RADICAL
BOWLING TECHNOLOGIES®

THE FIX

The Fix - Asymmetric Layouts

	Layout Specs	Low RG	Int Diff	Total Diff	Diff Ratio	RG PAP
	Undrilled	2.511	0.007	0.054	0.13	
A	Pin Up 65 x 5 ¼" x 40 CG within 1" of Grip Center		0.020	0.055	0.36	2.552
B	Pin Up 70 x 4 ½" x 40 CG within 1" of Grip Center		0.021	0.057	0.37	2.546
C	Pin Up 85 x 3 ¾" x 30 CG within 1" of Grip Center		0.022	0.060	0.37	2.542
D	Pin Up 85 x 3 ¾" x 30 CG within 1" of Grip Center Motion Hole		0.032	0.066	0.48	2.550
E	Pin Up 85 x 3 ¾" x 30 CG 1" pos. of Grip Center Double Thumb Balance Hole		0.028	0.072	0.39	2.528
F	Pin Up 60 x 3 ¾" x 30 CG 1 ¼" pos. of Grip Center Balance Hole on VAL 1 ½" below PAP		0.023	0.064	0.36	2.538

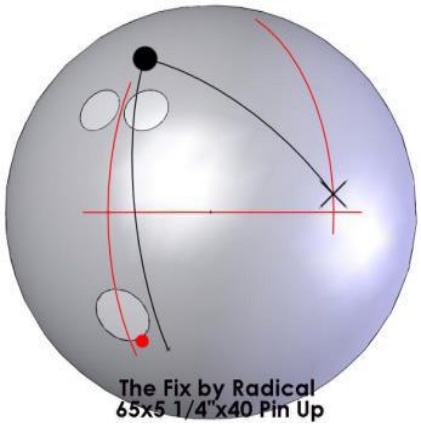
The Fix - Symmetric Layouts

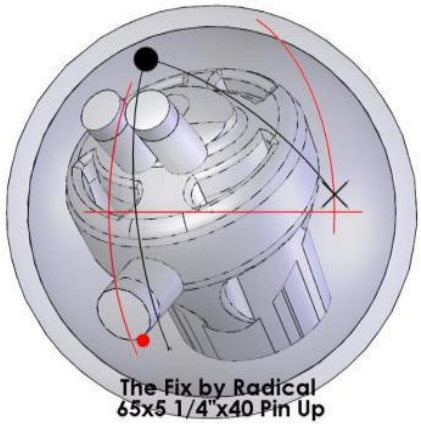
	Layout Specs	Low RG	Int Diff	Total Diff	Diff Ratio	RG PAP
	Undrilled	2.511	0.007	0.054	0.13	
A	Pin Down 75 x 5 ¼" x 80 CG within 1" of Grip Center		0.011	0.044	0.25	2.563
B	Pin Down 85 x 4 ½" x 80 CG within 1" of Grip Center		0.012	0.045	0.27	2.561
C	Pin Down 95 x 3 ¾" x 80 CG within 1" of Grip Center		0.013	0.046	0.28	2.559
D	Pin Down 80 x 3 ¾" x 80 CG 1 ¼" pos. of Grip Center Balance Hole on VAL 1 ½" below PAP		0.015	0.048	0.31	2.556
E	Pin Down 35 x 5 ½" x 75 CG 1 ¼" pos. of Grip Center Balance Hole at PAP		0.008	0.043	0.19	2.565
F	Pin Down 90 x 2 ¼" x 50 CG 1 ¼" pos. of Grip Center Balance Hole at PAP		0.006	0.039	0.15	2.554

The Fix
Asymmetric Layouts

Asymmetric Layout A

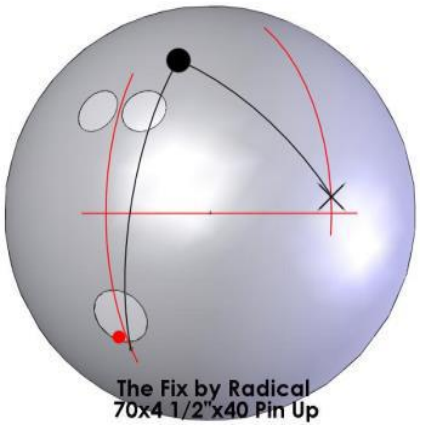
- Heavy Roll/Smooth Motion
- Ideal for playing up the boards when the lanes break down

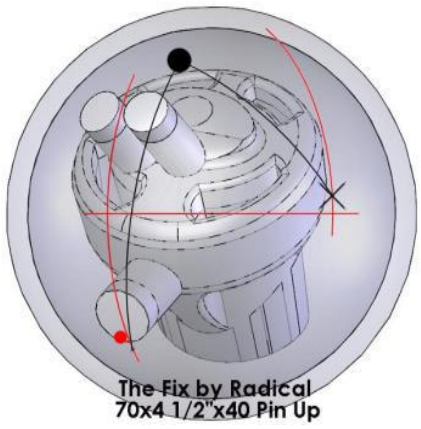




Asymmetric Layout B

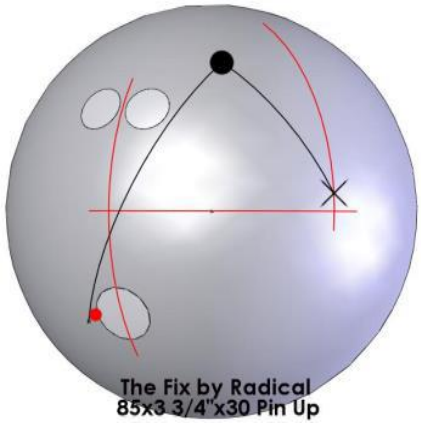
- Medium Overall Hook
- Ideal for all styles on medium oil conditions

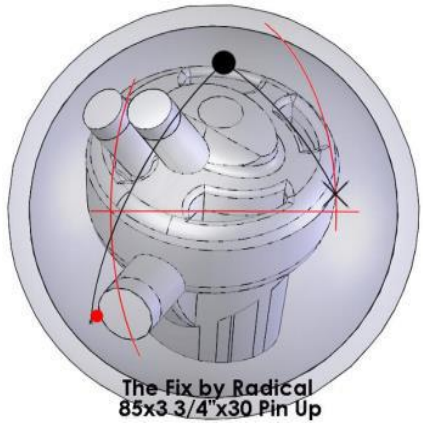




Asymmetric Layout C

- Strong Overall Hook
- Ideal for covering boards and opening up the lane

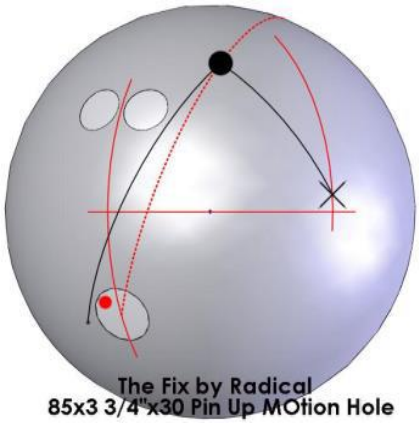


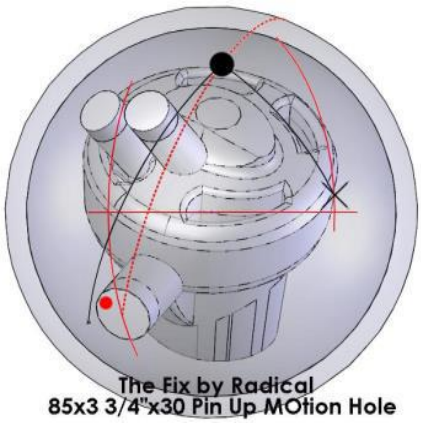


The Fix
Asymmetric Layouts

Asymmetric Layout D

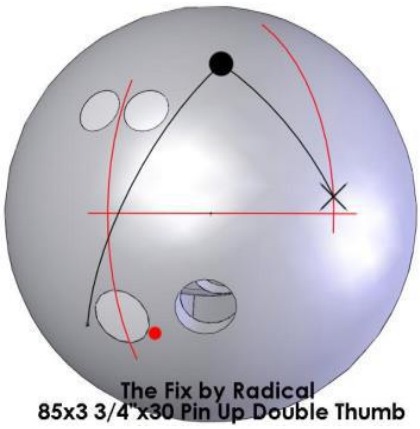
- Strong Backend Motion
- Ideal for high track players wanting to cover more boards on the lane

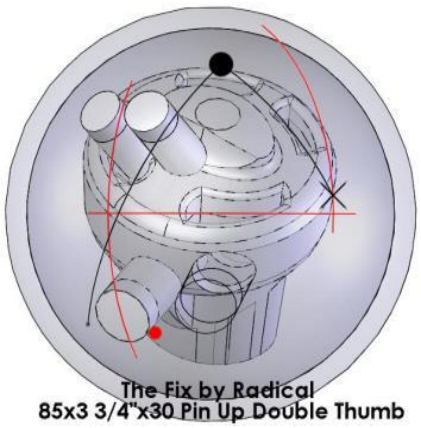




Asymmetric Layout E

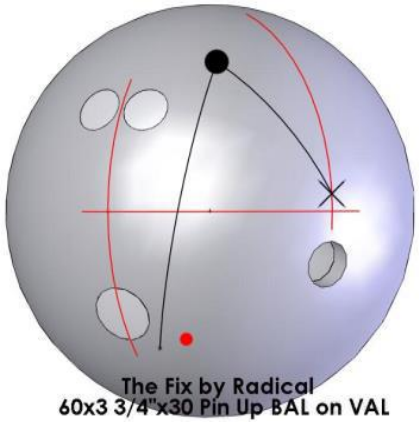
- Maximum Overall Hook
- Ideal for heavy oil lanes, higher ball speed players, or lower track players

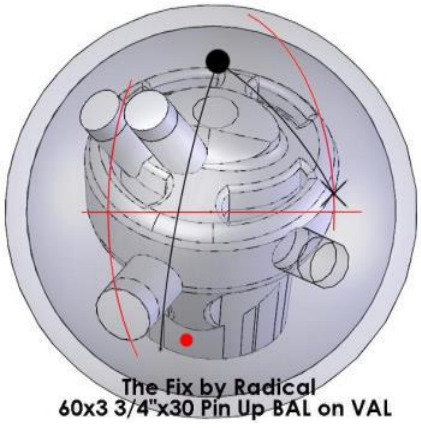




Asymmetric Layout F

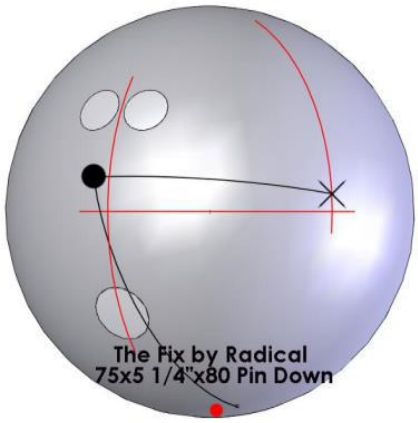
- High Rev Control Layout
- Ideal for playing up the boards or slower ball speed players wanting controllable hook motion

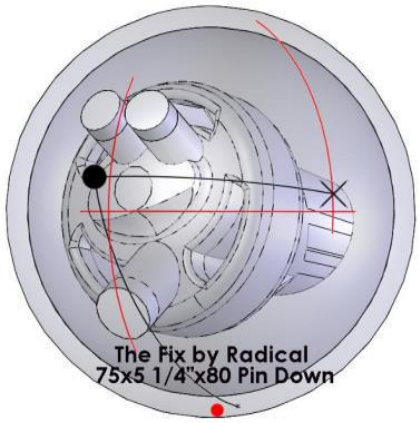




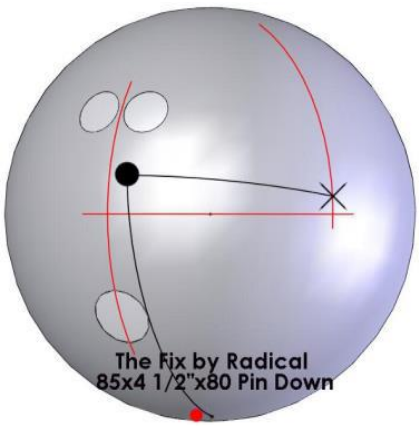
The Fix
Symmetric Layouts

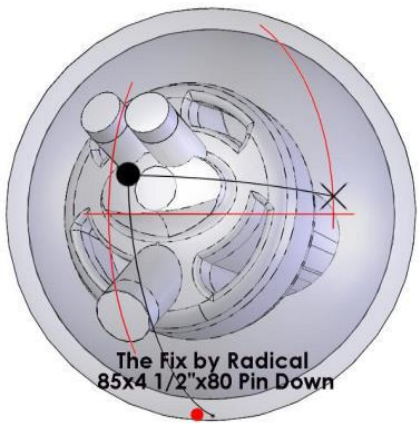
Symmetric Layout A
- Control Drilling
- Ideal for smoothing out wet/dry lane conditions



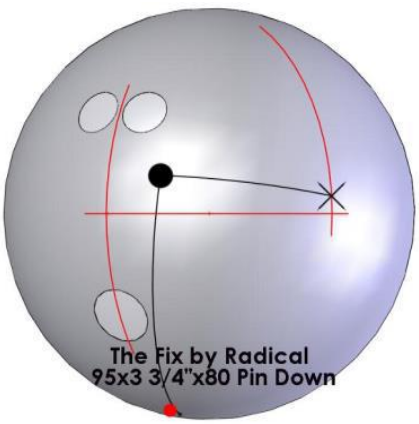


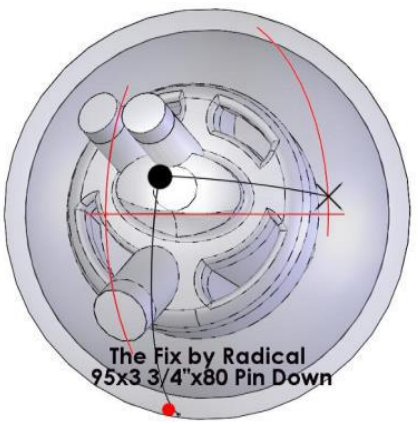
Symmetric Layout B
- Medium Hook w/Control
- Ideal for wet/dry conditions when more total hook is needed





Symmetric Layout C
- Strong Hook w/Control
- Ideal for lower rev players needing more total hook with control

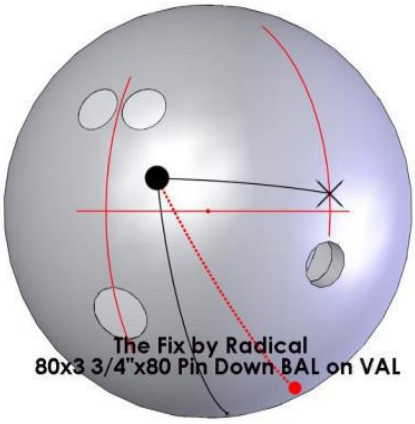


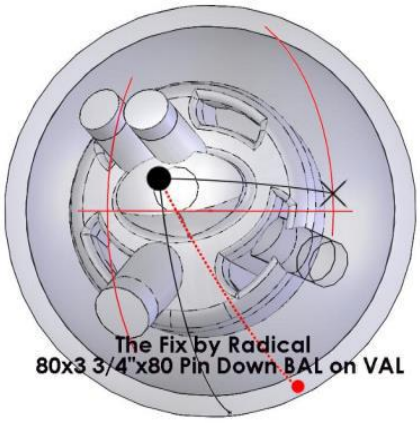


The Fix
Symmetric Layouts

Symmetric Layout D

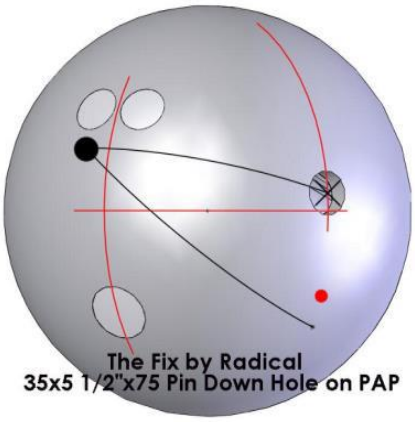
- Strongest Hook w/Control
- Ideal for medium speed and high rev players needing more total hook

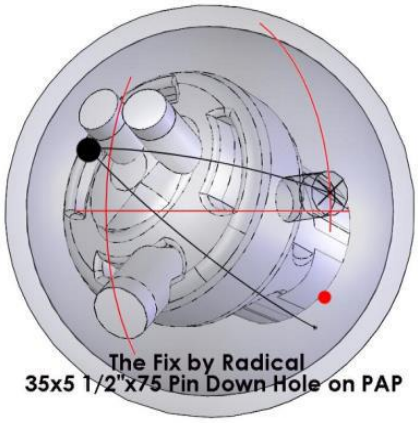




Symmetric Layout E

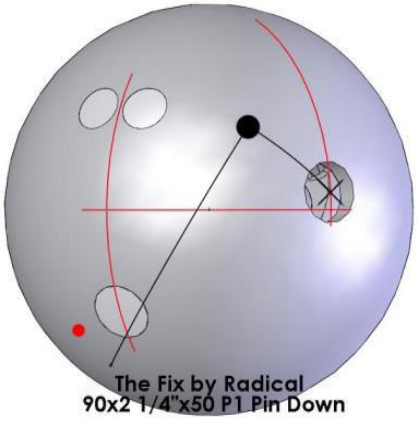
- Moderate Hook
- Ideal for low speed or very high rev players on medium oil conditions

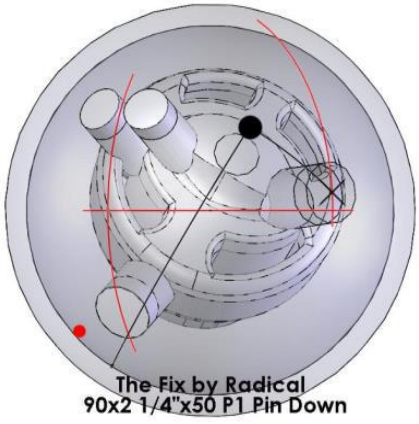




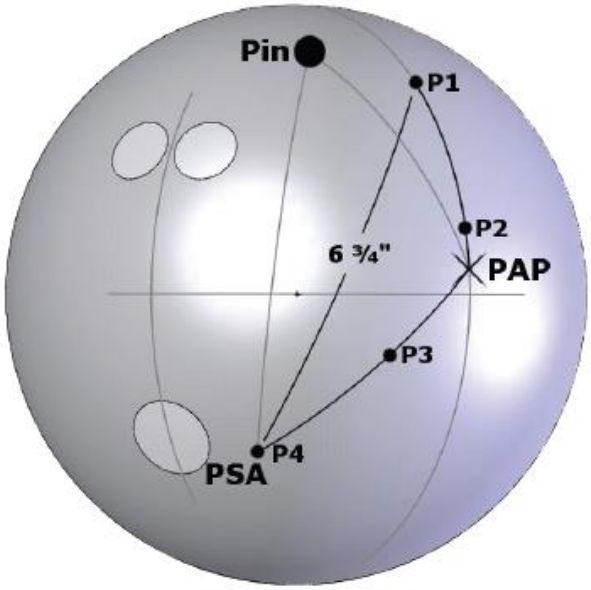
Symmetric Layout F

- Least Overall Hook
- Ideal for low speed or high rev players on high friction patterns when more control is needed





Balance Holes: If and when a balance hole is needed, we recommend using the "Gradient Line Balance Hole System" for all Radical balls. The Gradient Line extends from the PSA to P1 passing through the PAP.



Balance Hole Locations on the Gradient Line

Balance hole Position	Location	Change in Ball Reaction
P1	**6 ¾"** from the **PSA** on the **VAL**	Weakens ball reaction
P2	**1/3** of the distance from the **P1** to the **PSA**	Maintains ball reaction
P3	**2/3** of the distance from the **P1** to the **PSA**	Strengthens ball reaction
P4	**PSA**	Maximizes ball reaction

Ball Surface and Cleaning: Radical bowling balls are manufactured with a predetermined surface preparation that we feel best compliments the intended ball performance. However, we do recommend sanding, scuffing, or smoothing the surface texture of the bowling ball with the assistance of a qualified pro shop in order to optimize the performance for different styles of players on different lane conditions. We cannot overemphasize the importance of regularly cleaning your Radical ball with a quality bowling ball cleaner IMMEDIATELY AFTER each use. Doing so will insure a more consistent reaction and maximize the life of your Radical bowling ball.

Determining the Bowler's Initial Axis Tilt: Initial Axis Tilt is best determined by measuring the distance across the bowler's initial ball track on the surface of the ball. A measurement of > 11 ¼" (<12 degrees) indicates a high track bowler. A measurement of 10 ¼" to 11 ¼" (12 to 18 degrees) indicates a medium track bowler. A measurement of <10 ¼" (>18 degrees) indicates a low track bowler.