## Instructions for 60 stitch version of the Legare Style Circular Sock Machine

Design by JeepingJohnny on Printables.com Buckle by Christrobray on thingiverse.com Instructions written by Jasmine (teslaknits on instagram)

## Files to print from design:

https://www.printables.com/model/355228-circular-sock-knitting-machine-for-my-mom-and-you and https://www.thingiverse.com/thing:4572159

Qty		Qt	y	
1	Cylinder 60 Slots with Ribber Stop.stl	1		Frame Shorter
1	Crank Gear.stl	2		Frame Nut
1	Collar.stl	2		Frame Washer
1	Crank Arm.stl	2		Frame Bolt Front
1	Collar Gear.stl	Qt	$\mathbf{y}$	
1	Collar Gear Spacer.stl (no holes)	1		CSM_Buckle_Outer.stl
1	Collar Tension Cam.stl	1		CSM_Buckle_Inner.stl
1	Collar Needle Lift Cam A.stl			
1	Collar Needle Lift Cam B.stl			
1	Cylinder Riser 8mm.stl (has holes)			
1	Yarn Carrier Base.stl			
1	Yarn Carrier Guide-slots.stl			
1	Yarn Carrier Stem.stl			

#### **Hardware Used**

	Qty		Qty
M3 nut	7	M5 nut	1
M3 washer	2	M5 washer	1
M3 x 12	2	M5 x 8	1
M3 x 16	2		
M3 x 25	4	M6 nut	1
		M6 washer	1
M4 nut	8		
M4 x 12	4		
M4 x 16	4		

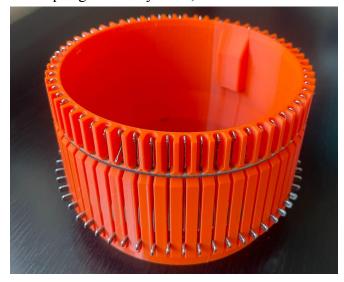
# **Extras to purchase:**

Sock Machine Cylinder Springs .110 inches wide	https://angoravalley.com/sockmachines/accessories.html
Auto Knitter /Legare Cylinder Needles - 12 gauge	https://angoravalley.com/sockmachines/accessories.html
M6 Handle	https://www.amazon.com/dp/B07MMS9TJS?ref=ppx_yo2ov _dt_b_product_details&th=1
M8 Flange Shaft Coupling	https://www.amazon.com/dp/B07FLTKK8B?psc=1&ref=pp x_yo2ov_dt_b_product_details
M8 Bearings	https://www.amazon.com/dp/B07R7PR72H?psc=1&ref=ppx yo2ov_dt_b_product_details
M8 Metal rod, 70mm used	Local hardware store

# **Assembly Instructions**

# Cylinder assembly

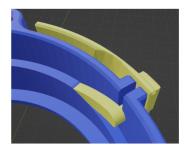
4x M3 nuts in cylinder (those little pockets on the inside) Place spring around cylinder, then slide in needles



Place cylinder in collar Insert Collar Needle Lift Cam A and B flat sides up.



The Key on the Needle lift is the flat center section, it fits in the Needle lift slot when you angle the needle lift and counterweight pointing upward. You push the center down to the hole and rotate it into place. No extra hardware is needed.



1x M5 nut in collar tension cam

1x M5x8 in collar

Mod: Don't use collar tension cam bolt holder. Use a M5 & M6 washer instead.

#### Collar gear assembly

2x M3 nut in collar gear

2x M3x16 in yarn carrier base

Assemble yarn carrier base on flat side of collar gear

1x M3 nut in yarn carrier base

1x M3x12 in yarn carrier stem

Mod: Add M3 washer instead of collar cam bolt holder

1x M3 nut in yarn carrier stem

1x M3x12 and M3 washer in yarn carrier guide

#### Crank Assembly

4x M4 nut in crank arm

4x M4x16 and flange shaft coupling in crank arm

1x M6 nut and M6 threaded handle

4x M4 nut in crank gear

4x M4x12 and flange shaft coupling in crank gear

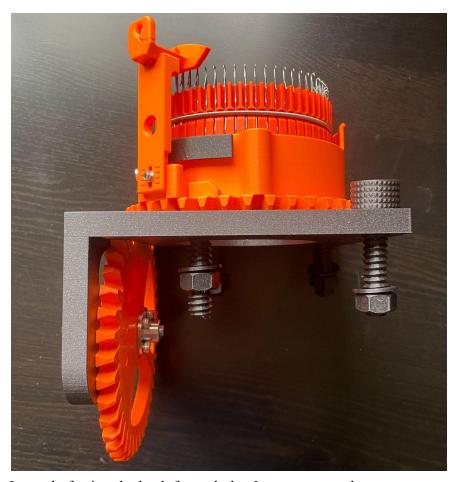
Press two skate bearings in frame flush with the inside where crank gear is. Cut 5/16 / 8mm rod at 70mm for crank arm through frame and crank gear. Add Flange shaft coupling to crank arm and crank gear.

### **Final Assembly**



Place the two Front Frame Bolts in the frame Place Cylinder assembly in Collar gear assembly. Add Collar Gear Spacer.stl (no holes) and Cylinder Riser 8mm.stl (has holes)

Align four M3 holes in the frame with four M3 holes in cylinder. Place on base and align gear with crank assembly. 4x M3x25 through frame cylinder riser into cylinder



Instead of using the back frame bolts, I use an extra clamp.

Add final assembly to your chosen mounting system and start cranking socks!

