

## Oval Setup Matrix V5

Condition	LOOSE	TIGHT	Loose Entering	Tight Entering	Loose Middle	Tight Middle	Loose Exiting	Tight Exiting
RF Tire	raise psi	lower psi	raise psi	lower psi	raise psi	lower psi	raise psi	lower psi
RF Spring	stiffen	soften	stiffen	soften	stiffen	soften	stiffen	soften
RF Bump Stiffness			increase	decrease	increase	decrease		
RF Rebound Stiffness					increase	decrease	increase	decrease
RF Camber	less neg	more neg	less neg	more neg			less neg	more neg
RF Caster**			increase	decrease	increase	decrease		
RF Corner Weight	increase	decrease						
RF Ride Height	raise	lower						
RF Shock-Collar Offset	decrease	increase						
LF Tire	lower psi	raise psi	lower psi	raise psi	lower psi	raise psi	lower psi	raise psi
LF Spring**	soften	stiffen	soften	stiffen			soften	stiffen
LF Bump Stiffness			increase	decrease	increase	decrease		
LF Rebound Stiffness					decrease	increase	Decrease	increase
LF Camber	less pos	more pos	more neg	more pos	more neg		more neg	more pos
LF Caster**			increase	decrease	increase	decrease		
LF Corner Weight	decrease	increase						
LF Ride Height	raise	lower						
LF Shock-Collar Offset	increase	decrease						
Front Sway Bar Size	increase	decrease	increase	decrease	increase	decrease		
Front Sway Bar Arm	shorten	lengthen	shorten	lengthen			shorten	lengthen
Front Sway Bar Gap		more pos	more neg	more pos		more pos		
Front Sway Bar Assymetry			lower	raise		lower	raise	lower
Front Sway Bar Pre-Load			more neg	more pos			more pos	more neg
Ballast Forward					increase	decrease	increase	decrease
Front Stagger			less	more			more	less
Front Toe In				decrease				
Front Toe Out				increase				
Steering Ratio	decrease	increase						
RR Tire	lower psi	raise psi	lower psi	raise psi	lower psi	raise psi	lower psi	raise psi
RR Spring	soften	stiffen	soften	stiffen	soften	stiffen	soften	stiffen
RR Spring Perch/Wedge	Lower	Raise			Lower	Raise	Lower	Raise
RR Bump Stiffness					Increase	Decrease	increase	increase
RR Rebound Stiffness*			decrease	increase				
RR Camber					more neg	more pos	more neg	more pos
RR Truck Arm Mount					Lower	Raise	Lower	Raise
RR Corner Weight	increase	decrease						
RR Ride Height	raise	lower						
RR Shock-Collar Offset	increase	decrease						
RR Track Bar	lower	raise	Lower	raise				
LR Tire	raise psi	lower psi	raise psi	lower psi	raise psi	lower psi	raise psi	lower psi
LR Spring	stiffen	soften			stiffen	soften	stiffen	soften

<b>LR Spring Perch/Wedge</b>	Raise	Lower	raise	lower psi	Raise	Lower		
<b>LR Bump Stiffness</b>					increase	decrease	increase	decrease
<b>LR Rebound Stiffness*</b>			decrease	increase	decrease	increase	increase	decrease
<b>LR Camber</b>		more neg	more pos					
<b>LR Truck Arm Mount</b>			Lower	Raise	Lower	Raise		
<b>LR Corner Weight</b>	increase	decrease						
<b>LR Ride Height</b>	lower	raise						
<b>LR Shock-Collar Offset</b>	decrease	increase						
<b>LR Track Bar</b>	lower	raise			Lower	raise	lower	raise
<b>Rear Sway Bar Size</b>	decrease	increase			decrease	increase	increase	decrease
<b>Rear Sway Bar Arm</b>	lengthen	shorten			lengthen	shorten	shorten	lengthen
<b>Rear Sway Bar Assmetry</b>							raise	lower
<b>Rear Sway Bar Pre-Load</b>			more pos	more neg				
<b>Rear Stagger</b>			more	less			less	more
<b>Rear Toe In</b>	increase		increase				increase	
<b>Rear Toe Out</b>	decrease		decrease				decrease	
<b>Cross Weight***</b>	increase							

**Notes**

\* increasing or decreasing LR rebound more than RR will have a greater effect on entry and exit

\*\* Most oval cars require approximately a two-degree split in caster left to right, with the left front running a lower caster setting than the right.

\*\*\*Increase cross weight by increasing RF/LR spring or ride height or decreasing LF/RR spring or ride height. Opposite will decrease cross weight.

\*\*\*\* if lowering the front ride hights the intent is to seal off the splitter to the track, going too low will result in the splitter hitting the track which will cause less grip.

Oval Setup Matrix by Corey Riley

Sources: everything I could find  
on the internet

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Edits by Brent Wall