

Step-up Workout

Here is a progressive workload workout. It helps you to improve your POWER and STRENGTH. No target HR (Heart Rate) Zones or Power Levels specified for this workout. Maintain a cadence between 90 - 100 rpm. Time

00:00

10:00

11:00

12:00

13:00

14:00

15:00

16:00

17:00

18:00

19:00

20:00

21:00

22:00

23:00

10' Warm-up: 39/36/34x23 gearing	
1' Step up Interval: 53/50x23 gearing	
1' Recovery Interval: 39/36/34x21gearing	
1' Step up Interval: 53/50x21 gearing.	
1' Recovery Interval: 39/36/34x19 gearing.	
1' Step up Interval: 53/50x19 gearing	
1' Recovery Interval: 39/36/34x17 gearing	
1' Step up Interval: 53/50x17gearing	
1' Recovery Interval: 39/36/34x16 gearing	
1' Step up Interval: 53/50x16 gearing	
1' Recovery Interval: 39/36/34x15 gearing	
1' Step up Interval: 53/50x15gearing	
1' Recovery Interval: 39/36/34x14 gearing	
1' Step up Interval: Last one! 53/50x14gearing	
10' Cool-down: 39/36/34x14 gearing	
Total = 33 minutes	
Note: The large chain-ring is either a 53 or 50 and the small	

Note chain-ring is either 39, 36 or 34 teeth.

This is a long version of the progressive workload workout. No target HR (Heart Rate) Zones or Power Levels are specified for this workout. Maintain a cadence between 90 - 100 rpm.

- 10' Warm-up: 39/36/34x17gearing
- 5' Step up Interval: 53/50x17gearing
- 5 'Recovery Interval: 39/36/34x16gearing
- 5' Step up Interval: 53/50x16gearing.
- 5' Recovery Interval: 39/36/34x15 gearing.
- 5' Step up Interval: 53/50x15gearing
- 5' Recovery Interval: 39/36/34x14 gearing
- 5' Step up Interval: 53/50x14gearing
- 5' Recovery Interval: 39/36/34x13 gearing
- 5' Step up Interval: 53/50x13gearing
- 5' Recovery Interval: 39/36/34x12 gearing
- 5' Step up Interval: Last one! 53/50x12gearing
- 5' Cool-down: 39/36/34x17gearing

Total = 70 minutes



Explosive Power Drill

This workout is excellent for increasing your explosive (anaerobic) power for "jumps", "quick accelerations", and "counterattacks".

Description	Interval	Recovery	Interval time
Warm-up	10 min. , Zones 2 – 3	n/a	10 minutes
Explosive Power	30 sec. x 6, HR n/a	2 minutes between intervals – HR Zone 2	13 minutes
Cool-down	10 min., Zones 1 – 2	n/a	10 minutes

Begin with a 10-minute warm-up (HR Zone 2 - 3). 6 x 30-second intervals – Recovery = 2 minutes between intervals. End with a 10-minute cool-down (HR Zone 1 - 2). Total = 33 minutes

6x30-second Intervals #	Time	Comment
Warm-up	00:00	Use a very high gear, 53x12 or 53x13.
1	10:00	Juniors: 53/50x14 or 53/50x15.
Recovery	10:30	Maintain a high cadence, 95 – 110 rpm
2	12:30	during each 30-second interval.
Recovery	13:00	
3	15:00	
Recovery	15:30	
4	17:30	
Recovery	18:00	
5	20:00	
Recovery	20:30	
6	22:30]
Cool-down	23:00]
Dismount	33:00	



Power Spin Drill

To enhance power at higher pedaling cadences and your aerobic capacity (VO₂ Max), you should perform Power Spin Drill on your Trainer. Refer to the following chart.

Begin with a 10-minute warm-up (HR Zones 2 - 3).

-	Description	Interval	Recovery	Heart rate	Interval time
	Warm-up	10 minutes	n/a	Zones 2 – 3	10 minutes
	Power Spin	2 minutes x 3	2 minutes between	Zones 5A – 5C	10 minutes
			intervals – HR Zone 2		
	Cool-down	10 minutes	n/a	Zones 1 – 2	10 minutes

End with a 10-minute cool-down (HR Zone 2)

Total = 30 minutes

Note: Begin each interval with these Stop Watch Settings:

02:00 Interval #	Time
Warm-up	00:00
1	10:00
Recovery	12:00
2	14:00
Recovery	16:00
3	18:00
Cool-down	20:00
Dismount	30:00

Use a relatively high gear, 53x15 or 53x16. Juniors: 50x14 or 50x15. Maintain a cadence, 85 – 95 rpm during each two minute interval. You may need to adjust the resistance setting on your trainer to permit the high cadence/high gear combination to hit your Power Zone Target (or Heart Rate Zone Target).

Criss-Cross – Alternate Big/Small Chain-ring

This is interval workout alternates intensity for power and speed development.

Maintain a cadence of 85 – 95 rpm

- 5' Warm-up 39/36/34T x 21
 - 1. 5' Aerobic interval 39/36/34T x 17
 - 2. 5' Tempo interval 53/52/50T x 17
 - 3. 5' Aerobic interval 39/36/34T x 17
 - 4. 5' Tempo interval 53/52/50T x 17
 - 5. 5' Aerobic interval 39/36/34T x 17
- 5' Cool-down 39/36/34T x 23

Total = 35 minutes

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05:00 Interval #	Time	
Warm-up	00:00	
1	05:00	
2	10:00	
3	15:00	
4	20:00	
5	25:00	
Cool-down	30:00	
Dismount	35:00	





<u>2-hour Criss-Cross – Alternate Big/Small Chain-ring</u>

This is interval workout alternates intensity for power, speed-endurance, and endurance development.

Make sure that your indoor trainer is adjusted to the appropriate resistance to target the intensity zones.

5' Warm-up #1. Recovery, Zone 1 - $39/36/34T \times 19$ 10' Warm-up #2. Aerobic, Zone 2 - $39/36/34T \times 17$ 10' Interval #1. Tempo, Zone 3 - $53/52/50T \times 17$ 10' Interval #2. Aerobic, Zone 2 - $39/36/34T \times 17$ 10' Interval #3. Tempo, Zone 3 - $53/52/50T \times 17$ 10' Interval #4. Aerobic, Zone 2 - $39/36/34T \times 17$ 10' Interval #5. Tempo, Zone 3 - $53/52/50T \times 17$ 10' Interval #6. Aerobic, Zone 2 - $39/36/34T \times 17$ 10' Interval #6. Aerobic, Zone 2 - $39/36/34T \times 17$ 10' Interval #7. Tempo, Zone 3 - $53/52/50T \times 17$ 10' Interval #8. Aerobic, Zone 2 - $39/36/34T \times 17$ 10' Interval #8. Aerobic, Zone 2 - $39/36/34T \times 17$ 10' Interval #9. Tempo, Zone 3 - $53/52/50T \times 17$ 10' Cool-down #1. Aerobic, Zone 2 - $39/36/34T \times 17$ 5' Cool-down #2 Recovery, Zone 1 - $39/36/34T \times 19$

Total = 120 minutes

05:00 Interval #	Time
Warm-up #1	00:00
Warm-up #2	05:00
1	15:00
2	25:00
3	35:00
4	45:00
5	55:00
6	1:05:00
7	1:15:00
8	1:25:00
9	1:35:00
Cool-down #1	1:45:00
Cool-down #2	1:55:00
Dismount	2:00:00



2 x CP6 (Critical Power 6-minutes) Indoor Trainer Workout (35 minutes)

This workout is for increasing your W_{LT}, time trial.

10' Warm-up. Start in the small chain-ring. Increase your heart rate and power throughout the warm-up period. During the ninth minute, slip into the large chain-ring.

6' Interval #1. Start your HRM to measure AHR with this period. Shift into a highest gear that you can maintain at 90 – 100 rpm. Hard intensity level (super-LTHR).

3' Recovery. Drop to the small chain-ring and original cassette cog.

6' Interval #2. Shift into a highest gear that you can maintain at 90 - 100 rpm. Hard intensity level (super-LTHR).

10' Cool-down. Eliminate lactate build-up in your legs.

Total: 35 minutes

Aerobic Capacity Sprint Workout

Short intervals (sprints) - builds your ability to recover from repeated high intensity efforts .

- Warm-up: 10 minutes (Zone/Level 2 building to Zone/Level 4)
- First set: Big chain-ring, 15-tooth cog: 6 intervals of 15s on, 15s off Sprint 15 seconds, then recover 15 seconds
- Recovery small chain-ring spin: 5 minutes (Level 1)
- Second set: Big chain-ring, 15-tooth cog 6 intervals of 15s on, 15s off Sprint 15 sec., then recover 15 sec.
- Cool-down: easy spin, small chain-ring, 10 minutes (Level 1)
- Total: 31 minutes

Total: 31 minutes

Note: Begin each interval with these Stop Watch Settings:

Interval	Time
Warm-up	00:00
15 sec. sprint #1 53/50x15	10:00
Recovery #1 53/50x15	10:15
15 sec. sprint #2 53/50x15	10:30
Recovery #2 53/50x15	10:45
15 sec. sprint #3 53/50x15	11:00
Recovery #3 53/50x15	11:15
15 sec. sprint #4 53/50x15	11:30
Recovery #4 53/50x15	11:45
15 sec. sprint #5 53/50x15	12:00
Recovery #5 53/50x15	12:15
15 sec. sprint #6 53/50x15	12:30
Recovery #6 53/50x15	12:45
5 min. Recovery 39/36/34x15	13:00
15 sec. sprint #1 53/50x15	18:00
Recovery #1 53/50x15	18:15
15 sec. sprint #2 53/50x15	18:30
Recovery #2 53/50x15	18:45
15 sec. sprint #3 53/50x15	19:00
Recovery #3 53/50x15	19:15
15 sec. sprint #4 53/50x15	19:30
Recovery #4 53/50x15	19:45
15 sec. sprint #5 53/50x15	20:00
Recovery #5 53/50x15	20:15
15 sec. sprint #6 53/50x15	20:30
Recovery #6 53/50x15	20:45
Cool-down	21:00
Dismount	31:00

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Pyramid Sprint Workout #1

Short intervals (sprints) will build your ability to recover from repeated high intensity efforts – criterium racing, attacks, and counterattacks.

Use 53/50x15 gearing throughout, except Cool-down (39/36/34x15).

Warm-up: 10 minutes (Zone 2 building to Zone 4)

- Pyramids:
 - Sprints of 10 seconds, 20 sec., 30 sec., 20 sec., and 10 seconds.
 Same recovery between sprints (10s, 20s, 30s, 20s, 10s)
- Cool-down 10 minutes

Total: 29 minutes, 30 seconds

Interval	Time
Warm-up	00:00
10 sec. sprint	10:00
Recovery #1	10:10
20 sec. sprint	10:20
Recovery #2	10:40
30 sec. sprint	11:00
Recovery #3	11:30
20 sec. sprint	12:00
Recovery #4	12:20
10 sec. sprint	12:40
4:10 Recovery	12:50
10 sec. sprint	17:00
Recovery #1	17:10
20 sec. sprint	17:20
Recovery #2	17:40
30 sec. sprint	18:00
Recovery #3	18:30
20 sec. sprint	19:00
Recovery #4	19:20
10 sec. sprint	19:40
9:40 Cool-down	19:50
Dismount	29:30



Pyramid Sprint Workout #2

Short intervals (sprints) will build your ability to recover from repeated high intensity efforts – criterium racing, attacks, and counterattacks.

Use 53/50x15 gearing throughout, except Cool-down (39/36/34x15).

- Warm-up: 10 minutes (Zone 2 building to Zone 4)
 - Pyramids:
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 - Sprints of 5 seconds, 10 sec., 15 sec., 20 sec., 25 sec., 30 sec., 25 sec., 20 sec., 15 sec., 10 sec., and 5 seconds.
 - 1 minute of recovery between sprints
 - Cool-down 10 minutes

Total: 33 minutes

Interval	Time
Warm-up	00:00
5 sec. sprint	10:00
Recovery #1	10:05
10 sec. sprint	11:05
Recovery #2	11:15
15 sec. sprint	12:15
Recovery #3	12:30
20 sec. sprint	13:30
Recovery #4	13:50
25 sec. sprint	14:50
Recovery #5	15:15
30 sec. sprint	16:15
Recovery #6	16:45
25 sec. sprint	17:45
Recovery #7	18:10
20 sec. sprint	19:10
Recovery #8	19:30
15 sec. sprint	20:30
Recovery #9	20:45
10 sec. sprint	21:45
Recovery #10	21:55
5 sec. sprint	22:55
10 min. Cool-down	23:00
Dismount	33:00



Threshold Ladder Indoor Trainer Workout I (30 minutes)

This workout is for maintaining your power at threshold (W_{LT}) during the Transition, Preparation, and Base periods.

10' Warm-up. Start in the small chain-ring. Increase your heart rate and power throughout the warm-up period to the aerobic zone/level. During the ninth minute, slip into the large chain-ring.

- 3' Interval #1. Aerobic intensity level. Cadence ~100 rpm..
- 3' Interval #2. Tempo intensity level. Cadence ~90 rpm..
- 3' Interval #3. Super Threshold intensity level. Cadence ~90 rpm..
- 1' Interval #4. All out!
- 10' Cool-down. Drop to the small chain-ring. Eliminate lactate build-up in your legs.

Threshold Ladder Indoor Trainer Workout II (45 minutes)

This workout is for maintaining your power at threshold (W_{LT}) during the Transition, Preparation, and Base periods.

10' Warm-up. Start in the small chain-ring. Increase your heart rate and power throughout the warm-up period to the aerobic zone/level. During the ninth minute, slip into the large chain-ring.

- 3' Interval #1. Aerobic intensity level (2). Cadence ~100 rpm..
- 3' Interval #2. Tempo intensity level (3). Cadence ~90 rpm..
- 3' Interval #3. Super Threshold intensity level (4). Cadence ~90 rpm..
- 1' Interval #4. All out! (Level >4)
- 5' Easy spin (recovery)
- 3' Interval #5. Aerobic intensity level (2). Cadence ~100 rpm..
- 3' Interval #6. Tempo intensity level (3). Cadence ~90 rpm..
- 3' Interval #7. Super Threshold intensity level (4). Cadence ~90 rpm..
- 1' Interval #8. All out! (Level >4)
- 10' Cool-down. Drop to the small chain-ring. Eliminate lactate build-up in your legs.



VO₂ Max Keeper Indoor Trainer Workout (35 minutes)

This workout is for maintaining your power at VO₂Max (W_{max}) during the Transition, Preparation, and Base periods.

10' Warm-up. Start in the small chain-ring. Increase your heart rate and power throughout the warm-up period to the aerobic zone/level. During the ninth minute, slip into the large chain-ring.

3 x 1-minute sprint intervals with 1-minute easy spin between (large chain-ring, 15-tooth cassette cog – do not change gears during the easy spin between)

5 minutes of recovery in the small chain-ring' During the fourth minute, slip back into the large chain-ring.

3 x 1-minute sprint intervals with 1-minute easy spin between (large chain-ring, 15-tooth cassette cog – do not change gears during the easy spin between)

10' Cool-down. Drop to the small chain-ring and an easy gear. Eliminate lactate build-up in your legs.

Interval	Time
Warm-up	00:00
1 minute sprint	10:00
Recovery #1	11:00
1 minute sprint	12:00
Recovery #2	13:00
1 minute sprint	14:00
Long recovery - 5 min.	15:00
1 minute sprint	20:00
Recovery #1	21:00
1 minute sprint	22:00
Recovery #2	23:00
1 minute sprint	24:00
10 min. Cool-down	25:00
Dismount	35:00



Speed Work #1

Speed Work #1 will improve your speed for sprint finishes. Indoor or outdoor workout – For outdoor, select a course (without traffic) at least 1/4 mile long

- Warm-up: 10 minutes (large chain-ring, Zone 2 building to Zone 4)
- 3 intervals of 1 minute 53/50x17 gear @ 90 rpm in Zones 4/5A, with 1 minute recovery between intervals in same gear
- 3 intervals of 1 minute 39/36/34x17 gear @ 110 rpm in Zone 4, with 1 minute recovery between intervals in same gear
- Cool-down 10 minutes remain in the small chain-ring, easy gear, easy spin

Total: 31 minutes

Note: Begin each interval with these Stop Watch Settings:

Interval	Time
Warm-up	00:00
#1 53/50x17	10:00
Recovery #1	11:00
#2 53/50x17	12:00
Recovery #2	13:00
#3 53/50x17	14:00
Recovery #3	15:00
#1 39/36/34x17	16:00
Recovery #1	17:00
#2 39/36/34x17	18:00
Recovery #2	19:00
#3 39/36/34x17	20:00
Cool-down	21:00
Dismount	31:00

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Speed Work #2

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Speed Work will improve your speed for sprint finishes.

Warm-up: 10 minutes (Zone 2 building to Zone 4)

- 3 intervals: start with 53/50x15 gear: 45 seconds in Zones 3 & 4 then shift up and sprint 15 seconds
 - 1 minute recovery in small ring between each interval
- Recover: 5 minutes easy spin
- Ins and Outs: 3 intervals of 10 seconds one-legged revolution sprints
 - o 10 seconds "on" (hard), use 53/50x17gear with fast accelerations in-the-saddle
 - o 10 seconds "off" (easy), same gear, in-the-saddle
 - 4-minute recovery both legs
 - Switch legs after the recovery
- Cool-down 6 minutes both legs

Total: 32 minutes

Interval	Time
Warm-up	00:00
#1 53/50x15	10:00
#1 53/50x14	10:45
Recovery #1 39/36/34x15	11:00
#2 53/50x15	12:00
#2 53/50x14	12:45
Recovery #2 39/36/34x15	13:00
#3 53/50x15	14:00
#3 53/50x14	14:45
Recovery 39/36/34x15	15:00
#1 "on" 53/50x17 right leg	20:00
#1 "off" 53/50x17 right leg	20:10
#2 "on" 53/50x17 right leg	20:20
#2 "off" 53/50x17 right leg	20:30
#3 "on" 53/50x17 right leg	20:40
#3 "off" 53/50x17 right leg	20:50
Recovery 39/36/34x17	21:00
#1 "on" 53/50x17 left leg	25:00
#1 "off" 53/50x17 left leg	25:10
#2 "on" 53/50x17 left leg	25:20
#2 "off" 53/50x17 left leg	25:30
#3 "on" 53/50x17 left leg	25:40
#3 "off" 53/50x17 left leg	25:50
Cool-down – both legs	26:00
Dismount	32:00



Cycling Indoor Fitness Test

In order to establish your heart rate training zones, which are used to quantify workout and interval intensities, the following *Cycling Indoor Fitness Test* should be performed. This test can be used to establish (or to reestablish) your heart rate training zones.

<u>Indoor Fitness Test</u> – alternative to the outdoor 3-mile ITT Fitness Test Required equipment: indoor trainer, your bicycle, cycling shoes and apparel, timer, heart rate monitor with "average heart rate" feature.

10' Warm-up. Start in an easy gear (small chain-ring). Your HR should be Zone 2 (low intensity). When you get to the ninth minute, slip into the large chain-ring.

8' Interval #1. Shift into a higher gear, like 15 or 16T cassette cog. Pedaling cadence 90 - 95 rpm. Elevate your HR to Zone 3. Low to moderate intensity level.

5' Recovery. Drop to the small chain-ring and original cassette cog. Your HR should return to <130 beats per minute (bpm).

8' Interval #2. Shift into the large chain-ring and a higher gear, like 14 or 15T cassette cog. Pedaling cadence 90 - 95 rpm. Moderately hard intensity level (HR Zone 4, sub-LTHR).

5' Recovery. Drop to the small chain-ring and original cassette cog. Your HR should return to <130 bpm.

8' Interval #3. For this interval, start your HRM and measure Average HR. Shift into the large chain-ring and the highest gear you can maintain a pedaling cadence between 85 and 90 rpm. Go as hard as you can for the full eight minutes (super-LTHR). At the end of the interval, stop your HRM and capture/store your Average Heart Rate*. This is the value used to set your heart rate training zones.

10' Cool-down. Your HR should be <130 bpm by the end of this period. Eliminate lactate build-up in your legs.