



SPINERGY

SERVICE INSTRUCTIONS

Wheelchair
Handcycle
(read to bottom before starting)



WARNING!

These service instructions are intended for bicycle mechanics with prior wheel servicing experience. These instructions are not intended to be a tutorial on general wheel truing or hub service. We strongly suggest using an experienced bicycle or wheelchair service department for wheel repair and service.

TRUING & TENSIONING

1999-2003 SPOX wheelchair wheels:
(spoke nipples located at hub)

Tools required:

- Spinergy small spline tool (fig. 1)
- Spinergy large spline tool (fig. 2)
- Park Tools TM-1 tension meter (Fig. 6)

LX and SLX wheelchair wheels:

Tools Required:

- 1/4in. Open-ended wrench (fig. 5)
- Spinergy hex nipple wrench (fig. 3)
- Park Tools TM-1 tension meter (fig. 6)

2003- Present SPOX wheelchair wheels:
(Spoke nipples located inside wheel rim)

Tools required:

- Spinergy small spline tool (fig. 1)
- 1/4in. nut driver (fig. 4)
- Park Tools TM-1 tension Meter (Fig. 6)

Spinergy Stealth Handcycle wheels:

Tools Required:

- Spinergy small spline tools (fig. 1)
- 1/4in. nut driver (fig. 4)
- Park Tools TM-1 Tension meter (fig. 6)

Instructions:

SPOX wheelchair wheels: (fig. 7) First, remove tire/tube/rim strip on 2003-present model wheels. Tension spoke using 1/4in. nut driver for wheels with nipple located inside wheel rim (Older wheels with nipple located at hub, use hex or large spline nipple tool - depending on style of nipple). While tensioning spoke, use small spline tool to hold spoke stationary - do not allow spoke to rotate while tensioning nipple. Bring spoke tension to 20-22 on the Park Tools tension meter.

LX & SLX wheelchair wheels: (fig. 8) First, remove tire/tube/rim strip. Tension spoke using Spinergy hex nipple wrench (or 3/8in. nut driver). Use 1/4in. open-ended wrench (or pliers) to hold the spoke stationary - do not allow spoke to rotate while tensioning nipple. Bring tension to 24-26 on the Park Tools tension meter (~40 on WheelSmith).

Stealth Handcycle wheels: (same as fig. 7) First, remove tire/tube/rim strip. Use 1/4in. T-Wrench (not shown) to turn nipple. Use Spinergy small spline tool to hold spoke stationary - do not allow spoke to rotate while tensioning nipple. Rear wheels = 18-20 on tension meter. Front = 21-23 on drive side, and 10-12 on non-drive side.

Notes:

- For BEST RESULTS, apply a small amount of medium strength loctite (blue) to the threads prior to installing nipple.
- Spinergy wheels are hand tensioned and stress relieved before shipping.
- PBO spokes may feel under tensioned when compared to steel spokes. This is normal, and overtightening will risk damaging the rim.
- Over tensioning will void warranty.



Fig. 7



Fig. 8

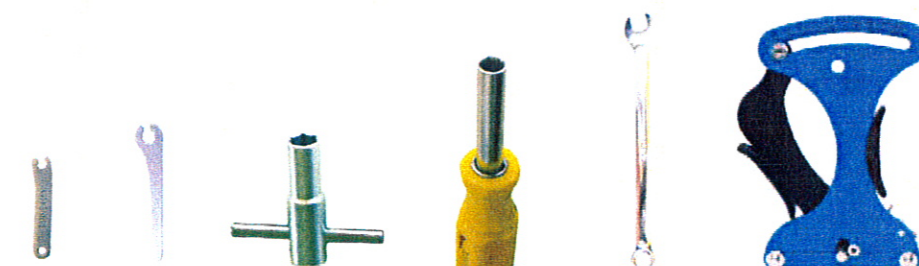


Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6



In Canada Call 49 Bespoke Inc. T: 416-661-4499

Everyday Wheels

Sport Wheels



Light Extreme "LX"

PBO Spokes: 12
Spoke thickness: 4 mm
Weight: 680g/wheel *
FlexRim handrim optional
Extreme rollability & reliability



FLEXRIM

"Super smooth, and I can reach through my spokes." - Mateo



Sport Light Extreme "SLX"

PBO Spokes: 18 or 24
Spoke thickness: 4 mm
Weight: 762g/wheel (18 spk) *
Extreme strength & speed

"I no longer worry about breakdowns." - Jeremy



SPOX Everyday

PBO Spokes: 18
Spoke thickness: 3 mm
Weight: 725g/wheel *
#1 wheel for over 12 years

"I love how quiet and responsive they are." - Andrea



SPOX Sport

PBO Spokes: 24
Spoke thickness: 3 mm
Weight: 771g/wheel *
Unsurpassed quality for all sports

"They're highly versatile and maintenance free." - Lauren



Wire

Stainless Steel Spokes: 30
Weight: 861g/wheel *
Spinergy quality at a great price

"Looks and holds up better than other standard wheels." - Tom



Handcycle

PBO Spokes: 20 front, 16 rear
Size: 650c
Weight: 2426g/3 wheels
Rim depth: 43mm - carbon
Shimano or Campy
Aerospace grade aluminum axle
Smooth, sleek and lightweight

"Perfect upgrade that boosted the performance of my bike." - Bill

* Weight = 24" wheel, no handrim/tire/axle

Toughest wheels on the planet!

- > PBO spokes 2x stronger vs carbon/kevlar
- > PBO spokes 10x stronger vs steel/alum.

PBO spokes eliminate the brittleness inherent with resin-impregnated carbon/kevlar spokes, and aren't subject to bending, breaking & buckling like steel or aluminum.



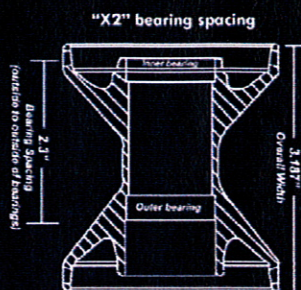
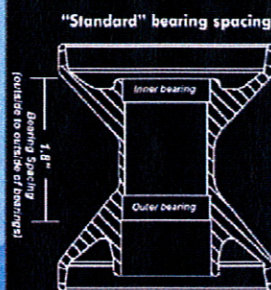
"They're the only wheels I trust." - Ian

Spinergy is the leading wheel brand in the industry. Our unique design results in low rotational weight allowing you to go further and faster with less effort.

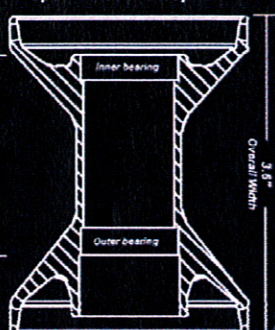


4@49Bespoke.com
www.49Bespoke.com
T: 416-661-4499

Everyday wheel hub options



Sport wheel hub option



$$\text{Effective Axle Length} = \text{Bearing Spacing} + \text{Axle Receiver in Chair}$$

Our "standard" hub is most common, with some chairs needing the "X2" hub for additional clearance. All sport chairs use the sport hub.

Available Options:

Custom combinations available

PBO Spoke Color

Hub color is black except with black spokes = silver hub

Pink Code 188

Green Code 177

Orange Code 166

Black (silver hub) Code 111

White Code 155

Red Code 133

Yellow Code 144

Blue Code 122

Silver (steel spokes)

Wheel Size

20" (451mm)

22" (501mm)

24" (540mm)

25" (559mm)

26" (590mm)

650c (671mm)

700c (27"/28")

Spoke count

Spoke thickness

Wheel Weight *

Bearing I.D. = 1/2" (12.7mm)

Bearing I.D. = 12mm

Bearing I.D. = 5/8" (15.8mm)

Splenergy handrims

FlexRim option* *

Silver Aluminum

Black Vinyl Coated

MSRP/pair (incl. tire/handrim)

** FlexRim at add'l cost

* 24" no handrim/tube/tire

Everyday Wheels

For everyday use

LX

SPOX

Wire

Sport Wheels

For sports & heavy duty use

SLX

SLX R10

SPOX Sport

Handcycle

For recreation & racing

Handcycle

	LX	SPOX	Wire	SLX	SLX R10	SPOX Sport	Handcycle
	x			x			x
	x			x			x
	x			x			x
	x	x		x	x (red hub)	x	x
	x	x		x		x	x
	x	x		x		x	x
	x	x		x		x	x
			x				x (black alum.)
			x				
	x	x	x				
	x	x	x	x	x	x	
	x	x	x	x	x	x	
	x	x	x	x	x	x	
							x
				x	x	x	
	12	18	30	18 or 24	24	24	16 (ft.) 20 (rear)
	4mm	3mm	14g	4mm	4mm	3mm	3mm PBO
	680g	725g	861g	762g	794g	771g	745g (rear) 936g (ft.)
	x	x	x	x		x	threaded (rear)
	x	x		x		x	
					x		
	x						
	x	x	x	x	x	x	
	x	x	x	x	x	x	
							set = 3 wheels
	\$ 953.00	\$ 853.00	\$ 508.00	\$ 953.00	\$1053.00	\$ 853.00	\$2,050.00 (PBO)
	\$1053.00						

In Canada Call 49 Bespoke Inc.

T: 416-661-4499 toll free T:866-827-4548

4@49Bespoke.com www.49Bespoke.com



416-661-4499