

Chassis Squaring Kit Procedure

Front of Car Preparation:

- Jack up the front of the car.
- Loosen the front coil nuts or torsion jacker bolt screws all the way.
- Unhook the rear shocks, this eliminates their influence on the car.
- Remove front wheels.
- Place 2¼" block under the left front frame, between the frame and the ground (use 1¼" for the first version of the squaring blocks that used a full circle toe plate).
- Place a 3¼" block under the right front frame (2¼" for early version kit).
- Remove jack.

Rear of Car Preparation:

- Jack up rear of car.
- Loosen the rear torsion jacker bolt screws all the way.
- Remove the rear wheels.
- Slide on the gold wheel replicator spacers (either 1¼" or 2" 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 2¼" block under the left rear frame (1½" for early version).
- Place 3¼" block under the right rear frame (2½" for early version).
- Remove jack.



The car will now be resting on the blocks and the axles will be held up by the front 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.
- Adjust the threaded rods if using an adjustable panhard assembly until the handle is in the center of its adjustability.
- 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 and measure over to the top and the bottom rod end, make the top rod end ⅜" further forward than the bottom.
- Align the bearing carriers so that the torsion bar rod ends are 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 ½" 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 ½" away from the frame upright in front of it.
- Slide the squaring rod into the ⅞" 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 very close to 13¼".
- Slide the rod through the bar until it now sticks out the right side of the car, but 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, adding or removing 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 so 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 to 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 front of the toe plate at the bottom along the ground.
- Measure the back of the toe plate.
- Adjust the steering rods so that the front number is 0 to ⅛" larger than the back number.



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Read Mike Dickey's dirt track theory article "Rethink Dirt" at www.hyperracing.com.



- Set the front panhard bar height to 3¼" from the center of the rod end to the top of the bottom rail.
- Use an angle finder placed on top of the right side steering arm. Set the front caster to 8-10 degrees. More makes the car harder to steer.
- 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" 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 center line mark on the front toe plates.
- Adjust the front radius rods until both the left and the right side are equal. This measurement is the wheelbase. On an '07 and up Hyper 600, the wheelbase should be 62½" to 62¾".



Blocking the Front of the 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 the Rear of the 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.

