

THE BACK FOOT BLUEPRINT

Stop Over-Rotating. Start Making Contact.

Why elite hitters keep the back foot sideways at contact — and the 2 drills that wire it into your hitter's swing automatically.

THE CORE PRINCIPLE

At contact, the pelvis should be perpendicular to impact — not perpendicular to the pitcher. *The difference is small. The effect on contact quality is enormous.*

✓ Perpendicular to Impact

- **Back foot points sideways** at the moment of contact
- **Hip rotation stops** at the ball — not at the pitcher
- **Back foot acts as a governor** — anchors the hip from spinning past contact
- **Pelvis alignment follows pitch location** — inside pitch rotates more, outside pitch stays more sideways
- **Back foot may skip or lift** after contact — that's fine; the key moment is AT contact

✗ Perpendicular to Pitcher

- Back foot rotates fully forward at or before contact
- Back foot faces pitcher on every pitch regardless of location
- More spin on the ball — creating roll-over ground balls on outside pitches
- Chest-on view makes this look correct — it's the most misleading angle for coaches
- Think of "putting the bag" — the back heel pivoting like a cigarette being put out

What Camera Angle to Use When Analyzing the Back Foot

**PITCHER-SIDE VIEW**

Best. Shows exact foot and pelvis angle at contact. Use this first.

**CATCHER-SIDE VIEW**

Also reliable. Shows hip orientation clearly at the contact zone.

**OVERHEAD VIEW**

Excellent for seeing pelvis angle vs. impact location simultaneously.

**CHEST-ON / SIDE VIEW**

Misleading. Makes over-rotation look normal. Do not use to assess the back foot.

How Pitch Location Changes Back Foot Rotation

Pitch Location	Hip Rotation at Contact	Back Foot at Contact	Common Batted Ball
Inside (pull pitch)	More rotation — pelvis further open	May come around slightly	Pull side — line drive or fly ball
Down the Middle	Moderate rotation — pelvis near perpendicular	Sideways at contact	Up the middle or slight pull
Outside (oppo pitch)	Minimal rotation — pelvis stays sideways	Barely rotates; may stay flat	Opposite field — line drive

2 Drills to Train Perpendicular-to-Impact

1

The Impact Freeze Drill

Trains the hitter to feel the correct stop point of hip rotation

Setup: Front toss or coach-pitch, hitter on tee. After every swing, the hitter **freezes at contact position** — do not follow through yet.

Check: Film from pitcher-side angle. Is the pelvis perpendicular to where the ball was at contact, or has it already spun past? The front hip pocket should point at the impact zone — not at the pitcher or the dugout.

Cue: "Stop your hips at the ball." Do 10 freeze-reps per session before allowing full follow-through swings. This builds proprioceptive awareness of the stop point.

2

The Opposite Field Tee Drill

Instantly exposes over-rotation — and rewards proper pelvis alignment

Setup: Place the tee on the outer third of home plate, slightly behind the midpoint of the stance. Hitter drives the ball to the opposite field gap.

What happens with over-rotation: The hitter rolls over the ball every time — weak ground ball to the pull side. Hips spun past the contact point before the barrel arrived.

What happens with perpendicular hips: The barrel stays through the zone and the ball jumps to the opposite field with backspin. **10 swings per session**, all aimed at the opposite-field gap. When the hitter can drive the oppo tee consistently, the hip governor is working.