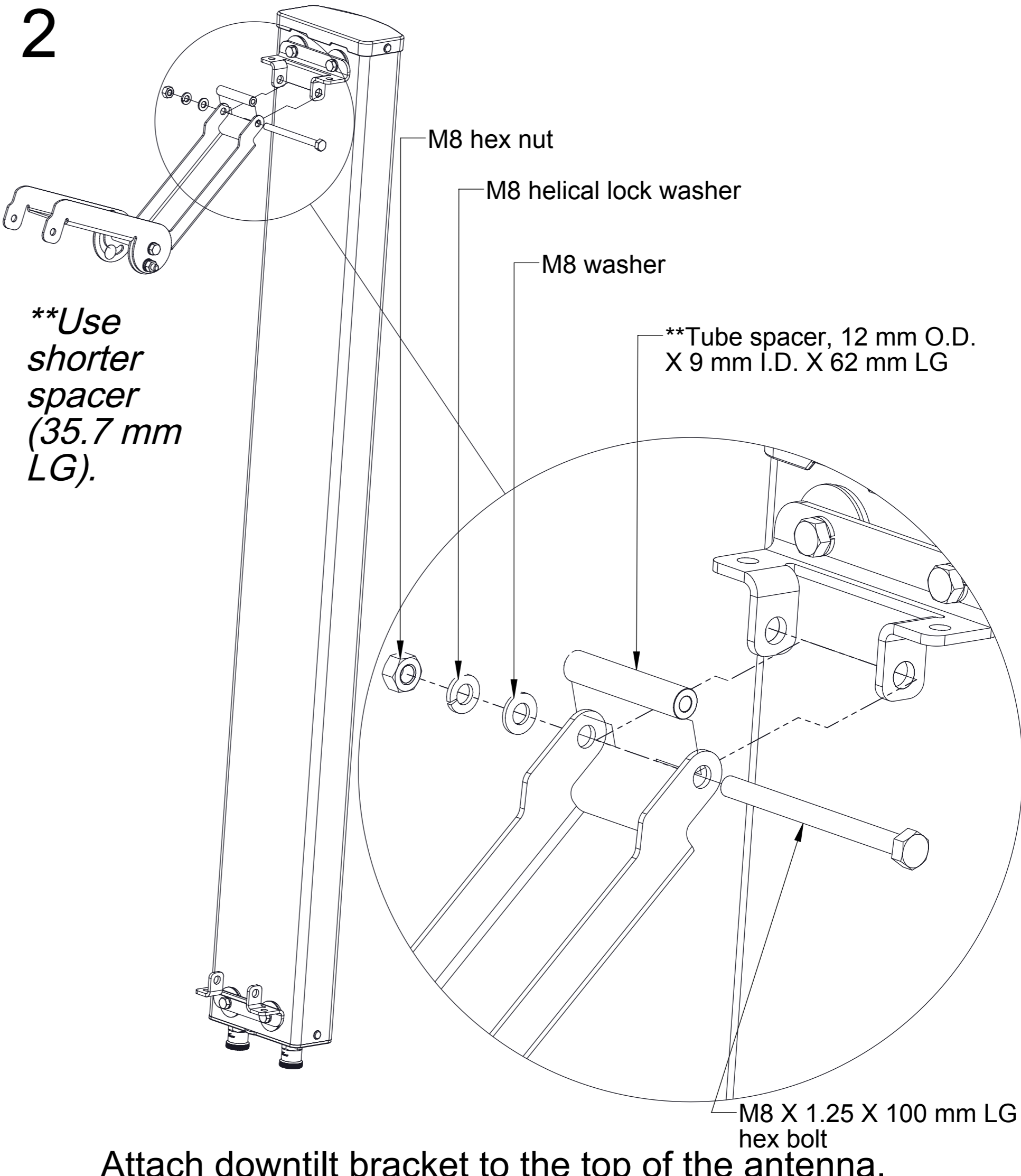
***M8 hex nut (2 POS'NS)

M8 helical lock washer (1 POS'N)

M8 hex nut (1 POS'N)

Assemble downtilt bracket.

2



M8 hex nut

M8 helical lock washer

M8 washer

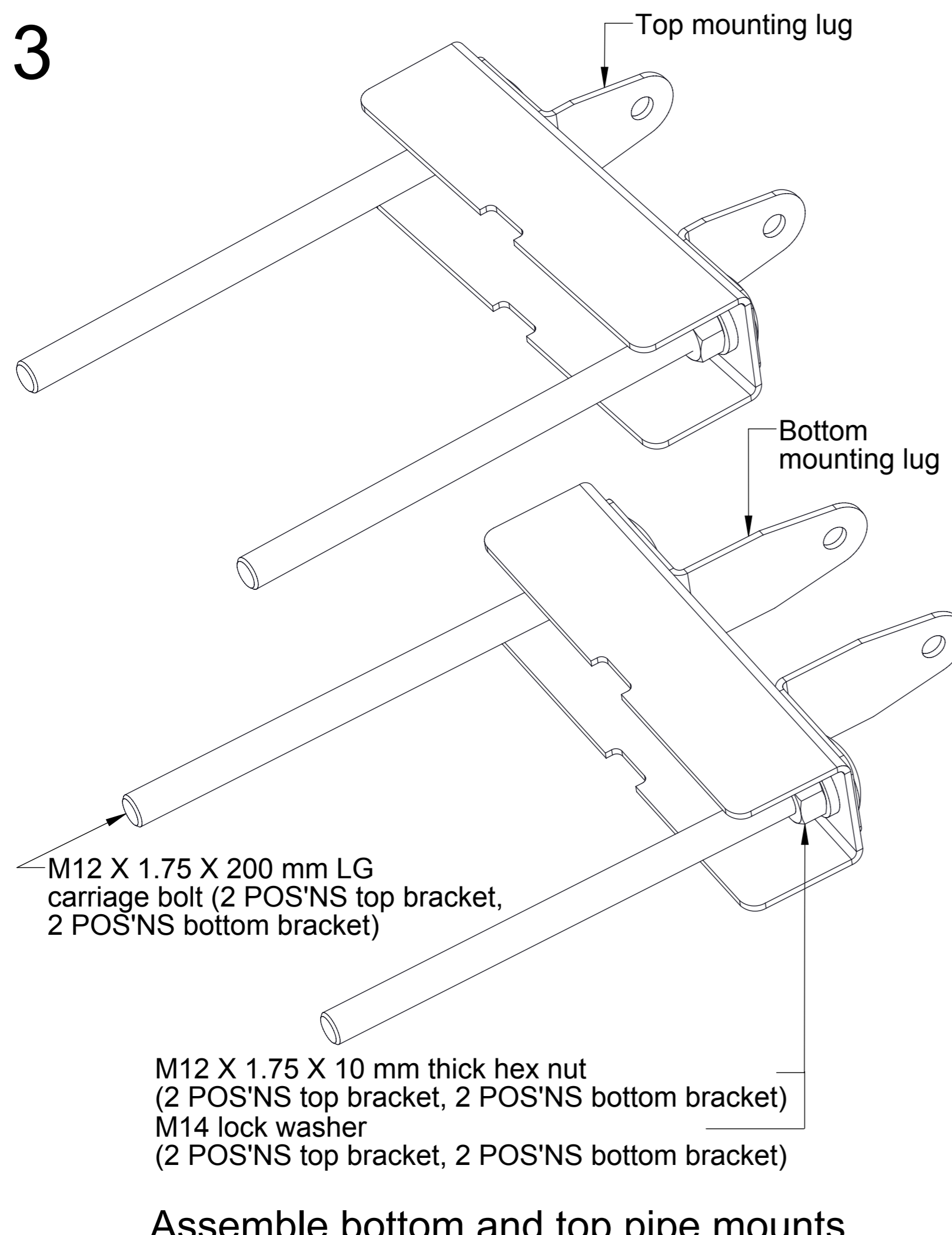
**Use shorter spacer (35.7 mm LG).

**Tube spacer, 12 mm O.D. X 9 mm I.D. X 62 mm LG

M8 X 1.25 X 100 mm LG hex bolt

Attach downtilt bracket to the top of the antenna.

3



Top mounting lug

Bottom mounting lug

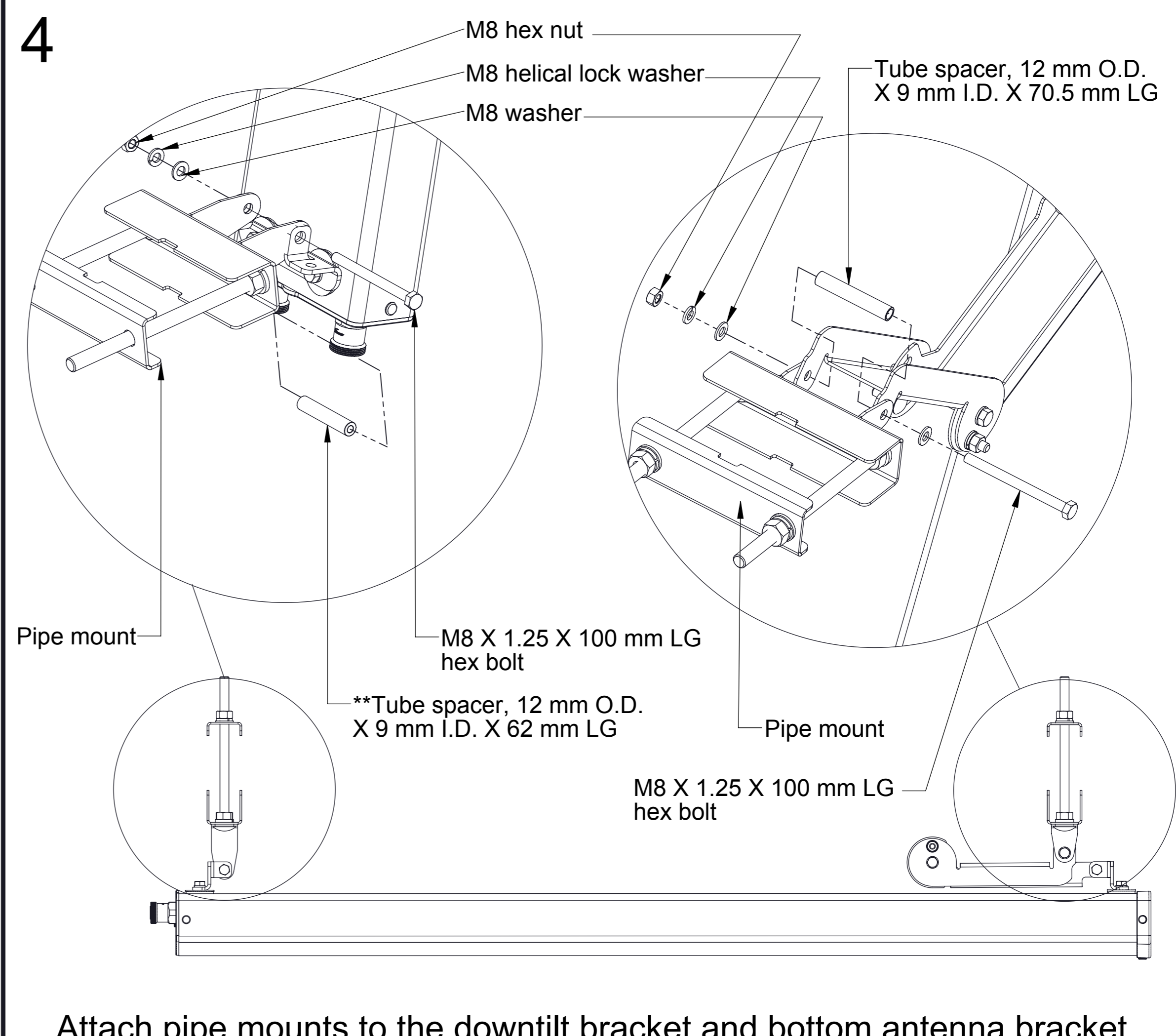
M12 X 1.75 X 200 mm LG carriage bolt (2 POS'NS top bracket, 2 POS'NS bottom bracket)

M12 X 1.75 X 10 mm thick hex nut (2 POS'NS top bracket, 2 POS'NS bottom bracket)

M14 lock washer (2 POS'NS top bracket, 2 POS'NS bottom bracket)

Assemble bottom and top pipe mounts.

4



M8 hex nut

M8 helical lock washer

M8 washer

Tube spacer, 12 mm O.D. X 9 mm I.D. X 70.5 mm LG

Pipe mount

M8 X 1.25 X 100 mm LG hex bolt

**Tube spacer, 12 mm O.D. X 9 mm I.D. X 62 mm LG

Pipe mount

M8 X 1.25 X 100 mm LG hex bolt

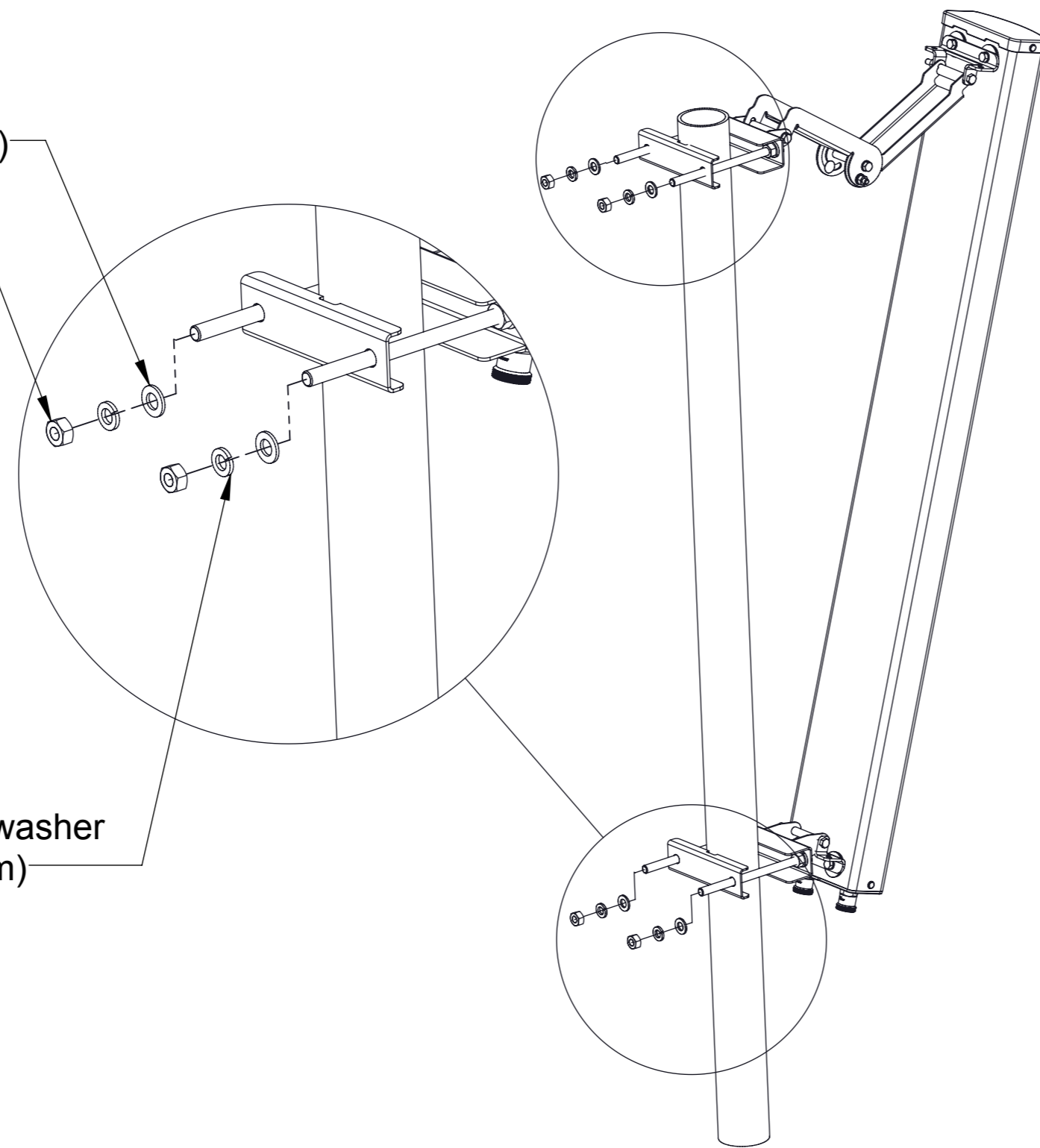
Attach pipe mounts to the downtilt bracket and bottom antenna bracket.

5

M12 X 2.5 mm thick flat washer
(2 POS'NS top, 2 POS'NS bottom)

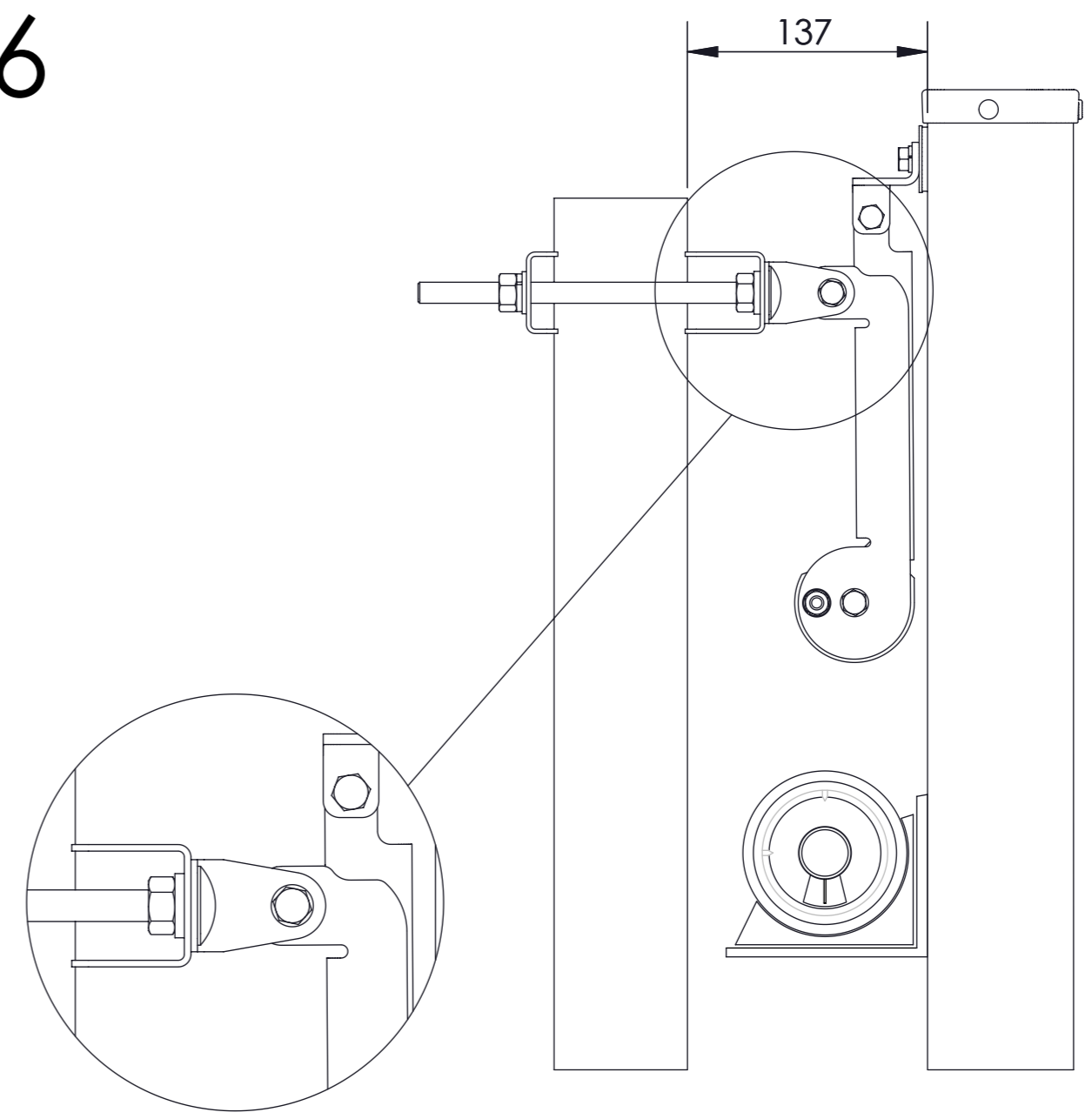
M12 X 1.75 X 10 mm thick hex nut
(2 POS'NS top, 2 POS'NS bottom)

M12 X 2.5 mm thick helical lock washer
(2 POS'NS top, 2 POS'NS bottom)



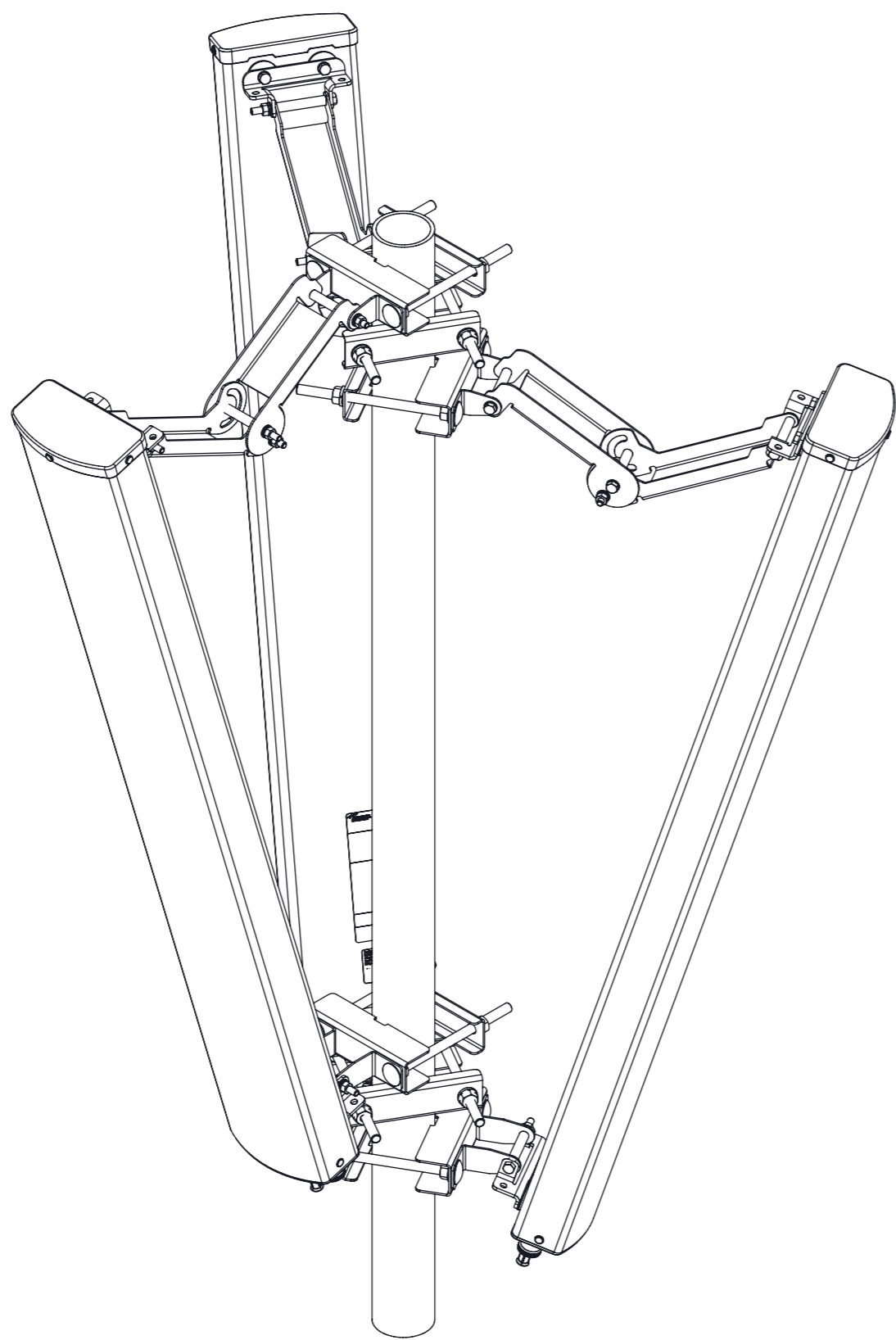
Fasten pipe mounts to mast.

6



*When downtilt bracket is set at 0°. Loosen M8 hardware to adjust downtilt. Verify desired downtilt with an Inclinator.

7



EXAMPLE SHOWING THREE ANTENNAS



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.