

Universal Mast Clamp

Oct 2021

The Universal Mast Clamp (UMC) is designed for use on new KIO hex beams and will also retrofit all older KIO hex beams. No holes need to be drilled for use on new or older hex beams. The clamp will fit any size mast from 1.25 to 2.5 inches O.D.

The UMC consists of two right angle brackets that are mounted back to back on the bottom of the base plate and two toothed clamp halves that are bolted together with four long threaded tap bolts. The mast which the hex beam is to be mounted on fits into the toothed clamp and the bolts are tightened. The UMC can be assembled and installed initially or later when the hexbeam is completed. The four mounting bolts for the center post flange should be installed with the nuts on the top side.

For older hex beams, the old bottom fixture must be removed to attach the new UMC shown. If the old bolts are re-used, you need to reverse their direction so that the heads of the bolts are on the bottom so as to minimize any interference with the clamps.

On new hex beams where the UMC has been ordered with the hex beam, there will be no fixture on the bottom of the base plate but the bolts securing the top center post flange will be visible. These bolts should be loosened so the UMC can be affixed using these same bolts. The steps for assembly and installation of the UMC follow. Please note that the baseplate figures below are shown without spreader arms, U bolts and center post so that assembly of the UMC will be more clearly seen.

1. Fasten the two bracket halves, back to back, to the base plate using the four middle flange nuts on the bottom of the base plate. (Fig 1)
2. Install the four long tap bolts and one of the clamp halves as shown. Tighten the intermediate nuts to fasten the clamp half to the brackets. (Fig 2)
3. Install the second clamp half but loosely so that it can be slipped over the mast when you are ready to install the hexbeam on the mast. (Fig 3)
4. The tap bolts, washers and nuts should be arranged as shown. (Fig 4) There is only one lock nut for each tap bolt.
5. When installing on the mast, tighten the clamp halves. The mast should be flush against the bracket on the bottom of the baseplate.

It should be noted that the hex beam will be off center of the mast itself. (Fig 5) This is by design to permit the UMC to be used on legacy hexbeams as well as current models and this very slight unbalance will cause no problem whatsoever. (Fig 5)

Fig 1.

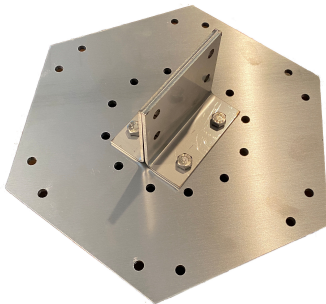


Fig 2.

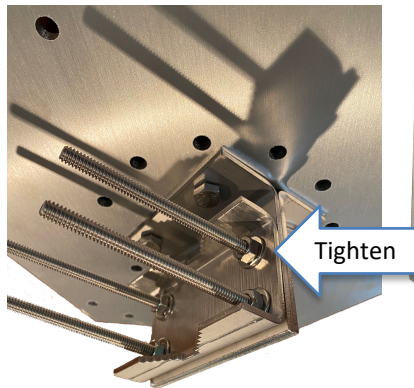


Fig 3.

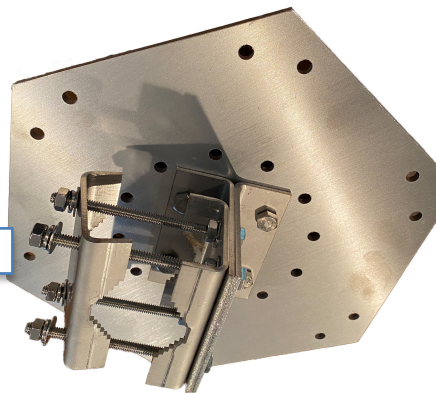


Fig 4.

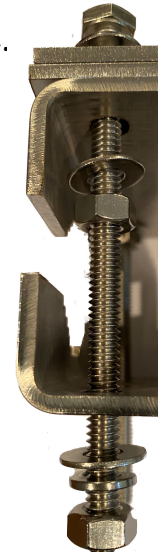


Fig 5.

