



Overhead Squat Solutions Table • CES | www.nasm.org | 800.460.6276

View	Checkpoint	Compensation	Probable Overactive Muscles	Probable Underactive Muscles	Example Flexibility Exercise (SMR & Static)	Example Strengthening Exercise
Anterior	Foot	Foot Turns Out	Soleus Lat. Gastrocnemius Bicep Femoris (short head) Tensor Fascia Latae	Med. Gastrocnemius Med. Hamstring Gluteus Medius/Maximus Gracilis Popliteus	Calf Stretch Hamstring Stretch Standing TFL Stretch	Single-leg Balance Reach
	Knee	Moves Inward	Adductor Complex Bicep Femoris (short head) Tensor Fascia Latae Vastus Lateralis Lat. Gastrocnemius	Gluteus Medius/Maximus Vastus Medialis Oblique (VMO) Med. Hamstring Med. Gastrocnemius	Adductor Stretch Hamstring Stretch TFL Stretch Calf Stretch	Lateral Tube Walking Ball Squat w/Abduction Ball Bridge w/Abduction
		Moves Outward	Piriformis, Biceps Femoris Tensor Fascia Latae Gluteus Minimus/ Medius	Adductor Complex Med. Hamstring Gluteus Maximus	Piriformis Stretch, Hamstring Stretch TFL Stretch	Ball Squat w/Adduction Ball Bridge w/Adduction
Lateral	L-P-H-C	Excessive Forward Lean	Soleus Gastrocnemius Hip Flexor Complex Abdominal Complex (rectus abdominus, external oblique)	Anterior Tibialis Gluteus Maximus Erector Spinae	Calf Stretch Hip Flexor Stretch Ball Abdominal Stretch	Ball Squat
		Low Back Arches	Hip Flexor Complex Erector Spinae Latissimus Dorsi	Gluteus Maximus Hamstrings Intrinsic Core Stabilizers (transverse abdominis, multifidus, internal oblique, transversospinalis, pelvic floor muscles)	Hip Flexor Stretch Latissimus Dorsi Stretch Erector Spinae Stretch	Ball Squat Floor Bridge Ball Bridge
		Low Back Rounds	Hamstrings Adductor Magnus Rectus Abdominus External Obliques	Gluteus Maximus Erector Spinae Intrinsic Core Stabilizers (transverse abdominis, multifidus, internal oblique, pelvic floor muscles, transversospinalis)	Hamstring Stretch Adductor Magnus Stretch Ball Abdominal Stretch	Floor Cobra Ball Cobra Ball Back Extension
	Upper Body	Arms Fall Forward	Latissimus Dorsi Pectoralis Major/ Minor Teres Major Coracobrachialis	Mid/Lower Trapezius Rhomboids Rotator Cuff Posterior Deltoid	Latissimus Dorsi Stretch Pec Stretch SMR Thoracic Spine	Floor Cobra Ball Cobra Squat to Row
		Forward Head (pushing/pulling assessment)	Levator Scapula Sternocleidomastoid Scalenes	Deep Cervical Flexors	Levator Scapula Stretch Sternocleidomastoid Stretch Scalene Stretch	Tuck chin, keeping head in neutral position during all exercises
		Shoulder Elevation (pushing/pulling assessment)	Upper Trapezius Sternocleidomastoid Levator Scapulae	Mid/lower Trapezius Rhomboids Rotator Cuff	Upper Trapezius Stretch Sternocleidomastoid Stretch Levator Scapulae Stretch	Floor Cobra Ball Cobra
Posterior	Foot	Foot Flattens	Peroneals Lat. Gastrocnemius Bicep Femoris (short head) Tensor Fascia Latae	Anterior Tibialis Posterior Tibialis Med. Gastrocnemius Gluteus Medius	Peroneal Stretch Calf Stretch Hamstring Stretch Standing TFL Stretch	Single-Leg Balance Reach Single-leg Medial Calf Raise
		Heel Rises	Soleus	Anterior Tibialis	Soleus Stretch	Single-leg Balance Reach Single-leg Squat
	L-P-H-C	Asymmetrical Weight Shift	Adductor Complex Tensor Fascia Latae (same side) Piriformis Bicep Femoris Gluteus Medius (opposite side)	Gluteus Medius (same side) Adductor Complex (opposite side)	Adductor Stretch (same side) Tensor Fascia Latae Stretch Piriformis Stretch Hamstring Stretch (opposite side)	Gluteus Medius (same side) Adductor Complex (opposite side)