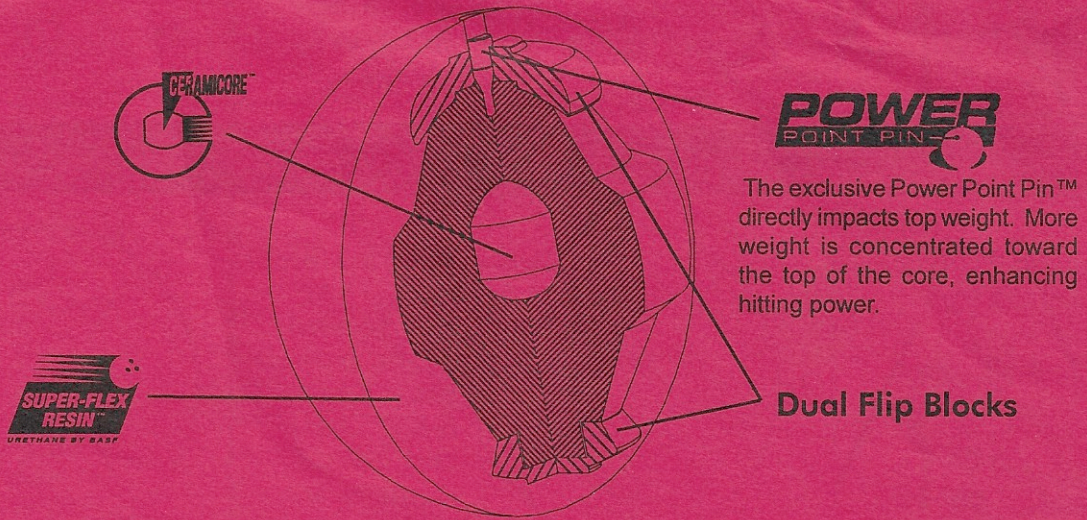


R

PRIMAL RAGE™

THIS DRILL SHEET IS DESIGNED TO BE USED AS A QUICK REFERENCE CHART FOR DETERMINING THE OPTIMUM DRILL PATTERN BY MATCHING SPECIFIC BOWLING STYLES TO SPECIFIC LANE CONDITIONS.



**SUPER-FLEX
RESIN™**
URETHANE BY BASF

**POWER
POINT PIN™**

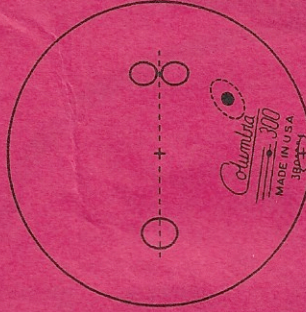
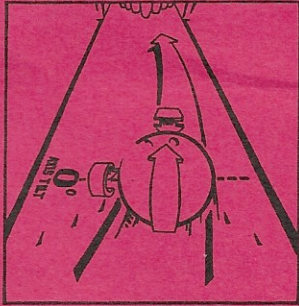
The exclusive Power Point Pin™ directly impacts top weight. More weight is concentrated toward the top of the core, enhancing hitting power.

Dual Flip Blocks

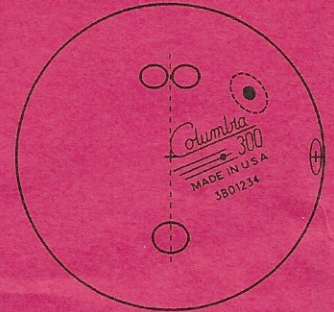
Columbia
300
COLUMBIA 300

Columbia bowls the world over.™

Match your roll with a common lane condition to select a drill pattern.



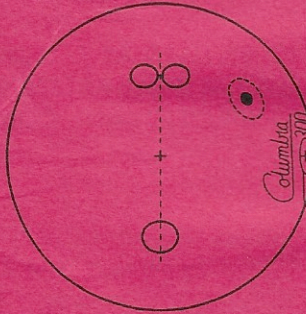
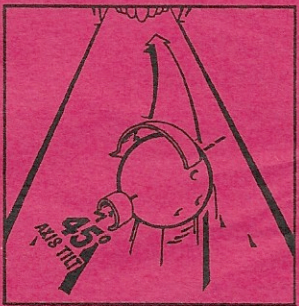
Cg 2" from PAP and Pin located 3-3/8" from PAP. X-hole on axis to 1/2 positive.



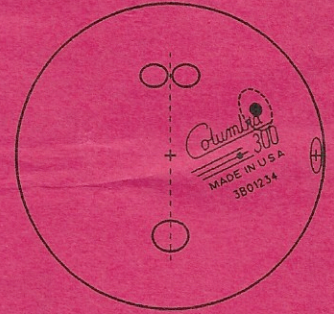
Top weight & Pin Selection

Pin 1 - 3" with 2.5 - 3.5 oz. top wt.

Pin 0 - 2" with 2.5 - 3.5 oz. top wt.



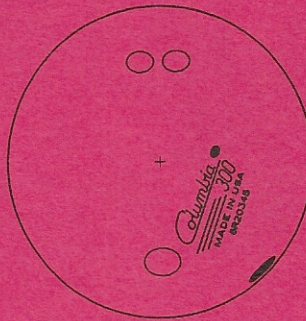
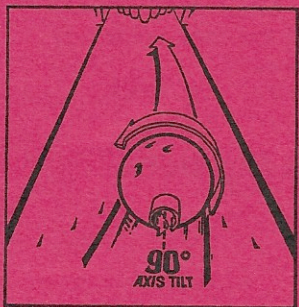
Cg located on PAP with Pin positioned between PAP and ring finger. X-hole on axis to 1/2 positive.



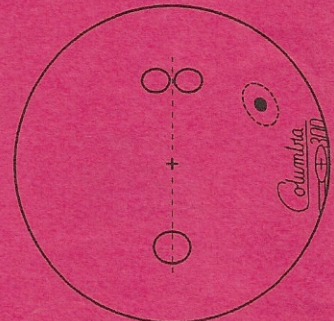
Top weight & Pin Selection

Pin 2 - 3+ with 2 - 3 oz. top wt.

Pin 0 - 2" with 2.5 - 3.5 oz. top wt.



Pin 3-3/8" from PAP. Cg located 4:30 from pin. X-hole 6-3/4" over and 3-3/8" down to 1/2 positive.



Top weight & Pin Selection

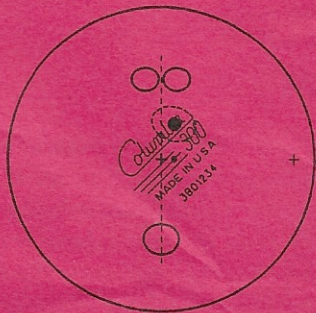
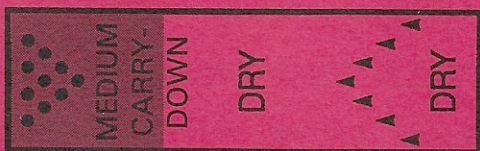
Pin 1 - 3" with 2.5 - 3.5 oz. top wt.

Pin 2 - 3+ with 2 - 3 oz. top wt.

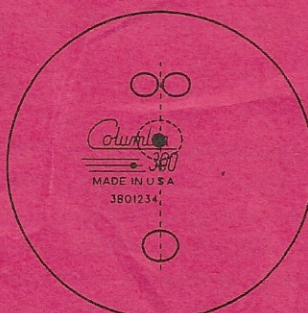
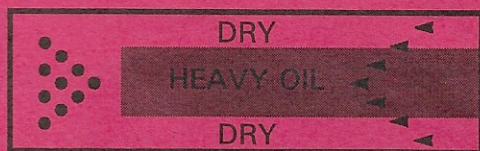
All diagrams assume Positive Axis Point is 6" over from center of grip.



n and cg lo-
 ted 4" from
 AP. X-hole
 n axis to 1/2
 positive.



Pin located
 5-1/2" from
 PAP with 1/2
 positive on
 label.



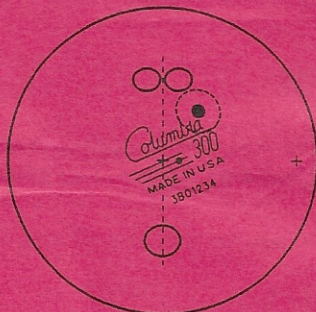
Pin located
 6" from PAP
 with 1/2 nega-
 tive on label.

oz. top wt.

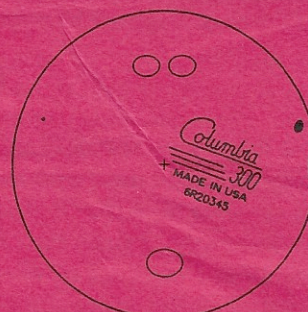
Pin 0 - 1" with 3 - 4+ oz. top wt.

Pin 0 - 2" with 2 - 3 oz. top wt.

n and cg lo-
 ted 3-3/8"
 om PAP. X-
 ble on axis
 1/2 positive.



Pin located
 5" from PAP
 with 1/2 posi-
 tive on label.



Pin located
 1" from PAP,
 cg Approx.
 4" from PAP
 with X-hole
 (if nessesary)
 on PAP to 1/2
 positive.

oz. top wt.

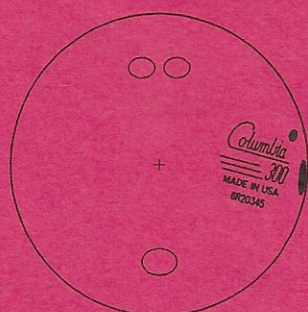
Pin 1 - 2" with 3 - 4 oz. top wt.

Pin 1 - 3+ " with 2 - 3 oz. top wt.

g located on
 AP with Pin
 ositioned
 erween PAP
 d ring fin-
 er. X-hole
 n axis to 1/2
 positive.



Pin located
 4" from PAP
 with 1/2 posi-
 tive on label.



Pin located
 1" from PAP,
 cg Approx.
 2" from PAP
 with X-hole
 on PAP to
 1/2 positive.

oz. top wt.

Pin 2 - 3" with 2.5 - 3.5 oz. top wt.

Pin 1 - 2" with 2 - 3 oz. top wt.

See back page for additional information.

POWER POINT PIN™ CAUTION STICKER

A caution sticker has been applied around the POWER POINT PIN™ of each PRIMAL RAGE™ ball to indicate the area that should not be drilled into. This area was determined by using 1" pitch towards the pin. Use your own discretion when using less pitch. Avoid drilling into the pin by positioning the pin above or below the fingers while keeping the pin the same distance from the PAP. Strict adherence to this policy will avoid drill-bit damage.

EXPLAINING AXIS TILT

"To maximize performance of the PRIMAL RAGE, with SUPER-FLEX™ Resin, it is helpful to first identify your axis tilt before choosing a particular drilling layout. Although the axis point is an important locator of a player's track, the axis tilt is more instrumental in determining how a ball will react to the lane, and more importantly when it will begin to react to the lane. In general, a bowler with a 90° axis tilt will naturally produce a later reaction to the lane than a bowler with 0° axis tilt (forward roll), who will produce a much earlier reaction to the lane. For this reason, I have illustrated the 3 basic types of axis tilts and matched them with four common lane conditions. Choose the axis tilt illustration which best resembles your roll, then choose the lane condition which most resembles the one at your bowling center and use that drilling pattern (or a variation there of).

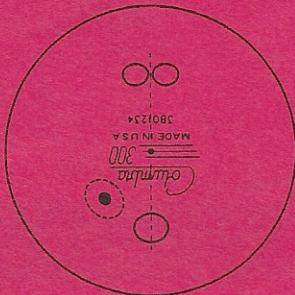
Dave Smart, Technical Support Manager, Columbia 300, Inc.

THINGS TO REMEMBER

1. The PRIMAL RAGE with SUPER-FLEX Resin in the solid finish is designed to make a strong continuous arc on heavy oil, when used with the "out of box" surface. (Polished, expect The PRIMAL RAGE to be 2-4 boards stronger than the OUTRAGE).
2. Any of the drillings can be drilled back to negative side-weight for earlier roll and less backend.
3. PAP is defined as Positive Axis Point.
4. Cg is defined as center of gravity (found near the Columbia 300 label).
5. Recognize that all illustrations shown are for right-handers. They must be reversed for left-handers.
6. **DO NOT DRILL ANY HOLES DEEPER THAN 2-3/4" TO AVOID HITTING THE CERAMICORE®.**

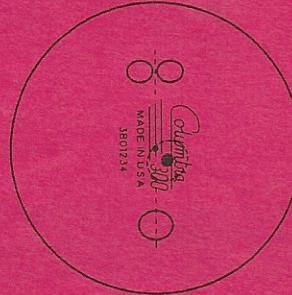
DRILLINGS FOR FULL ROLLERS

LEVERAGE DRILLING



Pin 3+” out with 2.5 to 3.5 oz. top weight. Pin at 7:30 with cg in center of grip.

STABLE DRILLING



Pin 0-2” with 2.0 to 3.0 oz. top weight. Pin at 4:30 with cg in center of grip.