



Physical Preparation Handbook

Trampoline

Version 1.0

**British
Gymnastics**

Aim of the Physical Preparation Handbook

The purpose of this handbook is to optimise the physical preparedness of gymnasts within the performance pathway to cope with the demands of the sport and raise performance standards to the highest level.



The expectation is that a gymnast attending a Junior national camp should be able to demonstrate a Level 2 competency and be striving for a Level 3 in all fundamental movement patterns.

The exercises in this handbook have been specifically chosen as they require minimal equipment. This will maximise versatility and the frequency with which they can be performed, allowing optimal musculoskeletal adaptations.

This will ensure gymnasts are ready to undertake their technical training, and that they are robust to withstand increases in training load and strain as they progress through the performance pathway.

This handbook provides a useful resource for both gymnasts and coaches to integrate strength and conditioning into their programmes in a safe, progressive way to enhance athletic development.



Why is Physical Preparation Important?

Physical Performance

The way you physically prepare can positively influence performance on the trampoline. For example, appropriate physical preparation can increase the amount of force a gymnast can produce. The more force that a gymnast can produce, the greater their chances of increasing their time of flight.

Additionally, specific physical preparation set by a Strength and Conditioning coach can support the physical demands of executing gymnastics skills, enabling gymnasts to have greater control over their required movement patterns and allowing them to master more complex skills.

Injury Prevention

One of the most important areas that physical preparation covers is reducing the risk of injury. A senior male gymnast can experience forces up to 16x their body weight at the bottom of the trampoline bed. These high forces can partly explain why injuries, for example to the lower back, are very common in trampoline gymnasts. Developing the required relative strength throughout the body is therefore essential to help the gymnast to withstand these extreme forces.

Additionally, as a gymnast progresses through the performance pathway there will be an increase training load demand. Our aim is to ensure that all gymnasts are physically robust to withstand the increases in training load and the technical demands associated with performing at a high level. Being able to minimise time lost through injury ensures more time is spent developing the technical and physical qualities which are essential for effective long-term athletic development.

Development

Appropriate physical preparation is crucial in developing fundamental movement patterns, which form the foundations to more complex skills that are developed at a later stage. Like a pyramid, a strong, broad foundation of movement competency creates the possibility of a gymnast's physical capabilities being elevated and fulfilled.

How to use the handbook

Bring your programmes to any national training camps that you attend for review and advice.

A blank programme can be found on the last page of this handbook for you to print off and utilise.

Key Principles of Training

To optimise athletic development of the gymnast, there are 5 key principles of training that need to be incorporated.

1. Frequency

This handbook is designed to ensure that there should be no limitation to undertaking a structured physical preparation programme, regardless of the facilities or equipment available. Integrating specific physical preparation within and around a gymnast's training programme will maximise the opportunity to perform the required frequency of each component of the programme (Strength, Core, Conditioning). This will ultimately help develop robust, physically competent gymnasts.

2. Variability

A new programme should be created every 6 to 8 weeks. This ensures that a gymnast has a new stimulus regularly which will improve motor skill development, reduce training stagnation and prevent boredom.

3. Specificity

This refers to choosing specific exercises that challenge the gymnast. To ensure effective long-term athletic development, we don't need to run before we can walk. A gymnast needs to earn the right to progress, and should develop competency within each level to ensure they acquire a well-rounded physical literacy. Certain exercises will challenge areas more than others and these should always be prioritised. A Strength and Conditioning coach can help guide you as to what these areas might be.



Variations in boxes with a green background are body weight exercises and should be the preference in programming before selecting more advanced exercises that may require additional external load.



Variations in boxes with a light-yellow background are simple exercises that require light additional load and the preference is that these should be performed once body weight exercise variations have been achieved, and prior to the more advanced exercises in the light-red shaded boxes.



Variations in boxes with a light-red background are more advanced exercises that require additional load and the preference is that these should be performed once both body weight and light-yellow exercise variations have been achieved, and if any prerequisite exercises have been competently demonstrated.

4. Overload

For a muscle to become stronger it must be subjected to a degree of stress beyond what it can currently withstand. During the recovery phase the body responds to this stress stimulus by adapting the muscle to withstand a stress greater than the stimulus it was exposed to, and thus the muscle becomes stronger. We can create an overload by increasing the volume of work done (more reps and/or sets), increasing the external load (increasing resistance/weights) or increasing the lever length.

5. Progression

This is key to ensure there is a consistent gradual overload within the programme which in turn creates variability via increases in exercise complexity. The aim of the programme is to develop movement competency and motor skill. Progressing training volume is therefore easy to administer and will promote the required physical adaptions of strength and capacity.

Example 1: Linear progression via increasing reps to increase training volume

Week	1	2	3	4	5	6
Reps	10	11	12	13	14	15
Sets	3	3	3	3	3	3
Training Volume (reps x sets)	30	33	36	39	42	45

Example 2: Varied progression by manipulating reps and sets to increase training volume

Week	1	2	3	4	5	6
Reps	12	9	15	11	9	10
Sets	2	3	2	3	4	4
Training Volume (reps x sets)	24	27	30	33	36	40

RULES

1. New programme every 8 weeks
2. Based off competency and previous programme, choose a variation or progression and fill in the exercise information (name & level) for Strength
3. Only progress to the next level if the progression criteria **is** strictly met. Long-term athletic development doesn't require short cuts or rapid progression
4. Vary Core and Conditioning based on each gymnast's specific needs, competency and previous programme
5. Training volume (Reps x Sets) should equal a minimum of 20, maximum of 45 for Strength. Ensure there is a progression throughout the programme
6. Jumps & Landings training volume should be 15 to 25 contacts. Performing a greater number of contacts could put the gymnast at increased risk of injury. An increase in height will increase training intensity, therefore reps and sets don't have to be changed as frequently. Ideally this work should be done barefooted on a thin mat. However, changes to the compliance of the surface will increase the intensity (harder surface equals more load). If there is no appropriate matted surface gymnasts should wear trainers.
7. Core and Conditioning training load should total between 60-120 seconds, except for Plyometrics which should be limited to 10 seconds per set
8. Strength should be completed 2x a week
9. Core should be completed 3x a week
10. Conditioning should be completed 3x a week
11. Only introduce external load if bodyweight competency been shown across the level, and exercise prerequisite competency has been demonstrated
12. Gymnasts should bring their current programme, along with any previous programmes, to any national camps they attend. This will allow the National Coaches to monitor their physical progress

Prepare to Perform

In order to train or compete optimally, preparing the body to physically perform is critical to ingrain key routine characteristics and reduce injury risk.

A warm-up is more than just raising the pulse and increasing muscle temperature. It is an excellent opportunity to develop key fundamental movement patterns, regularly expose the body to specific conditioning, and enhance the physical output of the body to perform at an elevated state.

The acronym RAMP can be used to form an effective warm-up. It stands for Raise, Activate, Mobilise and Perform.

Raise

This is your traditional pulse raiser. This could be performed on or off feet (e.g. running, bike) or could be done as a fun game (e.g. tag, handball). Games are great ways to build athlete engagement, teamwork, cognitive skills, decision making and spatial awareness, and drives intensity from the start.

Activate

This is where we ensure key muscle groups are fully recruited. In trampolining, the glute, hamstring, calf and trunk muscles are key areas for performance. A failure to effectively activate these muscle groups could also increase injury risk. The activation phase is a good opportunity to include any specific rehabilitation exercises a gymnast may have.

Mobilise

The aim here is to increase the range of motion around a joint, which is essential to both create the required shapes and reduce injury risk.

Research suggests that performing static stretches (where a stretch is held for a period of time e.g. 20-30 seconds) can reduce power output for up to 30 minutes afterwards. Therefore, it is recommended that dynamic mobilisation, where joints and muscles are actively moved in and out of their full range of motion, is performed during warm up.

Potentiate

This phase is all about creating a high stimulus under intent that, following a recovery period, will elevate the gymnast's physical capabilities above their resting state. In other words, making them more powerful than prior to warm-up.

This phase can also be used to incorporate regular ballistic and plyometric exercises (e.g. Countermovement Jumps, Hops, Drop Jumps) to develop skill competency and physical characteristics associated with power development.

The potentiation should be done between 5-10min before going on to the trampoline to maximise performance gains.

(Performing static stretches after the potentiation may reduce or reverse the benefits of the warm-up and should therefore be avoided).

Building a warm-up

A warm-up doesn't have to be like a structured recipe. However, the potentiation should always come at the end so a gymnast can maximally apply themselves to optimally reap the rewards. A warm-up should last between 15 and 30 minutes depending on the session goal.

RAM the P

To save time and increase the flow of the warm-up, the raise, mobilisation and activation can be integrated together. By dynamically mobilising and activating the heart rate will increase simultaneously allowing the raise to be achieved.

A warm-up can be a great time to integrate fundamental movement patterns as dynamic mobilisations (e.g. Squats, Hinges, Push, Pulls, Unilateral work, Trunk), which can create a high dosage across a training week. This will ultimately improve motor skill development. Including multiple fundamental movement patterns within a warm-up can develop these important competencies whilst mobilising and activating the key muscles.

An effective warm up should be structured in a similar fashion to an orchestral piece that finishes in a big crescendo. All the slow, low intensity exercises should be at the start, with the intensity gradually increasing until you reach your peak during the potentiation phase.

Intensity	Low	Med	High		
Content	Foam Rolling Specific Stretches	Floor Based Mobility	Activations Pre-habilitation	Dynamic Mobility	Potentiation

The warm-up should also reflect the session. A light skills-based session might pair well with a general mobility, pre-habilitation based session. In contrast, a competition preparation session will require a concise, high level of intensity throughout. The majority of technical sessions would complement a warm-up that includes multiple fundamental movement skills, as part of a wider long-term athletic development strategy.

If this can be performed well 3-5 times per week we can be confident that there will be significant positive physical adaptations derived from the warm-up alone. Overall, this will save time, reduce unnecessary additional training load, and potentially free up additional training time on the trampoline.

Example warm up structures

Low Intensity Skills Session	Medium Intensity Technical Session	High Intensity Competition Session
Foam Roll	Problem Solving Game	Competitive Game
Individual Stretches	Individual Preparation	Individual Preparation
Shoulder, Thoracic, Hip & Ankle Mobility	Shoulder, Thoracic, Hip & Ankle Mobility	Specific Hip & Trunk Activations
Ankle Activations	Hip & Trunk Activations	Specific Dynamic Mobility
Proprioception Training	Dynamic Mobility (Squats, Lunges, Hinges, Overhead Patterns)	Single Leg Landing Drills
Hip & Trunk Activations	Single Leg Hop & holds	Plyometrics
Squats, Lunges, Hinges, Overhead Patterns	Plyometrics	Ballistic Exercises
Jump & Landing Skills	Landings	
Low Level Plyometrics	Ballistic Exercises	

Prior to a Strength and Conditioning session, a gymnast needs to ensure the key movement patterns are mobilised and rehearsed under low loads. Any pre-habilitation work should also be undertaken to ensure the body is optimally prepared to facilitate the desired training adaptations.

Squat

Level

1

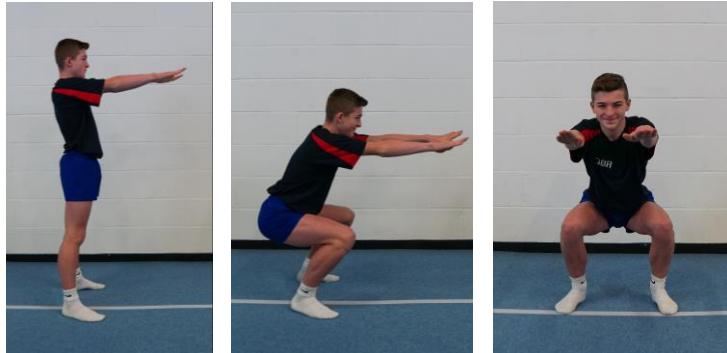
Zombie Squat

Lower limb strength development and motor control to apply force into the bed which will improve time of flight

Coaching Points

1. Tear the floor apart from front to back with toes & knees aligned
2. Balance a tray of drinks on arms
3. Shin and torso parallel with hips below knees and squash a grape under your heel
4. Aim for the hips to be below parallel (knee height) at the bottom of the descent

Progression Criteria: 15 perfect reps



Variations



Narrow Overhead Wall Squat

Feet hip width & parallel, close to the wall as possible without hands touching. Progress exercise by narrowing the shoulder width.



Goblet Squat

Hold weight in front of the body at chin height- extend arms to increase lever and increase pelvic stability



Sumo Squat

Wide as possible, knees aligned with toes and feet externally rotated. Drive knees out over the toes as you descend



Bilateral Leg Press

Full range under control, narrow stance with knees and toes aligned

Squat

Level

2

Prisoner Squat

Lower limb strength development and motor control to apply force into the bed which will improve time of flight

Coaching Points

1. Proud chest
2. Hold a pen between shoulder blades by squeezing elbows back
3. As Zombie Squat set up

Progression Criteria: 15 perfect reps

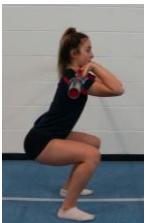
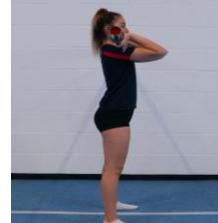


Variations



Sots Squat

At the bottom of a dowel back squat overhead press, holding depth



Front Squat

Bar in a front rack position which sees the bar resting on the anterior aspect of the shoulder. Elbows like guns to full depth



Lateral Squat

In a sumo stance, extend one leg and shift weight to the opposite side keeping both feet flat



Hexbar Deadlift

Brace trunk and squeeze shoulders throughout. Narrow stance. Lifting by extending knees followed by hips, control descent

Squat

Level

3

Overhead Squat

Lower limb strength development and motor control to apply force into the bed which will improve time of flight

Coaching Points

1. Pull the pole apart
2. Pole above the crown of the head
3. As prisoner squat set up



Progression Criteria: 15 perfect reps

Variations



Banded Monster Squat

Stand within the band. Pull band apart overhead. Hold the tension and squat



Back Squat

With bar across shoulders, pull the bar apart. Push the feet apart and twist the knees out over the toes as you descend into a full depth squat



Cossack Squat

Perform a lateral squat to full range, aim to keep both feet flat to the ground



Deadlift

Maintain trunk alignment throughout, first pull trunk remains fixed as knees extend, second pull hips extend into standing, trunk moves vertical. Keep shoulders squeezed back

Split Squat

Lower limb unilateral strength development and motor control. Important for reducing inter-limb asymmetry, applying force into the trampoline and stabilising horizontal movement during contact with the bed.

Coaching Points

1. Stay tall as if you are keeping your head above water
2. Keep a straight line between shoulder, hips and rear knee as you descend
3. Feet hip width apart with knees at right angles and toes inline with knees

Progression Criteria: 10 perfect reps on each leg

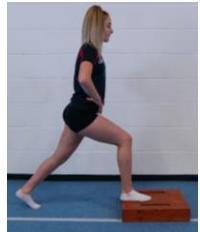


Variations



Assisted Split Squat

Hold onto something stable to ensure stability and technique



Front Foot Raised Split Squat

Increase front hip flexion by raising front foot up at least 2 inches



Overhead Split Squat

Have a dowel above head and pull apart with hands. Maintain a straight line between hands, shoulders, hips and rear knee.



Goblet Split Squat

Hold weight in front of the body at chin height- extend arms to increase lever and reduce weight

Lunge

Level

1

Lunge

Level

2

Reverse Lunge

Lower limb unilateral strength development and motor control. Important for reducing inter-limb asymmetry, applying force into the trampoline and stabilising horizontal movement during contact with the bed.

Coaching Points

1. Step back onto ball of rear foot with heel raised high
2. Assume split squat position
3. Push into the floor with rear foot to maintain tension throughout the leg to prevent rear hip dropping

Progression Criteria: 10 perfect reps on each leg



Variations



Assisted Reverse Lunge

Hold onto something to ensure stability and technique



Sliding Reverse Lunge

Keep rear forefoot in contact with a sliding surface, extend back, lowering body down, drag back up to complete a rep



Overhead Reverse Lunge

Have a dowel above head and pull apart with hands. Maintain a straight line between hands, shoulders, hips and rear knee.



Goblet Reverse Lunge

Hold weight in front of the body at chin height extend arms to increase lever and reduce weight

Lunge

Level

3

Bulgarian Split Squat

Lower limb unilateral strength development and motor control. Important for reducing inter-limb asymmetry, applying force into the trampoline and stabilising horizontal movement during contact with the bed.

Coaching Points

1. Avoid directing bodyweight through rear foot, use only for stability
2. Keep bodyweight through mid foot of front foot
3. Maintain straight line between shoulder, hip and rear knee

Progression Criteria: 10 perfect reps on each leg



Variations



Assisted Bulgarian Split Squat

Hold onto something to ensure stability and technique



Forward Lunge

Finish in split squat position. Push up onto toes as you lunge forward to lock hips, on ground contact keeps hips stable and trunk rigid and parallel to front shin



Overhead Bulgarian Split Squat

Have a dowel above head and pull apart with hands. Maintain a straight line between hands, shoulders, hips and rear knee.



Goblet Bulgarian Split Squat

Hold weight in front of the body at chin height extend arms to increase lever and reduce weight

Unilateral Squat

Level

1

Standing Partial Squat

Lower limb unilateral strength development and motor control. Important for reducing inter-limb asymmetry, applying force into the trampoline and stabilising horizontal movement during contact with the bed.

Coaching Points

1. Body weight needs to be positioned in the middle of your foot as if you are balancing on a tennis ball
2. Flex ankle, knee & hip together
3. Maintain alignment of toes and knee

Progression Criteria: 10 perfect reps on each leg

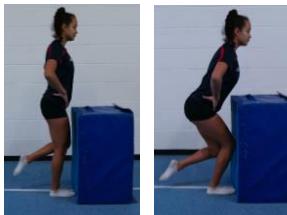


Variations



Partial Squat Balance Matrix

Perform a partial squat, using non stance leg reach out towards each point of a compass



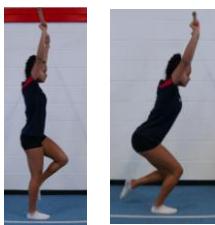
Knee Constrained Squat

Position a box in front of knee to prevent excessive dorsi flexion



Small Step Up (A-March)

Use a step that's halfway up the shin. Drive down into the step, punching the rear leg through into an A-March



Overhead Partial Squat

Increase trunk lever with arms above head

Unilateral Squat

Level

2

Deficit Squat

Lower limb unilateral strength development and motor control. Important for reducing inter-limb asymmetry, applying force into the trampoline and stabilising horizontal movement during contact with the bed.

Coaching Points

1. In the working leg, feel as if you are squashing a grape underneath your heel
2. With the free leg, touch the ground lightly as if you are dipping your toe in water
3. To maintain posture, picture keeping head above deep water to maintain torso tension

Progression Criteria: 10 perfect reps on each leg



Variations



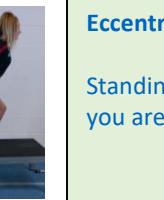
Chair Squat

Keeping shin and torso parallel tap a chair at the end of descent



Running Man Squat

Knee of the free leg touches the floor to complete descent



Eccentric Small Step Down

Standing on a step, lower rear leg back to tap the floor as if you are testing the temperature of water



Medium Step Up

Use a step that's at knee height. Drive down into the step, punching the rear leg through into an A-March

Unilateral Squat

Level

3

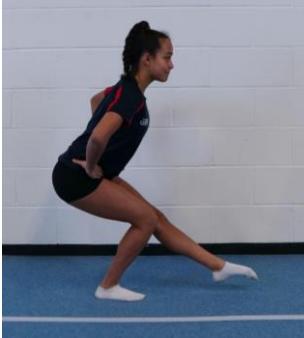
Standing Parallel Squat

Lower limb unilateral strength development and motor control. Important for reducing inter-limb asymmetry, applying force into the trampoline and stabilising horizontal movement during contact with the bed.

Coaching Points

1. Squat so that your stance leg thigh is parallel with the floor, with hips and knee aligned
2. Shin and trunk needs to be parallel
3. Maintain alignment of knee and toes

Progression Criteria: 10 perfect reps on each leg



Variations



Overhead Chair Squat

Have a dowel above head and pull apart with hands throughout exercise keeping shin and torso parallel



Large Step Up

Use a step that's at a mid thigh height. Drive down into the step, punching the rear leg through into an A-March



Pistol Squat

Non-stance leg stays in front of the body, lower hips down to heel and return to standing for one rep. Maintain alignment



Unilateral Leg Press

Split the legs so that one leg is dominant but the non-working leg can help maintain pelvic stability. To do this keep the working leg on the plate as pictured whilst resting the ball of the other foot at the bottom of the plate

Hinge

Level

1

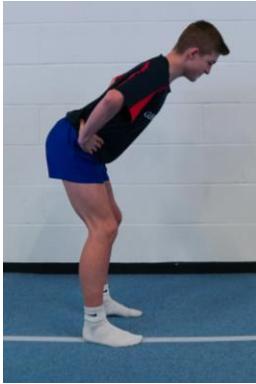
Hands on hips hinge

Disassociation between the torso and the lower limbs protects the spine whilst strengthens the posterior musculature of the body, reducing injury risk and enabling the body resist against higher ground reaction forces at the bottom of the bend. The extension of the hips allows for the development of force

Coaching Points

1. Knees stiff, trunk rigid (show your t-shirt logo in a mirror ahead of you)
2. Push hips back towards the wall
3. Keep weight towards heel
4. Squeeze shoulder blades together as if you have a £50 note between them on a windy day

Progression Criteria: 15 perfect reps



Variations



Prisoner Good Morning

Hands behind head, squeeze shoulders back as you hinge at the hip



Split Stance Good Morning

Split feet so rear foot is inline with front heel. Rear leg is relaxed with ground contact made via ball of the foot. Hands in a prisoner position



Cricket Slips Knee Extensions

This is a good regression of hands on hips hinge. Partial squat with hands on knees. Keep back rigid and extended knees without standing up (stay under a low ceiling)



Horizontal Medicine Ball Push Hinge

Perform hands on hips hinge, in doing so holding a medicine ball push in front of the body with arms parallel to the floor

Hinge

Level

2

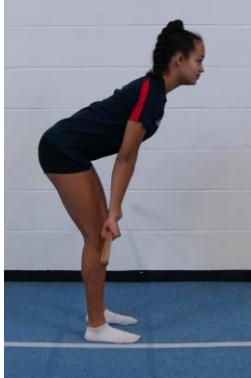
Romanian Deadlift (Dowel)

Disassociation between the torso and the lower limbs protects the spine whilst strengthens the posterior musculature of the body, reducing injury risk and enabling the body resist against higher ground reaction forces at the bottom of the bend. The extension of the hips allows for the development of force

Coaching Points

1. Shoulders in front of hands (make a triangle: back, arms, legs)
2. Squeeze a note between shoulder blades
3. Allow dowel to slide down the legs
4. Knees should NOT be locked out but slightly bent and stiff
5. Weight should move towards the heel of the foot

Progression Criteria: 15 perfect reps



Variations



Kettlebell Arabesque

Hold KB in the opposite hand to the stance leg, keep rigid throughout upper body and use non-stance leg to drive the hinge



Barbell Romanian Deadlift

Use a barbell to overload the movement pattern



Hip Thrust

Only perform with external load once bodyweight has been mastered. Have knees at 90° with feet shoulder width apart. Pull in belt buckle as you drive the hips up.



Horizontal Push Holds

Same as the medicine ball push hinge, but hold the position for time opposed to performing reps

Hinge

Level

3

Arabesque (Dowel on Shoulders)

Disassociation between the torso and the lower limbs protects the spine whilst strengthens the posterior musculature of the body, reducing injury risk and enabling the body resist against higher ground reaction forces at the bottom of the bend. The extension of the hips allows for the development of force

Coaching Points

1. Drag rear foot for as long as possible, push back as far as possible with heel to drive the hinge
2. Pull the bar apart to keep tension through the back
3. Through the standing leg, picture you squashing a grape with the ball of your big toe

Progression Criteria: 10 perfect reps on each leg



Variations



Barbell Good Morning

With bar on shoulders pull bar apart as you hinge at the hip



Kettlebell (KB) Swing

Must be able to perform a Romanian deadlift before attempting this exercise. Allow the KB to drop, in doing so hinge at the hips, maintaining rigid back and straight arms, allow KB to move through legs with forearm touching inner thigh. Drive hips through arms to propel KB up. Arms should be relaxed and straight throughout.



Single Leg Hip Thrust

Bring non-stance leg hip to 90° so thigh is vertical. Maintain hip alignment parallel to the floor throughout



Medicine Ball Wall Rebound Hinge

Facing a wall, maintain hinge position and rebound the ball off the wall, ensuring hinge position stays stiff throughout

Vertical Pull

Level

1

Hanging Scapula Depressions

The latissimus dorsi muscle situated in the back stabilises the trunk during landing whilst helping to provide propulsion during jumping

Coaching Points

1. Squeeze shoulder blades down and together with elbows extended but not locked
2. Hold bar with hook grip - vary grip positions
3. Tuck hips up for a hollow hold

Progression Criteria: 15 perfect reps



Variations



Lat Pulldown Machine

Squeeze shoulder blades together and pull the bar down towards the chest

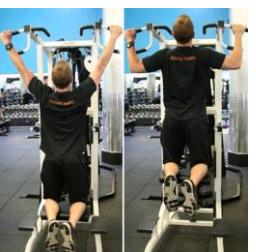


Assisted Pull Up Machine

Use the machine to act as a counterweight to regress the load

Chin Up Negatives

In a narrow supinated hand grip, descend for 5sec into full extension without locking out elbows



Pronated Hand Grip = Palms Down/ Away From face

Supinated Hand Grip = Palms Up/ Towards Face

Vertical Pull

Level

2

Chin Up

The latissimus dorsi muscle situated in the back stabilises the trunk during landing whilst helping to provide propulsion during jumping

Coaching Points

1. Narrow hand grip with hands supinated so palms face you
2. Squeeze shoulder blades during ascent pull until chin is above hands, keeping hollow hold
3. Lower down under control without fully extending and locking out elbows

Progression Criteria: 5 perfect reps under control



Variations



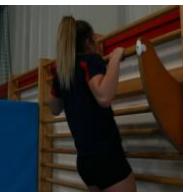
Banded Chin Ups

Use a band to deload the chin up, progressively build back up to body weight



Weighted Chin Ups

If you can perform 10 bodyweight chin ups, include external load to increase relative strength
Easiest way is to thread a power band through a weight plate and loop each end of the band around your shoulders.



Negative Pull Ups

In a wide pronated hand grip, descend for 5sec into full extension without locking out elbows

Pronated Hand Grip = Palms Down/ Away From Face

Supinated Hand Grip = Palms Up/ Towards Face

Vertical Pull

Level

3

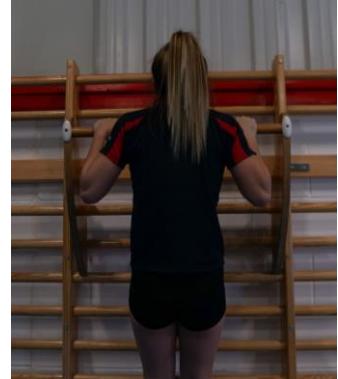
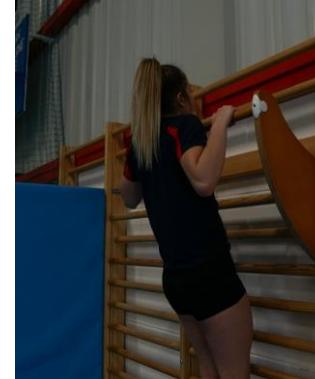
Pull Up

The latissimus dorsi muscle situated in the back stabilises the trunk during landing whilst helping to provide propulsion during jumping

Coaching Points

1. Wide grip with hands pronated so that the knuckles face you
2. Squeeze shoulder blades during ascent. Extend upper back so chest moves up towards the bar
3. Maintain hollow hold

Progression Criteria: 5 perfect reps under control



Variations



Banded Pull Ups

Use a band to de-load the pull up, progressively build back up to body weight



Weighted Pull Ups

If you can perform 10 bodyweight Pull ups, include external load to increase relative strength



Hollow Hold Chin Ups

Raise legs into a hollow hold pike position during each rep

Pronated Hand Grip = Palms Down/ Away From Face

Supinated Hand Grip = Palms Up/ Towards Face

Horizontal Pull

Level

1

TRX Row

Maintain a balance in the muscles at the front and back of the shoulder ensure the joint is protected during contact with the bed. Strength of the posterior shoulder works alongside the trunk to help produce and stabilise rotation and create the required technical shapes.

Coaching Points

1. Closer you take your feet to the anchor increases bodyweight resistance
2. Keep whole body rigid with only arms moving
3. Squeeze shoulder blades to initiate pull squeezing elbows together behind the body as you pull back

Progression Criteria: 15 perfect reps under control



Variations



Standing Bilateral Banded Row

Have arms parallel to the floor, squeeze shoulders blades and elbows together behind the body as you pull



Prone Barbell Row

Using an incline or flat bench, lay face down. Use a pronated hand grip. Squeeze glutes, keeping whole body rigid. Pull up into the bench



Standing Unilateral Banded Row

Set up like bilateral resistance band row. Interloop handles of the resistance band and resist rotation as you pull



Pronated Hand Grip = Palms Down/ Away From Face

Supinated Hand Grip = Palms Up/ Towards Face

Horizontal Pull

Level

2

TRX Inverted Row – Bent Leg

Maintain a balance in the muscles at the front and back of the shoulder ensure the joint is protected during contact with the bed. Strength of the posterior shoulder works alongside the trunk to help produce and stabilise rotation and create the required technical shapes.

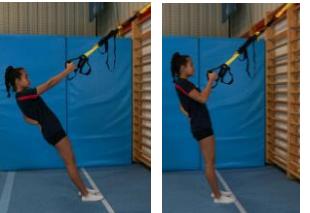
Coaching Points

1. Hold onto TRX handles with straight arms and shoulders directly underneath the straps.
2. Position knees at 90° and maintain a straight line from the knees to the hips and shoulders
3. Pull into the handles, lifting the upper body so the chest is positioned between the handles. Keep the torso rigid throughout.

Progression Criteria: 15 perfect reps under control

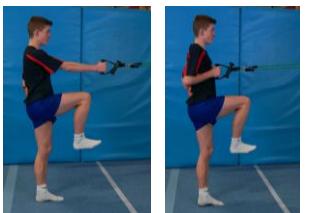


Variations



TRX Single Arm Row

Set up like an inverted row, inter looping both handles together. Keep torso perpendicular to the TRX to resist rotation.



Single Leg Unilateral Banded Row

Stand on the opposite leg to the working arm. With the non stance leg raised up to 90°. Resist rotation as you pull



Prone Dumbbell Row

Using an incline or flat bench, lay face down. Squeeze glutes, keeping whole body rigid. Pull up either side of the bench



Horizontal Pull

Level

3

TRX Inverted Row – Raised Straight Leg

Maintain a balance in the muscles at the front and back of the shoulder ensure the joint is protected during contact with the bed. Strength of the posterior shoulder works alongside the trunk to help produce and stabilise rotation and create the required technical shapes.

Coaching Points

1. Lay on the floor with shoulders directly under the bar, which should be at a height just beyond reach. Rest heels on a bench that is just below the bar height
2. Hold on to the bar and keeping whole body rigid, with a straight line between shoulder, hips and ankles.
3. Pull chest into the bar, touching the sternum. Do not allow the hips to flex

Progression Criteria: 15 perfect reps under control

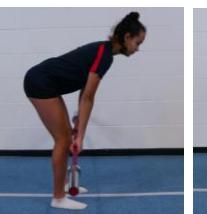


Variations



Seated Cable Row

Have the cable positioned at chest height. Brace trunk and resist thoracic extension and flexion. Pull under control.



Bent Over Row

Prerequisite is to perform a technically sound Romanian deadlift. Have trunk just above parallel to the floor. Have supinated grip. Pull bar up and back into the crease of the hip, following the length of the thigh. Maintain trunk rigidity throughout



Renegade Row

In a quadruped position have one hand on a dumbbell. Resist rotation throughout the shoulders, trunk and pelvis as you perform a row

Vertical Push

Level

1

Box Pike Handstand

Works alongside the trunk to enable effective force transfer throughout the body to hold technical positions and maintain shoulder stability and thoracic mobility

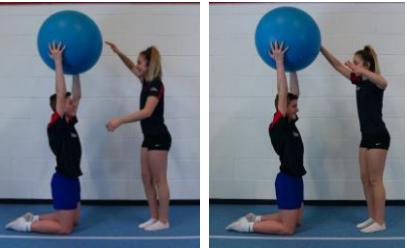
Coaching Points

1. Have box at hip height, with feet on the box and hands on the floor
2. Walk feet towards hands to take shoulders over the hands, extending the upper back. Aim for hips to be at 90°
3. Push bodyweight through the knuckle of the hands. With fingers slightly flexed. Push away from the floor

Progression Criteria: Hold correct shape for 30s

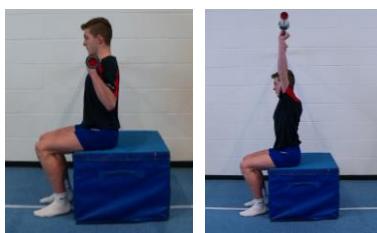


Variations



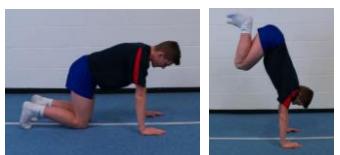
Overhead Perturbation Hold

Hold a stability ball above your head with eyes closed. Have a partner push the ball in a random way. Try to remain still throughout.



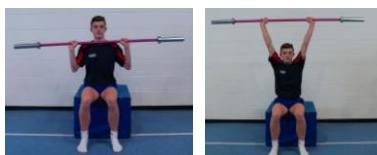
Seated Barbell Shoulder Press

In a seated position with core engaged, press barbell above head with a grip that's is slightly wider than shoulder width



Donkey Kicks

In a quadruped position. Push hands into the floor and kick feet upwards.



Vertical Push

Level

2

Wall Assisted Handstand

Works alongside the trunk to enable effective force transfer throughout the body to hold technical positions and maintain shoulder stability and thoracic mobility

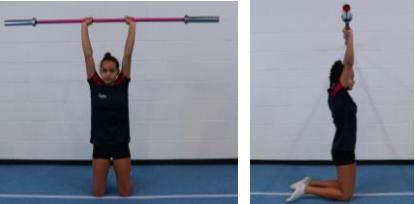
Coaching Points

1. Position hands close to the wall, with fingers pointing as the wall
2. Kick up so back faces the all. Push bodyweight through the knuckle of the hands. With fingers slightly flexed. Take one foot off the wall at a time
3. Keep whole body rigid, take one foot off the wall, then the other, squeezing both feet together

Progression Criteria: Hold correct shape for 30s



Variations



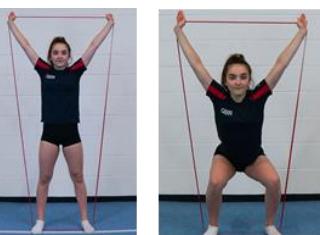
Kneeling Bilateral Overhead Hold

Hold a barbell above your head. Pulling bar apart and pushing towards the ceiling. Keep abdominals engaged



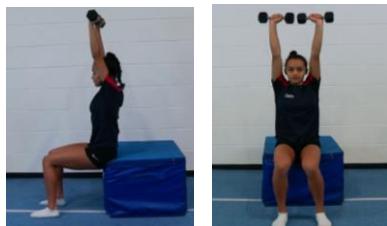
Seated Dumbbell Shoulder Press

In a seated position with core engaged. Hold dumbbells in a neutral position. As you press overhead pronate hands so the end of the dumbbells touch above your head



Monster Band Squat

Stand in a resistance band. Press band overhead and squat. Can be performed as a Sots squat.



Vertical Push

Level

3

Handstand

Works alongside the trunk to enable effective force transfer throughout the body to hold technical positions and maintain shoulder stability and thoracic mobility

Coaching Points

1. Bodyweight through the knuckle of the hand with fingers slightly flexed
2. Push the floor away
3. Bring one leg up at a time. Squeeze, glutes, abdominals and feet together

Progression Criteria: Hold correct shape for 30s



Variations



Kneeling Bilateral Overhead Hold

Hold a dumb bell above your head. Keep abdominals engaged. Push to the ceiling



Seated Unilateral Shoulder Press

In a seated position with core engaged. Hold dumbbell in a neutral position, with the opposite arm laterally raised and held straight at shoulder height.



Windmill

Hold weight in one arm above your head. Have a wide stance with toes angled parallel away from the weight. Maintain eye contact with the weight. Slide the non-weight bearing hand down the same sided leg. Keeping legs straight.



Horizontal Push

Level

1

Kneeling Press Up

Maintain a balance in the muscles at the front and back of the shoulder ensure the joint is protected during contact with the bed. Strength of the anterior shoulder works alongside the trunk to help produce and stabilise rotation and create the required technical shapes.

Coaching Points

1. Bodyweight through the knuckle of the hand with fingers slightly flexed
2. Push the floor away
3. Bring one leg up at a time. Squeeze, glutes, abdominals and feet together



Progression Criteria: 15 perfect reps

Variations



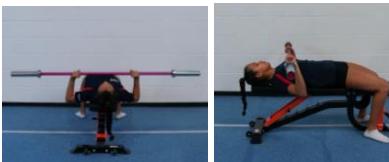
Kneeling Narrow Press Up

Hands shoulder width apart, with elbows tucked into body at full descent.



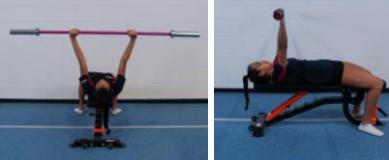
Press Up Negative Holds

For the negative component perform a full press up with a 5s decent. Aim to then hold the bottom position for 5s. No need to push back up.



Barbell Bench Press

Have a spotter. Pronated grip, pull bar apart. Bring bar down to the chest. Press lower back into the bench and feet on the floor.



Pronated Hand Grip = Palms Down/ Away From face

Supinated Hand Grip = Palms Up/ Towards Face

Horizontal Push

Level

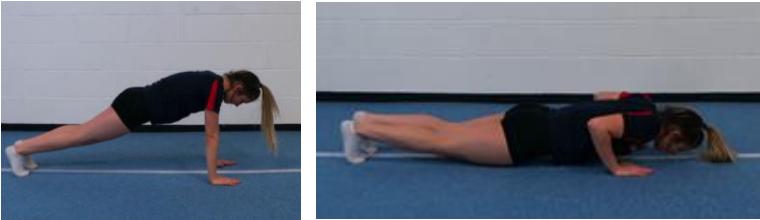
2

Press Up

Maintain a balance in the muscles at the front and back of the shoulder ensure the joint is protected during contact with the bed. Strength of the anterior shoulder works alongside the trunk to help produce and stabilise rotation and create the required technical shapes.

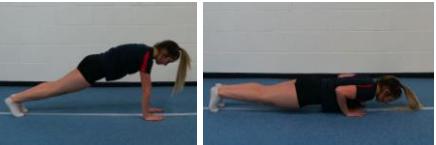
Coaching Points

1. Hands slightly wider than shoulder width apart
2. Straight line between ankle, hip and shoulder with hips tucked up (prawn like)
3. At full descent, elbow should be at a 45° from the shoulder



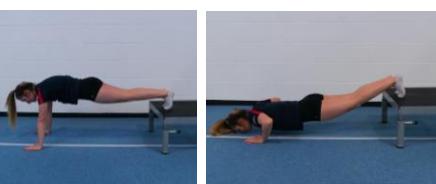
Progression Criteria: 15 perfect reps

Variations



Narrow Press Up

Hands shoulder width apart, with elbows tucked into body at full descent.



Feet Raised Press Up

Elevate feet to shoulder height when in a press up position



Dumbbell Bench Press

Have a spotter. Neutral grip. Bring dumbbells down either side of the chest. Press dumbbells above chest so that the ends of the dumbbells touch. Press lower back into the bench and feet on the floor.



Horizontal Push

Level

3

Loaded Press Up

Maintain a balance in the muscles at the front and back of the shoulder ensure the joint is protected during contact with the bed. Strength of the anterior shoulder works alongside the trunk to help produce and stabilise rotation and create the required technical shapes.

Coaching Points

1. Hands slightly wider than shoulder width apart. Straight line between ankle, hip and shoulder with hips tucked up (prawn like)
2. At full descent, elbow should be at a 45° from the shoulder
3. Rest weight plate between shoulder blades



Progression Criteria: 15 perfect reps

Variations



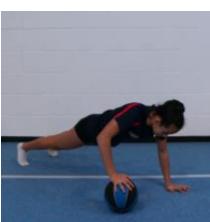
Band Resisted Press Up

Use a resistance band across the back of your shoulders, held in place with your hands to add resistance to the ascent phase



Unilateral Dumbbell Bench Press

Keep one arm extended and stationary whilst the other arm works.



Medicine Ball Press Ups

Have one hand on a medicine ball or box to increase range on that arm

Hip Extension

Level

1

Posterior hip strength ensures effective lumbar, pelvic, hip and knee control which reduces injury risk, whilst providing posterior musculature force development into the bed. Strengthening the hamstrings ensures that the ratio of quadricep (front of the thigh) to hamstring (back of the thigh) remains optimal, which is important in reducing the risk of knee injuries, especially in female gymnasts.



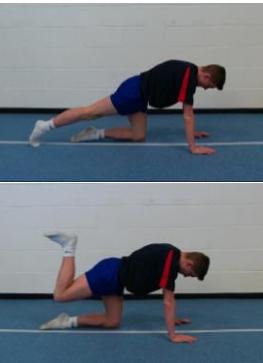
Supine Bridge Hold

Knees at 90°, with feet shoulder width apart. Tuck hips under and extend hips to the ceiling



Feet Raised Hamstring Bridge Reps

Knees at 140°, feet hip width apart, tuck hips under and extend to the ceiling

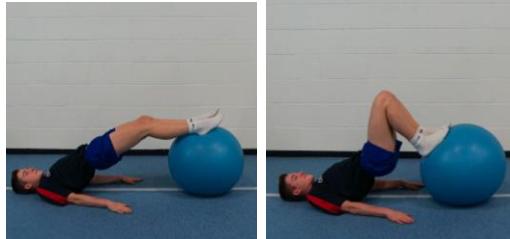


Fire Hydrants

In a quadruped position with one leg straight, extend the hip to raise the back leg. Keep lower back in a prawn shape to main tuck.

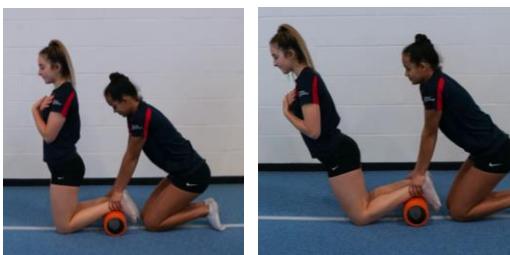
Donkey Kicks

For donkey kick bend the knee of the extended leg.



Double Leg Hamstring Curl

Using a stability ball, perform the feet raised hamstring bridge. In this position pull the heels in towards the hips, keeping hips extended and stable. Extend legs under control without locking out knees. Aim to have hands off the floor.



Nordic Hamstring Curl

In a kneeling position, brace ankles and maintain hip extension. Slowly lean forwards under control. Aim to constantly keep moving until you can't hold the position. Aim to reach the floor without falling.



Hamstring Curl Machine Hypertrophy

Hypertrophy loading scheme would be 5 sets of 10 reps with a one minute inter set recovery at 70-80% 1RM load.

Hip Extension

Level

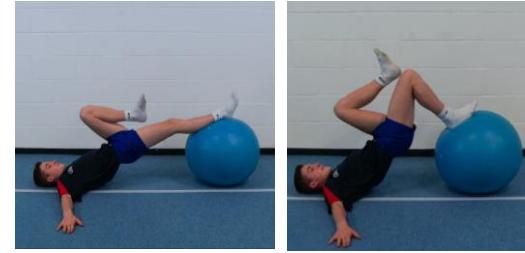
2

Posterior hip strength ensures effective lumbar, pelvic, hip and knee control which reduces injury risk, whilst providing posterior musculature force development into the bed. Strengthening the hamstrings ensures that the ratio of quadricep (front of the thigh) to hamstring (back of the thigh) remains optimal, which is important in reducing the risk of knee injuries, especially in female gymnasts.



Supine Bridge March

In a supine bridge hold, keep hips extended & stable whilst alternating bringing the non-stance leg in towards the chest



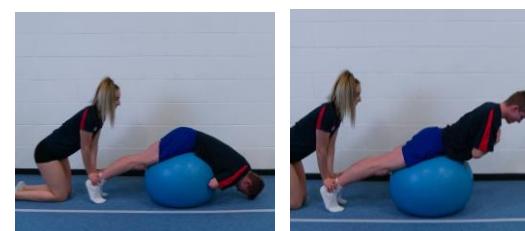
Stability Ball Single Leg Hamstring Curl

Using a stability, perform the single leg hamstring bridge hold. Keep hands on the floor for stability. Keeping hips extended pull heel in towards hips, extend under control without locking out the knee.



Feet Raised Single Leg Hamstring Bridge Hold

Holding knee at 140°. Have the non-holding leg pulled into the body so thigh is vertical. Keep hips tucked under and hold.



Hyperextensions

Use a stability ball, lie on the ball with hips in contact with the upper surface of the ball. Wedge feet and flex over the ball, with hands across chest. Extend up into full hip extension.



Razor Curl

Set up is the same as a Nordic hamstring curl. Begin by hinging at the hip, keeping thighs vertical and trunk rigid. At 90° hip flexion, extend the knees, moving forwards for as long as you can hold.



Hamstring Curl Machine Strength

Strength loading scheme would be 3-5 sets of 5-8 reps with 2-3min of inter set recovery at 80-90% 1RM load.

Hip Extension

Level

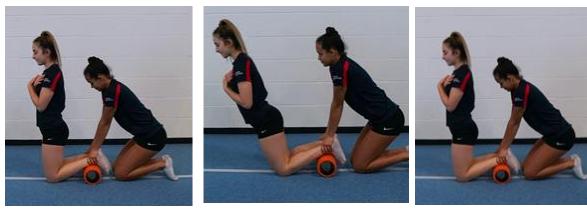
3

Posterior hip strength ensures effective lumbar, pelvic, hip and knee control which reduces injury risk, whilst providing posterior musculature force development into the bed. Strengthening the hamstrings ensures that the ratio of quadricep (front of the thigh) to hamstring (back of the thigh) remains optimal, which is important in reducing the risk of knee injuries, especially in female gymnasts.



Cook Hip Bridge

Pull one knee into the chest, extended hips to the ceiling



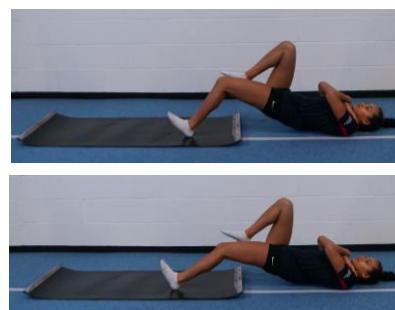
Nordic Hamstring Curl – Up & Down

Perform a Nordic hamstring curl and without failing, return back to the start position. Gold standard is to get to the floor and back



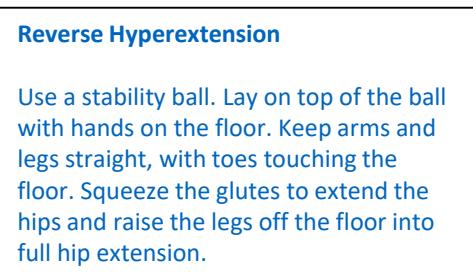
Feet Raised Single Leg Hamstring Bridge Reps

In the position of a single leg hamstring bridge hold, lower hips from full extension to the floor and back. Keep hips tucked under



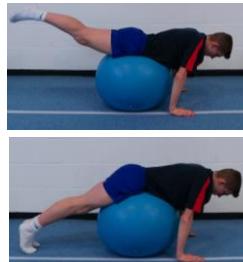
Slider Single Leg Hamstring Curl

Using a surface that will slide. Perform a single leg bridge. In this position extend the leg by sliding it away from the body without locking out the knee. Pulling heel back in towards the body once full extension has been achieved.



Reverse Hyperextension

Use a stability ball. Lay on top of the ball with hands on the floor. Keep arms and legs straight, with toes touching the floor. Squeeze the glutes to extend the hips and raise the legs off the floor into full hip extension.



Hamstring Curl Machine: 2 Down 1 Up Eccentrics

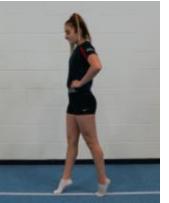
Loading scheme would be supramaximal (Heavier than you can perform a single leg hamstring curl). Perform a double leg curl, remove one leg, and under control of the working leg return back to the starting position. Loading scheme would be 3-5 sets of 5-8 reps with 3min of inter set recovery

Foot & Ankle

Level

1

Mobilise, stabilise and strengthen the ankle to load in response to external forces whilst producing force into the bed to improve time of flight. The foot experiences large ranges of pronation, its important for effective transfer of force throughout the body to work the opposing muscle groups around the ankle to ensure muscle balance and reduce injury risk



Toe Walk

Walk on the tips of your toes. Keep everything tense



Double Leg Seated Ski Sit Heel Raise

Ski sit against a wall with knees 90°. Raise both heels off the floor



Heel Walks

Walk on your heels. Keep whole body straight and everything tense



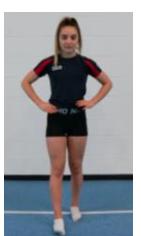
Isometric Dorsi Flexion Hold

Pull the toes towards you, using the band to resist and hold



Outside of the Foot Walk

Walk on the outside edge of the foot
Squeeze the glutes and keep the legs straight



Inside of the Foot Walk

Walk on the inside arch of the foot with outside raised off the floor.
Squeeze glutes and keep the legs straight



PROPRIOCEPTION

Single Leg Balance – Look Left & Right

Bodyweight through ball of the foot. Leg straight but knee not locked out. Feel tension in the stance leg glute. Opposite hip at 90°. Look left and right



PLYOMETRICS

Double Leg Pogo's

Stiff knees. Ground contact with ball of the foot. Contact should sound crisp. Small amplitude off the ground, high frequency.

Foot & Ankle

Level

2

Mobilise, stabilise and strengthen the ankle to load in response to external forces whilst producing force into the bed to improve time of flight. The foot experiences large ranges of pronation, its important for effective transfer of force throughout the body to work the opposing muscle groups around the ankle to ensure muscle balance and reduce injury risk



Single Leg Heel Raise

Perform a heel raise on one leg, pushing into the big toe.
Keep glutes squeezed.



Split Stance Heel Raise

In the deep position of a split squat, raise the heel of the front foot



Narrow Wall Facing Overhead Squat

Feet hip width & parallel, close to the wall as possible without hands touching



Resistance Band Ankle Flexions

Using a band slowly extend and flex the ankle



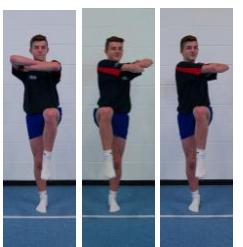
Resistance Band Eversion

Have a resistance band positioned sideways on towards midline of body, turn the sole of your foot outwards. Keep leg still



Resistance Band Inversion

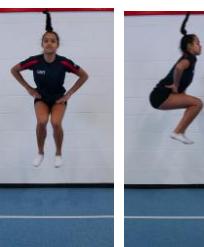
Have a resistance band positioned sideways on away from the midline of body, turn the sole of your foot inwards. Keep leg still.



PROPRIOCEPTION

Single Leg Balance – Rotate Shoulders Left & Right

Bodyweight through ball of the foot. Leg straight but knee not locked out. Feel tension in the stance leg glute. Opposite hip at 90°. Keep head still and rotate shoulders left and right. Keeping hips and knee still



PLYOMETRICS

Tuck Jumps

Bring knees to chest, striking the ground through the ball of the foot, keeping legs stiff, as quickly as possible. The floor is lava.

Foot & Ankle

Level

3

Mobilise, stabilise and strengthen the ankle to load in response to external forces whilst producing force into the bed to improve time of flight. The foot experiences large ranges of pronation, its important for effective transfer of force throughout the body to work the opposing muscle groups around the ankle to ensure muscle balance and reduce injury risk



Single Leg Heel Raise

Add an external load (Dumb bell) in the same sided hand of the working leg

Perform a heel raise on one leg, pushing into the big toe. Keep glutes squeezed.



Heel to Toe Rotations – Outwards & Inwards

Stand on one leg and roll from outside to inside/ inside to outside of the forefoot and heel to rotate outwards (Right foot rotate right; left foot rotate left) and inwards (Right foot rotate left; left foot rotate right)



Weighted Ankle Flexions

Strap a small weight to your forefoot, hang off over a bench and flex and extend the foot



Single Leg Bent Knee Heel Raise

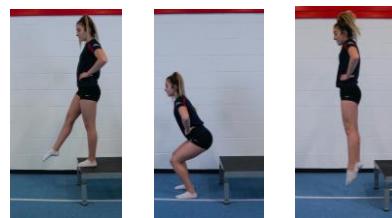
Using a step, bend the stance leg to 90°. Raise the heel



PROPRIOCEPTION

Single Leg Balance- Eyes Closed

Bodyweight through ball of the foot. Leg straight but knee not locked out. Feel tension in the stance leg glute. Opposite hip at 90°. Close eyes



PLYOMETRICS

Drop Jumps

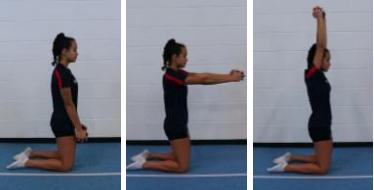
Use a 30cm box. Step off landing with both feet. Get off the ground as quick as possible (floor is lava) Ground contact with the ball of the foot. Keep knees stiff.

Shoulder

Level

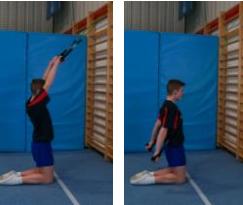
1

Strengthening the shoulder, including the rotator cuff, improves efficient and stability of the shoulder joint reducing injury risk whilst assisting with technical positions.



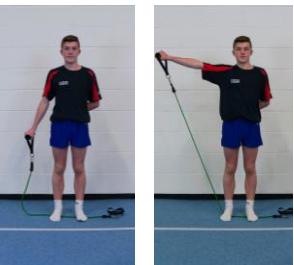
Front Raise

Hold weight in neutral hand grip, Push the weight away as you raise your arms above your head. Keep trunk rigid



Resistance Band Pulldown

In a kneeling position, keep trunk rigid and arms straight and pull the handles down to the hips, squeezing shoulder blades together.



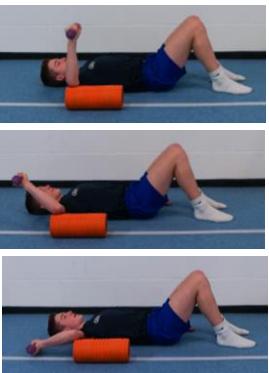
Resistance Band Lateral Raise

Stand on the resistance band. With hand neutral raise the arm to the side, keep arm straight by pushing the knuckles away from you until the hand is at shoulder height



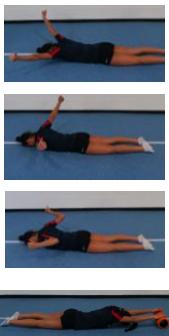
Resistance Band External Rotation- Single Arm

With the upper arm at shoulder height, elbow touching the wall and angled at 90° with the forearm perpendicular to the wall. Hold the resistance band in front of your body and externally rotate the shoulder to take the knuckles to the floor



Supine Internal Rotations

Lie on your back. Have shoulder and elbow at 90°, with the elbow slightly elevated to allow for increased external rotation. Holding onto a weight control the external rotation of the shoulder, lowering the weight to the floor, then raise the weight back up so that the forearm is vertical, keeping the elbow still throughout.



YTWI's

Lie prone of the floor. Have thumbs pointing up to the ceiling.
Y: have arms straight and shoulders at 45° away from the ears. Raise hands off the floor squeezing shoulder blades together.

T: have thumbs up, arms straight and shoulders at 90°.

W: flex the elbows 90° then pull in towards the trunk, keep thumbs up and raise arms off the floor.

I: With thumbs up to the ceiling, have arms out straight ahead alongside each ear. Keep trunk braced and raise arms off the floor

Shoulder

Level

2

Strengthening the shoulder, including the rotator cuff, improves efficient and stability of the shoulder joint reducing injury risk whilst assisting with technical positions.



Front Raise Dumbbells

Hold with dumbbells in a pronated grip (knuckles forwards) push the weights away from you as you raise your arms above your head. Keep trunk rigid.



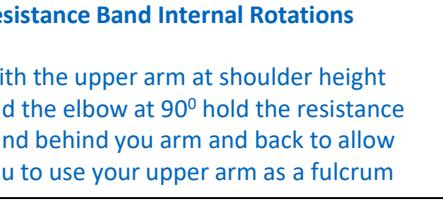
Cable Pulldown

In a kneeling position, keep trunk rigid and arms straight. Hold the bar in a pronated grip and pull the bar down to the hips, squeezing shoulder blades together.



Lateral Raise Dumbbell

Keeping the non-working hand pressed into your side. Raise the working arm to the side in a neutral grip, pushing the weight away from the body up to shoulder height.



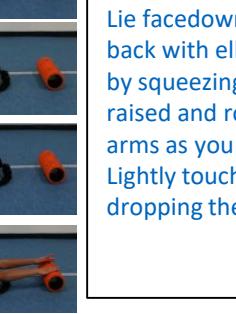
Resistance Band Internal Rotations

With the upper arm at shoulder height and the elbow at 90° hold the resistance band behind you arm and back to allow you to use your upper arm as a fulcrum



Double Arm External Rotation

Anchor a resistance band in front of the body. Have upper arms laterally raised at shoulder height, with elbows flexed at 90° and forearms parallel to the floor. Keep elbows still external rotate shoulders, raising forearm vertically



Blackburn's

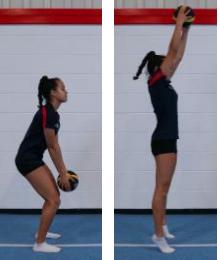
Lie facedown. Have fingers tips in the small of your back with elbows touching the floor. Elevate elbows by squeezing shoulders together. Keep elbows raised and rotate hands forwards straightening the arms as you reach out to an object straight ahead. Lightly touch the object and return back without dropping the elbows

Shoulder

Level

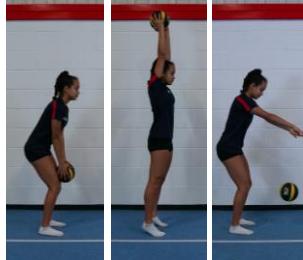
3

Strengthening the shoulder, including the rotator cuff, improves efficient and stability of the shoulder joint reducing injury risk whilst assisting with technical positions.



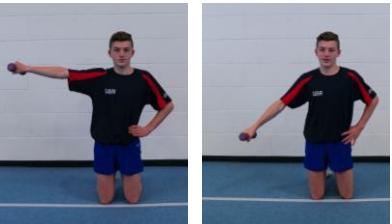
Overhead Toss Backs

In a standing position. Keeping arms straight and trunk rigid, hold a light medicine ball and throw the ball over your head as hard as possible



Overhead Slams

In an explosive motion, with straight arms raise the ball above and behind your head. As soon as you reach end range of motion, slam the ball back over your head and down into the ground. Flex at the hips to maintain rigidity of the trunk



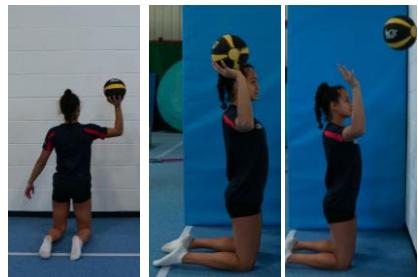
Lateral Drop & Catch

Hold a weight out to the side at shoulder height in a pronated hand position. Release the weight and catch it as quickly as possible without flexing the trunk.



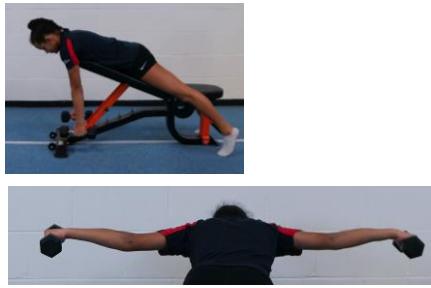
Bench External Rotations

Lie face down on a bench. Pull the arms upwards, so there is straight line between each elbow. With elbow at 90° rotate the hands upwards so the forearm is parallel to the floor



Single Arm Catch & Throw

With the upper arm at shoulder height and the elbow at 90° have a partner throw you a small medicine ball. Catch the ball under control and throw the ball back. Try to keep the elbow fixed



Reverse Fly

Lie face down on a bench. Keep arms straight and raise hands out to the side. Squeezing shoulder blades.

Hip

Level

1

Maintaining equal strength levels around the hip which assists with effective transfer of force from the ground up as well as protecting the lower back to high external reaction forces



FLEXION

Hand Resisted Hip Flexion Holds

Lie on your back, with one leg straight and one hip flexed at 90°. Push the knee into your hands, with the hands resisting the flexion



ADDITION

Deadbug Knee Squeeze

Lie on your back with both hips and knees at 90°. Place a ball/ object between your knees and squeeze as hard as you can. Keep back pressed into the floor.



ABDUCTION 1

Quadruped Dog Pee

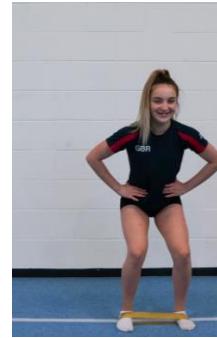
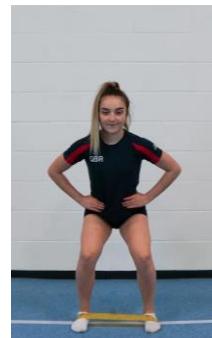
On your hands and knees, elevate one leg to the side, keeping knee at 90° whilst aiming for the thigh to be parallel to the floor without the hips twisting.



ABDUCTION 2

Mini Band Crab Walk

Place a mini band around the toes. Externally rotate hips, keep knees and toes aligned and walk sideways with small controlled steps. Keep shoulders balanced, as if you have cups of water on them and you don't want to spill a drop and maintain tension in the band throughout.



Hip

Level

2

Maintaining equal strength levels around the hip which assists with effective transfer of force from the ground up as well as protecting the lower back to high external reaction forces



FLEXION

Resistance Band Hip Flexion Holds

Lie on your back, with one leg straight and one hip flexed at 90° . Have the band around the flexed knee and hold. Keep lower back pressed into the floor



ADDITION

Bent Leg Adductor Bridge

In a side plank position, rest the knee of the top leg on the bench. Raise hips and lower leg off the floor. Aim for a straight line between upper knee, hip and shoulder.



ABDUCTION 1

Clam

Lie on your side with hips flexed at 135° and knees flexed at 90° . Create a space between the floor and your waist so that you could slide your hand underneath. Secure the upper body by placing the elbow and the upper arm on the floor in front of the body. Keep feet together and raise the upper knee, opening the hips.



ABDUCTION 2

Stability Ball Wall Leg Raises

Lie on your side with your back to a wall. Elevate lower abs off the floor, whilst bracing the upper body with the upper arm and hand on the floor. Position a stability ball between the heel of the upper leg and the wall. Raise the leg, rolling the ball up the wall. Push your heel into the ball to maintain pressure



Hip

Level

3

Maintaining equal strength levels around the hip which assists with effective transfer of force from the ground up as well as protecting the lower back to high external reaction forces



FLEXION

Standing A-March Hold & Knee Extension

Elevate one foot off a box into an A-March position without any compensation. Hold the thigh parallel to the floor and extend the knee without the lower back arching or the stance knee flexing



ADDITION

Straight Leg Adductor Bridge

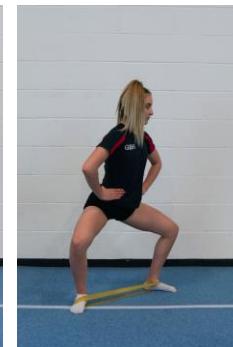
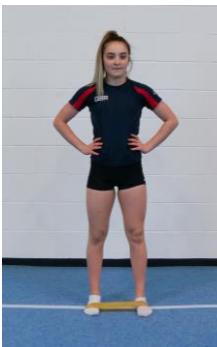
In a side plank position, rest the foot of the top leg on a bench. Raise the hips and lower leg off the floor, bringing the lower leg knee up towards the chest. Aim for a straight line between the upper foot, hips and shoulder.



ABDUCTION 1

Banded Clam

Place a mini band around your knees. Lie on your side with hips flexed at 135° and knees flexed at 90°. Create a space between the floor and your waist so that you could slide your hand underneath. Secure the upper body by placing the elbow and the upper arm on the floor in front of the body. Keep feet together and raise the upper knee, opening the hips.



ABDUCTION 2

Standing Banded internal/ External steps

Place a mini band around your toes. Slightly flex the knees. Keep one foot still and perform an external rotation step, keeping toes and knee aligned. Return with control.

Trunk

Level

1

Enables the effective transfer of force between the lower and upper limbs. Assists with stability and technical execution. Helps protect the spine from high external forces.



PRONE BRACE

Plank

Forearms parallel, pelvis tucked up (prawn), straight line from heel, hips and shoulders



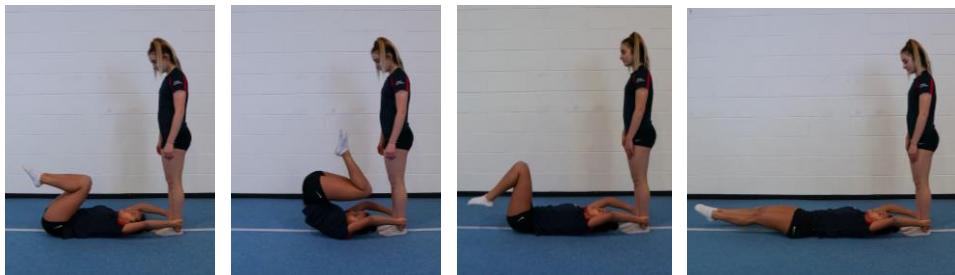
SUPINE BRACE

Hollow Hold Heel Tap
Press lower back into the floor. Extend hips to tap the floor without releasing lower back

SEGMENTAL ANTERIOR

Dragon Fly's

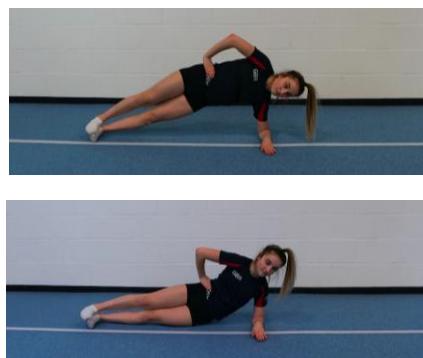
Anchor hands overhead. Pull knees in towards the head, curling the spine up and off the floor. Gradually unflex the spine as you extend one vertebrae at a time under control



LATERAL BRACE

Kneeling Side Plank

Straight line between knee, hips and shoulder. Tuck hips up at the front and push pelvis towards the ceiling



SEGMENTAL ROTATION/LATERAL

Side Plank Dips

Perform a side plank on feet or knees. Maintain a straight line between knee, hip & shoulder. Lower hips towards to and from the floor

Trunk

Level

1

Enables the effective transfer of force between the lower and upper limbs. Assists with stability and technical execution. Helps protect the spine from high external forces.

DISSOCIATION SUPINE

Deadbug Contralateral

Press lower back into the floor. Extend the opposite arm and leg without the lower back releasing, holding the remaining limbs still. Alternate sides



DISSOCIATION PRONE

Birddog

Quadruped position, round lower back (prawn). Extend opposing arm and leg, maintain spinal alignment and stability. Alternate



DISSOCIATION ROTATION

Kneeling Parlov Press

Kneel sideways to the anchored band which should be at chest height. Hold band into the chest with both hands and extend the arms forwards. Maintain trunk and pelvis alignment



DISSOCIATION PILLAR

Kneeling banded Overhead Trunk Flexion

In a kneeling position anchor a band behind the body with hands holding the band overhead. Keep arms straight, flex the trunk, returning to upright under control.



Trunk

Level

2

Enables the effective transfer of force between the lower and upper limbs. Assists with stability and technical execution. Helps protect the spine from high external forces.



PRONE BRACE Plank Shoulder Tap

In a press up position, tap the opposite shoulder with your hand without the hips moving

SEGMENTAL ANTERIOR

Half Candlestick

Anchor hands overhead. Pull legs up so one is straight pointing to the ceiling and the other is fixed with the knee pulled into the chest. Gradually unflex the spine as you extend one vertebrae at a time under control



SUPINE BRACE Alekna

Press lower back into the floor. Reach arms above your head and extend your legs without releasing lower back



LATERAL BRACE Side Plank

Straight line between feet, hips and shoulder. Tuck hips up at the front and push pelvis towards the ceiling.



SEGMENTAL ROTATION/LATERAL Woodchop's

Kneel sideways to the band anchor. Start with hand above the inside shoulder. Extending the arms, pull down and across the body towards the outside hip bone. Keep trunk rigid and hips extended.

Trunk

Level

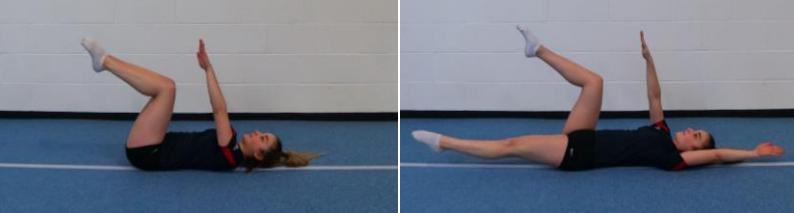
2

Enables the effective transfer of force between the lower and upper limbs. Assists with stability and technical execution. Helps protect the spine from high external forces.

DISSOCIATION SUPINE

Deadbugs Ipsilateral

Press lower back into the floor. Extend the same sided arm and leg without lower back releasing, holding the remaining limbs still.
Alternate sides



DISSOCIATION ROTATION

Side Plank Rotations

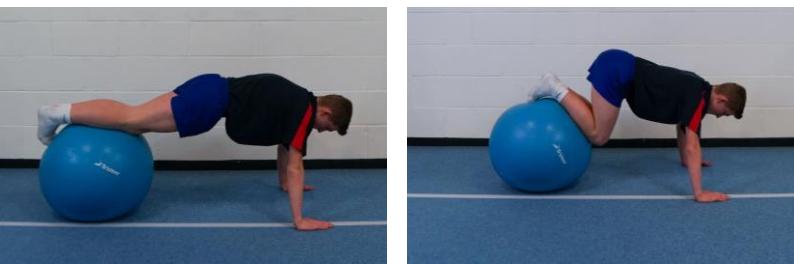
Straight line between feet, hips and shoulder. Tuck hips up at the front and push pelvis towards the ceiling. With the upper arm, reach underneath the body rotating the shoulder towards the floor. Keep pelvis still.



DISSOCIATION PRONE

Stability Ball Tuck In

Start with feet on a stability ball. With hands on the floor and lower back rounded (prawn). Without the spine moving out of alignment, tuck knees into chest. Keep back rounded when you return back to the starting position



DISSOCIATION PILLAR

Overhead Medicine Ball Rebound

Face a wall, hold a ball above your head. Keep trunk rigid and arms extend. Create the movement through the shoulder to rebound the ball off the wall

Trunk

Level

3

Enables the effective transfer of force between the lower and upper limbs. Assists with stability and technical execution. Helps protect the spine from high external forces.

PRONE BRACE

Inchworm

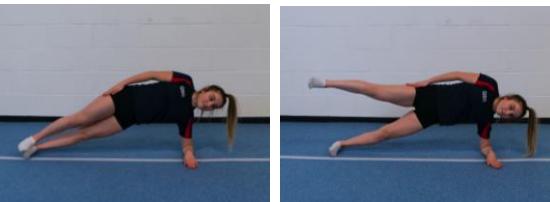
In a press up position, round lower back. Walk feet into the hands, keeping legs straight and hands fixed. Then walk hands out as far as possible without arching back. Repeat by walking feet in again



SUPINE BRACE

Dish hold

Keep lower back pressed into the floor, reach arms above your head and extend legs so that both hands and feet are around 30cm off the floor without releasing the lower back. Hold the position



LATERAL BRACE

Side Plank Leg Raise

Hold a side plank position, raise the upper leg as high as possible, maintain a straight line between the lower foot, hip and shoulder



SEGMENTAL ANTERIOR

Candlestick

Lie on your back with hands anchored overhead. Start with both legs straight pointing towards the ceiling, extending the chest and hips into a shoulder stand. Aim to maintain whole body rigidity as you lower the body towards the floor under control

SEGMENTAL ROTATION/LATERAL

Stability Ball Crunch

Wedge feet on the ground. With body angle 45° to the ground. On your side have the hips in contact with the ball so that the torso isn't touching the ball. Split legs and straighten legs to ensure stability. Hands across shoulders, lower shoulders to and from the floor to create lateral trunk flexion and extension

Trunk

Level

3

Enables the effective transfer of force between the lower and upper limbs. Assists with stability and technical execution. Helps protect the spine from high external forces.

DISSOCIATION PRONE

Stability Ball Pike

Start with feet on a stability ball. With hands on the floor and lower back rounded (prawn). Without the spine moving out of alignment, bring feet in towards the body, flexing at the hip and keeping legs straight. Keep back rounded when you return back to the starting position



DISSOCIATION PILLAR

Hanging Leg Raise

In a hanging position. Tuck knees into chest. Progress this by extending the legs from a tuck position, or raising legs straight into a pike. Aiming to have toes touch the bar eventually

DISSOCIATION ROTATION

Kneeling Medicine Ball Wall Throws

Kneel sideways to the floor. Throw medicine ball into the wall as hard as possible. Control the rebound to complete the rep. Keep pelvis extended and stable.



DISSOCIATION SUPINE

Hand Resisted Deadbug

Press lower back into the floor. Push opposing hand and knee together in an isometric contraction. Extend the opposing leg and arm without lower back releasing. Perform one side then repeat on the other



Being able to brake effectively under high levels of force reduces risk of injury to ankles, knees, hips and back. Being able to use elastic energy from rapid braking can increase propulsive force production.

Each level can be progressed by increasing the box height which will increase the braking force or the intent of the jump.

All jumps and landings should follow the technical model and only be progressed if correct technique is demonstrated.

Example progressions: 30cm, 45cm, 60cm, 75cm, 90cm. Reps should be limited to between 3-5reps per exercise, with appropriate recovery between reps.

Bilateral

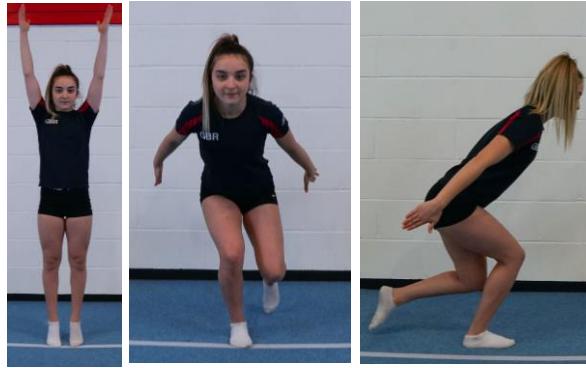


Squat Drop
From tip toes, drop into a jump squat position. Maintain knee and toe alignment and parallel trunk and shin angles. Stop as quickly as possible.



Drop Landing
Step off a box, pre flex the ankle by pulling the foot up and stick the landing with both feet flat to the floor. Maintain knee and toe alignment and parallel trunk and shin angles. The greater the height of the box, the greater the landing forces. This should be higher than the height an athlete can jump to overload landing mechanics

Unilateral



Squat Drop
From a tip toe stance drop onto one leg, sticking the landing keeping the foot flat to the floor. Maintain knee and toe alignment and parallel trunk and shin angles into a partial single leg squat.



Drop Landing
Step off a box, pre flex the ankle by pulling the foot up and stick the landing with one leg, keep foot flat to the floor. Maintain knee and toe alignment and parallel trunk and shin angles

Landing

Level

1

Landing

Level

2

Being able to brake effectively under high levels of force reduces risk of injury to ankles, knees, hips and back. Being able to use elastic energy from rapid braking can increase propulsive force production.

Each level can be progressed by increasing the box height which will increase the braking force or the intent of the jump.

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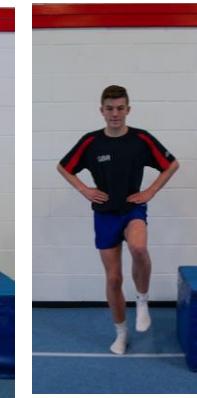
Bilateral



Quarter Turn Drop Landing

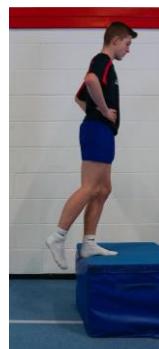
Step off a box, rotate 90° left/right and stick the landing with both feet. Maintain knee and toe alignment and parallel trunk and shin angles

Unilateral



Lateral Landing

Step off a box with one leg to the side, sticking the landing. Ensure you do both sides. Maintain knee and toe alignment and parallel trunk and shin angles



Backward Landing

Step backwards off a box with one leg and stick the landing. Maintain knee and toe alignment and parallel trunk and shin angles

Landing

Level

3

Being able to brake effectively under high levels of force reduces risk of injury to ankles, knees, hips and back. Being able to use elastic energy from rapid braking can increase propulsive force production.

Each level can be progressed by increasing the box height which will increase the braking force or the intent of the jump.

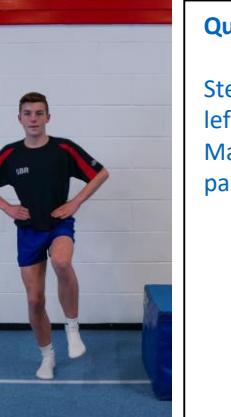
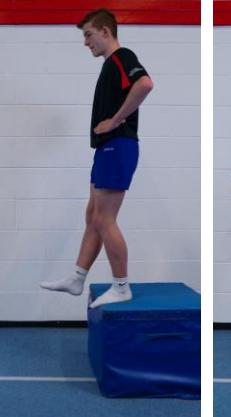
All jumps and landings should follow the technical model and only be progressed if correct technique is demonstrated.

Example progressions: 30cm, 45cm, 60cm, 75cm, 90cm. Reps should be limited to between 3-5reps per exercise, with appropriate recovery between reps.

Bilateral



Unilateral



Quarter Turn Drop Landing

Step off a box with one leg, rotate 90° left/right and stick the landing on one leg. Maintain knee and toe alignment and parallel trunk and shin angles

Jumping

Level

1

Bilateral



Box Jump

Explosive jump off two feet onto a box, triple extending ankle, knee and hip. Stick the landing. Higher the box the greater the intent and force production.



Squat Jump

Start in a partial squat position (Ankles, knees and hips flexed). Hold for 3 seconds before explosively extending hip, knee and ankle to jump up vertically. Land in an athletic position.



Countermovement Jump (CMJ)

Start in a standing position. Rapidly drop into a partial squat. Without any pause immediately extend hip, knee and ankles to jump up vertically. Land in an athletic position.

Unilateral



Box Jump

Explosive jump off one leg onto a box, sticking the landing in a single leg squat.



Squat Jump

Start in a partial single leg squat. Explosively extend hip, knee and ankle to jump vertically. Land in a partial single leg squat.

Hop

Start in a standing position on one leg. Rapidly drop into a partial squat. Without any pause immediately extend hip, knee and ankles to jump up vertically. Landing back on one leg in a partial single leg squat.

Ability to produce force rapidly increases impulse which results in greater power production and positively influences time of flight.

Each level can be progressed by increasing the box height which will increase the braking force or the intent of the jump.

All jumps and landings should follow the technical model and only be progressed if correct technique is demonstrated.

Example progressions: 30cm, 45cm, 60cm, 75cm, 90cm. Reps should be limited to between 3-5reps per exercise, with appropriate recovery between reps.

Jumping

Level

2

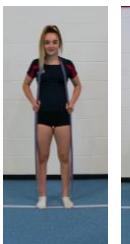
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Each level can be progressed by increasing the box height which will increase the braking force or the intent of the jump.

All jumps and landings should follow the technical model and only be progressed if correct technique is demonstrated.

Example progressions: 30cm, 45cm, 60cm, 75cm, 90cm. Reps should be limited to between 3-5reps per exercise, with appropriate recovery between reps.

Bilateral



Depth Jump

Step off a box. Aim to get off the ground as quickly as possible (floor is lava) jumping as high as possible. Ensure you strike the floor with a stiff ankle through the ball of the foot not toes. The box height should be higher than an athlete can jump to overload landing mechanics.

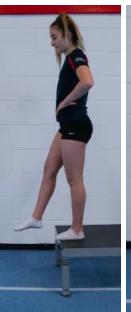
Band Resisted CMJ

Stand with your feet on the band and the band around your shoulders behind your neck. Perform a CMJ vertically into the band.

Broad Jump

Perform a CMJ. As you descend flex at the hip, shifting body weight towards the ball of your foot, in doing so, positioning your direction of movement to a 45° angle off the floor and in turn jumping forwards as you extend the hips, knees and ankles. To land bring the knees forwards, striking the ground with your heel and flexing the legs to hold an athletic position.

Unilateral



Drop Jump

Step off a box with one leg. Aim to get off the ground as quickly as possible (floor is lava) jumping as high as possible. Ensure you strike the ground with a stiff ankle through the ball of the foot not toes. The box height should be higher than an athlete can jump off one leg to overload landing mechanics

Linear Hop

Perform a hop forwards, sticking the landing in a partial single leg squat



Lateral Leaps

Perform a hop to the left or right on each leg, sticking the landing in a partial single leg squat

Jumping

Level

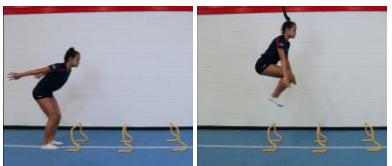
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Bilateral



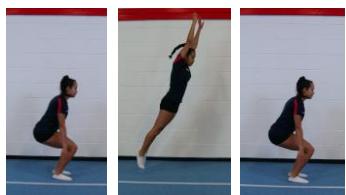
Box to Box Jumps

Step off a box. Aim to get off the ground as quickly as possible (floor is lava) jumping as high as possible onto another box. Ensure you land with a stiff foot through the ball of the foot not toes. The higher the landing box the greater the intent and force production.



Continuous Broad Jumps

Perform back to back broad jumps, aiming to get off the ground as quickly as possible.

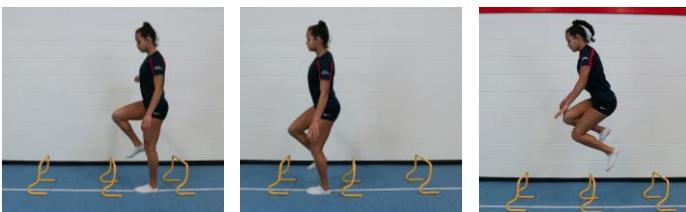


Unilateral



Box to Box Jumps

Same principle as the bilateral box to box jump. Step off a box with one leg and aim to get off the ground as quickly as possible. Box heights will need to be lower than bilateral.



Continuous Hurdle Hops Linear

Perform a single leg tuck jump to jump forwards over the hurdles, striking the ground forcefully, crisply and quickly between the hurdles with one leg. Floor is lava.



Continuous Hurdle Hops Lateral

Perform a sideways tuck jump off one leg, either to the left or right to jump over the hurdles, striking the ground forcefully, crisply and quickly between the hurdles. Floor is lava.

Ability to produce force rapidly increases impulse which results in greater power production and positively influences time of flight.

Each level can be progressed by increasing the box height which will increase the braking force or the intent of the jump.

All jumps and landings should follow the technical model and only be progressed if correct technique is demonstrated.

Example progressions: 30cm, 45cm, 60cm, 75cm, 90cm. Reps should be limited to between 3-5reps per exercise, with appropriate recovery between reps.

Name		Notes
Programme Goal		
Upcoming Competitions		



Personal Rehabilitation				
Exercise	Load	Reps	Sets	Rest