

<u>Position</u>	<u>Movement/ Task</u>	<u>Emphasis</u>	<u>Verbal Cue</u>	<u>Tactile Cue</u>
Prone	Breathing	1) Breaths should be lateral and anterior-posterior not superior 2) Should not see elevation of shoulder blades 3) Total trunk expansion while breathing	<i>"Imagine a tire around the waist (breathing in will cause midsection to touch every part of the tire.)"</i>	<i>Put your thumbs on the central portion of the athlete's ribs and let your fingers wrap around sides.</i>
Prone	Conscious awareness and palpation (just inside ASIS) of local stabilizing system	TrAb Activation	<i>"Imagine an ice cube under your belly button and you are trying to lift up off of it."</i> <i>"You should feel the muscles flatten and slightly pull away from your fingers."</i>	
Supine	Neutral spine education	Achieving and maintaining neutral spine for the rest of supine tasks	<i>"Arch your back as far as you can go, flatten your back into the ground, find the middle point of those two movements."</i> <i>"Imagine you have a small grape under your low back and you don't want to crush it."</i> <i>"Maintain this neutral spine position with the rest of the things we are going to do lying on your back."</i>	
Supine	Breathing	1) Breaths should be lateral and anterior-posterior not superior 2) Bottom of the rib cage should not flare toward the ceiling 3) Maintain thoracolumbar junction in neutral 4) If the thoracolumbar junction is extended it will manifest itself as anterior lower rib flare.	<i>"Take a deep breath in, exhale completely, think about the position your back and ribs are in at the end of the exhale, and maintain this position as you inhale again (use tire cue from prone)."</i>	<i>Put thumbs on costochondral cartilage and pull ribs down into an exhaled position.</i>
Supine	Conscious awareness and palpation (just inside ASIS) of local stabilizing muscles	Pelvic Floor/TrAb Activation	<i>"Imagine you are sitting on an ice cube and lifting up off of it."</i> <i>"You should feel the same sensation that you did when you were laying on your stomach."</i>	
Supine	Maintain neutral spine with UE movement	No compensatory extension at T-L junction (rib flare) during this overhead elevation pattern.	<i>"Maintain your neutral spine position as you lift your right arm over your head and bring it back down. Repeat with left arm."</i>	<i>Put thumbs on costochondral cartilage and pull ribs down into an exhaled position (if needed).</i>
Supine	Maintain neutral spine with a lower extremity flexion moment.	No compensatory flexion at the T-L junction while the athlete is performing a reciprocal marching pattern.	<i>"Maintain your neutral spine position as you lift your right foot off the floor and bring it back down. Repeat with left foot."</i> <i>"Feel how your back wants to press into the floor...don't let it."</i> <i>"Don't crush the grape under your low back."</i>	
Supine	Maintain neutral spine with a lower extremity extension moment.	No compensatory extension at the T-L junction (rib flare) while the athlete is performing a reciprocal heel slide.	<i>"Maintain your neutral spine position as you slide your right heel on the floor and bring it back. Repeat with left heel."</i> <i>"Feel how your back wants to arch off the floor....don't let it."</i> <i>"Don't let the grape roll away."</i>	
Supine	Maintain neutral spine with a lower extremity rotation moment.	No compensatory movement at the T-L junction while the athlete is performing reciprocal knee fallouts.	<i>"Maintain your neutral spine position as you drop your right knee to the floor and bring it back. Repeat with left knee."</i> <i>"Feel how your back wants to twist off the floor....don't let it."</i>	

Quadruped	Neutral spine education	Achieving and maintaining neutral spine for the rest of quadruped tasks	<p><i>"Arch your back up as far as you can go, then let your belly button drop to the ground, find the middle point of those two movements."</i></p> <p><i>"Maintain this neutral spine position with the rest of the things we are going on your hands and knees."</i></p> <p><i>"Don't forget to breathe like you did lying on your back."</i></p>	<p>1) <i>Place your elbow on the sacrum, finger pointing toward the head, so that forearm is along the spine. There should be a small space between their low back and your arm and their head should be a natural extension of their spine.</i></p> <p>2) <i>At the same time, place your opposite hand on their stomach and ask the athlete to gently lift their belly button of your hand.</i></p>
Quadruped	Maintain neutral spine with UE movement	No compensatory extension at T-L junction (rib flare) during this overhead elevation pattern.	<i>"Maintain your neutral spine position as you lift your right arm and bring it back down. Repeat with left arm."</i>	<i>Put fingers on costochondral cartilage and pull ribs in or up toward the ceiling.</i>
Quadruped	Maintain neutral spine with a lower extremity flexion moment.	No compensatory flexion at the T-L junction while the athlete is performing reciprocal hip flexion.	<p><i>"Maintain your neutral spine position as you bring your right knee toward your chest and bring it back down. Repeat with left knee."</i></p> <p><i>"Feel how your back wants to round....don't let it."</i></p>	
Quadruped	Maintain neutral spine with a lower extremity extension moment	No compensatory extension at the T-L junction while the athlete is performing reciprocal leg extension.	<p><i>"Maintain your neutral spine position as you push your right heel back and off the ground extending your hip and knee. Bring it back down and repeat with left heel."</i></p> <p><i>"Feel how your back wants to arch....don't let it."</i></p>	
Quadruped	Maintain neutral spine with a lower extremity rotation moment.	No compensatory movement at the T-L junction while the athlete is performing reciprocal short leg abduction.	<p><i>"Maintain your neutral spine position as you bring your right knee off the ground and out to the side. Bring it back and repeat with left knee."</i></p> <p><i>"Feel how your back wants to rotate....don't let it."</i></p>	
Kneeling	Neutral Spine Education	Achieving and maintaining neutral spine for the rest of upright tasks	<p><i>"Sit your butt on your heels. Do you feel your sit bones on your heels? Arch your back so your sit bones move backward, round your back so your sit bones move forward, feel this movement and stop when you feel like you are in the middle"</i></p> <p><i>**Place blue pads on top of heels if not able to sit back**</i></p> <p><i>"Imagine someone is lifting up on your hair. Get tall in this posture while maintaining neutral spine."</i></p>	
Kneeling	Hip extension while maintaining neutral spine	Move from heel sit to tall kneel via hip extension while maintaining active tall posture	<i>"Maintain tall, active posture as you use your hips to bring yourself off your heels into tall kneeling. Maintain that same tall, active posture as you go back to sitting on your heels. Repeat several times."</i>	
Transition to Standing	Move from tall kneeling to standing	<p>1) Maintain a neutral spine position and active posture as the athlete moves up against gravity</p> <p>2) Use half kneeling as intermediate step</p>	<i>"Stay up tall, maintain your active posture, bring your right foot forward so you are in a half kneeling position. Maintain your tall posture as you drive through your foot to raise yourself into standing."</i>	
Standing	Athletic Base	<p>1) Teach neutral spine and hip hinge to get from active tall standing to athletic base position</p> <p>2) Reinforce the awareness of starting postures</p> <p>3) Transition to Movement 101 miniband glute activation</p>	<p><i>"Bring your feet apart, keep your chest up, and sit back into your hips. Maintain your tall posture feeling. Stand back up and repeat"</i></p>	<p><i>Help to create a hip hinge by standing behind the person, fingers on the front of their hips, and help them into hip flexion.</i></p> <p><i>A dowel can be used to teach this concept</i></p>