



# ***2015 Spencerport Rangers Pitching Manual***

## **Pitching Philosophy**

1. We need to take care of arms. Adhere to the 7 Mechanical Steps and keep mound pitching to a minimum during practice. Flat ground work can be just as effective. Always keep a pitch count. Do not put a kid in a game at a high stakes position after they have thrown.
2. Strike one is the most important pitch. Develop 3 pitches to keep hitters off balance.
3. Let the Defense do the work.

## **7 Mechanical Steps to Increase Velocity and Protect From Injury**

### **Balance and Posture**

Balance: Having head over the belly button, between the balls of the feet, in an athletic position.

Posture: A spine to hep angel that stabilizes the pitchers head throughout the delivery. There should be no inappropriate movement other than the pitchers head going towards the plate.

### **Stride and Momentum**

Stride: the route the pitcher's body and head take into the foot stride

Momentum: getting in foot strike as far and as fast as possible - affected by leg lift and stride.

### **Opposite and Equal**

Opposite and equal: the mirror imaging of the glove arm and the throwing arm, from the time the hands break until just prior to the release point. You do not mess with the throwing arm. Manipulate the glove arm.

### **Pre-Footstrike Checkpoint.**

1. No throwing before checkpoint
2. Leave throwing arm alone. The change is in the glove side
3. Head stays over the belly button before foot strike.

## **Separate and Rotation**

Separation: The optimal angle difference between the front hip and back shoulder

Delayed shoulder rotation: delaying the back shoulder from the starting forward until pitcher is as close to home plate as momentum, strength, and flexibility will allow. The longer the delay the more torque you develop

## **Stack and Track**

Stack and Track: “Up for dollars” and “down for pennies!” The longer the head over the shoulder the better it is. As the shoulders tort around the spine, the torso would stay on-line and continue going forward towards home plate. Head should stay upright and over shoulders through release point. The more upright you have the more control you will have at release point.

## **Swivel and Stabilize**

Swivel and Stabilize: As the shoulders begin to rotate, the glove needs to stabilize over the landing foot somewhere in front of the torso. (between shoulders and belly button) Do not pull glove down!

## **Post-Footstike Checkpoint**

4. Head up! (looking for dollars)
5. Glove over foot
6. Late rotation

## **Release Point**

- Front knee firm and flexed
- Glove firm over front foot knee in front of chest with chest moving towards glove
- Shoulders perpendicular to target line
- Head upright over front knee/landing foot
- Back foot drag line ends at ball release and should finish on an imaginary line connecting the middle of the pitching rubber to the middle of the plate.

## **Back Foot Drag Line**

- The length and direction the back foot drags on the ground (mound) from the rubber is important. It should:
- Finish on the (imaginary) center line connecting middle of the pitching rubber with middle of Home Plate.
- Not come off the ground (mound) before release of baseball.

- The length and direction of the back foot drag line is unique to each pitcher. It is part of his delivery “signature” and a trailing indicator of mechanical efficiency.

## GRIPS

No matter what pitch you need to “cut the baseball in half” with your thumb and middle finger. As shown in this picture



Notice how the thumb and middle finger “cut the ball in half” This needs to be done for each pitch.

For different pitches there are different ways to grip the baseball on the seams. This is up to you and pitcher. However, the hand position is key. Here is how the hands should be at release point. **DO NOT CHANGE ARM SPEED OR ARM SLOT.** Just change your grip on the laces and your hand position. Here is how your hand should be at release point:

Grips = Change Flight of the ball

Hand position = Creates movement of the ball

# GRIPS AND HAND POSITION

Fast Ball - Palm forward	Change Up - Palm Out	Curve Ball - Karate Chop
		
Fast Ball Grip - 4 Seam	Change Up Grips	Curve Ball Grips - Front View
		
Fast Ball - 2 Seam	Fast Ball - 2 Seam	Curve Ball - Side View
		

## FLAT GROUND DRILLS

**Step Behinds** - Step behind with your rear foot and then go into a leg lift. Then throw.



**Cross overs** - Lead with your rear end, do not pound down on front foot, and stack and track. Get momentum, lift leg, and follow through.



**Narrow Stance** - Start with your knees tight together. Have your arch and your big toe touch, bend knees equally, start to fall and lift as high as you can.





**Rocker Drill** - Start in a rocker position. Put your momentum towards your front knee. Your glove, eyes, and ball will all be out front once your finish. Remember stack and track and swivel and stabilize. Keep head level towards ground.



**Towel Drills** - Do 25 a day! Put a baseball down as a rubber and complete 3 pitches. After the third pitch take 5 steps out. The phrase is "Stride Plus 5" Have your partner hold glove at the pitchers eye heighth. The pitcher wants to stay "stacked and tracked". If the pitcher misses the glove left or to the right, it is a posture issue. If he is short, then his glove is moving away and not in the swivel and stabilize way. "Gloves to target, eyes to target, and towel to target!" You have to complete the 7 mechanical steps perfectly for success in this!

PLACE THE TOWEL IN YOUR HAND BETWEEN YOUR MIDDLE FINGER AND THE REST.



**Swivel and Stabilize Towel Drill** - Start in the swivel and stabilize position. Notice how the pitcher is out over his knee. Get out in front and just swing the arm towards the glove as shown. Do this 5 times. Keep glove in front of your chest and over foot. This drill helps with posture.



**Rocker Towel Drill** - Start in your pitching routine and then stop in your "opposite and equal." Focus on keeping your head still. As you rock back and forth a few times get your momentum going forward. When you get as far as you can bring your glove, eyes, and towel over your body and fire away. Stack and track and thrust your momentum forward!





**Knee Drill** - Get on two knees. You are going to create torque, swivel and stabilize, and then throw. You are working on the upper half here.

Start by getting your knees and hips at the same angle as your stack and track. Lower yourself on two knees as shown to the left. Make sure posture stays firm. Show your number on the back to the receiving player without moving your head. Another way of saying this is winding your rubber band. **BIG TORQUE!**

Notice the angle of the throwers. The lower half of the body is taken out of the equation so no energy should be going through the arm. You can even do different pitches (FB, CB, CU, and etc.) Remember, don't change anything but grip and hand position.

Make sure the glove doesn't get sloppy. That is what the fix needs to be when pitches aren't doing what they are supposed to. Stick the glove in front of the face to help with this.



**Flat Ground Pitching** - You are putting all the flat ground drills together. You will work on your pitching and your partner will use towel and stay in the "Knee Drill Position (as shown)."

Preset the grip in the mitt along with the had position. Let your catcher know what is coming. The guy in the knee drill will throw the same pitch back to him.

Work on the 7 mechanical steps. He is practicing on Flat Ground on what he will do on the mound.



**Towel Drill on the mound** - Remember, stride plus 5.

You are getting used to the slope. You are just introducing the slope without the ball.



**Step Behinds to the catcher** - Do the parts to the step behind drill. Have rear foot go behind, then lift knee, stack and track, swivel and stabilize, and release.

We've now added the baseball on the hill. Its the last step before live pitching.





**Mound Windup Drills** - Start with feet at 45 degrees with big toe to arch. He will be in front of the rubber and not on it. The pitcher should keep his head still. In essence, the pitcher is simply stepping into the the stretch position. He goes through his normal windup. The head doesn't move!



**Stretch Mound Drills** - The only difference with this is that you are going to go in front of the mound. In reality, the only difference between the windup and stretch it the 45 degrees.

Never more than a 45 pitch off the mounds. Somewhere between 30-45 is optimal. You can create strength and endurance on flat ground. Just do mound work for skill work, pre-game, and the games. Mix and match different pitches and stretch/windup off the mound. Do not create more wear and tear off the mound!

