This is a NON RECOMMENDED LAYOUT. This layout will produce a very mild ball reaction and is not recommended.

Drilling #5
Ball Reaction: Very mild
Suitable for: Extremely high rev rates
Flare potential: Very Small
Pin Placement: Not recommended with this layout
Mass Bias Placement: Mass Bias Placements to the left of the thumb hole are not recommended because of the severe reduction in flare potential.

**Trick Tour Layouts**

**Tommy Jones Favorite Trick Layout**
Ball Reaction: Long and most aggressive at the breakpoint for Tommy Jones
Suitable for: High Rev Rates only
Flare potential: High
Pin Placement: Place Pin 1½ inches away from the Vertical Axis Line and 4½ inches away from the PAP
Center of Gravity: The center of gravity placement may or may not fall inside the CG area. If it doesn’t then the balance hole location may need to be adjusted.
Mass Bias Placement: Mass Bias Placement at 80 degree angle to the right of the thumb hole. If needed place balance hole approx 4 inches to the right and drill the ball back to statically legal

**Jason Couch Favorite Trick Layout**
Ball Reaction: Long and most continuous for Jason Couch Suitable for: High Rev Rates only
Pin out distance must be at least 3.5 inches out
Flare potential: High
Pin Placement: Place Pin: 1½ inches away from the Vertical Axis Line and 5¼ inches away from the PAP
Center of Gravity: The center of gravity placement may or may not fall inside the CG area. If it doesn’t then the balance hole location may need to be adjusted.
Mass Bias Placement: Mass Bias Placement at 60 degree angle to the left of the thumb hole. If needed place balance hole approx 4 inches to the right and 1 inch up and drill the ball back to statically legal

At Ebonite, we strive to develop the absolute latest technology in covers and cores. The enclosed drilling instructions will allow you to tune in the ball motion that you are looking for.

A few key points: The strongest factor in determining ball motion is the cover. Make certain that you have prepared the surface of your new Ebonite Performance ball in the manner that you think will best suit your style of play, and in the environment that you are bowling on. Whether you require more surface texture or perhaps a shine. Motions will be determined with how much friction you are creating with the cover.

Layouts: When looking at the strength of the Pin and Mass Bias, the pin, is without a doubt the stronger of the two dynamic points. Remember to choose the correct ball, as it relates to cover strength you require.

At that point you and your Pro Shop Operator can discuss what layout will best dial in the motion that you are looking for. Pin to PAP (Positive Axis Point), ball speed, rotation, tilt are all key factors that your Pro Shop Professional will take into consideration when laying out your new Ebonite High Performance Bowling Ball.

Mass Bias Placement: The placement of the Mass Bias will aid in fine tuning your motion, as dictated by the surface preparation on your new ball, and with the Pin placement as it relates to your Positive Axis Point. Typically, the stronger you place the Mass, the stronger the ball will be in the Mid-Lane. Weaker positions will promote more length.

Ball Care: Ebonite Highly recommends that you care for your new Ebonite High Performance product by these easy tasks: 1) Use a Micro-Fiber Towel while bowling. This aids in keeping oil from collecting in the pours of ball.

2) Use PowerHouse Energizer Ball Cleaner for polished balls, and Powerhouse Clean and Dull on balls with surface, after each session of bowling.

For long term care practices, please consult your Pro Shop Professional

For More Information on Ebonite Products, visit www.ebonite.com
**Ebonite Asymmetric Drilling Instructions**

**Drilling #1**
If you do not have a positive axis point, use this layout.
Ball Reaction: Long and Strong
Suitable for: Most Styles and Lines
Flare potential: Medium
Center of Gravity: The center of gravity placement may or may not fall inside the CG Area. If it doesn’t then the balance hole location may need to be adjusted.
Mass Bias Placement: Place Mass Bias 3 inches to the right of the thumb hole
If needed place balance hole 4 inches over and 1/2 inch up and drill back to statically legal.

**Drilling #2**
Ball Reaction: Long and Strong
Suitable for: Most Styles and Lines
Flare potential: Large
Pin Placement: Place Pin 4 1/2 inches from PAP
Center of Gravity: The center of gravity placement may or may not fall inside the CG Area. If it doesn’t then the balance hole location may need to be adjusted.
Mass Bias Placement: Place Mass Bias at a 45 degree angle to the right of the thumb hole. If needed place balance hole over on the Vertical Axis Line and 2 inches down and drill back to negative side weight. The bigger and deeper the hole is the more increased ball reaction. Remember to keep the ball statically legal.

**Drilling #3**
Ball Reaction: Early and Strong
Suitable for: High Ball Speed, Low RPM's, Heavy oiled lanes
Flare potential: Very Large
Pin Placement: Place Pin 3 1/2 inches from PAP
Center of Gravity: The center of gravity placement may or may not fall inside the CG Area. If it doesn’t then the balance hole location may need to be adjusted.
Mass Bias Placement: Place Mass Bias in line with the Pin. If needed place balance hole over on the PAP and drill back to statically legal.

This layout produces the most even reaction with the highest TOTAL hook.

**Drilling #4**
Ball Reaction: Strong Arc
Suitable for: Most Styles and Lines
Flare potential: Large
Pin Placement: Place Pin 3 1/2 inches from bowlers center of span in an 8:00 direction.
Center of Gravity: The center of gravity placement may or may not fall inside the CG Area. If it doesn’t then the balance hole location may need to be adjusted.
Mass Bias Placement: Place Mass Bias at a 2:00 direction from the center of span. If needed place balance hole 8 inches from the center of span in a 2:00 direction to remove excess positive side weight. Place balance hole 6 inches from the center of span in a 8:00 direction to remove excess negative side weight.

This is the recommended layout for All Full Rollers

This is the recommended layout for most players, with or without a positive axis point. Use mirror image for left handed drilling.