

## FORM 5.7 JAM Chart: Spinal Muscles and Their Actions

	Flexion	Extension	Lateral flexion	Rotation (same side)	Rotation (opposite side)
<b>Lumbar and thoracic spines</b>					
Rectus abdominis	PM		AM		
External oblique	PM		PM		PM
Internal oblique	PM		PM	PM	
Psoas	AM	<sup>a</sup>			
Quadratus lumborum		AM	PM		
Erector spinae group		PM	PM	PM	
Deep posterior group		PM	PM		PM
<b>Cervical spine</b>					
Sternocleidomastoid	PM		PM		PM
Scaleni group	AM		PM		
Erector spinae group		PM	PM	PM	
Deep posterior group		PM	PM		PM

Note: PM = prime mover; AM = assistant mover.

<sup>a</sup>The psoas may pull the spine into hyperextension without balance from the abdominal muscles, especially if the iliacus tilts the pelvis forward.

From J.C. Griffin, 2015, *Client-centered exercise prescription*, 3rd ed. (Champaign, IL: Human Kinetics).