



SPEED SHOP SCHOLAR

Welcome to the another installment of the "Speed Shop Scholar." This month we are concentrating on kart assembly. The critical areas will be defined along with coverage of proper seat mounting and attaching the bodywork.

Fast karts are not fast by accident. They are a combination of a quality design, quality components, and all those parts and pieces assembled in a manner to com-



plement each other and work properly. Improper assembly methods can make the best chassis unresponsive and uncompetitive.

Upon delivery of our new chassis, we will first visually inspect the work performed by the factory. Double check the tightness of all the fasteners and check the brakes for proper operation. Verify the nerf

bars are free in the chassis and won't bind the frame as it flexes during the race.

First we will mount the seat. Set the chassis on a table, or place boards

under the chassis. This will serve as a helping hand to hold the seat up, as well as keeping the seat from being below the frame rails. Attach the rear seat struts and tighten just enough to hold themselves in position. We will need to move these as we work, so do not over tighten.

Place the seat into position. Center the front of the seat with the steering post, slide forward, and slightly cock the rear of the seat to the driver's left. Unless the scales tell us to change it, this should be our home position.

Use the seat struts to hold the seat, and set the height on the rear off the axle. Regulations state that for the adult classes the seat cannot be less than 14" high. This translates to 8 1/2" off the top of the axle. Check the rules for your particular division. Set to the height of your choosing, adding about 3/8" drop allowance when all the hardware is tightened, and mark the mounting holes. Be sure to bend any misaligned



tabs to insure a nice flat mount to the seat.

Drill the mounting holes about 1/32 larger than the mounting bolt to allow adequate movement. Tighten the bolts to the point of contact. Again, make contact, do not securely tighten. The seat is now correctly mounted. Let's move on to the rest of the kart.

Attach the steering shaft and connect the tie rods according to the manufacturer's recommendations.

The correct position of the tie rods is usually the one that keeps the rods as level as possible. Tighten all hardware, check for any binding or limit of travel, and install the cotter pin. Mount the steering wheel, attach the instrument mount, and install the cotter pins as well.

Use cotter pins to secure the fasteners for all



brake and steering components. This will keep them from loosening as well as get you through safety tech.

Attach the side panels to the nose cone. Again, do not over tighten. Slide the body onto the kart as one piece. Position one side panel, set the height, and mark the holes.



Repeat the procedure for the other side, drill and attach the sides to the nerf bars. The sides will center the nose. Pull the bottom of the nose forward and up to contact the front bumper and mark the locating holes. Drill and securely tighten.

The hard work is now complete. Add the tires, engine, and a few more items and you are ready to do your setup work and prepare for the track.

Just as I have stressed many times before, take your time and check your work as you go. Extra effort dur-



ing assembly will pay huge dividends on raceday, with improved performance and repeatability.

Let me extend a personal invitation for you to attend our next "Speed Shop Scholar" seminar at my race shop, JRPW Racing in Augusta, GA. Our next date is tentatively set for April 6th at 7 pm. The topic will be announced very soon via our website at www.jrpwracing.com and our facebook page under JRPW Racing. Check us out and be sure to send any questions, comments, or suggestions. This column and the seminars are for you. If you have an idea for a topic, please send it my way. See you next time!