



## EMERALD KART STANDARD SET UP

- Front Wheel Width:** Outside to outside of tires 45 ¾"/Jr 2 start at 45 ¼"
- Align Front End:** ½ mm (.020") toe out on each side
- Rear Wheel Width:** Position the rear hubs with ¼" of the axle protruding through each hub and tighten/Jr 2 start with ½" protruding
- Tire Inflation:** Start with 12 to 13 pounds/Jr 2 start with 13 to 14 pounds
- Front Torsion Bar:** Install/Jr 2 do not install
- Rear Torsion Bar:** Must be removed
- TO ADD GRIP:** Use one or both of the following options
- Rear Torsion Bar:** Install/Install for Jr 2
- Seat Struts:** Install seat struts behind the axel in either of the two unthreaded holes. DO NOT USE THE THREADED HOLES.

## **SEAT INSTALLATION:**

To get the correct seat measurement as it relates to the frame rails use two 2" x 4" pieces of tubing wide enough to span the chassis where the seat will be placed with enough overhang to be clamped to the frame rails. Depending on the grip required, the bottom of the seat is set flush with or to the middle of the longitudinal frame rail.

First clamp the tubing to the bottom of the frame rail. Place spacers up to ½" on top of the tubing and tape them in place. Next place the seat on top of the spacers. (TIP: a weight inside the seat will help keep it stable and upright). When installing a flat bottom seat it is best to use the angle built into the seat when positioning the seat.

Next you must get the second vital dimension which is the actual position of the drivers back. In order to get the correct balance in the chassis it is important to understand where the drivers back is in relation to the rear axle. Take a 90° line (approximate) from one side of the spine recess and measure the shortest distance to the axle surface. (the spine recess runs down the middle of the back of the seat) You must not use the spine recess to measure this it varies in depth to much between each type of seat. With a 155 pound driver this dimension is currently an average of 6 3/8". Please note bolting a substantial amount of lead weight to the back of the seat can make a difference to the seat position, it will force you to position the seat further forward to achieve the same balance.

Before marking the holes, bend the flat metal tabs of the seat struts so the flat parts are parallel to the surfaces of the seat. You can use a large adjustable crescent wrench to do this. Mark the holes, a good tip is to put a blob of paint on the end of an 8M bolt and pass the bolt through the strut spotting the seat in all the four main mounting points. Drill all four mounting points, use the nylon seat washers between the composite and the seat struts (additional spacers, rigid (not rubber) may be used to fill any gaps between the struts and the seat). Tighten the bolts until very tight. The quantity of spacers must be correct to ensure the composite is not pulled out of its natural shape and to keep the seat in the desired position. Extra seat struts can now be fitted if used. Keep the head of the bolt away from the top edge of the seat to eliminate bruising of the ribs.

When you are completely satisfied with the performance of the kart, record the position, size and shape of the correctly fitted seat. Also record the measurements of the furthest forward edge of the seat to the main chassis rail where your heel would normally rest and from the axle surface up to the top edge of the seat. (see dim. 1) Keep the dimension that the seat shows below the chassis tubes. Prepare the seat for wet weather by drilling two holes for water drainage at the lowest point of the seat. Remember to consider your rain tire may be a different diameter than the dry tire, check that there is sufficient ground clearance when fitting rain tires.