



BEAR VALLEY

CIRCULAR SOCK MACHINE

Assembly Instructions & Start up Guide

Putting Together Your Machine

Everything you need to set up your CSM comes in the box.

The first thing you will need to do is attach the table mount to your table using the provided clamps.

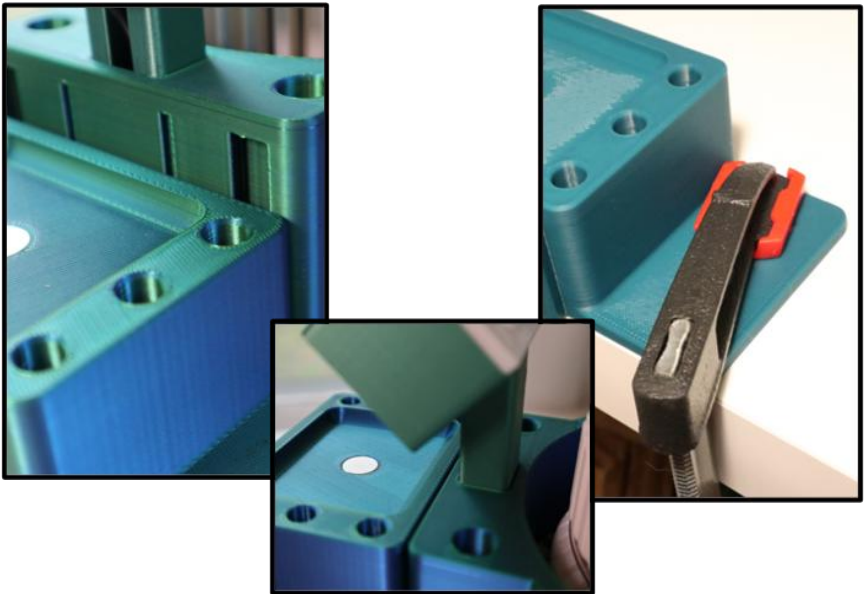
Place the mount on the edge of your table with only the protrusions hanging over the edge, as shown. Place a clamp on each side and tighten. It is recommended that the clamps be angled outwards to prevent them from interfering with the CSM once installed.



Mounting the CSM

To install the CSM onto the mount, hold it in the air above the mount, line up the notches on the rear of the CSM with the protrusions on the front of the mount, then slide the CSM downward onto the mount.

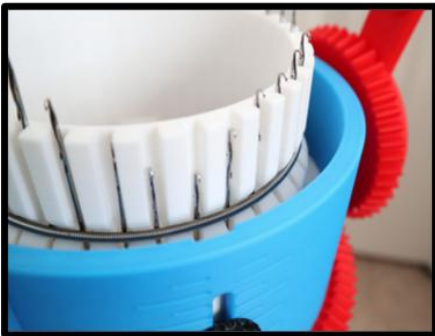
The top of the CSM should end up flush with the top of the mount.



Installing Needles

Next you will need to install needles into the cylinder. This can be done while the cylinder is installed or while it is outside of the CSM.

Holding a needle parallel to the floor, slip the foot of the needle over the cylinder spring and into a notch in the cylinder, then tip the needle upwards so that it can slide the rest of the way down into the notch. Repeat for each needle until the cylinder is full.



Installing Yarn Guide & Row Counter

Insert the yarn guide into the matching slot on the CSM as shown. Make sure to push it down as far as it can go. The top of the yarn guide should point towards the inside of the CSM.

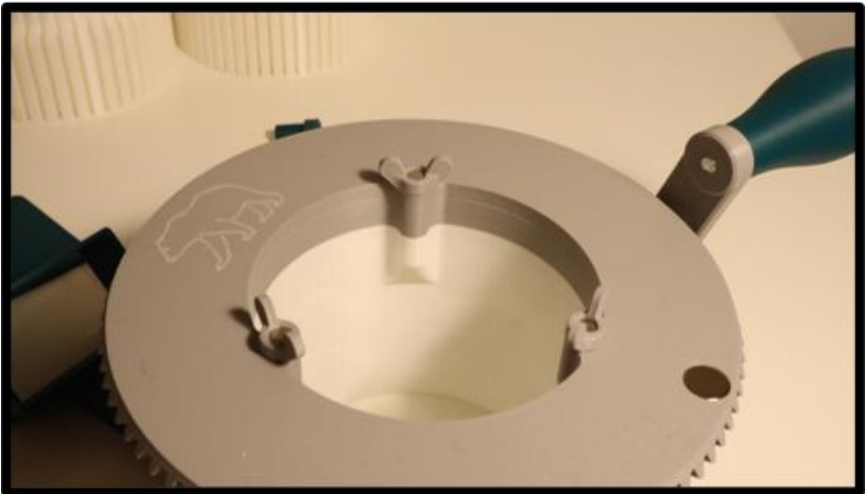


Insert the row counter into the rectangular slot at the rear of the CSM. Make sure to push it down as far as it will go. Hold the power button to turn it on. To test the counter, crank the handle until the counter increases by 1.

Installing a Cylinder

Insert the desired cylinder into the CSM, then place the large gear on the bottom of the machine, taking care to line up the small holes in the cylinder with the matching holes in the large gear. This can be done while the CSM is mounted to a table, but it is easier when the CSM is upside down.

Insert a cylinder bolt into each of the 3 holes. Tighten each bolt by twisting the wing nuts clockwise until you feel some resistance, taking care to not overtighten or strip them.



Removing The Cylinder

The cylinder can be removed either while empty or while loaded with needles. If loaded with needles, first remove the 2 cams from the CSM.

Next, unscrew the 3 cylinder bolts that attach the cylinder to the large gear by twisting the wing nuts counter-clockwise. This can be done while the CSM is mounted to a table, but it is easier when the CSM is upside down.

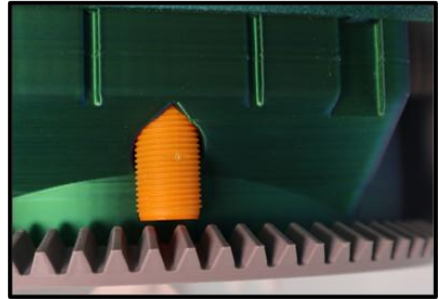


The cylinder will detach from the large gear and you can now install a different cylinder.

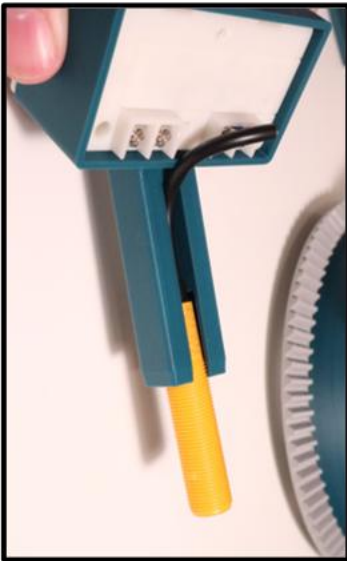
Flip the machine back over, re-install the spring, needles and cams. Remount the machine and you're ready to start cranking!

Troubleshooting The Row Counter

If the counter does not indicate an increase for each full rotation of the large gear, confirm that it is pushed down all



the way and that the yellow sensor is as close to the large gear as possible, as shown. Also check that the magnet is not missing from the large gear. In some cases a second magnet may be needed to aid in sensing.



If the counter is still not working, check the connections on the backside of it. The wires from the sensor should be connected to the screw terminals. Ensure they are connected and not too loose.

Taking Apart Row Counter

Remove the yellow sensor from the casing by pulling it downwards and out.

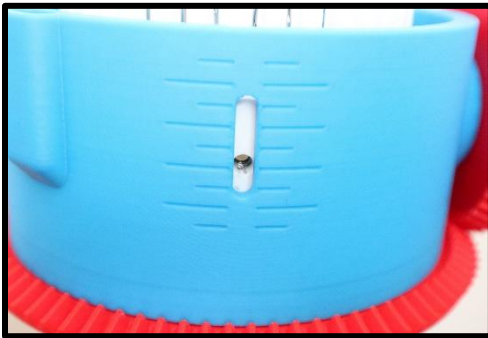
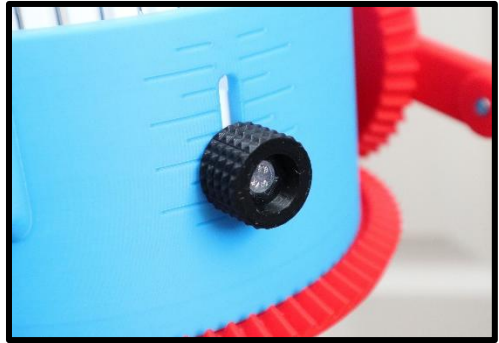
Push the counter out of the casing from the rear.

The wires from the yellow sensor to the terminals on the counter can now be more easily inspected.



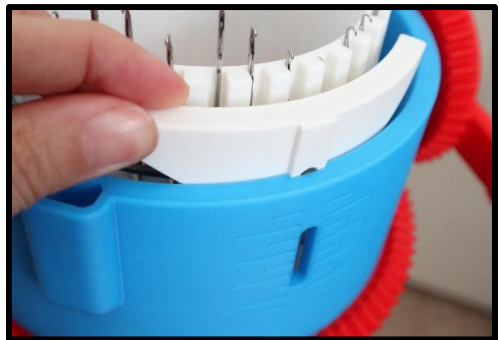
Removing the Cams

To remove a cam, unscrew the adjuster knob all the way by turning it counter-clockwise.



You can use a loom pick or crochet hook to slide the cam up and out of the CSM.

Both cams are removed the same way. Be sure to set the knobs and cams somewhere safe.



Casting on without a setup bonnet

Things you will need:

- .50 lbs & 2.5 lbs soft weights
- 2 balls of yarn of contrasting colors
- Scissors
- Clip or clothes pin
- Crochet hook
- Latch Hook
- Loom Pick



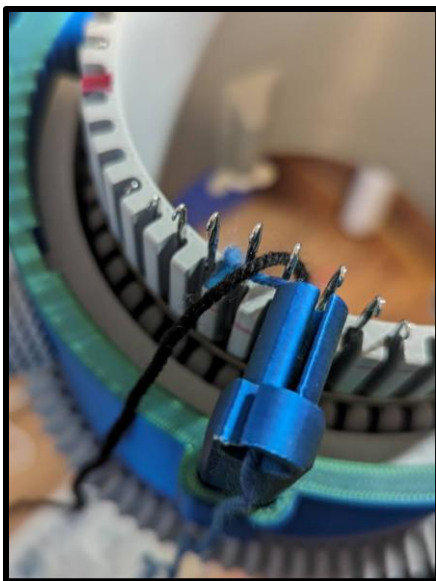
Step 1:

Pull the yarn that will be your working yarn after you finish the cast on through the yarn feeder and to the left of the first needle to the right of the main mark.



Step 2:

Take the contrast yarn that will be cut and only used for the cast on and thread it to the right of the first needle, to the right of the main mark. The needle should be 'sandwiched'



between the two yarns. Do not thread through the yarn feeder.

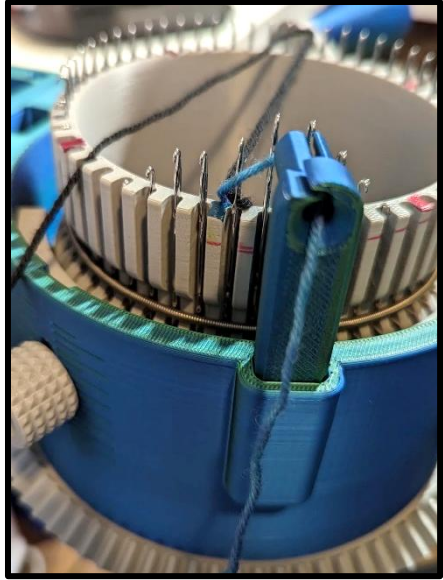
Step 3:

Using a small clip or clothes pin, secure the tail of both yarns on the inside of the cylinder.

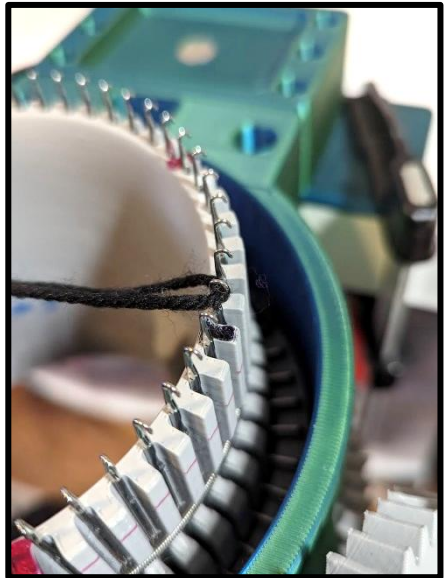


Step 4:

Take the contrast yarn and loop it around the needle to the right of the halfway mark, making sure it also is looped around the first needle and is under the needle latch.

**Step 5:**

When looping, make sure your yarn is not too tight, otherwise it will make cranking difficult.



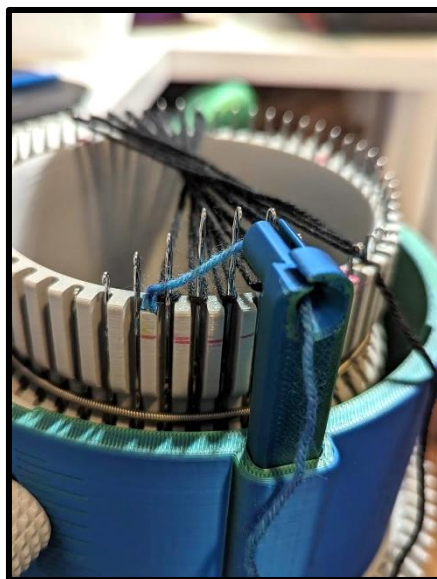
Step 6:

Continue looping the yarn around the needles, without turning the cylinder, until you have a section completed.



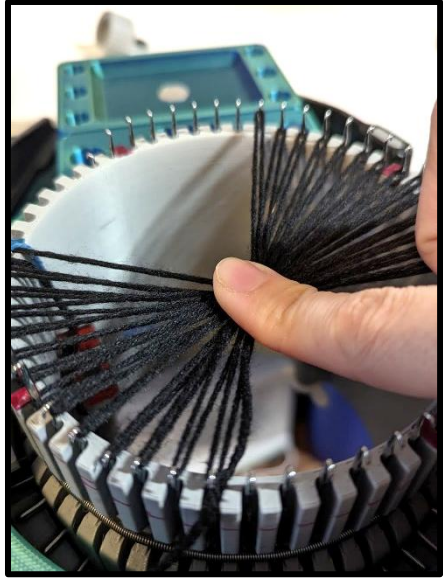
Step 7:

Slowly turn the cylinder, ensuring each of the contrast looped yarn is under the latches and the yarn going through the feeder is knitting through the loops. You will need to use your hands to push down the contrast yarn under the loops as you go.

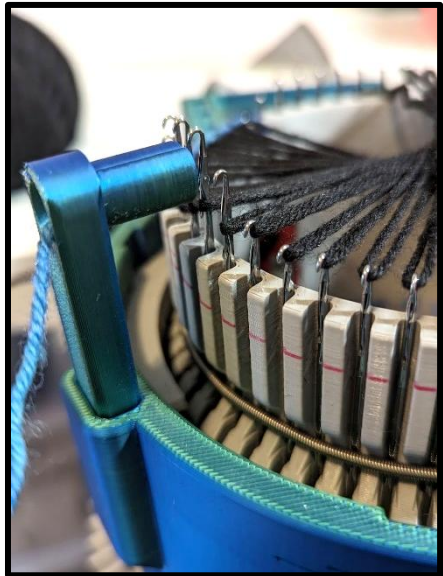


Step 8:

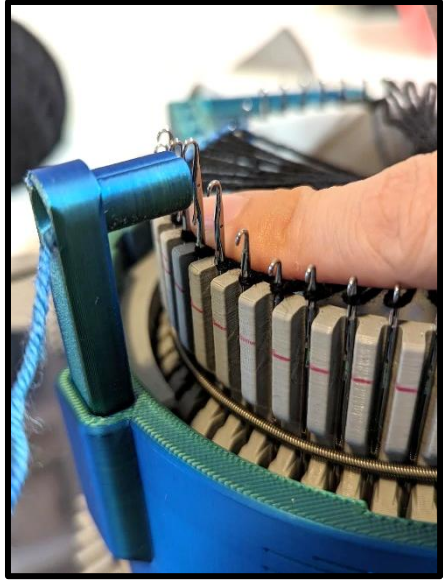
You will need to check your tension on the looped yarn often to ensure it is not too tight. You want there to be able to press down on the center of the cast on and it move at least 1-2cm.

**Step 9:**

Continue looping and cranking around the cylinder, pushing the looped yarn under the latches as it approaches the feeder to be knit. See photo on next page.

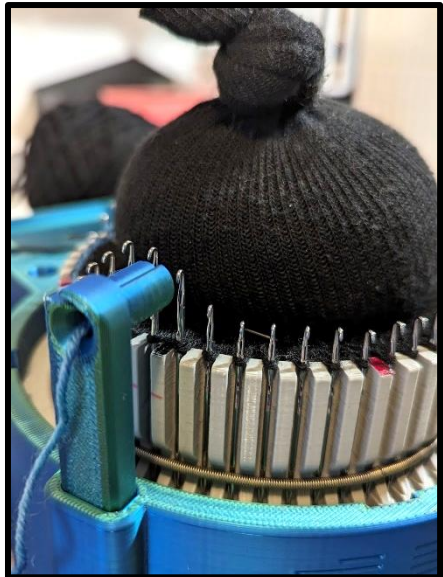


Step 9 Cont.:



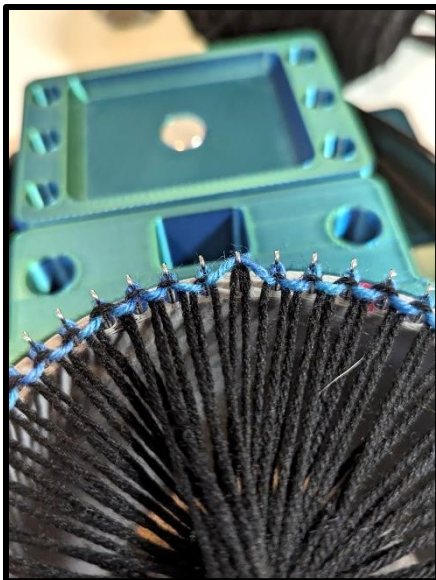
Step 10:

Once you have enough loops created you can place one of the soft weights (1.5lb) onto them to help pull the loops under the latches.



Step 11:

You might miss a stitch, use your loom hook or crochet hook to bring the contrast loop over the working yarn to knit the stitch.



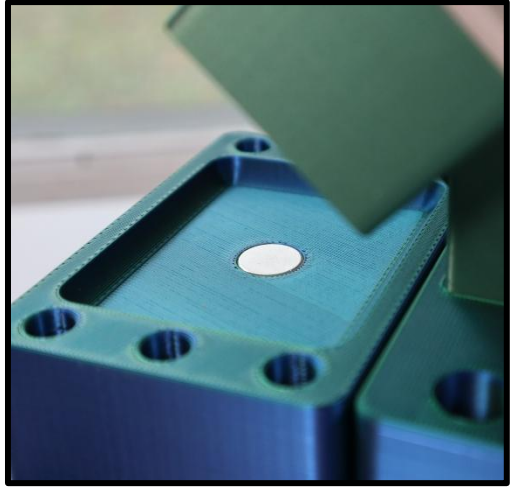
Upgraded Yarn Feeder & Mast

If you purchased the upgraded feeder and mast, take note that you will need to tighten the feeder screw at the top to secure its position once installed and slid into the preferable position.

The mast is designed to be used with cones or caked yarn, however you will manually need to pull yarn back during heel turning to prevent tangling/looping back onto itself.

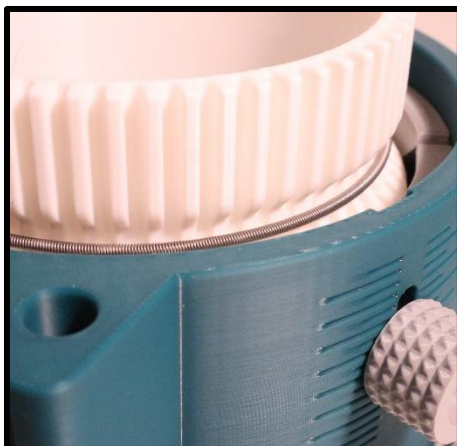
Cranking with your CSM

I know firsthand the excitement in wanting to get started on your first project, but first there are some important things to know before you get cranking!



1. When cranking, you should have no tension on the yarn that is feeding into the machine. Any additional tension will create uneven gauge or binding of the needles and yarn causing it to jam.
2. The only exception to working yarn tension is when turning a heel to prevent yarn from becoming tangled when working back and forth.

3. Always work at least a 50 row gauge swatch before starting your project to ensure you will have the perfect fit.



4. Never force it! If you're unable to turn the handle, or if it feels like the gears are slipping. STOP! Check to see if anything has come loose or has become jammed. It is better to start your project over than wait for a part to arrive in the mail.
5. Do not forget to adjust your cams! If your needles are not knitting, and the yarn is just riding along as you crank, check and see what your cam knob is set to. You want at least 2 to 3 lines from the top of the cam knob notch (show in the photos above).

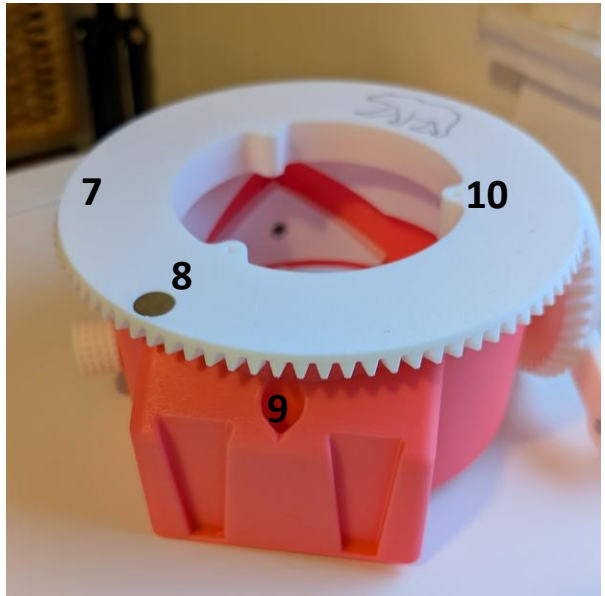
CSM Diagram



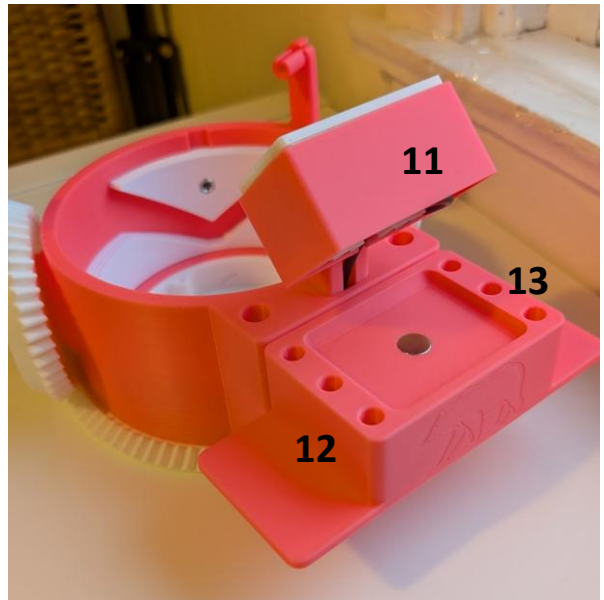
1. Handle Gear
2. Handle
3. Table Mount
4. Yarn Guide
5. 'V' Cams
6. Needle Track



7. Bottom Gear
8. Row Counter
Magnet
9. Row Counter
Sensor
10. Wingnut
holes for
attaching
cylinder.



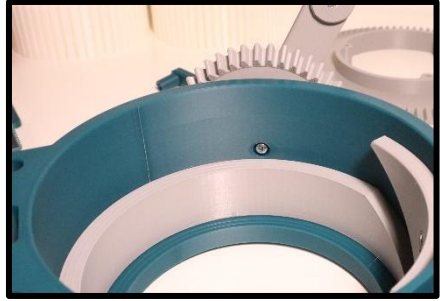
11. Row
Counter
12. Table Mount
13. Accessory
Holes



Troubleshooting

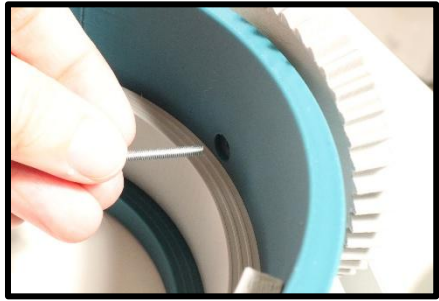
Needles not pulling down to knit:

Remove cylinder and cams and ensure the track on the inside of the housing is flush to the bottom.



Handle wobbles:

Remove the cams and cylinder to expose the screw on the inside of the CSM. Remove the screw to allow the handle gear to be removed. Check for damage. Apply a few drops of the provided lube and reinstall the stub and handle gear. Tighten the screw until the gear and handle are snug but not too tight. Turn the handle to ensure it does so smoothly and without resistance.



Safety Precautions:

To ensure safe operation, this machine is intended for use only by individuals aged **12 years and older**. Children under the age of 12 are not permitted to operate or handle the machine, even under supervision.

This is to prevent potential injuries due to the machine's mechanical components and to ensure the operator has the required understanding of safety procedures.

For all users, it is essential to follow these general safety precautions:

1. Always read and follow the operating instructions carefully.
2. Keep hair, loose clothing, and jewelry away from the machine during use.
3. Ensure the machine is used on a stable surface in a well-lit area.
4. Do not leave the machine unattended while it is in operation.

Failure to adhere to these guidelines may result in injury or damage to the machine.

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