

SHOT PUT COACHING GUIDE



Scott Skipper
Super Thrower Track Club
Clackamas Community College



02 | INTRODUCTION

The shot put is a power event requiring:

- ▶ Technical precision and consistent execution
- ▶ Explosive strength and speed development
- ▶ Proper progression from fundamentals to advanced technique
- ▶ Understanding of safety protocols and biomechanics

Goal: Develop young throwers through systematic skill acquisition, moving from simple to complex movements while emphasizing safety and proper form.

03 | SAFETY PROTOCOLS

CRITICAL

Never throw without checking area

CORRECTION

Always verify landing area is clear

PROCEDURE

Unclear throwing/retrieval rules

CORRECTION

Establish clear procedures from day 1

EQUIPMENT

Wrong implement weight

CORRECTION

Use experience appropriate weights

Coaches: Create a culture of safety from day one. Athletes should never feel rushed or pressured to throw when conditions are unsafe.

04 | HOLDING THE SHOT

THE GRIP

Place shot on base of fingers, NOT the palm.

ALIGNMENT

Find midline of shot and place middle finger there.

SUPPORT

Thumb and pinky provide balance and stability.

SPREAD

Fingers should be slightly spread for control.



05 | NECK PLACEMENT

POSITION

Elbow position relates to where shot sits on neck.

PRESSURE

Push shot firmly into the neck.

ORIENTATION

Thumb points down, palm faces throwing direction.

LOCATION

Shot rests just behind jaw, below ear.



06 | RELEASE MECHANICS

THE PUNCH

Punch with thumb down - drives elbow high.

FLICK

Flick fingers through the shot at release.

ELBOW OUT

Keep elbow OUT - lowering causes injury.

BLOCK

'Block' the left side to transfer energy.

-Start EVERY Practice with Flicks!



07 | GLIDE VS ROTATIONAL

START WITH GLIDE

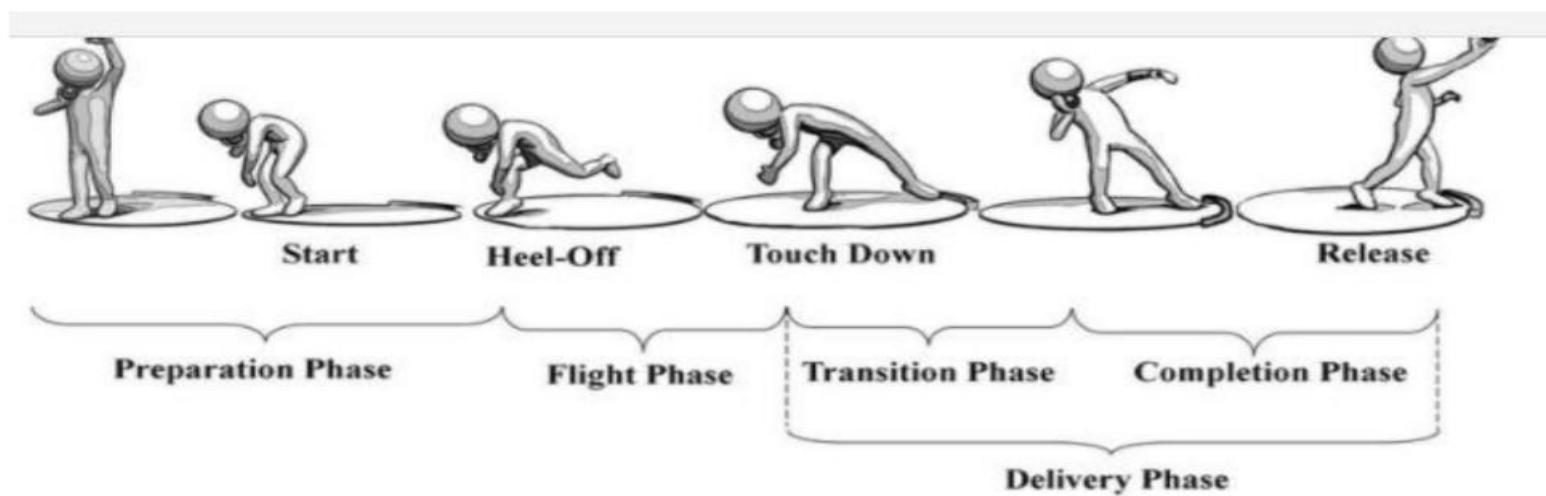
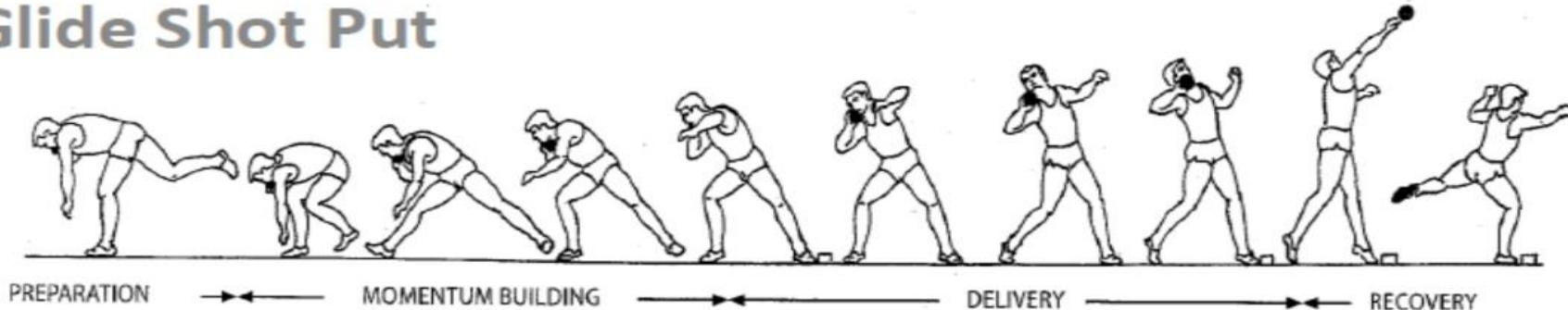
- ▶ Easier to learn fundamentals
- ▶ Better for beginners
- ▶ Builds proper power position
- ▶ Skills transfer to rotation
- ▶ If it ain't broke... don't fix

AND

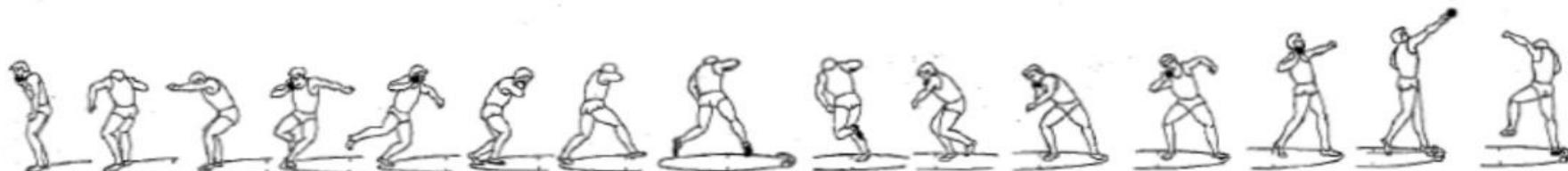
PROGRESS TO ROTATION

- ▶ When glide is 'capped out'
- ▶ For advanced athletes
- ▶ Higher technical demand
- ▶ Greater distance potential

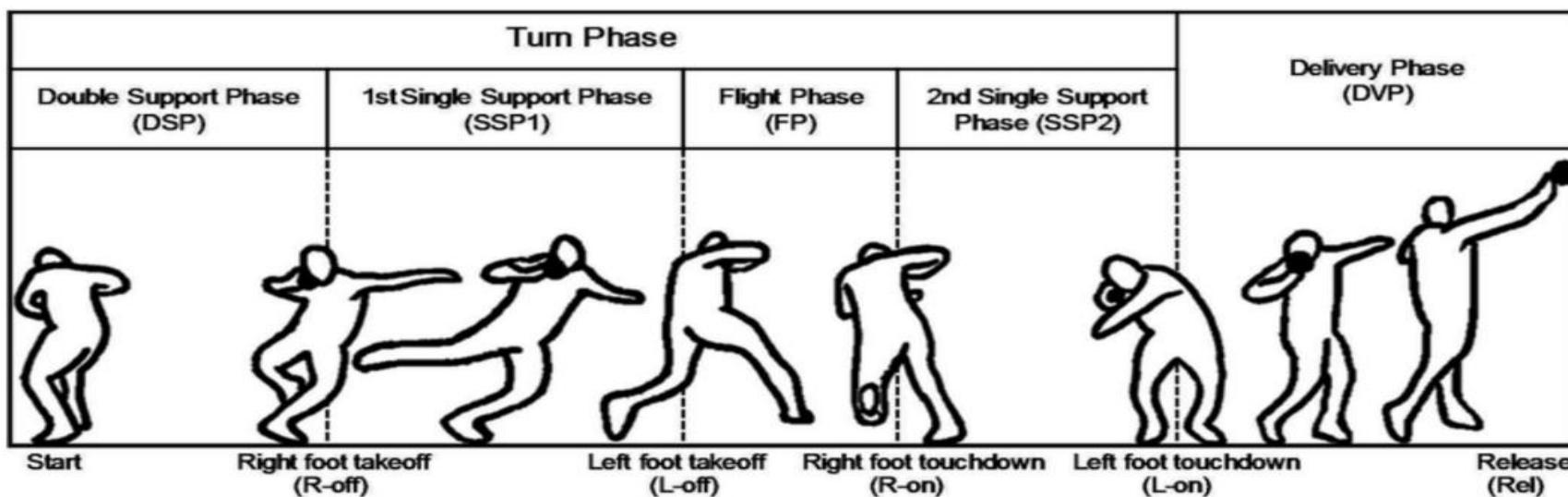
Glide Shot Put



Rotational Shot Put



PREPARATION → ← MOMENTUM BUILDING → ← DELIVERY → ← RECOVERY



08 | GLIDE TECHNIQUE - OVERVIEW

PREPARATION → MOMENTUM BUILDING → DELIVERY → RECOVERY

Key Phases:

- ▶ Preparation: Starting position (crouch or T-start)
- ▶ Momentum Building: Glide across the circle
- ▶ Delivery: Power position through release
- ▶ Recovery: Controlled landing, no foul

09 | GLIDE - STARTING POSITION

CROUCH START

- ▶ More stable and consistent
- ▶ Easier for beginners
- ▶ Requires leg strength
- ▶ Recommended for HS athletes

VS

T-START

- ▶ Greater velocity potential
- ▶ Higher technical demand
- ▶ Requires excellent timing
- ▶ For advanced throwers

10 | GLIDE - DRIVE LEG

SETUP

Lower trunk until abdomen contacts upper thigh.

EXTENSION

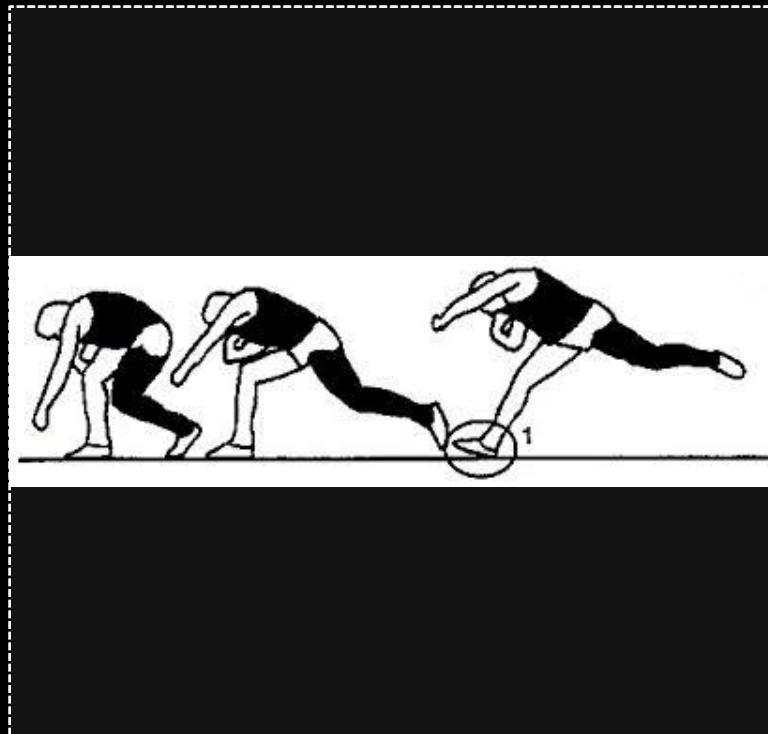
Explosive full extension drives system forward.

TRAJECTORY

Projects center of mass from low (back) to middle height (center).

CONTACT

Maintain abdomen-thigh contact throughout extension.



11 | GLIDE - FREE LEG

BALANCE

Balances thrower during initial single support.

EXTENSION

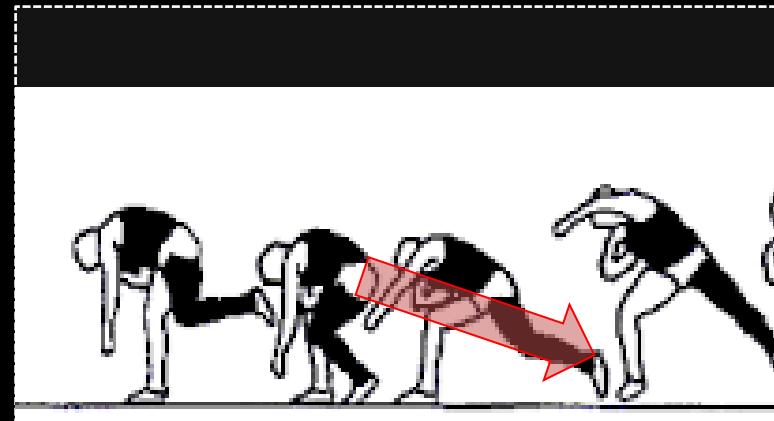
Full, rapid extension toward toe board.

TARGET

Between toe board (0") and 18" height.

DIRECTION

Direction of extension determines throwing line.



Preparation

Glide

12 | GLIDE - POWER POSITION

LOCATION

Center of circle, both feet grounded.

BASE

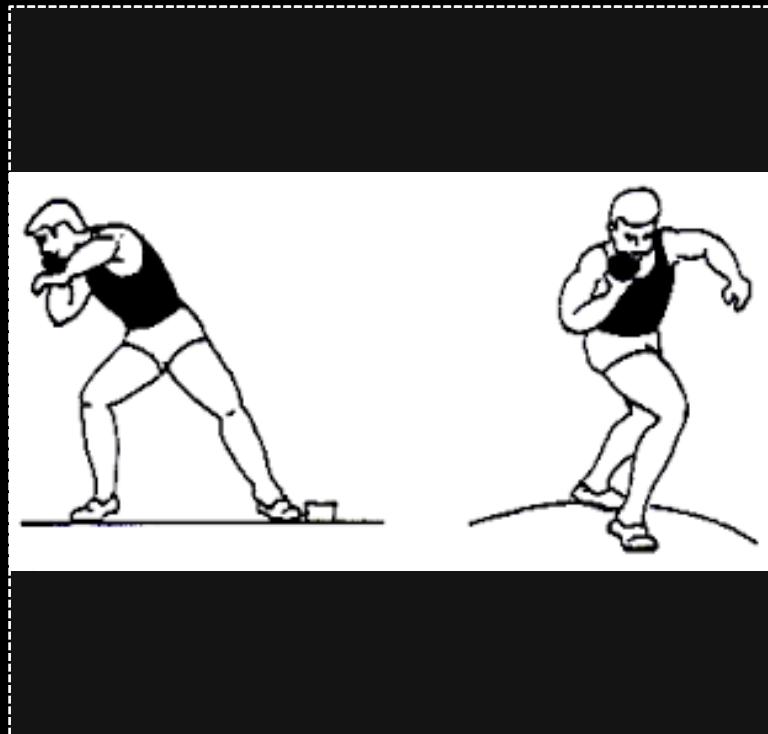
Wide base - stable platform for delivery.

SEPARATION

Hips and shoulders maintain separation/torsion.

WEIGHT

Weight primarily on drive leg (right leg).



13 | ROTATIONAL TECHNIQUE - OVERVIEW

PREPARATION → MOMENTUM BUILDING → DELIVERY → RECOVERY

Key Phases:

- ▶ Double Support Start: Similar to discus
- ▶ First Single Support: Drive and swing leg action
- ▶ Flight Phase: Non-support rotation
- ▶ Second Single Support: Landing and pivot
- ▶ Delivery: Power position through release

14 | ROTATION - STARTING POSITION

SETUP

Back of circle, facing away from throw direction.

WEIGHT

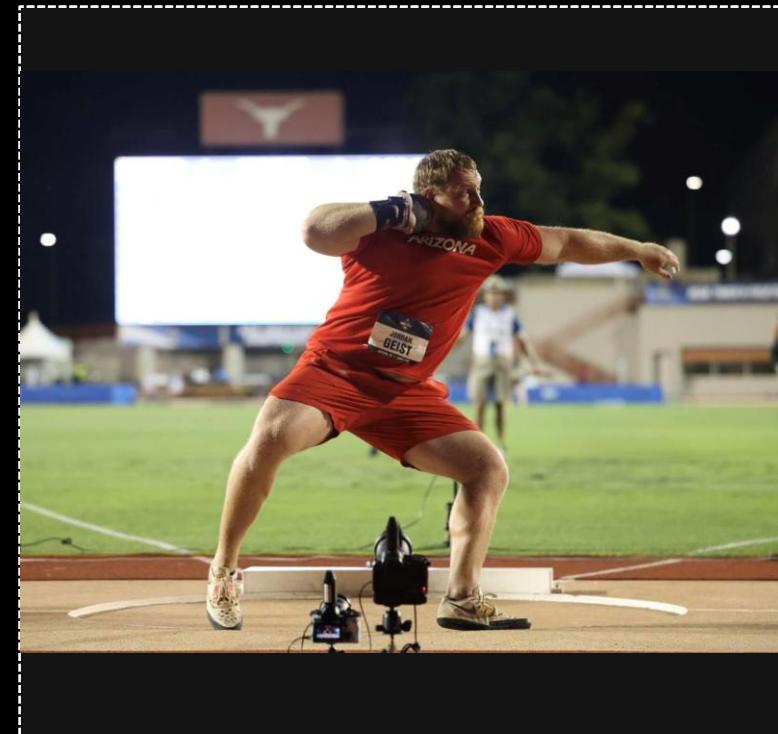
Weight shifts to create dynamic balance over single support.

AXES

Hip and shoulder axes remain horizontal.

SHOT

Shot placed behind jaw (counteracts centrifugal force).



15 | ROTATION - FIRST SINGLE SUPPORT

DRIVE LEG

Abbreviated but explosive drive phase.

PUSH-OFF

Shorter push-off than discus technique.

HEEL TUCK

Active 'heel tuck' and adduction as push completes.

SWING LEG

Aggressive and dominant swing leg action.



16 | ROTATION - NON-SUPPORT PHASE

SWING LEG

Swing leg inverts at conclusion of kick-in.

FREE ARM

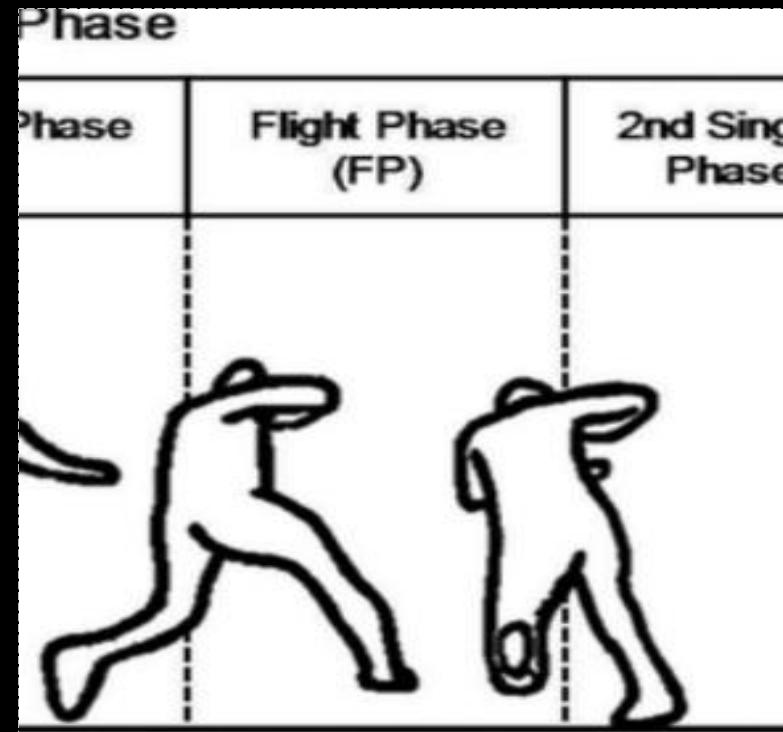
Hold Arm and chest back to maintain separation.

POSITION

Actively maintain position achieved in single support.

DRIVE LEG

Drive leg heel tucks underneath body.



17 | ROTATION – THROUGH TO FINISH

TIMING

Swing leg lands earlier than in discus.

FOOT AXIS

Foot axis generally at 270-315 degrees.

CONTACT

Soft turning re-contact reduces friction.

SETUP

Sets up stretch reflex in swing leg for delivery.



18 | POWER POSITION COMPARISON

GLIDE

- ▶ Less vertical trunk
- ▶ Broader base
- ▶ Arrives from linear motion
- ▶ Consistent positioning

VS

ROTATION

- ▶ More vertical trunk
- ▶ Narrower base
- ▶ Longer drive from back
- ▶ Shorter power position base

19 | DELIVERY SEQUENCE

THE UNWIND

Turn in throw direction while maintaining torsion.

TIMING

When hips near perpendicular, actively unwind.

POSITION

Keep position on implement during unwind.

ACTION

Active turning/jumping from legs, slapping after ball lifted.



20 | ESSENTIAL GLIDE DRILLS

01

STANDING THROW

- ▶ Master power position
- ▶ Delivery focus
- ▶ No reverse

TARGET REPS

4-10

02

STEP BACK

- ▶ Walk Forward from stand
- ▶ Land on right
- ▶ Throw from right

TARGET REPS

2-8

03

A DRILL

- ▶ Reach for toe board
- ▶ Hold stretch
- ▶ pull right foot underneath

TARGET REPS

4-8

04

Right-Right (R-R)

- ▶ Repeat glide on line
- ▶ Timing and push off heel
- ▶ Chest, Eyes back

TARGET REPS

4-10

05

NON REVERSE

- ▶ Complete movement
- ▶ Controlled finish

TARGET REPS

2-8

06

REVERSE FULL

- ▶ Complete movement
- ▶ Controlled finish

TARGET REPS

0-8

21 | ESSENTIAL ROTATIONAL DRILLS

01

STANDING THROW

- ▶ Master power position
- ▶ Delivery focus
- ▶ No reverse

TARGET REPS

4-10

02

HALF TURN/PIVOT

- ▶ Rhythm and balance
- ▶ Chest and Eyes back

TARGET REPS

2-8

03

SOUTH AFRICAN

- ▶ Develop separation
- ▶ Arm path work
- ▶ Build torsion

TARGET REPS

4-8

04

WALL DRILL

- ▶ Balance into the middle
- ▶ Ensure air time

TARGET REPS

4-10

05

SINGLE SUPPORT HOLD

- ▶ Balance over left leg
- ▶ Push off right
- ▶ Beach Ball between legs

TARGET REPS

2-8

06

FULL THROW

- ▶ Complete movement
- ▶ Controlled finish
- ▶ Reverse and Non

TARGET REPS

0-8

22 | COMMON GLIDE ERRORS

WEIGHT ERROR

Sitting back on back leg

CORRECTION

Drive through, weight forward

TIMING ERROR

Opening shoulders too early

CORRECTION

Hips first, then shoulders

POSTURE ERROR

Collapsing in delivery

CORRECTION

Stay tall, vertical extension

DRIVE ERROR

Weak drive leg extension

CORRECTION

Full explosive extension

POSITION ERROR

Dead arm, no separation

CORRECTION

Keep shot back, create torsion

23 | COMMON ROTATIONAL ERRORS

TIMING ERROR

Over-rotating in back

CORRECTION

Control turn on left leg

RECOVERY ERROR

Poor heel tuck

CORRECTION

Active drive leg recovery

BALANCE ERROR

Loss of axis/wobbling

CORRECTION

Maintain vertical alignment

LANDING ERROR

Landing too early

CORRECTION

Stay in air longer, quick feet

SEPARATION ERROR

Shot leads thrower

CORRECTION

Keep shot back, maintain torsion

24 | TYPICAL PRACTICE STRUCTURE

- ▶ Warm-up/Mobility: Individualized to athlete needs
- ▶ Flick Drills: Wrist and finger release work ($6*3=18$ reps)
- ▶ Standing Throws: Power position emphasis (4-10 throws)
- ▶ Half/Step-backs: Build toward full movement (2-8 throws)
- ▶ Full Throws (no reverse): Technical focus (8-12 throws)
- ▶ Full Throws (with reverse): Competition simulation (4-8 throws)

Note: Numbers vary based on season phase and athlete needs.

25 | EARLY VS END SEASON FOCUS

EARLY SEASON

- ▶ Higher volume of drills & low-level throws
- ▶ Technical refinement focus
- ▶ Strength training emphasis
- ▶ More standing/partial throws

VS

LATE SEASON

- ▶ Lower volume, higher intensity
- ▶ More full throws
- ▶ Competition preparation
- ▶ Maintain strength gains
- ▶ Competition weight implements, possible light implements
- ▶ Full throws with quality focus

26 | DEVELOPING YOUNG THROWERS

Coaching Philosophy:

- ▶ Break complex movements into simple segments
- ▶ Master each component before combining
- ▶ Use progression with lighter implements
- ▶ Emphasize controlled execution over distance goals
- ▶ Build confidence through successful repetitions
- ▶ Celebrate technical improvements, not just distance

Patient, systematic development creates technically sound throwers who avoid injury and reach higher performance levels.

27 | COMMON COACHING MISTAKES

BAD CUE

Saying 'go faster'

CORRECTION

Focus on technical execution

TRAINING GAP

Lack of strength training

CORRECTION

Power is essential - lift weights

VOLUME ERROR

Too much throwing (practice and meet)

CORRECTION

Quality over quantity always

GOAL ERROR

Outcome related goals

CORRECTION

Focus on process - it's controllable

PRACTICE ERROR

Fouling in practice / Too many cues

CORRECTION

0 fouls allowed / Keep it simple

28 | SLEEP, HYDRATION, NUTRITION

SLEEP

8-10 hours for high school athletes
- non-negotiable.

HYDRATION

Constant throughout day, not just
at practice.

NUTRITION

Adequate calories and protein for
power athletes.

REALITY

Perfect training + poor habits =
underperformance.

"An athlete who trains perfectly but sleeps 5 hours and eats poorly will underperform an athlete with good habits. These fundamentals are force multipliers for all training."

29 | TRANSFER OF TRAINING PRINCIPLE

'Only do things that make you throw farther'

Ask Yourself:

- ▶ Does this exercise improve power output?
- ▶ Does this drill improve technical execution?
- ▶ Does this activity help specific bio-motor abilities needed?
- ▶ Is there a direct connection to throwing performance?

If you can't clearly explain how an activity makes the athlete throw farther, don't waste time on it.

30 | SKILL ACQUISITION PROCESS

The Learning Continuum:

INTRODUCE → DRILL → INSTILL

- ▶ Introduction: Present the skill, explain the 'why'
- ▶ Stabilization: Occurs through repetition of movements
- ▶ Habituation: Through repetition of stabilized movements

Goal: Move skills from conscious execution → automatic execution through systematic practice.

32 | WHAT DETERMINES DISTANCE

RELEASE HEIGHT

- ▶ Limited by athlete's height
- ▶ Improved by proper posture

RELEASE ANGLE

- ▶ Optimal: 38-42 degrees
- ▶ Affected by technique

AND

RELEASE VELOCITY

MOST IMPORTANT FACTOR

- ▶ Determined by power output
- ▶ Where coaching has biggest impact

33 | RHYTHM AND TEMPO

RHYTHM

The pattern of movement - stays constant.

TEMPO

The speed of movement - can vary.

ANALOGY

Like music: rhythm stays same whether you play fast or slow.

GOAL

Consistent rhythmic patterns reduce breakdown under pressure.

Athletes should establish consistent rhythmic patterns that remain constant regardless of throw intensity. This reduces technical breakdown under competition stress.

34 | BALANCE AND POSTURE

'Posture precedes balance'

Foundation of All Throwing:

- ▶ Proper alignment of body's lever system
- ▶ Center of mass controlled relative to base
- ▶ Static balance: Stationary positions
- ▶ Dynamic balance: During movement
- ▶ Loss of balance inhibits force application and rhythm

35 | EFFECTIVE COACHING CUES

Examples of Good Cues:

- ▶ 'Punch with thumb down' - proper release
- ▶ 'Hips before shoulders' - maintains separation
- ▶ 'See your target' - helps direct energy

Simple, action-oriented cues often work better than technical explanations during practice. Competitions need to require even less coaching/tasks.

36 | USING VIDEO ANALYSIS

BEGINNERS

- ▶ Still frames or diagrams
- ▶ Less overwhelming
- ▶ Simple position checks
- ▶ One cue at a time

VS

ADVANCED

- ▶ Detailed video analysis
- ▶ Specific position focus
- ▶ Rhythm and timing checks
- ▶ Multiple data points

Remember: Video is a tool, not a teaching method. Use it to support your coaching, not replace it.

- ▶ Always pair video with specific, actionable feedback
- ▶ Don't overload athletes with too much information at once
- ▶ Limit video review at practice

37 | STRENGTH TRAINING FOR SHOT PUT

Essential Components:

- ▶ Lower Body Power: Squats, deadlifts, Olympic lifts
- ▶ Core Stability: Rotational strength, anti-rotation work
- ▶ Upper Body: Overhead pressing, rowing movements
- ▶ Plyometrics: Medicine ball throws, box jumps, bounds
- ▶ Explosive Work: Power cleans, snatches, Jerks/Push Press

Shot put is a power event. Without a solid strength base, technical excellence has a ceiling.

38 | COMPETITION DAY STRATEGY

DAY BEFORE

- ▶ Minimal throwing - light technique work only
- ▶ 2 stands, 2 pivots, 4-6 throws, possibly w/ light ball
- ▶ Visualization and mental rehearsal
- ▶ Early bedtime, good meal, hydration

AND

COMPETITION DAY

- ▶ Standard warm-up routine (don't change it!)
- ▶ Limited warm-up throws - save energy
- ▶ Focus on execution, not distance in warm-ups
- ▶ Have a plan for each throw (first throw safe, build from there)

39 | MENTAL GAME

Building Mental Toughness:

- ▶ Visualization: See and feel successful throws
- ▶ Process Focus: Control what you can control (technique)
- ▶ Routine Development: Same pre-throw routine every time
- ▶ Confidence Building: Celebrate small victories in practice
- ▶ Pressure Training: Simulate competition scenarios

Shot put is as much mental as it is physical.

40 | QUICK TROUBLESHOOTING GUIDE

TRAJECTORY

Shot going too flat

CORRECTION

Emphasize vertical lift, "Rebound"

DISTANCE

No distance despite good technique

CORRECTION

Likely strength deficit- lift

CONSISTENCY

Inconsistent throws

CORRECTION

Rhythm issues - slow it down

PAIN

Elbow/Shoulder pain

CORRECTION

Check elbow/Thumb position on release

FOUL

Fouling in meets

CORRECTION

0 fouls allowed at practice

41 | CONTINUED DEVELOPMENT

Keep Learning:

- ▶ Attend coaching clinics and certifications
- ▶ Study video of elite throwers
- ▶ Network with experienced throws coaches
- ▶ Document what works with YOUR athletes
- ▶ Don't be afraid to ask questions

Great coaches are lifelong learners.

COACHING PHILOSOPHY

'Introduce, Drill, Instill'

Focus on the process. Trust the progression.
The results will follow.

Visit us at **superthrower.com** for more
coaching/athlete resources and
eliteathleteinc.com for equipment