



## Setup Procedure Using Squaring Blocks

(for chassis using 10" wheels)

### Front of Car preparation:

- Jack up the front of the car
- Loosen the front coil nuts or torsion jacker bolt screws the whole way
- Unhook the rear shocks, this eliminates their influence on the car
- Remove front wheels and mount the toe plates
- Place 2-1/4" block under the left front frame, between the frame and the ground (use 1-1/4" for the first version of the squaring blocks that used a full circle toe plate)
- Place a 3-1/4" block under the right front frame (2-1/4" for early version kit)
- Remove jack

### Rear of car preparation:

- Jack up rear of car.
- Loosen the rear torsion jacker bolt screws the whole way.
- Remove rear wheels.
- Slide on the gold wheel replicator spacers (there are 1-3/4" and 2" rear axle wheel replicators).
- Replace the outer spacers and the axle nuts.
- Hand tighten the axle nuts.
- Place the taller of the two squaring blocks under the right rear gold spacer.
- Place the other squaring block under the left rear gold spacer.
- Place 2-1/4" block under the left rear frame (1-1/2" for early version).
- Place 3-1/4" block under the right rear frame (2-1/2" for early version).
- Remove jack.



The car will now be setting on the blocks and the axles will be held up by the front toe plates and the rear squaring blocks.

### Rear of car:

- Set the rear panhard bar height to 6" from the center of the rod end to the top of the bottom rail.
- Set the left rear wishbone as short as it will go threading in the rod ends the entire way.
- With the wishbone type chassis, set the bearing carrier timing until the bubble level is level. If using a z-link rear, place a square bumped up to the back of the bearing carrier, measure over to the top and the bottom rod end, make the top rod end 3/8" further forward than the bottom or lean the bearing carriers forward 5 degrees.
- Align the bearing carriers such that the torsion bar rod ends are about in the center of the bearing carrier. Adjust rear panhard bar side to side, bend torsion arms, or space bearing carriers to achieve this. Right rear bearing carrier needs to be at least 1/2" away from the square panhard bar upright.

### Squaring the rear axle:

- The left side wish bone should be set so that the rear panhard bar is about 1/2" away from the frame upright in front of it.
- Slide the squaring rod into the 7/8 hollow torsion bar of the left rear.
- Measure the distance from the front of the squaring rod to the back of the rear squaring block. Document this number. On an '07 and up Hyper 600, this number should be real close to 13-1/4".
- Slide the rod through the bar until it now sticks out the right side of the car, it is still in the left rear torsion bar.
- Measure the distance from the front of the rod to the back of the right rear squaring block. Make this number the same as the left rear.

- Align rear sprocket with the front sprocket, add or remove spacers to achieve this. If you fine tune the chain alignment with the panhard bar, you will need to re-square the rear axle and check that the shackles are in the center of the bearing carrier.
- Align the chain block such that the center of the chain block through hole is centered up on the sprocket. Use different length spacers between the chain block and the left rear bearing carrier plate to achieve this.
- Make sure you use washers between the back of the plate and the nuts or nut plate of the chain guide block.
- Re-check chain alignment as final step.

#### **Front of car:**

- Measure the distance between the two front toe plates in the front and the rear.
- Adjust the steering rods so that the front number is 0 to 1/16" larger than the back number
- Set the front panhard bar height to 3-1/4" from the center of the rod end to the top of the bottom rail
- Using an angle finder placed on top of the right side steering arm, set the front caster to 8-10 degrees (for power steering, start at 17 degrees), more makes the car harder to steer, too little may make the car 'wonder' going down the straights.
- Rough measure the front axle offset by measuring from the bottom rail to the wheel mounting face of the left and right front hubs
- Adjust the front panhard bar until the right side offset is 1-1/2" larger than the left

#### **Squaring the front of the car:**

- Hook a tape measure onto the rear squaring block center line and measure up to the centerline mark on the front toe plates. Do this on the left and the right side of the car.
- Adjust the front radius rods until both the left and the right side are equal. On an '07 and up Hyper 600, this number should be 62-1/2" to 62-5/8"

#### **Blocking front of car:**

- Jack the front of the car
- Set the setup block to the desired height
- Place the setup block between the front axle and the frame
- Zero the coil nuts or the torsion jacker bolts
- Add or remove the desired turns

#### **Blocking rear of car:**

- Jack the rear of the car
- Set the setup block to the desired height
- Place the setup block between the front axle and the frame
- Zero the torsion jacker bolts
- Add or remove the desired turns
- Put the wheels back on the car
- Set the car on the ground
- Set the final wheel offset to the desired numbers from the setup sheet

Check counter steer, must be at least 40 degrees for winged and 45 degrees wingless

If your car every hops here are some things to do:

- Move right rear tire out
- Lower car
- Add tie down to the left front shock, ie. 4/2 or 5/2
- Make sure you do not have too much tie down in the left rear, should be about a 6/2 or 5/2
- Add tie down to the right rear
- Add compression to the right front spring
- Do not raise rear panhard bar
- Do not go to stiffer right rear bar
- Do not stiffen the compression of the RR shock.