



Installation Instructions

TMW™ Antenna

Tower Mount for 4ft (1.2m) Antennas.



Description

The following pages show the steps required to assembly and fit the antenna mount to a vertical tower pipe of diameter 48 to 115 mm (1.9 to 4.5"). This mount provides $\pm 20^\circ$ azimuth or $\pm 15^\circ$ elevation adjustment.

Notice

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

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



Warning: Use protective wear to avoid skin contact with the pre-applied conductive grease on threads. 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 sources. Dispose of empty or partially filled containers according to governmental regulations for petroleum products. Contents: oil, clay, and zinc dust.

1

Table 1. Antenna Parts list

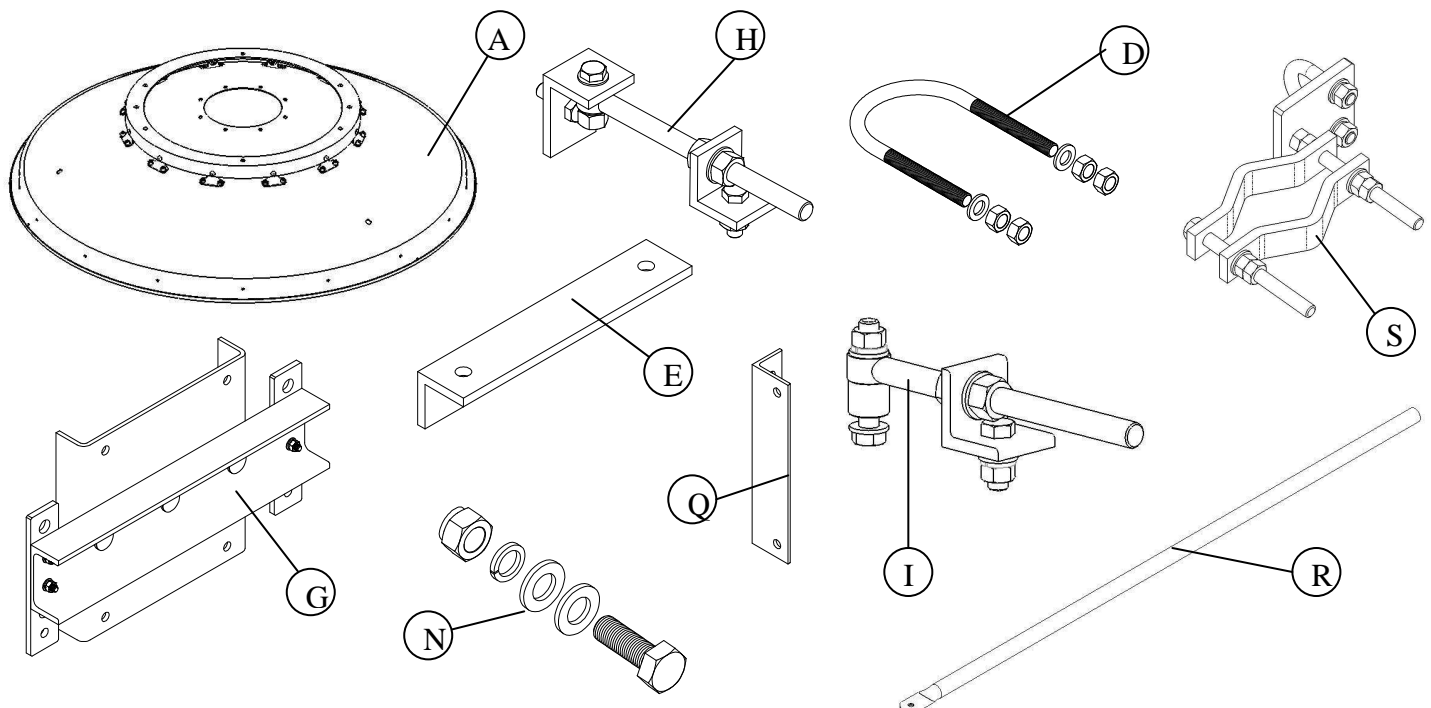
* Part of Accessory Kit

Item	Qty	Description
A	1	Reflector
D	3	U-bolt *
E	1	Fine adjuster angle bracket *
G	1	Mount
H	1	Fine Azimuth adjuster *
I	1	Fine Elevation adjuster *
N	4	M12x35 mm Hex head bolt *
	8	Flat washer *
	4	Spring washer *
	4	Nut *
O	16	M5x25 mm screw *
	16	Spacer washer *
Q	1	Mounting Angle Plate *
R	1	Strut Pipe
S	1	Clamp Bracket Assy *

Table 2. Fastener Torque Specifications

Fastener Torque value in N·m (lb·ft) for each fastener size

Fastener Size	Torque valve in N.m (lb.ft) for each fastener					
Size	M5	M6	M8	M10	M12	M16
Stainless	4.5	7.7	18.7	39.2	65.1	161
Steel	(3.3)	(5.7)	(13.8)	(28.9)	(48)	(18.7)
Galvanized	2.7	4.5	11.1	22	38	95
Steel	(2.0)	(3.3)	(8.1)	(16.2)	(28.0)	(70.1)





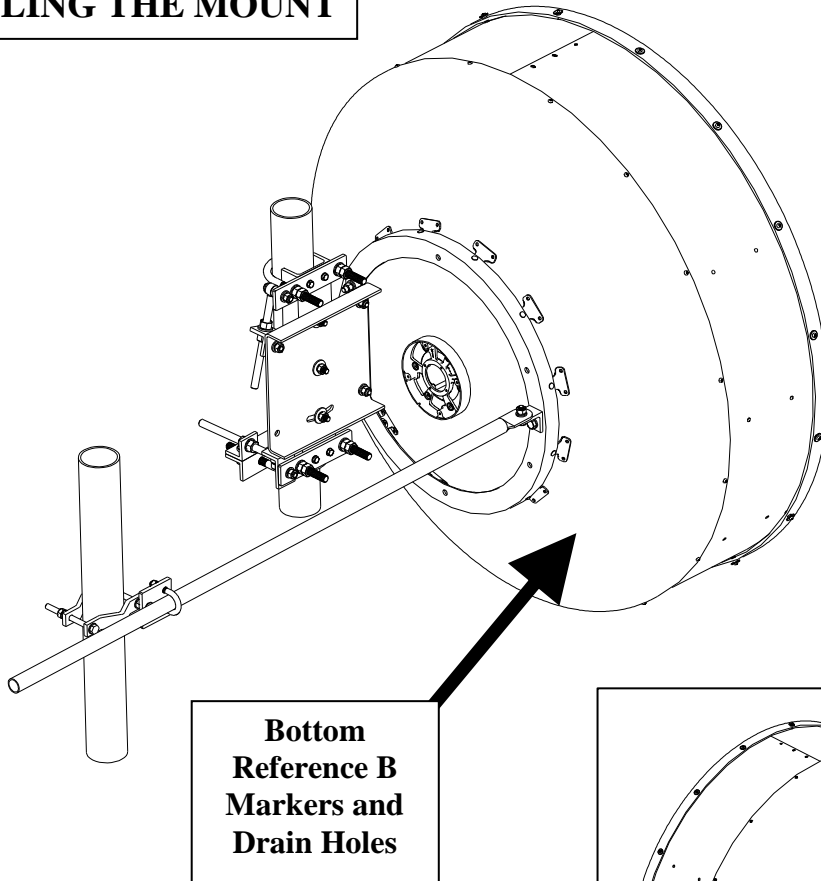
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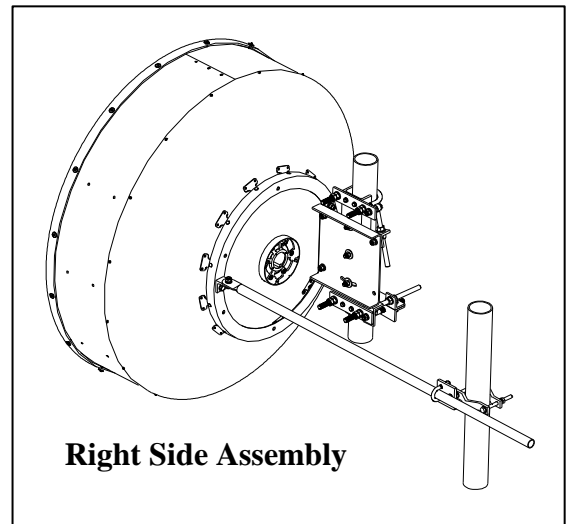
Tower Mount for 4ft (1.2m) Antennas



ASSEMBLING THE MOUNT



The image shown can vary from product to product. Specific views will be shown appropriate sections.



The antenna may be assembled with the mounts on the right or the left side of the pole as shown.



NOTE:

**ONLY THE LEFT SIDE ASSEMBLY IS DESCRIBED
THE RIGHT SIDE ASSEMBLY IS IDENTICAL AND IS SHOWN
TO THE RIGHT OF EACH IMAGE FOR REFERENCE.**



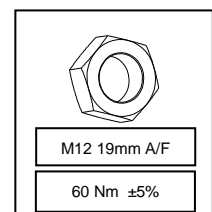
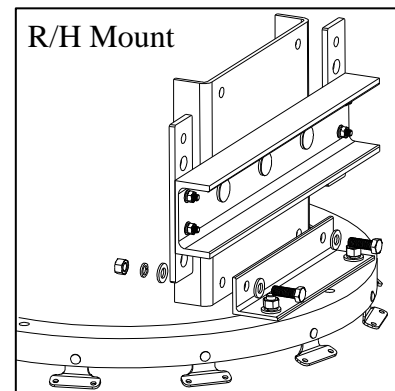
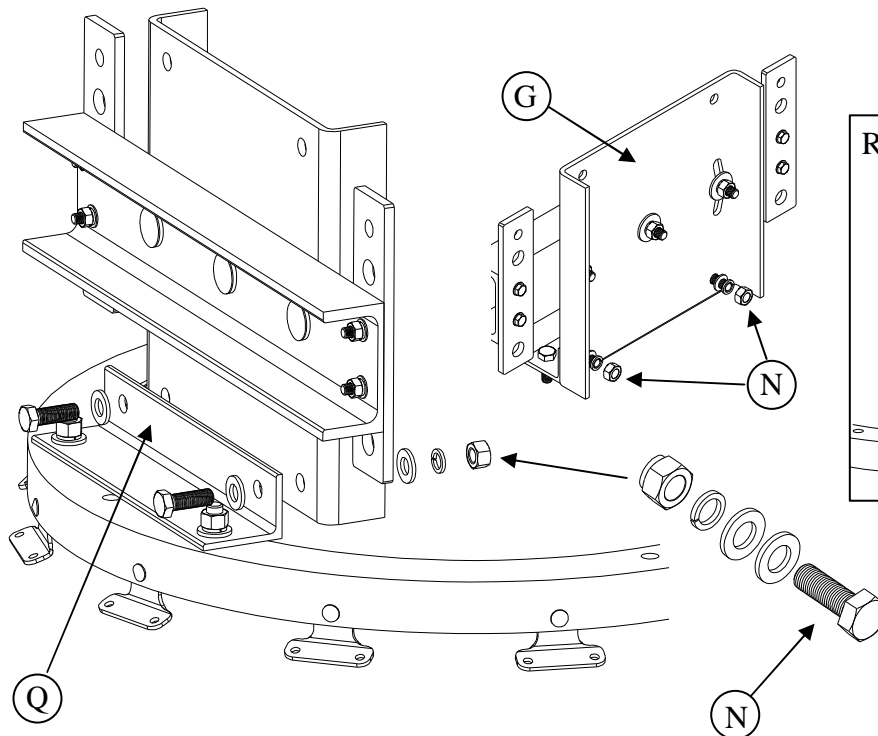
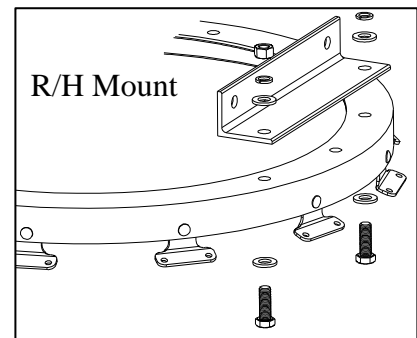
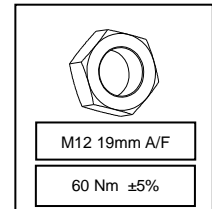
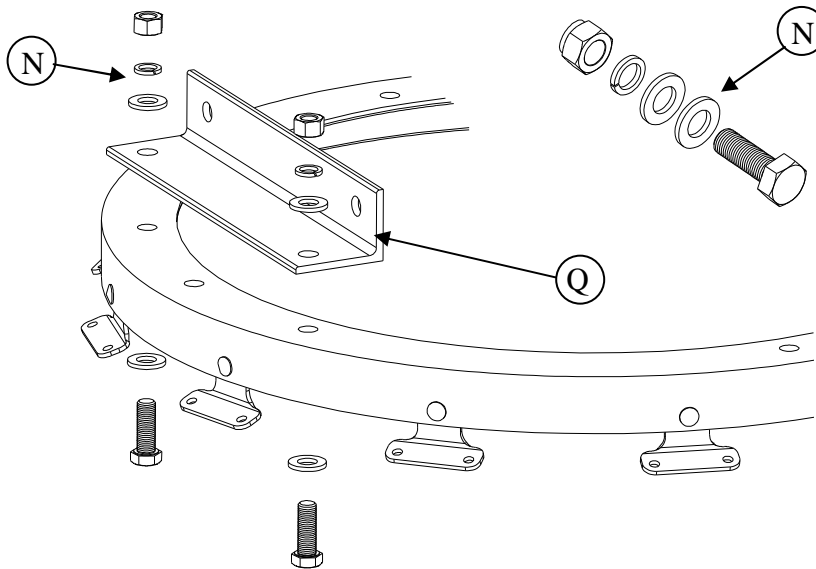
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LEFT-SIDE MOUNT ASSEMBLY



1. Fit the angle plate (Q) to the angle ring using fixings (N) tighten the bolts to the recommended torque.
2. Fit the mount (G) to the mount bracket (Q) using the fixings (N). Tighten the bolts to the recommended torque.

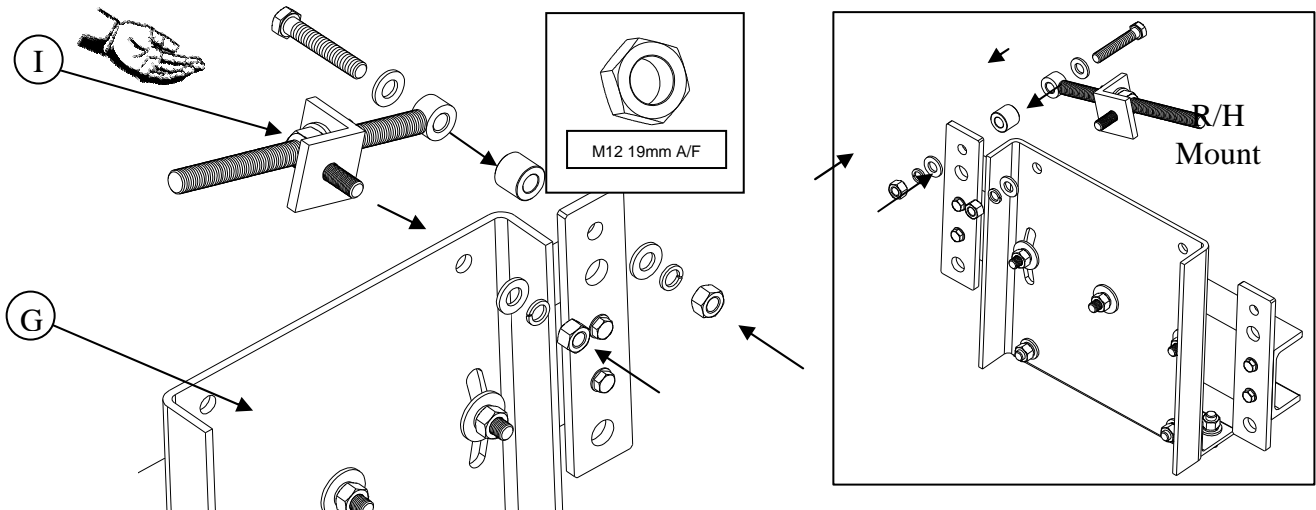


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TMW™ Antenna Tower Mount for 4ft (1.2m) Antennas

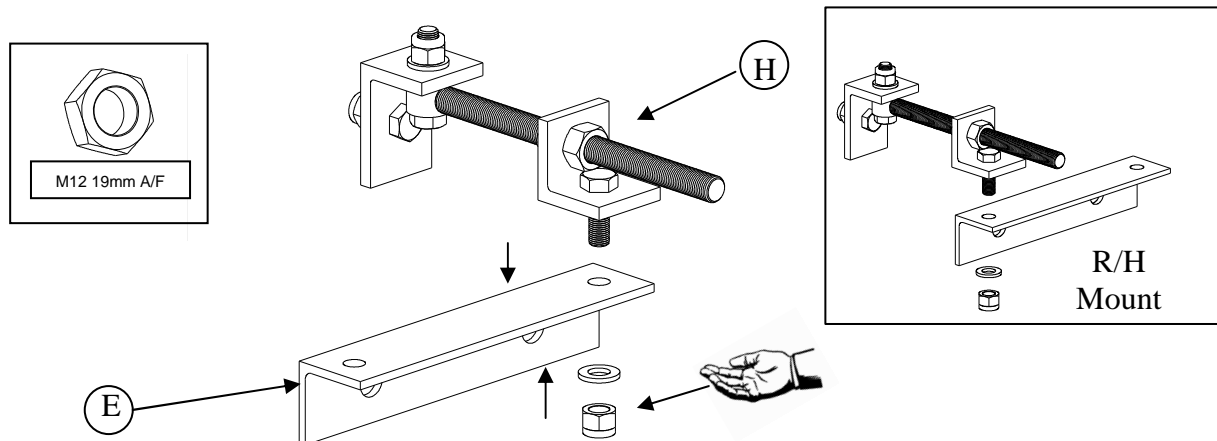


ATTACHING THE ELEVATION ADJUSTER



1. Fit the elevation adjuster (I) to the position shown on the mount (G). Tighten all bolts and nuts to the elevation adjuster securely enough to allow for rotational movement whilst remaining securely attached.

ATTACHING THE AZIMUTH ADJUSTER



1. Secure the Azimuth adjuster (H) to the angle bracket (E), in the correct orientation depending upon which side the mount (G) has been assembled.
2. Tighten the adjuster securely enough to allow for rotational movement whilst remaining securely attached



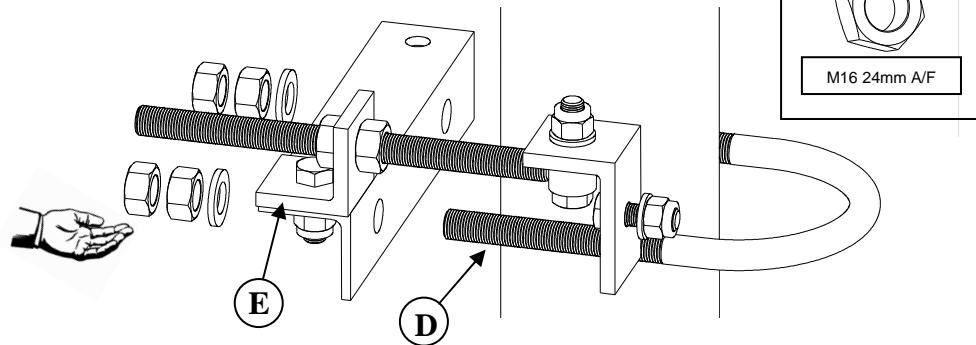
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Tower Mount for 4ft (1.2m) Antennas.

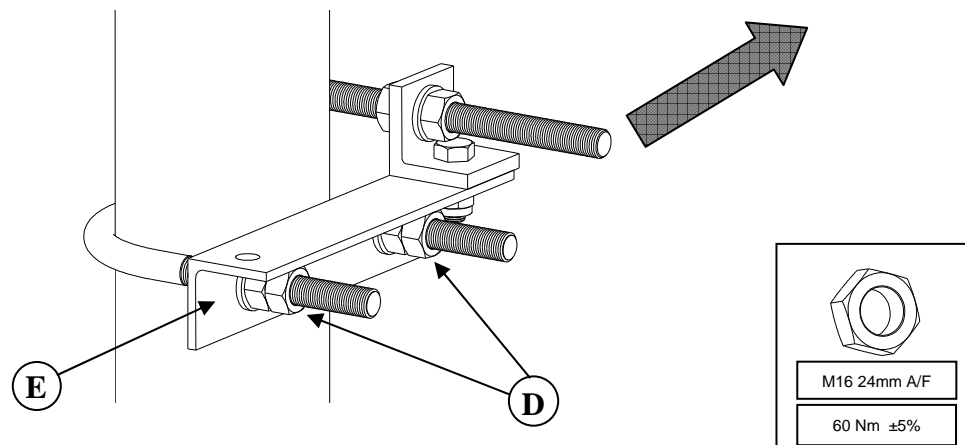


FITTING THE SAFETY BRACKET



1. Fit the U-bolt (**D**) to the angle bracket (**E**) around the pole just below the intended antenna position. Tighten the bolts to allow for rotational movement whilst being tight enough to leave the bracket securely attached.

TIGHTENING THE SAFETY BRACKET



1. Align the fine azimuth adjuster angle bracket (**E**). The fine azimuth adjuster angle bracket (**E**) shall be in alignment with the direction the antenna shall face.
2. Tighten the U-bolt (**D**) to the recommended torque.



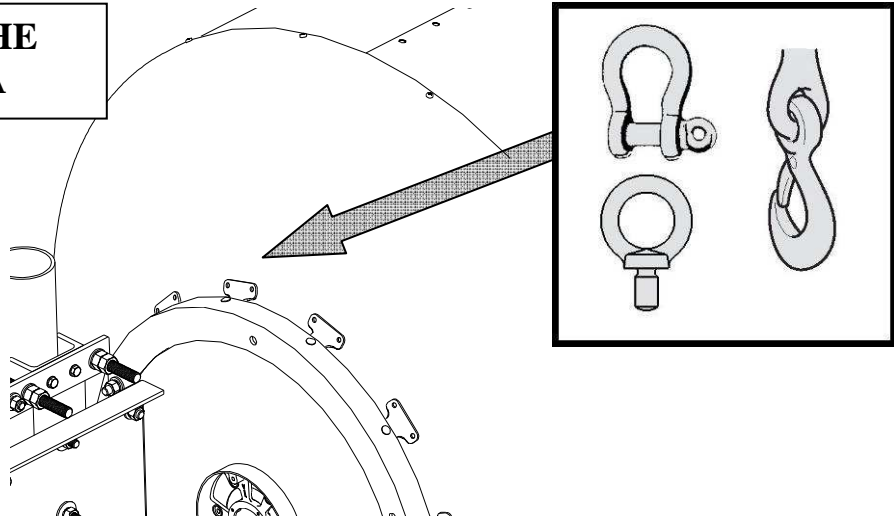
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LIFTING THE ANTENNA



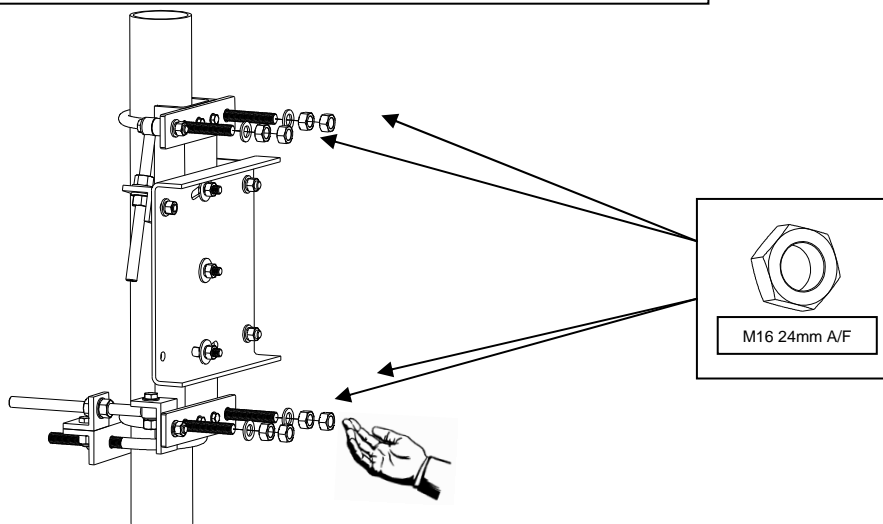
1. Lift the antenna using the hoisting hole located on the backing ring on the back of the dish.

WARNING



NEVER WALK UNDER HOISTED LOADS

ATTACHING THE ANTENNA TO THE POLE



1. Let the mount rest on the tightened U-bolt. Attach the antenna to the pole using the two remaining U-bolts. Tighten the bolts to allow for rotational movement whilst being tight enough to leave the bracket securely attached.



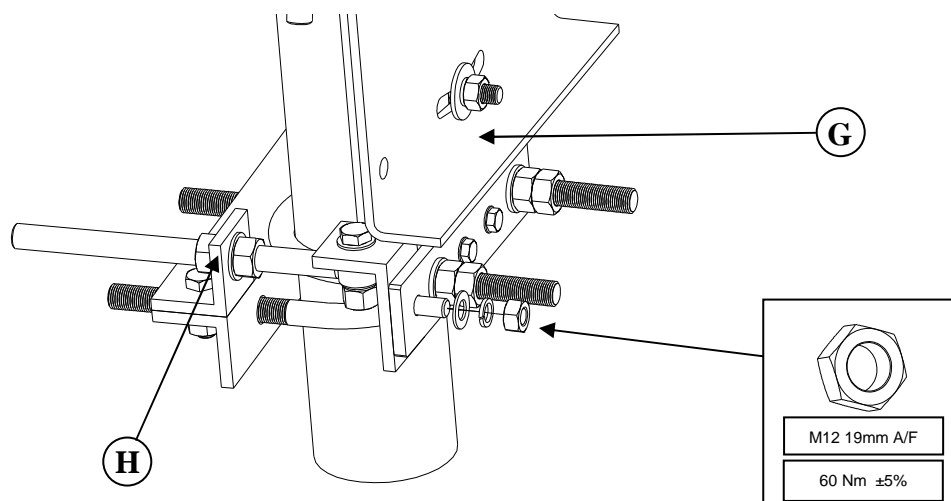
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Tower Mount for 4ft (1.2m) Antennas.



ATTACHING THE AZIMUTH ADJUSTER



1. Attach the azimuth adjuster (**H**) to the mount (**G**). Tighten the bolt on the azimuth adjuster (shown) to the recommended torque.



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TMW™ Antenna Tower Mount for 4ft (1.2m) Antennas

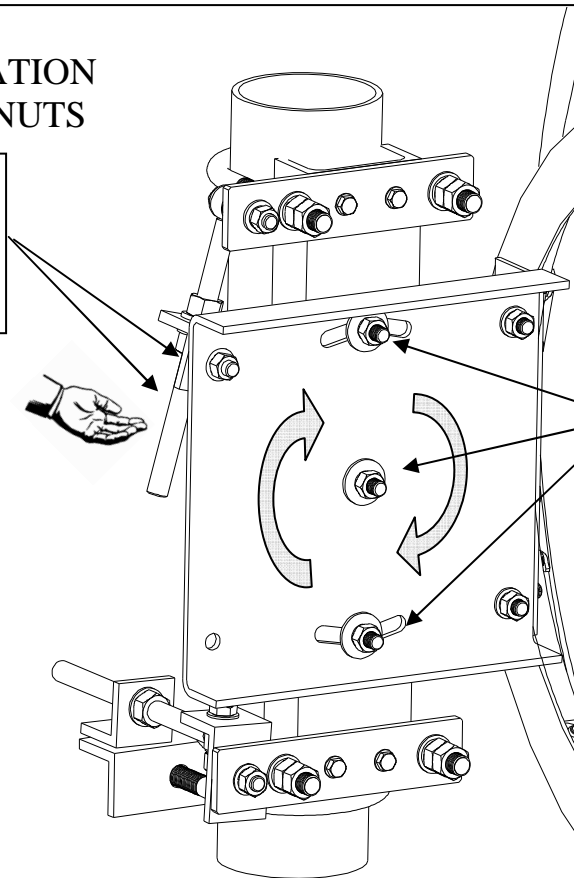
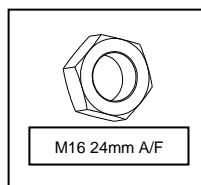


ANTENNA SET-UP AND ALIGNMENT

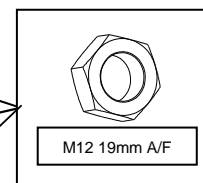
NOTE: The antenna can be adjusted ± 15 degrees in azimuth and ± 15 degrees in elevation.

ADJUSTING THE ANTENNA IN ELEVATION

**FINE ELEVATION
ADJUSTER NUTS**



THREE MOUNT FIXINGS



1. Loosen the three bolts on the mount enough to allow for rotational movement while remaining securely attached.
2. Loosen the nuts on the fine elevation adjuster and adjust the antennas signal until the optimum signal is found. Tighten the nut on the fine adjuster by hand.
3. Hand-tighten the fixings loosened in step 1.



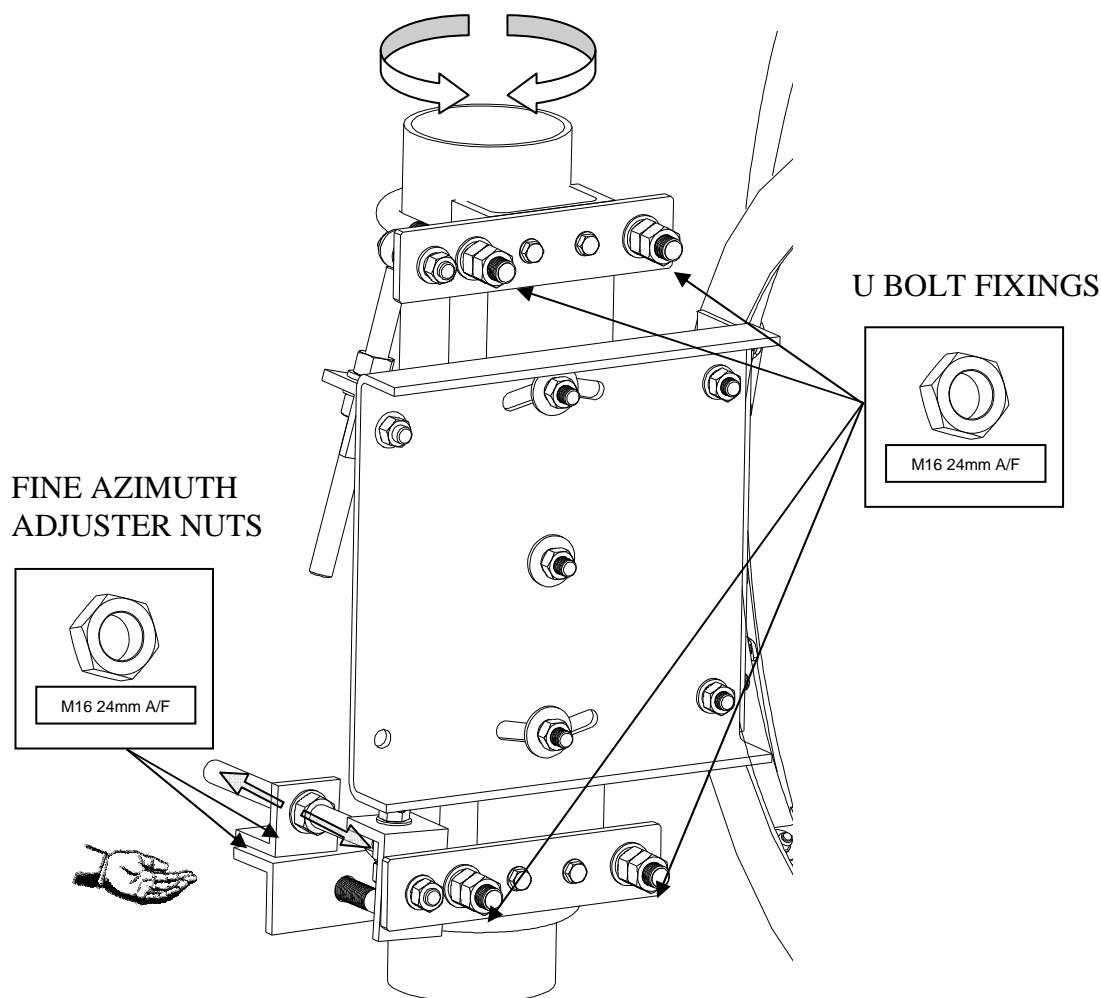
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Tower Mount for 4ft (1.2m) Antennas.



ADJUSTING THE ANTENNA IN AZIMUTH



1. Loosen the U-bolts sufficiently to allow movement around the pole.
2. Loosen the galvanized nuts on the azimuth adjuster by hand and adjust the antenna in azimuth until the optimum signal is found.
3. Hand-tighten the fixings loosened in step 1.
4. Repeat ELEVATION and AZIMUTH adjustments until the optimum signal is found.



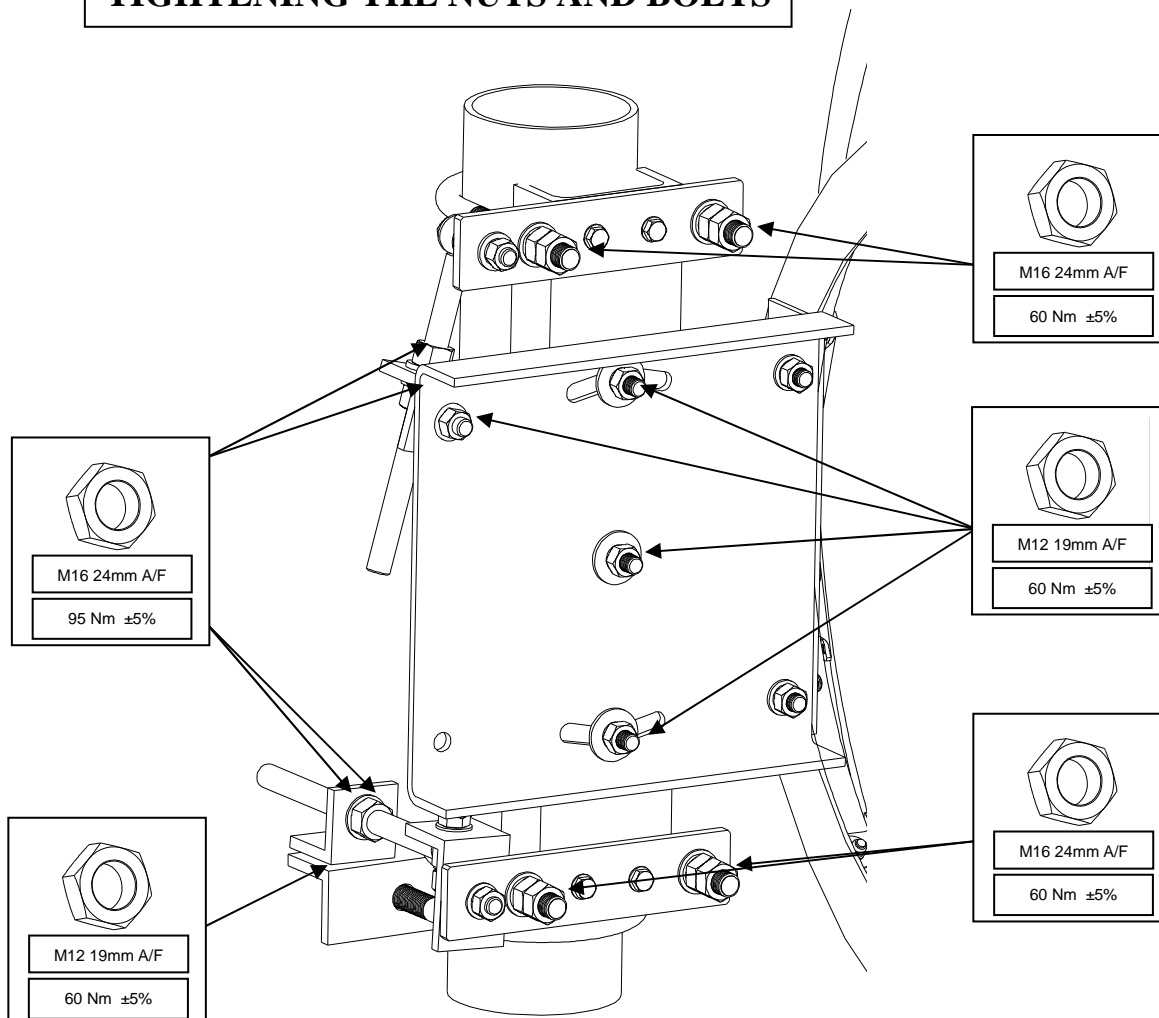
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TIGHTENING THE NUTS AND BOLTS



1. Tighten all of the above fixings to the recommended torque:



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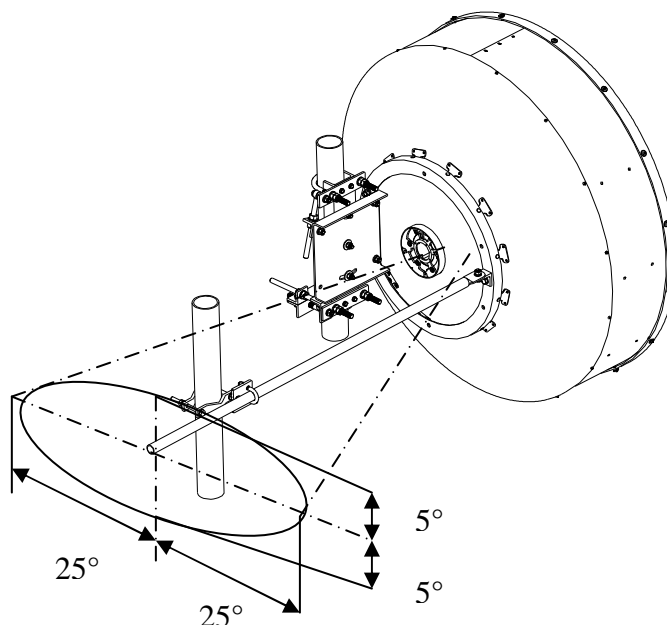


SIDE STRUT & CLAMP BRACKET INSTALLATION

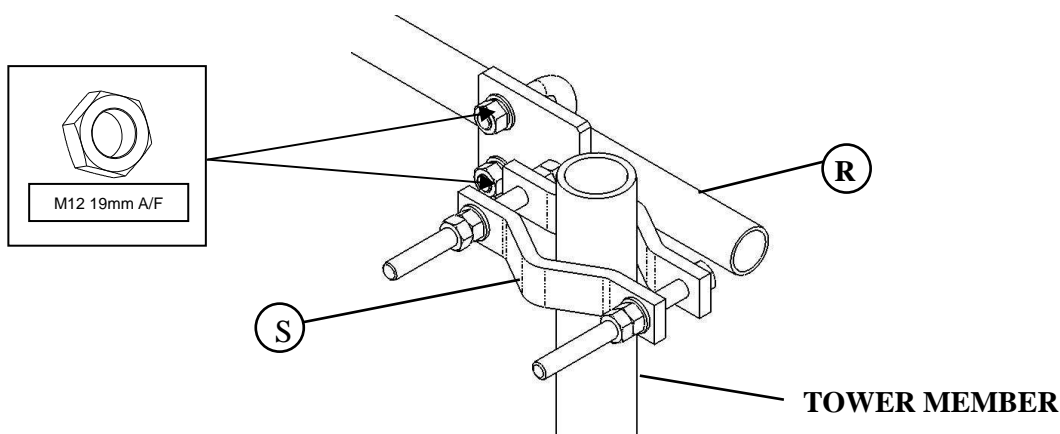
NOTE:

The side strut must be attached pointing directly behind the antenna within the angular limits shown in the illustrations.

The image shown can vary from product to product. Specific views will be shown appropriate sections.



ATTACHING THE CLAMP BRACKET TO THE SIDE STRUT



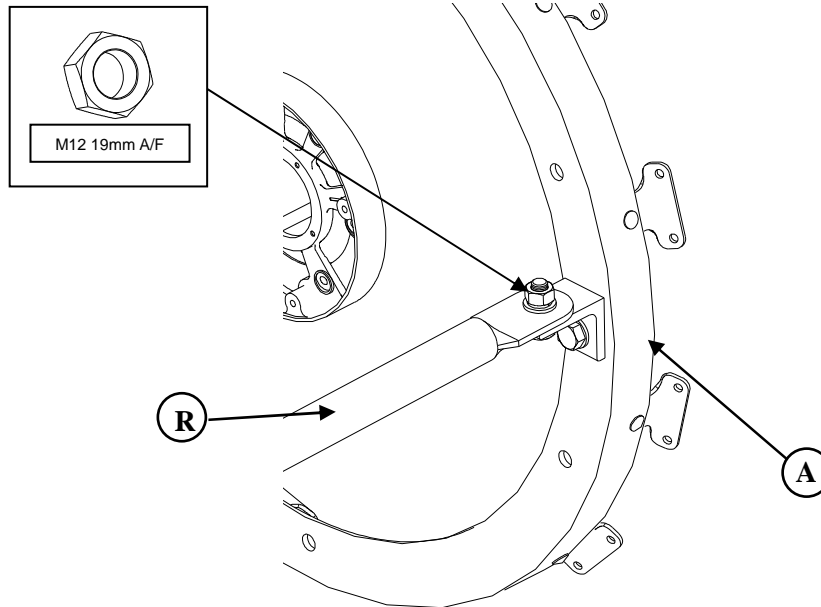
1. Tighten M12 'U' bolt sufficiently to allow for movement whilst remaining securely attached.

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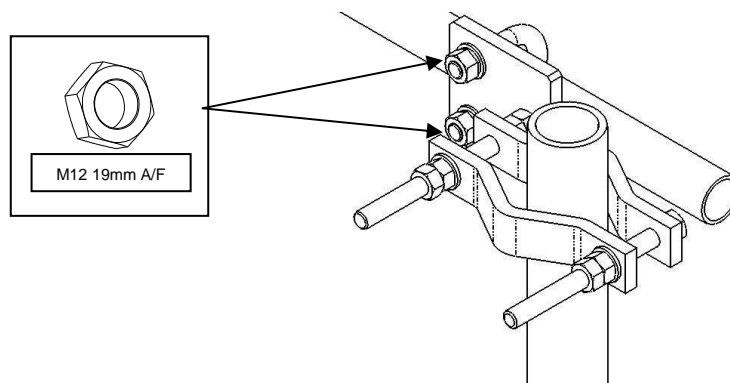


ATTACHING THE STRUT TO THE DISH



1. Attach through the small angle bracket, the side strut (**J**) to the dish support frame (**A**). Tighten sufficiently to allow for rotational movement whilst remaining securely attached.

ATTACHING THE CLAMP TO THE TOWER



1. Loosen the 'U' bolt sufficiently to allow for adjustment whilst remaining securely attached. Ensure the attachment angle is not exceeded; locate the side strut to the tower member. Attach the side strut clamp bracket to the tower member by tightening sufficiently to allow for adjustment whilst remaining securely attached.



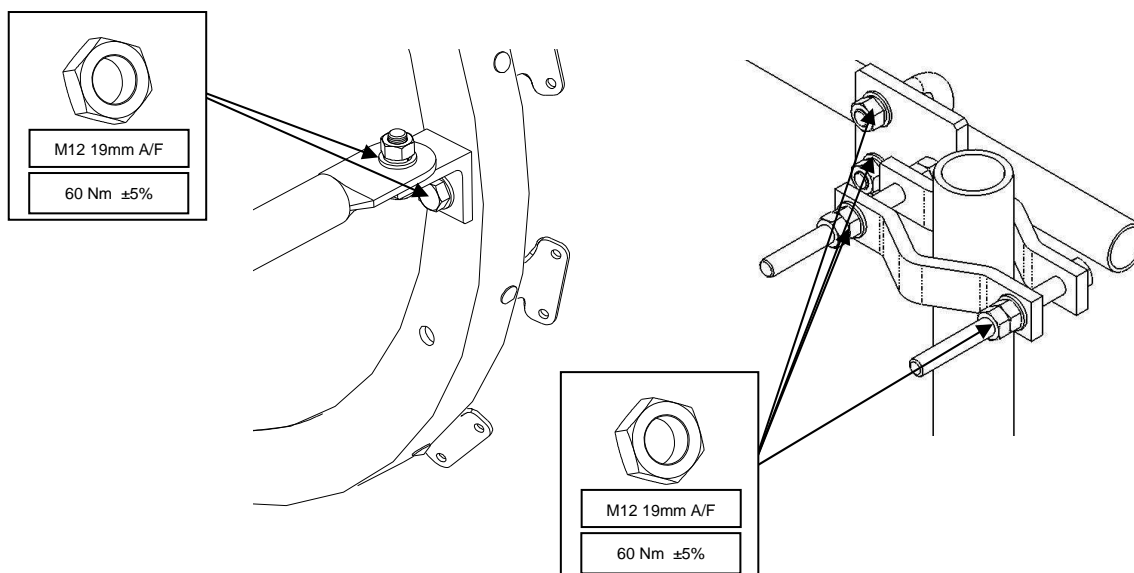
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TIGHTENING THE BOLTS AND NUTS



2. With the side strut (J) not exceeding the maximum attachment angle, tighten all the above fixings to the appropriate torque setting.