

THE EMILY — AMPUTEE TRAINING PROGRAM

AKA / BKA Prosthetic Training · Total Body · 2-Phase Progressive Program · Performance Collective

This program is designed for clients with above-knee (AKA) or below-knee (BKA) lower limb amputations training with a prosthetic. All standing and lower body exercises should be coached with prosthetic stability, weight distribution, and residual limb comfort in mind. Modify load, stance width, and range of motion based on client's prosthetic fit, confidence, and daily limb condition.

	PHASE 1 — FOUNDATION (Weeks 1–4)	PHASE 2 — PROGRESSIVE LOAD (Weeks 5–8)
Resistance	HICT 1 + HICT 2 circuits + Strength 1	Strength 2 (Upper) + Strength 3 (Lower)
Intensity	RPE 5–6 / 50–60% 1RM	RPE 7–9 / 75–90% 1RM
Conditioning	Aerobic Power: 3 min work / 90s rest × 4 rounds	Same protocol — increase load/output
Zone 2	Spin Bike or Rower — 30 min / Zone 2	Spin Bike or Rower — 30 min / Zone 2
Daily Rehab	Snow Angel, Band Pull Apart, Seated Forward Lean	Continue daily rehab throughout
Prosthetic	Prioritize stability — pattern assist as needed	Increase challenge as confidence builds

PHASE 1 — FOUNDATION	PHASE 2 — UPPER BODY	PHASE 2 — LOWER BODY
• HICT 1: Squat to Box, Chest Press, Hip Thrust, Bent-Over Row, Farmer Carry, Rower	• Chest Press 4×6 @ 80–90%	• Front Squat 4×6 @ 80–90%
• HICT 2: RDL, Overhead Press, DB/KB Snatch, TRX Row, Suitcase Carry, Spin Bike	• Bent-Over Single Arm Row 4×5 @ 80–90%	• RDL 4×6 @ 80–90%
• Strength 1: RDL, Knee Push-Up, Front Squat, Banded Row, Copenhagen Plank, Kneeling Iso Hold	• Overhead Press 3×8	• Standing Banded Hip Extension 3×7
• Activation: Clamshell/Starfish, Pallof Press, McGill Curl Up, Seated Forward Lean	• Pull-Up (eccentric) 3×6	• Copenhagen Plank 3×20s
• Conditioning: Aerobic Power 3 min / 90s × 4 Zone 2: 30 min bike/rower	• Scaption Raise 3×7	• Starfish Pump 3×7
	• Face Pull 3×12	• Hip Flexor March Hold 3×4×10s
	• Straight Arm Pull Back 3×6	• G Med Iso Wall Hold 3×max
	• Band Pull Apart 3×12	• Seated Forward Lean 2×2 min hold

PHASE 1 — FOUNDATION | HICT CIRCUITS

High Intensity Continuous Training · 4 Rounds · 1–2 Min Rest Between Rounds · Weeks 1–4

HICT 1 — TOTAL BODY CIRCUIT (4 Rounds | Rest 1–2 min between rounds)

#	Exercise	Intensity	Volume	Rest	Wk 1	Wk 2	Wk 3	Wk 4
A1	Squat to Box (pattern assist)	RPE 5 / ~50%	15 reps	Circuit				
A2	Chest Press (DB)	RPE 5 / ~50%	15 reps	Circuit				
A3	Hip Thrust	RPE 5 / ~50%	13 reps	Circuit				
A4	Bent-Over Single Arm Row	RPE 5 / ~50%	13 reps	Circuit				
A5	Farmer Carry (bilateral)	Moderate	1 min	Circuit				
A6	Rower	Zone 2–3	1 min	Circuit				

★ AKA clients: Use box height that allows full weight-bearing confidence. BKA clients: Monitor socket comfort during hip thrust — add pad if needed.

HICT 2 — TOTAL BODY CIRCUIT (4 Rounds | Rest 1–2 min between rounds)

#	Exercise	Intensity	Volume	Rest	Wk 1	Wk 2	Wk 3	Wk 4
A1	RDL	RPE 5 / ~50%	15 reps	Circuit				
A2	Overhead Press	RPE 5 / ~50%	15 reps	Circuit				
A3	2 KB / DB Snatch	RPE 5 / ~50%	13 reps	Circuit				
A4	TRX Inverted Row	Bodyweight	7 reps	Circuit				
A5	Suitcase Carry (unilateral)	Moderate	1 min	Circuit				
A6	Spin Bike	Zone 2–3	1 min	Circuit				

★ Suitcase carry: Load the sound-side first to build confidence. Snatch can be performed seated or split-stance if balance is a limiting factor.

PHASE 1 — FOUNDATION | STRENGTH & CONDITIONING

Strength 1 · Conditioning · Daily Rehab · Weeks 1–4

STRENGTH 1 — TOTAL BODY (Superset Format)

	Exercise	Intensity	Sets × Reps	Rest	Wk 1	Wk 2	Wk 3	Wk 4
A1	RDL	80–90%	4 × 6	2 min				
A2	Knee Push-Up → Push-Up	Bodyweight	4 × 6	—				
B1	Front Squat	Moderate	4 × 6	2 min				
B2	Standing Banded Row	RPE 7	4 × 8	90s				
C1	Copenhagen Plank	Hard	3 × 20s	90s				
C2	Tall Kneeling Iso Hold	RPE 7	3 × 45s	—				
D1	Clamshell → Starfish	RPE 6	2 × 12	—				
D2	Pallof Press	RPE 6	2 × 8	—				
D3	McGill Curl Up	RPE 6	2 × 6 × 5s	—				
D4	Seated Forward Lean	RPE 6	3 × 30s	—				

★ Front Squat: AKA — use box squat or supported variation as needed. BKA — monitor prosthetic ankle alignment. Always prioritize stable base before adding load.

CONDITIONING 1 — AEROBIC POWER (2:1 Work:Rest)

Protocol	Intensity	Volume	Rest	Wk 1	Wk 2	Wk 3	Wk 4
Aerobic Power Intervals (any implement)	RPE 8 / Zone 4	3 min work	90s rest × 4 rounds				
Implements: Spin Bike, Rower, SkiErg	Zone 2–4	Client choice	Rotate as tolerated				

CONDITIONING 2 — AEROBIC CAPACITY (Zone 2 Steady State)

Protocol	Intensity	Volume	Rest	Wk 1	Wk 2	Wk 3	Wk 4
Spin Bike or Rower — Zone 2 Steady State	Zone 2 / RPE 6	30 min continuous	N/A				

DAILY REHAB — Perform Daily (takes < 10 min)

Exercise	Volume / Duration	Notes
Snow Angel at the Wall	1 × 8–10 reps	
Band Pull Apart	2–3 × 30s	
Seated Forward Lean	1–2 × 20s–2 min	
★ Daily rehab should be performed every day, including non-training days. These movements support residual limb health, socket fit, and prosthetic alignment.		

PHASE 2 — PROGRESSIVE LOAD | STRENGTH

Upper Body Strength · Lower Body Strength · Weeks 5–8 · 80–90% Intensity

STRENGTH 2 — UPPER BODY (Progressive Overload from Phase 1)

	Exercise	Intensity	Sets × Reps	Rest	Wk 1	Wk 2	Wk 3	Wk 4
A1	Chest Press	80–90%	4 × 6	2 min				
B1	Bent-Over Single Arm Row	80–90%	4 × 5	2 min				
C1	Overhead Press	RPE 7.5	3 × 8	Superset				
C2	Pull-Up (eccentric)	RPE 7.5	3 × 6	90s				
D1	Scaption Raise	RPE 8	3 × 7	Superset				
D2	Face Pull	RPE 6	3 × 12	90s				
E1	Straight Arm Pull Back	RPE 8	3 × 6	90s				
E2	Band Pull Apart	RPE 6	3 × 12	—				

★ Eccentric pull-up: 4-second controlled lower. Use band assistance as needed. Add 2.5–5 lbs from start to end of Phase 2.

STRENGTH 3 — LOWER BODY (Progressive Overload from Phase 1)

	Exercise	Intensity	Sets × Reps	Rest	Wk 1	Wk 2	Wk 3	Wk 4
A1	Front Squat	80–90%	4 × 6	2 min				
B1	RDL	80–90%	4 × 6	2 min				
C1	Standing Banded Hip Extension	RPE 8	3 × 7	2 min				
C2	Copenhagen Plank	RPE 8	3 × 20s	2 min				
D1	Starfish Pump	RPE 7.5	3 × 7	90s				
D2	Hip Flexor March Hold	RPE 7.5	3 × 4 × 10s	90s				
E1	G Med Iso Wall Hold	RPE 7.5	3 × max	1 min				
F1	Seated Forward Lean	RPE 9	2 × 2 min	—				

★ AKA clients: Front squat may require elevated heel or box support. Monitor residual limb fatigue — reduce load before reducing form. BKA: watch for ankle compensation.

PHASE 2 COACHING NOTES — AKA / BKA CONSIDERATIONS

- AKA (Above-Knee): All unilateral lower body work should be coached with extra attention to hip stability and prosthetic socket pressure. Reduce range of motion before reducing load.
- BKA (Below-Knee): Monitor prosthetic ankle dorsiflexion in squatting movements. Heel elevation or wedge may be needed. Watch for socket pistoning during carries.
- Both: Track residual limb skin condition weekly. If redness, pressure sores, or socket discomfort arise, reduce load on standing exercises and flag for prosthetist review.
- Progress load only when form is stable and the client reports no prosthetic discomfort. Safety and fit always take priority over progressive overload.