

Story and photos by Bob Wark, The Warkshop

his saga began with USCA President Dave Szkudlarek suggesting I rig his zero electric bike with his Watsonian Meteor—as a leaner! First, know that I'm not into leaners or electric bikes. While I've grown to see the value of electric bikes, leaners must be an acquired taste.

I built a four-part subframe that attached at 14 bolt locations to the Zero. It was very challenging as I could not bolt bits in place and tack weld as is normal procedure. The computer and battery on the Zero would not like this.

I put leaner rivet nuts in place of the existing ones that had secured the side covers. There were not to be remounted. I also added one more rivet nut. This yielded five bolt locations on each side. Front and rear bolts on both sides were changed for more appropriate ones to mount the subframe. The lower main tube is a thick-wall Watsonian mounting arm repurposed. Threaded bungs were attached to same by a certified welder.

Because of very limited space on the front, the raised offset was a design challenge. Serious guessing gave us a compact, strong result. A front crossbar tied both sides together and locates the cooler assembly.

The brake pedal could not be spaced out for clearance. The master cylinder mount design would not allow it, so professional help was needed again. The brake pedal was cut, Z'd and welded. This moved it away from the sub frame and kept ideal pedal, brake rod, master cylinder alignment.

Six heavy straps connect the upper assembly to the lower. This is all a "bolt up" package and is not difficult to remove for battery replacement.

The Sidecarist

THE SIDECAR FRAME

The Meteor frame is 1.5-inch outer diameter and 1.25-inch inner diameter tubing. I bought some of the same, plus I had 1.25-inch outer diameter on hand for internal splints. The images on the next page show what was built and how.

The setup was mocked up with the bike straight up. The sidecar frame is level when viewed from the front. It is very slightly nose low. It was built to this mode with 3/8-inch toe-in.

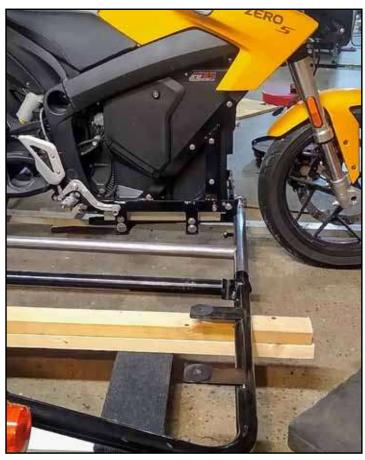
The test ride was uneventful which is always a good sign.

A lock-up steady strut was added to make moving the rig in the shop and on/off trailer easier. A travellimiting bump stop keeps the bike and hack from crashing together.

Dave's happy. I'm happy. The end.

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14



When I set the toe-in I found my front arm would hit the subframe.



Both side fabrications fitted and welded up. Now I'll make a bolt on front cross member.



Very slight bend did the trick. Prepped for sewing up. On to the lower rear arm next.



Been out for a test drive. I survived!