

# S10C

## Instructions



To celebrate our fortieth anniversary, we have transformed the spinning wheel it all started with: the S10. The new S10 Concept spinning wheel makes it possible to customize your wheel. We trust you have ordered all the parts to make your dream wheel, but in case your dream changes in time, it will always be possible to order other parts.

Of course you can change from single to double treadle (or vice versa) or change the design of your main wheel. But you can also change from Irish to Scotch tension and vice versa. So if you like to spin with Scotch tension and ply with Irish tension, you will only need to exchange the mother of all with flyer and bobbin!

I wish you a lot of joy spinning on your new S10 Concept wheel.

A handwritten signature in black ink that reads "Jan Houët". The signature is written in a cursive style with a large, looping initial 'J'.

## Assembly

Inside the main box you will find the parts you chose. To make your spinning wheel complete you will always need the following parts:

- Upright and box with hardware, tools and this manual
- Base (single or double treadle)
- Main wheel (classic, 3 spoke or 5 spoke)
- Mother of all (Irish tension or Scotch tension)
- Flyer and bobbins



The hardware bag contains:

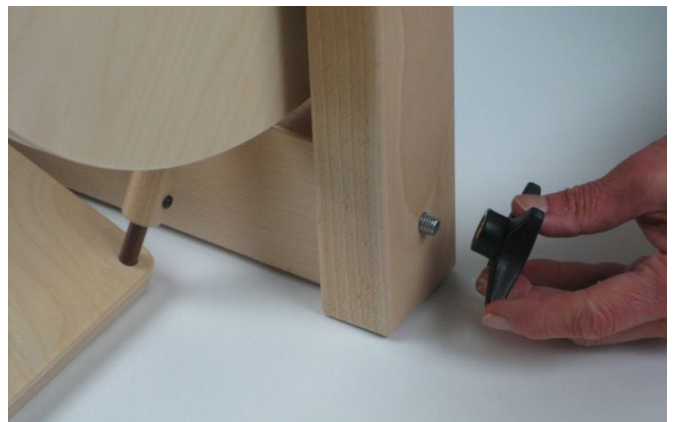
- 1 flange with axle
- 3 screws 4.5x20 mm
- 1 ball bearing
- 1 washer
- 1 lock washer
- 1 socket head bolt M6x20 mm
- 2 nylon retaining rings (1 for spare)
- 1 spring
- 2 star knobs M6
- 1 bolt with knurled cap M8x40
- 1 barrel nut M8
- 1 drive band
- 1 socket head wrench 4 mm
- 1 cross screwdriver Pz2
- 1 bottle of oil



Screw the flange with axle onto the main wheel using the 3 screws 4.5 x 20 mm. Slip the spring over the axle of the wheel.



Mount on the main wheel to the front of the upright: Insert the axle through the ball bearings of the post. Now push the wheel towards the post so the spring is pressed together and the end of the axle protrude far enough to make it easy to push one of the retaining rings into the groove of the axle. This retainer has a small protruding edge for your nail to pull it out again; naturally this edge should face outside.



Connect the base (single or double treadle) to the upright: Insert the threaded end through the hole in the upright underneath the wheel and fasten the assembly with one of the star knobs.

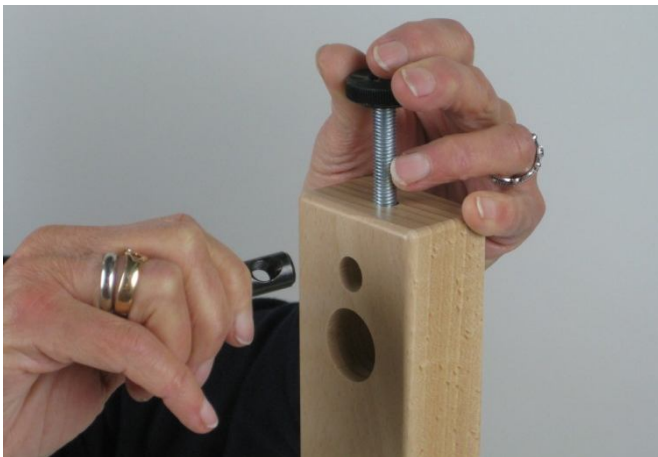


Assemble the eccentric parts: Insert the socket head bolt through the ball bearing, slip on the washers, first the locking one, then the regular one. Screw this assembly into the eccentric hole at the front of the wheel using the socket head wrench.





Connect the cup of the footman to the eccentric bearing: Place the drive band behind the footman and push the cup onto the eccentric bearing. It is easy if you hold the footman in an angle while you push it on (this also helps when you take it off). Secure the cup by pushing the ring to the edge.



Assemble the M8 bolt and its barrel nut into the top of the upright. The barrel nut has a slot that should face outside. The slot indicates the direction of the hole with the thread.

### For Irish tension wheels:



Mount the mother of all for Irish tension. Insert the threaded end through the hole in the upright and fasten the assembly with the remaining star knob.

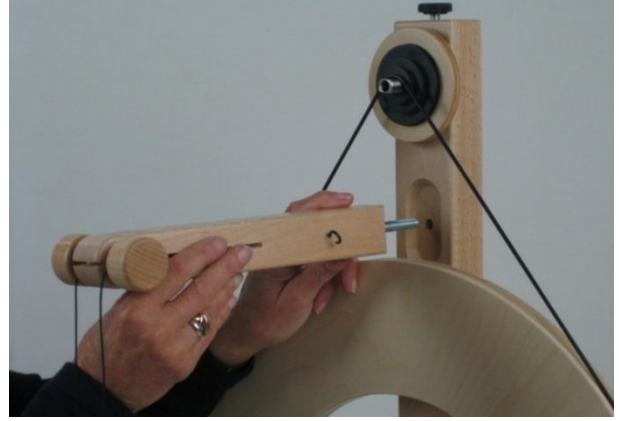
### For Scotch tension wheels:



Insert the bearing part of the pulley into the hole and fasten it with the bolt. Now you can install the drive band.



Complete the construction by fastening the bearing part for the flyer into the big hole. Screw on the bolt to hold the bearing part in place. Place the drive band on the flyer bearing.



Mount on the 'mother of all' to the upright and fasten it with the other star knob at the back side. This part for scotch tension is not really a mother of all but a handle and the base for the brake system.

You now have one of the following 12 wheels:

**SC0111 ("S10")**



**SC0112 ("S10DT")**



**SC0113**



**SC0114**



**SC0115**



**SC0116**



**SC0117**



**SC0118**



**SC0119**



**SC0120 ("S11")**



**SC0121**



**SC0122**



You can now attach the flyer and bobbin of your choice to the wheel.

### Available flyers Irish tension:



Regular, hooks

Orifice: 13 mm (1/2")



Regular, sliding guides

Orifice: 13 mm (1/2")



High speed

Orifice: 10 mm (6/16")



Bulky

Orifice: 13 mm (1/2")



Art yarn

Orifice: 20 mm (3/4")

### Available flyers Scotch tension:



Regular, hooks

Orifice: 12 / 8 mm (1/2" / 5/16")  
Ratios: 1:6 / 1:8.5 / 1:12.5 / 1:19



Regular, sliding guides

Orifice: 12 / 8 mm (1/2" / 5/16")  
Ratios: 1:6 / 1:8.5 / 1:12.5 / 1:19



part of SA0147

High speed

Orifice: 12 / 8 / 5 mm (1/2" / 5/16" / 3/16")  
Ratios: 1:6 / 1:8.5 / 1:12.5 / 1:19 / 1:27

*The high speed flyer is part of the high speed set, which also contains three bobbins, threading hook and extra disc for the pulley for the 1:27 ratio.*

## Available bobbins Irish tension:



### Regular

Ratios: 1:5.5 /  
1:7.5 / 1:10.5  
Volume: 670 cm<sup>3</sup>  
(42.4 cubic inch)



### High speed

Ratios: 1:6.5 /  
1:9.5 / 1:15  
Volume: 580 cm<sup>3</sup>  
(35.1 cubic inch)



### High speed fat core

Ratios:  
1:6.5 / 1:9.5 / 1:15  
Volume: 385 cm<sup>3</sup>  
(23 cubic inch)



### Bulky/Art yarn

Ratios:  
1:4 / 1:5 / 1:6  
Volume: 1240 cm<sup>3</sup>  
(75.4 cubic inch)

*The bulky/art yarn bobbin can only be used with the bulky or art yarn flyer.*

## Available bobbins Scotch tension:



### Regular

Volume: 393 cm<sup>3</sup>  
(25.1 cubic inch)



### High speed

Volume: 163 cm<sup>3</sup>  
(9.4 cubic inch)



### For Irish tension wheels:



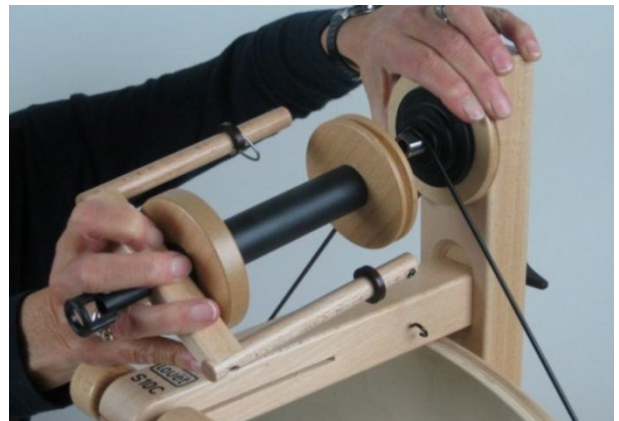
Take the flyer with bobbin and put it in place; the axle into the bearing in the post and the orifice onto the brass bearing at the front.

### Brake system Irish tension:



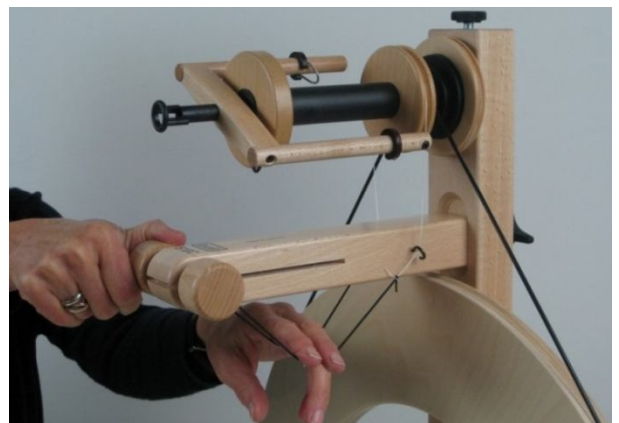
The brake band can be completely released when you start with an empty bobbin.

### For Scotch tension wheels:

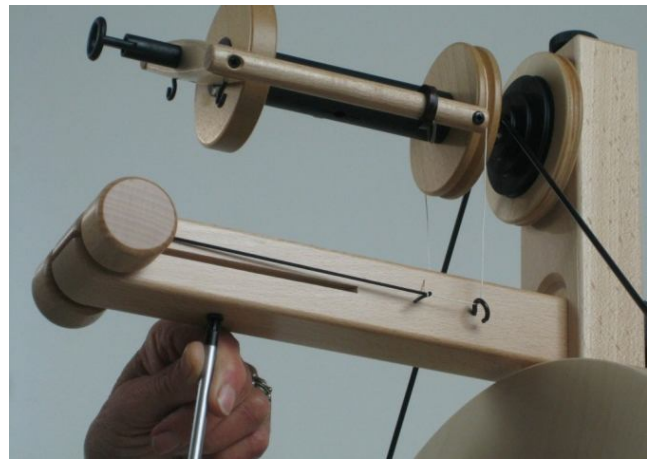


Insert the axle of the flyer, with a bobbin on it, into the central hole of the pulley. In this hole is a pin that fits the slot at the end of the axle. The system is magnetic, so when you turn the flyer it will snap in at the moment the slot and the pin are aligned.

### Brake system Scotch tension:



Place the brake cord into the groove in the bobbin end, lead it at both sides along the little hooks and turn the tensioning knob at the front just enough to straighten and stretch it a tiny bit. Make sure that you have the same number of windings on the knob at both sides.



You can adjust the ease of turning the tensioning knob by turning the screw on the bottom of the 'mother of all'.

## Accessories for S10 Concept

**SA0122**

Twine rack



**SA0143**

Twine rack ScT



**SA0121**

Block for twine rack



There are many options for adding the twine rack and block to your wheel. Below a few possibilities are shown.



On a single treadle base you can attach a lazy kate rack in the base to accommodate two bobbins. By adding a lazy kate block and rack you can also accommodate four bobbins.

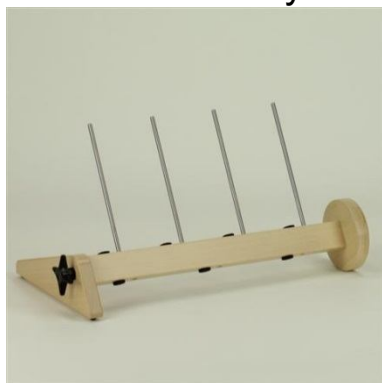
In the pictures on the previous page you can see the standard lazy kate rack. It has axles long enough to use for the Irish tension bobbins, and can also be used for the Scotch tension bobbins.



On a double treadle base you can attach the lazy kate (rack and block) to the left or right side of the base to accommodate or use both sides for a lazy kate. In the picture above on the left you can see the Scotch tension lazy kate rack. It has shorter axles so it can only accommodate the Scotch tension bobbins.

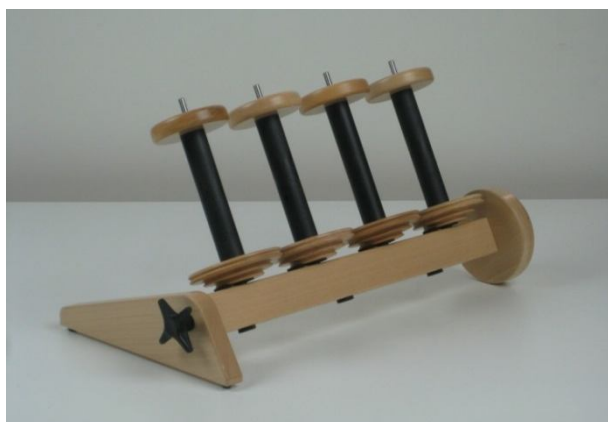
### SA0119

#### Stand-alone lazy kate



The stand-alone lazy kate has long 6 mm axles to accommodate all types of Louët bobbins. It can fit four regular or fast bobbins or three bulky/art yarn bobbins.

The rail of the lazy kate has a felt buffer for each bobbin, that will brake the speed of the bobbin by the weight of the bobbin. You can adjust the breaking effect by adjusting the angle of the bobbins.



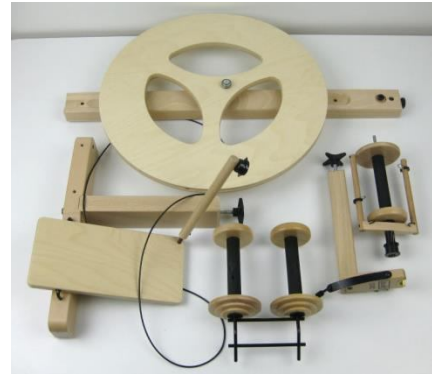
## SC0140

### Bag S10C/S11



Every version of the S10 Concept wheel can be easily disassembled so it fits the optional carrying bag. The bag has padding and an extra compartment on the front so all your accessories and fibers will fit.

To disassemble the wheel you just remove the flyer and bobbins and unscrew the two star knobs to detach the base and mother of all.



## Spinning instructions

Both with the single and the double treadle base you can treadle with one foot. This will give you greater flexibility to position the wheel. With the double treadle base you can also treadle with both feet which makes it lighter to treadle, but less flexibility on how you sit.

The main thing is to relax, and position yourself comfortably. You can spin well with a good distance between your hands and the flyer orifice. Having the yarn enter the flyer orifice at an angle is not a problem.

When you have never spun before it is best to first practice treadling, for instance while reading a book, until your feet work automatically. Alternatively or additionally you can try to 'spin' an already spun thread or ply two threads. This way you don't have to pay a lot of attention to your hands, while having the feel of the wheel actually doing the work.



In general you turn the main wheel clockwise for spinning (twisting the wool fibers to make a single yarn) and counter-clockwise for plying (joining 2 or more yarns together).

Use a starter yarn; make a double knot on one end and insert it in the slot of the bobbin core. Guide it along the hooks and/or sliding guide of the flyer (either side will work) and through the orifice. You will need a threading hook only for the Scotch tension high speed flyer, the other flyers have large enough openings to insert the thread manually.

The orifice of the Scotch tension flyers has a removable nylon bushing inserted, that gives you the choice between an 8 mm (5/16") or 12 mm (1/2") orifice. The smaller diameter orifice is beneficial while spinning finer yarns. The high speed Scotch tension flyer has an extra insert to reduce the orifice to 3/16".

On a flyer with sliding guides you can distribute the yarn on the bobbin evenly by changing the position of the guide. On the flyer with hooks the hooks are positioned differently on each arm, so you can fill up the bobbin evenly by changing the position of the yarn on the hooks.

Putting the drive band in one of the grooves of the pulley (Scotch tension) or bobbin (Irish tension) will result in a certain ratio. The largest diameter has the lowest ratio, so you will get fewer twists when treadling with the same speed compared to a higher ratio. When you are learning how to spin, the lowest ratio will give you more time to process the fibers with your hands. Finer yarns need more twist and then the higher ratios are more comfortable. The higher the ratio the more power the treadling needs. This is where double treadling helps. The ratios of the various pulleys and bobbins are given on page 8 and 9.

## Spinning



Make a loop at the other end of the starter yarn. Thread through some fibers from the fleece, batt or roving that you will spin and twist them together, to make the connection with your starter yarn.

Take the wool loose in your left hand. Pull a bit of wool out of your left hand with the fingers of your right hand in the direction of the orifice, so far as the fiber volume of the yarn requires. Then while treading slowly and still gripping the yarn move your right hand back towards your left and allow the twist to develop. Then you can let it go through the orifice and it will be wound up on the bobbin. Always keep thumb and finger closed when sliding over the fibers. Adapt the speed of foot and hand working to get a good twist of the thread.

## Adjusting the tension

By applying brake tension on the flyer (Irish tension) or on the bobbin (Scotch tension), you can control the tension on the yarn.



**For Irish tension wheels** the bobbin turns, which causes twist in the yarn. Since the yarn connects the flyer to the bobbin, the flyer will turn. The result is that you feel a pull on the yarn, and by tightening the brake strap you will increase this pull. If you need little to no pull you can also take out the knurled nut and let the brake strap hang loose. A drop of oil on the orifice bearing can reduce the pull even further.

**For Scotch tension wheels** the flyer turns because it is connected to the pulley, which causes the twist in the yarn. Since the yarn connects the bobbin to the flyer, the bobbin will turn. The result is that you feel a pull on the yarn, and by tightening the brake, you will increase this pull.

**For both systems** filling the bobbin will make it pull with a higher torque on the brake. If you want to keep the same amount of pull on the yarn, you will need to increase the brake tension. This also means that you will need more power to treadle as the bobbin fills up.

## Plying

It is easy to ply two or more threads to one thicker yarn if you place two or more full bobbins on the lazy kate. Take care that the threads lie parallel in your hands before plying.

## Tips and trouble shooting

### The yarn is too hard and overtwisted.

Possible causes:

1. You are treadling too fast, compared with the speed of your hands.
2. The yarn pulls in too slowly. You must brake the flyer a bit more.
3. The yarn is obstructed by something while passing the flyer.
4. The bobbin is full.

### The yarn constantly breaks.

Possible causes:

1. The yarn pulls in too hard. The tension is too great .Reduce tension with the knurled nut or tensioning knob.
2. Too little twist, the yarn is not strong enough for winding up.
3. Wool of bad quality (too short fiber).

### The fibers are very difficult to draw out of the wool supply.

Possible causes:

1. You are holding the wool supply too tightly.
2. The twisting got in your wool supply, which can be caused by too much twist. Keep thumb and finger closed so your supply doesn't get twisted.
3. Wool of bad quality (felted; it needs preparation).

### Treadling is very heavy.

Possible causes:

1. More brake on the flyer than you need.
2. The yarn is obstructed by one of the yarn guiders on the flyer.
3. You spin thick and irregular yarn with too high speed. Shift the drive band on the bobbin.
4. The bobbin is full.

### The sliding guides of my flyer slide too easy.

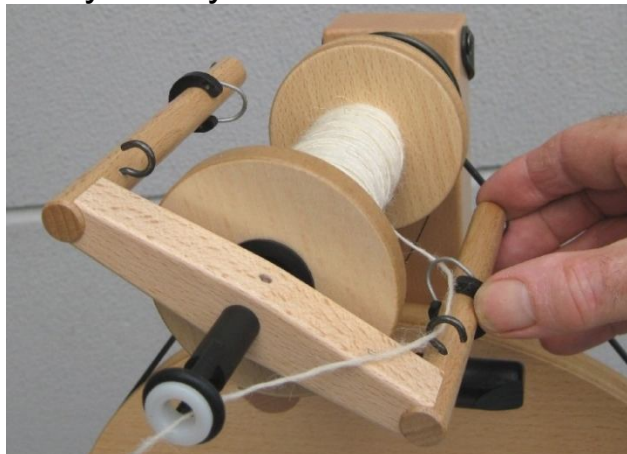


You can use a pair of pliers to tighten the guide, pushing it together where the metal wire enters the plastic part. Because it is a spring wire, you have to squeeze so far that it does not spring back completely to the old position. If you tighten it too much, it is hard to open it again, so the best way is to squeeze it a bit more each time, and re-test.

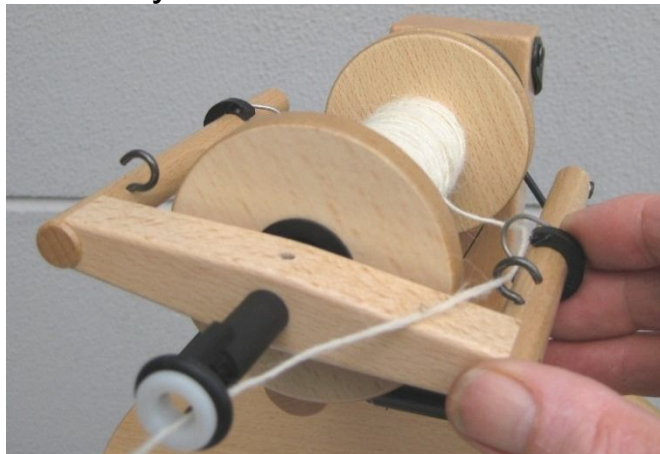
### How do I slide the sliding guides?

To evenly build up the yarn on the bobbin, you can move the yarn guide slide as shown on the pictures.

Away from yourself:



Toward yourself:



### I am not spinning for a while. How can I best store my wheel?

During periods when you are not spinning, we recommend that you take the drive band out of the bobbin groove and position it on the flyer bearing (for Irish tension wheels) or take the drive band out of the pulley groove and position it in front of the pulley on the axle (for Scotch tension wheels).

## Maintenance

If there is a squeaking noise, you can use a drop of oil to lubricate the nylon bearings of the treadles and rocker arm (for a double treadle base). Lubrication of the ball bearings is not needed, this could even damage them.

For Scotch tension (flyer led) wheels you need to take care that no dirt accumulates in the hole of the pulley. At the bottom of this hole is the locking magnet, which holds the flyer shaft in place. If some metal parts do get into this hole, use a pair of tweezers to clear.

## More information

If you still have questions after reading this manual, please contact your dealer or us directly.

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