Amphenol ANTENNAS

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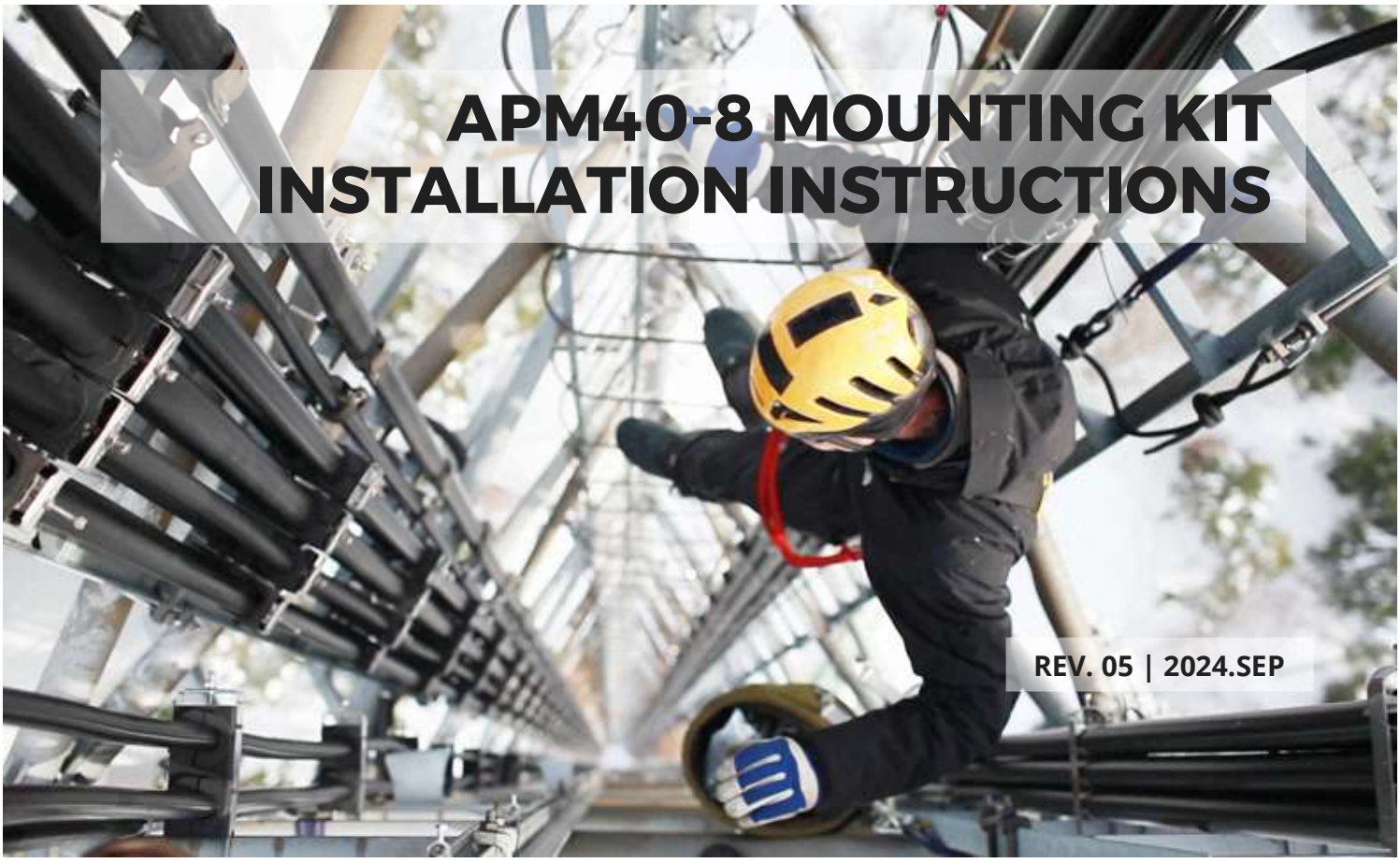


APM40-8 MOUNTING KIT INSTALLATION INSTRUCTIONS

REV. 05 | 2024.SEP

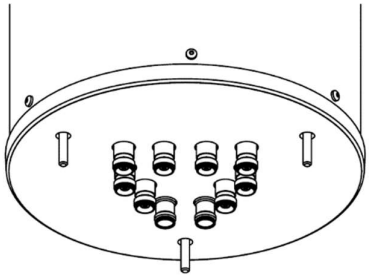
Mounting Instructions for APM40-8 Kit

SUMMARY

Mounting Instructions for APM40-8 Kit

1. APPLICATION

The APM40-8 Mounting Kit is a mounting hardware which uses mounting omni antennas as shown below (ports just for reference).



2. FEATURES

- Top mounting support for omni antennas.
- Pipe diameter: 85 ~ 170 mm.

3. MECHANICAL SPECIFICATIONS

Weight of Kit (kg)	10.5
Mounting Kit Material	Galvanized Steel, Aluminum
Packaging Dimensions, H x W x D (mm)	290 x 400 x 400
Packaging Material	Carton box

4. TOOLS REQUIRED FOR INSTALLATION

- 13mm, 19mm and 36mm Socket or Wrench.
- Torque wrench.

5. ITEM NUMBERS FOR THE MOUNT KIT HARDWARE

Item #	Description	Qty.
1	Trident frame	1
2	Transform frame	1
3	M24 screw	1
4	M24 flat washer	2
5	M24 spring washer	1
6	M24 nut	1
7	Bracket for pole	4
8	M12 screw	8
9	Big tube spacer	8

Item #	Description	Qty.
10	M12 flat washer	12
11	M12 spring washer	8
12	M12 nut	8
13	Gasket	3
14	Small tube spacer	3
15	M8 flat washer	3
16	M8 spring washer	3
17	M8 nut	3

6. ASSEMBLY OF COMPONENTS TO ANTENNA

Due to the weight of the antenna and in order to have better, safer and easier assembly, the operator can preassemble all the parts together on the ground according to the detailed view below. During the

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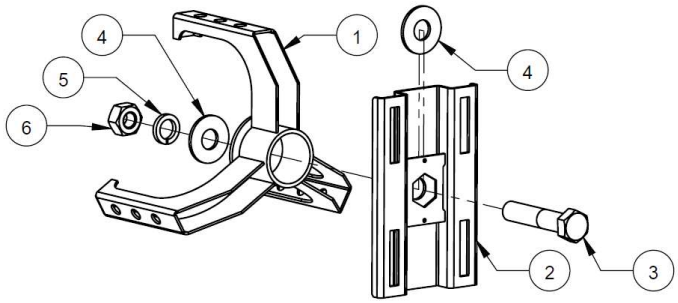
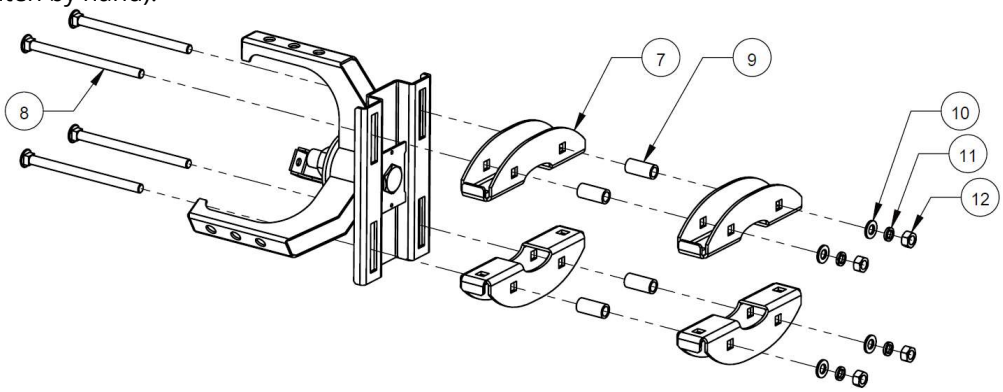
preassembly, all the fixations shall be assembled but not fully tightened, extreme caution to be used that all nuts bolt and washers are fitted according to the assembly diagram before lifting can take place. Then use lifter to lift the antenna to the correct pole, this will enable ease of installation.

Assemble step

1. Assemble item 1 to item 2 by M24 screw, washers and nut (Pre-tighten by hand).

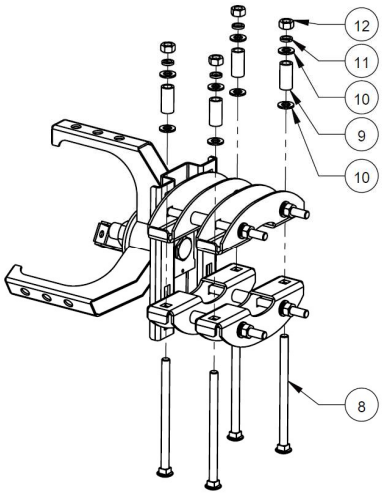


2. Connect four pieces of item 7 to item 2 with M12 screws, washers, nuts and big tube spacers (item 9). (Pre-tighten by hand).

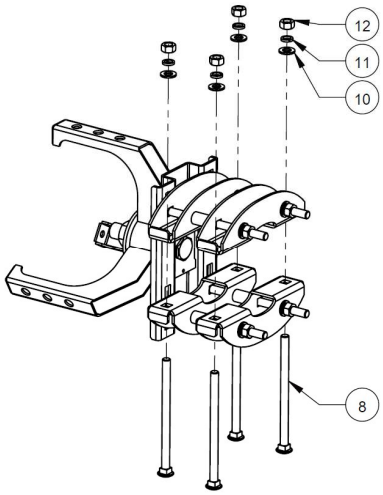


3. Pre assemble M12 screws, washers and nuts to Item 7. (Pre-tighten by hand)

NOTE: If diameter of pole is smaller than 130mm, additional "Big tube spacers" are needed, please refer to below figure.



Diameter of pole from 85 to 130mm



Diameter of pole from 130 to 170mm

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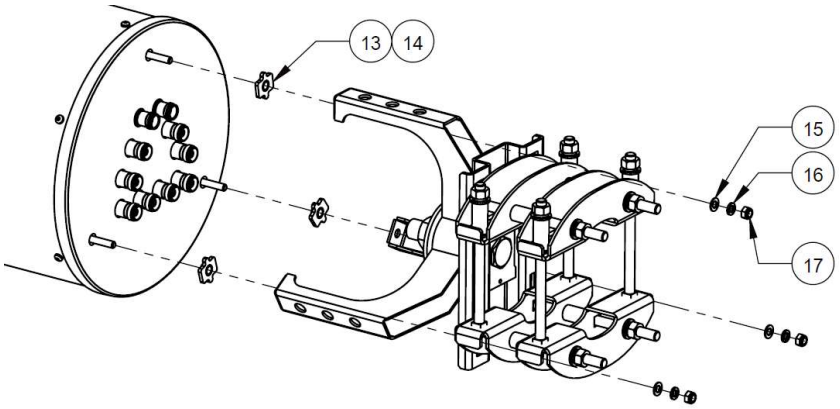
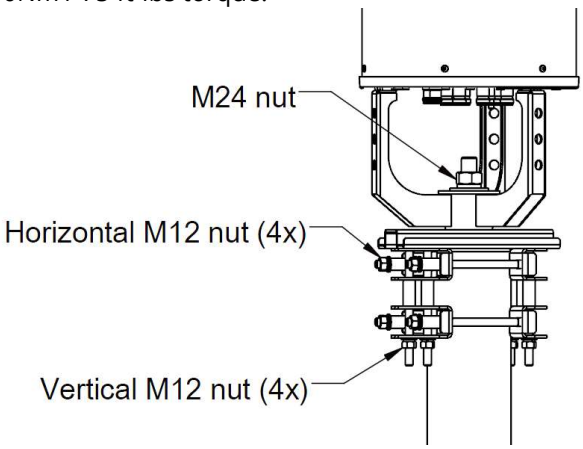
4. Install antenna to mounting kits by M8 screws, washers and nuts. (tighten M8 nuts with 11Nm / 8 ft-lbs torque)



5. Insert full assembly to top of pole, tighten nuts following below order:
   Tighten M12 nuts in horizontal direction with 30Nm / 22.5 ft-lbs torque.
   Tighten M12 nuts in vertical direction with 30Nm / 22.5 ft-lbs torque.
   Tighten M24 nut with 100Nm / 75 ft-lbs torque.



6. Connect the antenna to the system by means of jumpers.
7. When attaching the jumper cable 4.3-10 connector coupling nut to the antenna 4.3-10 female connector it is mandatory that the jumper cable meet the 4.3-10 female connector of the antenna straight in line
8. Press the inner part of the jumper cable connector into the antenna connector and maintain this pressure when turning the jumper coupling nut. Once aligned, the jumper coupling nut will fit the thread of the female connector correctly and it will turn smoothly. Tighten the jumper coupling nut by hand.
9. Use a torque wrench to tighten the connector assembly with11 Nm /8 ft-lbs torque. The torque wrench must be perpendicular to the antenna connector flange and jumper cable connector coupling nut when tightening. Note: No angular torque from the jumper cable is allowed at any time.
10. For additional protection against harsh environmental conditions, insulate all connector connections. See the Connector Insulation Section.

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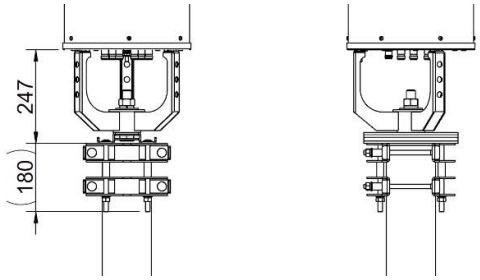
Outer size (Unit: mm)



7. TIGHTENING TORQUE VALUES

Unless otherwise stated, the following general tightening torque values shall be used for metric hexagon bolts and screws, coarse pitch threads.

Diameter	Pitch (mm)	Torque (Nm)
M24	3	100
M12	1.75	30
M8	1.25	11

8. MAINTENANCE

Under normal conditions, no maintenance is necessary. However, the antenna should be visually inspected at regular intervals for damage (e.g.: due to lightning strikes, falling ice, etc.). Periodic checks should be performed to verify correct torque and bracket clearance settings. Please contact technical support for more information.

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