

0.0.1 Mounting and Hardware

The hardware for each major joint was chosen as M2. In previous testing with similar scaled vehicles, these provide adequate shear out well past the loads expected. The only concern is bearing failure, over repeated use, this may need adjustment over time. For all major joints the stack of hardware went as follows:

Image (Bolt, washer, hole, washer, Locking Nut)

Torque specs, where not chosen, instead a judgment call at half turn past the first contact with the mating surface was used.

Clevis joint dimensions, was determined for each joint. Shown bellow:

- Compound/Eccentric loaded joints (vehicle frame and landing leg tension joints)
 - 1.75mm thickness axially
- Propulsion to Avionics space truss
 - 1.5mm thickness axially
- Landing Leg Compression Joint
 - 2mm thickness axially
- Landing Leg Tension Joints (Compound loading)
 - 2mm thickness axially
- Vane Assembly (Extreme Rigidity)
 - 2mm thickness axially