

# Stan Yockey Motorsports



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## 600cc Micro-Sprint Setup Sheet 2012

### Materials

- Level car stands
- 12'-25' Steel Tape Measure
- Combination Square
- 2" & 4" wood blocks or adjustable Moose Blocks
- Stagger Tape
- 3ft of 7/16" steel rod
- Torpedo Level or Angle Finder

### Squaring the Rear Axle

- Start by setting the left rear arm at 12-1/2" measured from the center of the splines to center of the rod end. Then hook up the rear arms to the torsion bars and slide the 7/16" steel rod through the rod ends. Set the rod on 2" blocks then measure the distance from the rod to the front of the rear torsion tubes, it should measure approx. 10-3/16" to 10-1/4". Now you should adjust the right rear arm accordingly to square the rear arms to the rear torsion tubes.
- The next step is to install the rear axle assembly in the car. Be sure to have spacers in place of the wheels on the axle to lock down all axle components. Set axle on 4" square up blocks and by using the flat face on the front of the birdcages level the birdcages by adjusting the radius rods on each side. Now measure from the back edge of the axle to the back edge of the rear torsion tube using a combination square. It should measure approx. 12-3/16" to 12-1/4", the measurement will be 1/16" longer on the right side with the short splined axle and cars with the universal splined axles will be even.

### Rear Radius Rods

- Start with the left rear rod in the short radius rod mount hole.
- Start with the right rear rod in the short radius rod hole.
- Time your birdcages with long radius rods as well in case of need to change, they are ready to bolt on.

### W-Link (Jacobs Ladder)

- Mount the ladder in the inner holes top and bottom. (To run Winged)

- With the rod ends on the torsion arms centered in the birdcage bracket, adjust the rod end on the birdcage to hookup the ladder.

#### Setup Blocks

- Use 2" blocks for both the front and rear, you may vary different heights for heavier/lighter drivers and also track size and conditions.
- Split Tube – Add 1-1/2 turns into left front bar. (Reverse split rear one turn in left front)
- Split Tube – Add 1- 1/2 turns into left rear bar (reverse split zero off blocks)

#### Squaring the Front Axle

- Set car up on the 2" blocks and measure from the front edge of front upright tubes to the back of the front axle at 6" to 6-1/8" on both sides. This will set your wheel base approx. 60-1/2".

#### Caster

- Adjust the right front rods to set caster. Caster should be a minimum of 8° measured from the top of steering arm of the right side. As much as 12° of castor maybe used. More caster allows the car to track straighter and will help excessive over steer.

#### Lead

- Adjust lead after car is set on the ground, run 0 to 1/4" lead. Lead will allow the car to turn easier.

#### Front Axle offset

- Measure from the left side frame rail to the inside of the back of the left front axle bracket. Should measure approx. 2-1/2" to 2-5/8".

#### Torsion Bars/Springs

Left Front Bar - .725	Right Front Bar - .725
Left Front Split Tube Bar - .550	Right Front Split Tube - .600
Left Rear Bar - .725 (Reverse split .750)	Right Rear Bar - .750 (Reverse split .725)

#### Shocks

- We recommend using Advanced Racing Suspensions Shocks. Regardless, Dyno Shock Sheets with compression and rebound rates are preferred for additional technical support.

Left Front – C-1 R-3	Right Front – C-2 R-2
Left Rear – C-1 R- 6-8	Right Rear – C-4 R-4

#### Ride Height

- Measure the ride height without the driver and with 2 gallons of fuel. Place the car on a flat level surface and measure from the ground to the center of the torsion bars. On a coil front measure from the ground to the bottom of the lower frame rail at the front cross member.

Left Front Bar – 10.25"	Right Front Bar – 11.25" to 11.50"
Left Rear Bar – 7.50"-7.75"	Right Rear Bar – 8.75"-9.00"
*Note: Ride heights are without bolt on lead. Ride heights will be slightly lower with bolt on lead.	

### Wing Angle/Location

- Short Track 22°-26°
- Long Track 18°-24°
- Start with trailing edge of wing approx. 4"-6" in front of rear axle.

### Tips to tighten the car on corner entry to apex

1. Lower right rear air pressure
2. Move right rear wheel in ½" to 1"
3. Decrease stagger
4. Move wing back 1"-2"
5. Change right rear shock to a 3 or 4 Compression, w/ 5 Rebound
6. Move jacobs ladder to inside bottom position.
7. Reduce rebound on left rear shock

### Tips to tighten car on corner exit

1. Raise front 4 turns on coil shocks & 1 turn on torsion bar front
2. Decrease stagger
3. Move wing back 1"-2"
4. Add left rear weight distribution (1/4 Turn in LR & RF, ¼ Turn out of RR & LF)

