



LIVE...RACE...WIN

## Hyper Lightning Sprint Setup

	Left Front	Right Front	Left Rear	Right Rear
<b>Torsion Bar/Coil Size</b>	140	150	.800	.825
<b>Block Size</b>	3"	3"	3-1/4"	3-1/2" on small O.D. part of axle
<b># of Turns Off Block</b>	-2	+2	-1/2	+0
<b>Ride Heights **</b>				
<b>Monotube ARS Shocks</b>	3265/2.5	3261/4	3276/3	3274.5/4
<b>Monotube Adjustable</b>	327 6.5-3/2.5	337 1/5-1	3278-4/3 WXS B/S	327 7-5/3 WXS
<b>Monotube Pressure</b>	20 psi	20 psi	15 psi	15 psi
<b>Wheelbase</b>	71-5/8"			
<b>Center Line of Tire Offset</b>		2-3/4" to the Right	8-1/2" from Torsion Arm	11"-14" Start at 12" From Arm
<b>Tire Pressure</b>	10 psi	10 psi	4-10 psi	5-12 psi
<b>Tires Hoosier</b>	68.0/7-13	68.0/7-13	74 or 76.0/10.0-13	82.0/12.0-13
<b>Tires American Racer</b>	22.5/7.0-13GT	22.5/7.0-13GT	23.5 or 24.0/10.0-13GT	26.0/12.0-13GT
<b>Wheels</b>	13x7 (3" outer)	13x7 (4" outer)	13x10 (7" outer)	13x12 (9" outer)
<b>Stagger</b>	5"-10" (6" Start)	** Ride heights are measured from the ground to the center of the torsion bar without driver in car. These are heights for a normal track.		
<b>Jacobs Ladder</b>	Start right side hole			
<b>Front Panhard</b>	4"			
<b>Rear Bearing Carrier Timing</b>	4 Degree Forward			
<b>Right Rear Control Arm</b>	Top hole	Left Rear Control Arm-Bottom Hole		

### Setup notes:

- Please run a tie down on the left front
- Remember on coil overs, you need to add 4 turns to make the same change as adding 1 turn on a torsion bar
- Make sure your car is correct, axles square, tire offsets correct, chain aligned, bearing carriers timed, caster set to 10 degrees, rear arms are not bound against the side of the bearing carrier, toe set to 0, chain tensioner blocks set correct, check stagger, brake floater does not hit anything, front wheels are on right (LF is 3" outer with 4" inner, RF is 4" outer with 3" inner)
- On the recommended adjustable shocks, LR-start full stiff (clockwise, increase) minus 1-1/2 turns (not clicks). RR-minus 1 turn, RF-minus 1-1/2 turns, LF-minus 1 turn
- For a driver heavier than 220 pounds use stiffer bars in the rear .850 LR and a .875 RR, keep the RR wheel out further.
- Lightweight drivers (170 pounds or less) or a really smooth slick track can run an .800 RR and a .775 LR
- Use a 32" wide nose wing
- For the Jacobs ladder, start in the right side hole, on slick tracks move it to the left side hole, make sure you lengthen the rod end to keep the rear axle in the same side to side position
- Set the top wing at 26 degrees on a 1/4 mile or smaller track and 18 degrees on bigger tracks.
- An ARS bump rubber may be needed on the left rear shock, only add one if the car bottoms out consistently on the LR in entry, set so the rubber so it hits 3/4" before the frame hits the ground
- If the car is bottoming out, add 1/2 to 1 turn on both rear bars and make sure you have a bump rubber on the LR
- If the car is not turning in, a slight push when you first point the car in, add more RF weight by taking a 1/2 turn out of the LF and RR and adding a 1/2 turn to RF and LR.
- Tire preparation, grinding, grooving, and siping are recommended to get the most traction
- Add LR RF weight to tighten up in middle and exit on small tracks, does not affect entry much on smaller tracks.
- Add LF RR weight to tighten up on **entry** on larger tracks.
- Shock pressure changes are not needed for optimal handling. Treat monotube shock pressures like extra turns in that corner, the more pressure you run in a corner, the more weight a 30psi change is similar to adding a turn, shock pressure is in no way like running a stiffer bar, it adds weight on that corner but does not change spring rate.



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### To make car tighter:

- Move wing back, possibly more angle
- RR shock full soft on compression adj, increase compression on RF
- Lower RR tire pressures to 6 and LR to 5
- On small tracks only, add cross weight by adding turns to the RF and LR, for example, add 2 turns to RF and 1-1/2 turns to the LR
- To make car tighter coming out (forward bite) raise ride heights front and rear and take tilt out of the car, generally done on a smaller track, go 1 turn on the right side and 2 turns on the left side. Yes, raising the rear will provide more forward drive.
- Go to less stagger, as little as 5"
- Go to stiffer coils in the front 150LF and a 165 RF, in extreme cases go to 165LF and 180RF
- Go to a stiffer LF will tighten up on entry and stiffer RF will tighten from the middle out. Too stiff on the front will make the car inconsistent, it will push when the front hits a slight bump
- Move RR in to 11" for tightening on entry
- Raise front panhard bar
- Soften up the RR bar

### To make the car looser:

- Move top wing front, but keep angle up on small tracks, use as large as possible nose wing (32" wide)
- Add more stagger
- Stiffen up RR shock compression, increase rebound in LR shock, be careful you do not get too much it will make the car hop
- Decrease RF shock compression
- Increase RR tire pressure
- Move RR out to 14" or as far out as it will go, if car is rolling up on RR too much
- Make sure Jacobs ladder is in the right side hole
- To make car looser coming out lower ride heights, take 2 to 8 turns out of each front side and one to three turns out of each rear, add tilt.
- Stiffen up rear bars (.850LR .875RR)
- Soften up coils in the front 125 LF and a 140 RF, or 115 LF and 125 RF

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