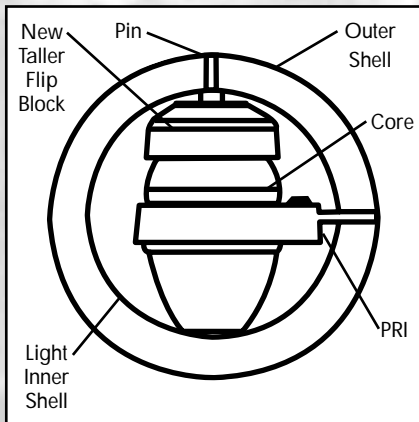




NIGHT HAWK

NIGHT HAWK Torque

Drilling Instructions



SPT II COVERSTOCK

AMF has taken the SPT coverstock and made it better. Introducing SPT II (Super Particle Technology) the most aggressive, versatile coverstock in history. This unique shell features an optimized distribution of particulate giving the Night Hawk Torque the most grip on today's high tech oils while still maintaining the versatility of shining the surface when the bowler wants to delay the breakpoint.

Key to drilling diagrams:

- = Pin
- ☞ = Power Ring Indicator (PRI)
- ☆ = Positive Axis Point (PAP)
- = Balance Hole
- CL = Centerline of Grip
- MP = Midplane
- ML = Midline
- = Center of Gravity

In these drillings, **HIGH RG** refers to a drilling that produces a longer skid. **Low RG** refers to drilling that produces earlier roll.

BEFORE DRILLING

The innovative design of the Night Hawk Torque combines the control and forgiveness of a traditional symmetrical ball with the dynamics, entry angles and explosive power of an asymmetrical ball. In order for the bowler to achieve the maximum desired effect, knowledge of the following is highly beneficial:

You'll Want To Know

The Bowler's: 1/Ball Speed, 2/Axis Rotation, 3/Axis Tilt, 4/Desired Flare, 5/The Lane Conditions and 6/Revolutions – either Blend, Top Hat (wet/dry or Track Shot).

Drilling For Maximum Results

Once you know these six variables, we offer a choice of twenty two different Arc Drillings, Forward Rolling Drillings, Strong Drillings and Full-Roller Drillings for the Torque to produce maximum results.

TORQUE, HIGHER SPIN RATE = POWER AND CARRY

The Night Hawk Torque features the largest flip block of any Night Hawk. This design change increases the flare potential by a full inch and helps lower the radius of gyration to 2.50. This combination produces more revs, continuous hook and control of the breakpoint for all players.

THINGS TO REMEMBER

1. There are five pin placements, four PRI placements and two full-roller drillings offered for the Torque. Other drillings can also be used. The CG is indicated by a pin mark located between the pin and PRI. This is not to be used for the layouts of the Torque. Reverse drilling procedure (mirror image) for left handed bowlers.
2. Arc Drillings are best for bowlers with slower ball speeds and less axis rotation. These drillings produce smaller entry angles and should be used when playing outside angles or when the bowler has to play a track shot.

- Flare potential: 6"
- Coverstock: SPT II
- Finish: 1000 Sheen
- Hook rating: 24
- Backend: 18

3. Forward Roll Drillings produce the highest rev-rates, so they should be used for heavily oiled lanes and carry down. Bowlers with higher ball speeds, large axis rotation and axis tilt (spinners) will benefit most.

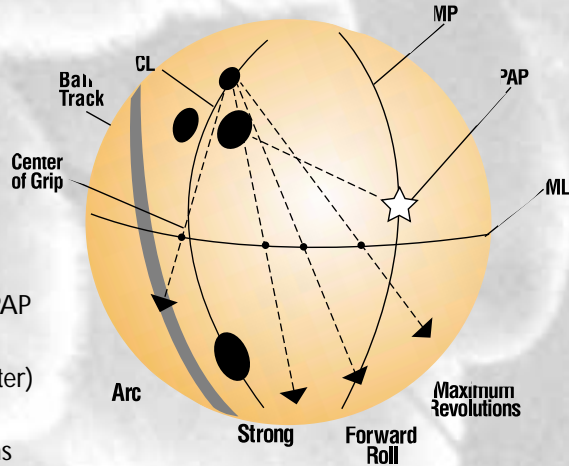
4. Strong Drillings create the highest entry angles of all the PRI placements available. They work best when playing inside angles and when the bowler is trying to create area on the lanes with medium carry down.

5. The Hookability and Breakpoint of the Torque can be changed by altering the surface of the ball through polishing or sanding.

6. Track Flare Management should be considered before drilling. Determine how much flare your customer needs to obtain the desired reaction. Using a leverage drilling with 6.5" of flare will not produce a SNAPPING MOTION ON HEAVILY OILED LANES. The more flare that is used, the earlier and more the ball will hook.

HIGH RG/STABLE PIN MOTION

- Pin 5" - 5.75" from PAP
- Small Flare 2" - 3"
- Maximum Length (later)
- Small Hook
- Drier Lane Conditions and Slower Ball Speeds



PRI locations pertain to all drilling techniques:

Maximum Revolution

1-2.5" beyond Midplane

Forward Roll

on Midplane

Strong

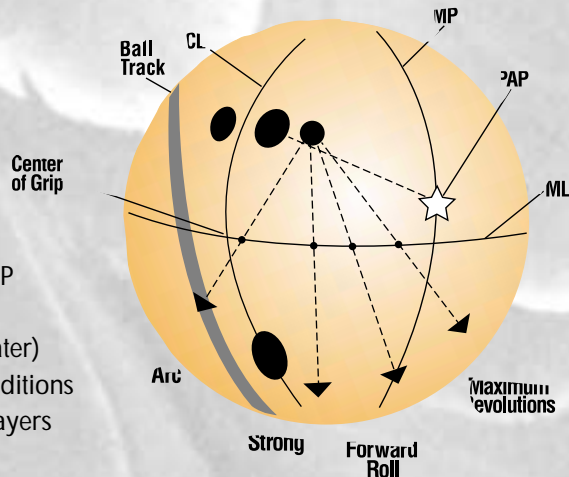
2.5" left of Midplane

Arc

Located near ball track

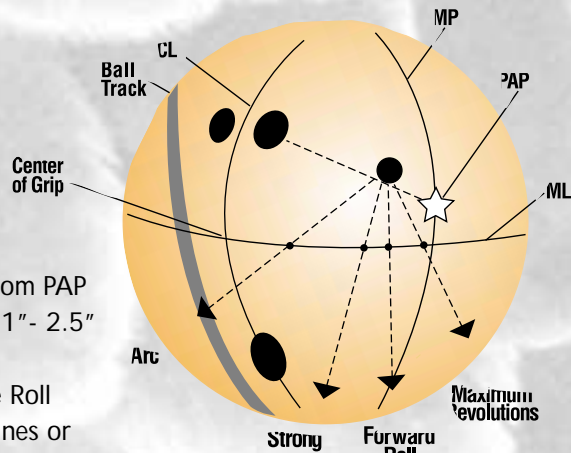
HIGH RG/MEDIUM PIN

- Pin 4.25" from PAP
- Medium Flare 5"
- Medium Length (later)
- Medium Lane Conditions for a variety of Players



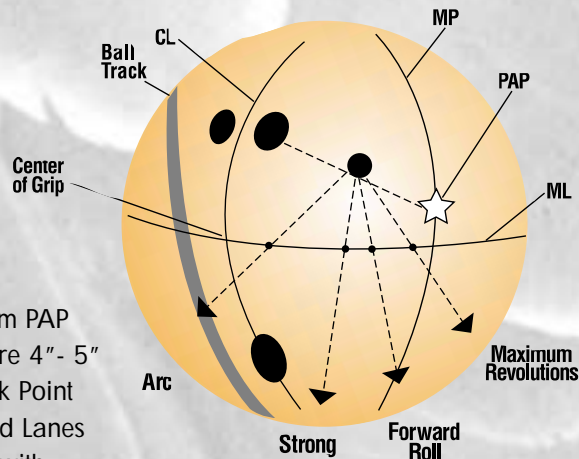
Balance holes can be used on all Torque drilling techniques.

LOW RG/STABLE PIN



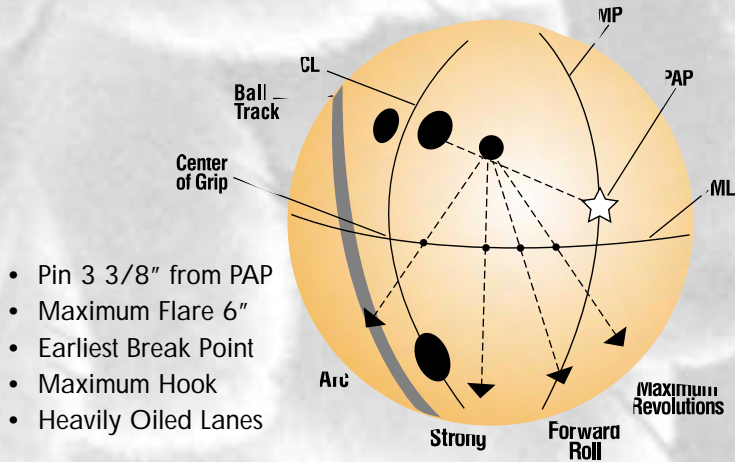
- Pin 1.25" from PAP
- Small Flare 1" - 2.5"
- Small Hook
- Early Stable Roll
- Wet/Dry Lanes or Track Shots

LOW RG/MEDIUM PIN

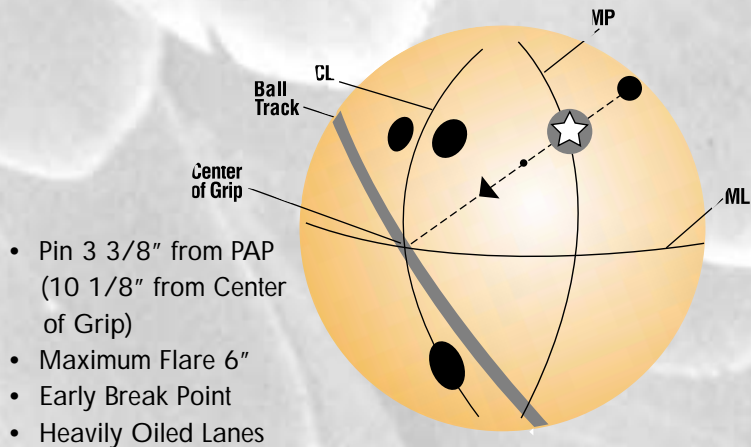


- Pin 2.5" from PAP
- Medium Flare 4" - 5"
- Earlier Break Point
- Freshly Oiled Lanes and bowler with higher ball speeds

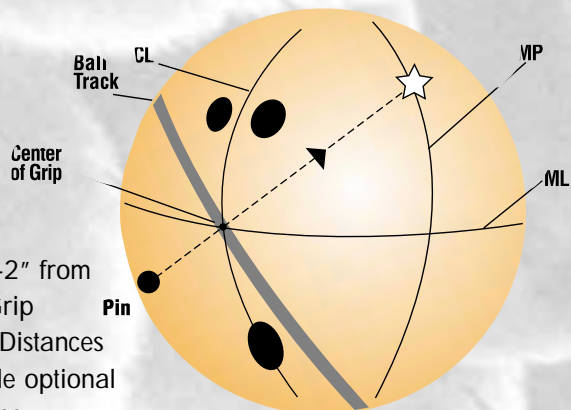
LEVERAGE/STRONG PIN



FULL ROLLER/#1 LEVERAGE



#2 FULL ROLLER LABEL



- Pin 4 1/4"-2" from Center of Grip
- Use all Pin Distances
- Balance hole optional
- Medium Lane Conditions and Even Arcing Motion



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