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Installation instructions for the Magnemount model MASS with 8 side plates

Tools needed

3/4" deep socket, 3/4" box wrench, 1/2" open ended wrench, 1/2" deep socket, 5/8" socket, and very importantly, a torque wrench.

*** DO NOT REMOVE THE MYLAR PADS ON THE BOTTOM OF THE MAGNETS. THEY ARE AN INTEGRAL PART OF THE SYSTEM. ***

Location note - In order to achieve maximum holding strength;

Model MASS should have no complete outside rows of magnets on side saddles over tank welds.

Installing the center section (the plate with the short mast)

- 1) When removing all mount sections from the shipping container (while on the ground) DO NOT REMOVE THE ATTACHED INSULATING BASE. This will keep the magnets free of debris and the mount from attaching to unwanted objects.
- 2) After the mount sections are on top of the tower, please remove all "dirt". Just wiping the surface will improve the holding power.

Lift by the plates only - keep hands and feet clear of the magnets

- *** Caution –Without the insulator attached, hold the plate by the sides only because the magnets will take the plate out of your hands with no warning when it gets close to the tower. ***
- 3) Stand the plate up on its edge orient the base direction remove the insulating base then set the plate down on the tower.

- 4) Totally loosen the double hex nuts on all 24 magnets at least ¼" above the plate. This will allow the magnets to be independently seated.
- 5) FINGER-TIGHTEN each bottom hex nut. Then, *with the torque wrench*, tighten the top nut using 10#-ft of torque while holding the bottom hex nut with an open ended wrench. Do not use power tools!!!
- 6) The center section is now installed.

<u>Installing the side saddles</u>

- 1) This 9-plate model uses 8 side plates (sidesaddles) marked "A" and "B". The sidesaddles marked "A" attach to the center plate, and the sidesaddles marked "B" attach to the "A" plates. (A to A, and B to B)
- 2) Set the sidesaddles marked "A" on each side of the center section, with the connecting straps facing the center section.
- 3) Remove the 4 sets of double nuts from each side of the center section. Place the connecting straps over the 4 bolts and replace the double nuts just below the top of the bolts. Cut the plastic wrap holding the insulating base. Lift the back end of the plate, remove the insulating base, and while holding the plate ONLY, set the plate down on the tower.
- 4) Totally loosen the double hex nuts on all 24 magnets at least ¼" above the plate. This will allow the magnets to be independently seated.
- 5) FINGER-TIGHTEN each bottom hex nut. Then, *with the torque wrench*, tighten the top nut using 10#-ft of torque while holding the bottom hex nut with an open ended wrench. Do not use power tools!!!
- 6) Repeat instruction #6 for the 4 sets of the double nuts holding the bars to the center plate. Caution: Only finger-tighten the bottom nut and use 10#-ft of torque tighten the top nut. THE CONNECTING BARS WILL NUT LAY FLAT AGAINST THE PLATE.
- 7) Repeat the attachment procedures #3, #4, #5 and #6 with plates "B" attaching to plates "A".

<u>Installing the elbow and top mast - with 8 turnbuckles</u>

Note: When the upper mast is attached to the base by the elbow, until the upper mast is raised, the upper mast must be supported above the top of the short mast to prevent possible damage to the support arms.

- 1) Remove the 4 sets of 3/8" bolts/lockwasher from the shanks of the elbow.
- 2) Place one shank end of the elbow into the lower mast. Insert the upper mast into the other shank end. Raise the mast and level it. Replace the lockwashers/bolts into the **bottom** mast through the opposite slots in the mast that align with the threads on the shank. Tighten these bolts to 18 #-ft of torque. Next, tighten the ½" internal tooth lockwashers and double nuts to 45 #-ft of torque. Rotate the upper mast so that the eyebolts are in line with the side plates.

3) Replace the lockwashers/bolts into the **upper** mast through opposite slots in the mast that align with the threads on the shank. Tighten these bolts to 18 foot-pounds of torque.

Installing the guy wires

- 1) Attach the guy wires to the turnbuckles. Hold the guy wires in place with the enclosed wire clips 3 per cable.
- 2) Tighten the turnbuckles by HAND ONLY!! The aim is to only remove the slack in the cable. Over tightening the cables will reduce the holding capacity of the Magnemount. All guy wires should have approximately the tension in them.
- 3) In order to eliminate the chance of the turnbuckles from loosening, loop the open end of the guy wire back through the turnbuckle.
- 4) For safety tether the mount to the tower.

Removal

- 1) Insert the enclosed 1.50" bar at the indicated area under the plate (or at any of the 4 corners) and lift the edge of the plate.
- 2) Cover the magnets with plastic, cardboard, foam board, or other barrier to keep ferrous materials from sticking to the magnets.

If you have any question at any time, please call David Klein at 330-963-7909.