PART VII

# BEGINNER-TO-ADVANCED PROGRESSION LADDER

From wall support to freestanding control.



LOAD | ALIGN | CONTROL | PROGRESS

Chapter 101

# How to use the progression ladder

**BEGINNER** **COACH**

The ladder is not a race. It is a decision sequence. Each rung should solve a mechanical problem and prepare the next rung with less risk than guessing.

An athlete may move quickly through some rungs and stay longer at others. Wrist capacity, shoulder mobility, fear, body size, training age and prior injury all change the route.

The MMSx progression rule is: never move up because the calendar says so; move up because the movement has become repeatable, quiet and symptom-tolerant.

**Table VII.1. Rung pass criteria**

| Criterion | Required standard | Reason |
|---|---|---|
| Pain response | No sharp or rising symptoms | Protects tissue capacity |
| Exit | Calm and repeatable | Protects learning and safety |
| Line | Stable enough to correct | Prepares transfer |
| Dose recovery | No next-day escalation | Guides frequency |

**KEY IDEA**

Progression is earned by repeatable control, not by ambition.

**EVIDENCE NOTE**

Load-management consensus and motor-learning evidence support staged exposure and response monitoring.

**CREDIBILITY & CAUTION**

A drill that looks easy on video may be excessive for a specific athlete.

*Figure VII-1. Progression ladder from first load to freestanding control.*

# HS-FIG-059
## Absolute Beginner Inversion Ladder

1 QUADRUPED



2 PIKE



3 WALL LOAD



Chapter 102

# Absolute beginner wrist and base preparation

BEGINNER | CLINICIAN

The first handstand session should often contain no full handstand. It should teach the hands how to load, the wrists how to tolerate extension and the athlete how to feel pressure without fear.

Quadruped rocks, palm lifts, finger pressure pulses and incline plank leans give the athlete the language of the base before inversion.

This stage is especially important for adult beginners, desk-bound clients and athletes with low prior weight-bearing exposure through the hands.

**Table VII.2. Base-prep session**

| Drill | Dose | Purpose |
|---|---|---|
| Wrist circles | 1-2 min | Warm range |
| Quadruped rocks | 2 x 10 | Loaded extension |
| Finger pressure pulses | 3 x 8 | Pressure awareness |
| Incline plank lean | 3 x 10 s | Entry-level support |

**KEY IDEA**

The handstand starts with hand confidence before upside-down confidence.

**EVIDENCE NOTE**

Handstand balance research makes hand pressure central, while gymnastics injury literature supports respect for wrist exposure.

**CREDIBILITY & CAUTION**

Do not dismiss wrist discomfort as weakness. It is a load-response signal.

Chapter 103

# Box and pike loading progression

**BEGINNER** **COACH**

The box handstand reduces the balance threat while introducing shoulder loading. It is the bridge between floor preparation and wall inversion.

The athlete should learn to push tall, keep the ribs controlled and shift small amounts of weight into the hands without collapsing.

A high box reduces load; a lower box and more vertical torso increase specificity. The coach chooses the angle that gives challenge without fear or pain.

**Table VII.3. Pike progression**

| Level | Body position | Progress when |
|---|---|---|
| 1 | Hands on bench, feet floor | No wrist pain |
| 2 | Feet on box, hips high | Shoulders push tall |
| 3 | Walk hands closer | Line improves without panic |
| 4 | One-leg pike shifts | Weight transfer controlled |

**KEY IDEA**

Pike loading teaches the body to support inversion before full inversion is demanded.

**EVIDENCE NOTE**

Progressive resistance-training principles support graded load exposure and task-specific progression.

**CREDIBILITY & CAUTION**

Avoid letting the athlete dump into passive shoulder elevation or hold the breath in pike holds.

Chapter 104

# Wall walk and chest-to-wall line

**BEGINNER** **COACH**

The wall walk builds confidence, shoulder endurance and spatial awareness. Chest-to-wall work usually teaches a cleaner line than back-to-wall work because it discourages excessive arching.

The athlete should walk in only as far as they can still breathe, push tall and exit under control. Closer to the wall is not better if the exit becomes unsafe.

Wall work should be paired with line education: ribs controlled, pelvis organised, legs active and fingers sensing pressure.

**Table VII.4. Wall-walk decision rules**

| Observation | Decision |
|---|---|
| Clean walk-up, calm breathing | Progress hold time slowly |
| Can hold but cannot walk down | Train exit, not longer holds |
| Ribs flare near wall | Stop farther from wall and rebuild line |
| Wrist pain appears | Reduce angle/volume and reassess |

**KEY IDEA**

The wall should teach line and tolerance without hiding panic.

**EVIDENCE NOTE**

Coaching practice and balance-control principles support wall-supported exposure as a foundation, provided transfer drills are later included.

**CREDIBILITY & CAUTION**

Never trap an anxious learner too close to the wall without a rehearsed exit.

Chapter 105

# Heel pulls and toe pulls

**INTERMEDIATE** **COACH**

Heel pulls and toe pulls are the bridge from wall support to freestanding balance. They create small, controlled balance errors and teach the athlete to recover without leaving the wall completely.

The drill should be quiet. If the athlete crashes back to the wall or repeatedly falls out, the correction window is too large.

The coaching target is early finger pressure, shoulder stability and calm re-contact with the wall if needed.

**Table VII.5. Pull drill progressions**

| Drill | Direction trained | Common error |
|---|---|---|
| Heel pull | Away from wall to centre | Over-pull and fall |
| Toe pull | From wall pressure to balance | Passive fingers |
| Split heel pull | Entry/line control | Hip twist |
| Timed free float | Short freestanding exposure | Breath hold |

**KEY IDEA**

Controlled wall separation teaches the correction that wall holds hide.

**EVIDENCE NOTE**

CoP/CoM balance research supports training pressure correction, not only static support.

**CREDIBILITY & CAUTION**

Do not rush heel pulls in an athlete who lacks safe exit or wrist tolerance.

*Figure VII-2. Twelve-week progression emphasis.*


HS-FIG-068 | Weekly Progression Example
1 WEEK 1
2 WEEK 2
3 WEEK 3
4 WEEK 4
chest to wall
controlled kick-up
Progress weekly only when the previous step is calm, clean and repeatable.

Chapter 106

# Freestanding kick-up practice

INTERMEDIATE ATHLETE

Freestanding kick-up practice should be measured by clean attempts, not total attempts. The athlete is learning to dose entry momentum and arrive near the balance window.

A professional session uses a small number of high-quality attempts, feedback, rest and retest. It does not turn into random kicking until exhaustion.

The athlete should be able to name the miss: short, long, twisted, soft arms, head movement or poor pressure.

**Table VII.6. Attempt audit**

| Miss type | Likely cause | Next attempt focus |
|---|---|---|
| Short | Too little kick or fear | Aim split higher |
| Long | Too much kick | Finger pressure early |
| Twist | Asymmetric hands/legs | Line markers |
| Soft arms | Support/fear | Regress to wall stack |

**KEY IDEA**

Freestanding practice becomes skill when the athlete can classify the miss.

**EVIDENCE NOTE**

Motor-learning literature supports feedback and error recognition as part of durable skill acquisition.

**CREDIBILITY & CAUTION**

Stop the set when misses become unsafe or indistinguishable. Random failure is not high-level practice.

Chapter 107

# Five-second hold to thirty-second hold

**ATHLETE** **COACH**

The first five-second hold is a milestone but not a licence for unlimited volume. The athlete must make the hold repeatable before chasing thirty seconds.

Duration grows through clean attempts, not desperation. Use clusters of short holds, quality stop rules and enough rest for correction to stay precise.

Thirty seconds should mean thirty seconds of handstand, not thirty seconds of survival.

**Table VII.7. Hold-duration ladder**

| Target | Practice method | Pass criterion |
|---|---|---|
| 3-5 s | Many clean singles | Safe exit each time |
| 8-12 s | Short clusters | One or fewer major saves |
| 15-20 s | Accumulated quality time | Breathing retained |
| 30 s | Low-frequency longer holds | No symptom escalation |

**KEY IDEA**

Extend duration only when correction quality survives the added time.

**EVIDENCE NOTE**

Training load and skill acquisition principles support progressive duration increases guided by quality and recovery.

**CREDIBILITY & CAUTION**

Do not let the athlete add time by increasing lumbar arch or shoulder collapse.

# PART VII reference apparatus

**EVIDENCE HIERARCHY**

Direct handstand studies are prioritised first; gymnastics, motor-control, strength-training, and clinical load-management literature are used only when they explain mechanisms not yet isolated in handstand-specific trials.

**Table R.1. Evidence-to-practice translation audit**

| Source type | Use in this part | Limit |
|---|---|---|
| Direct handstand biomechanics | Balance, CoP/CoM, wrist strategy, press-to-handstand, EMG | Often small samples and expert-biased cohorts |
| Gymnastics injury / RTP | Wrist, elbow, shoulder, spine loading and return-to-sport logic | Sport-specific, not always transferable to recreational adults |
| Motor learning | Cueing, feedback, variable practice, skill retention | Requires contextual coaching judgement |
| Strength and load-management consensus | Progression, tissue adaptation and monitoring | Does not replace individual assessment |

## Core references used in this part

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# Transition to the next part

Part VIII now takes balance into locomotion: the handstand walk changes the task from holding the line to repeatedly catching a controlled fall.

# HS-FIG-059 | Absolute Beginner Inversion Ladder




Build the hands, shoulders and line gradually before chasing full inversion.

# HS-FIG-060 | Wall Progression Ladder




Progress from supported pike loading to a calm chest-to-wall handstand.

# HS-FIG-061 | From Wall Hold To Freestanding



# HS-FIG-062 | Five Second To Thirty Second Hold Ladder



# HS-FIG-063 | Tuck To Straddle To Full Line Progression



# HS-FIG-064 | Safe Exit Progression



# HS-FIG-065 | Press To Handstand Introduction Drills



# HS-FIG-066 | Handstand Push Up Introduction Drills



# HS-FIG-067 | Endurance Progression Figure



# HS-FIG-068 | Weekly Progression Example With Athlete Snapshots

