

## Understanding the Purpose of an Industrial Sewing Machine 101 – Tuan Course

### a. Key Differences from a Domestic Machine:

- **Power & Speed:** Industrial machines are designed for continuous use and high-speed sewing, ideal for large-scale or heavy-duty projects.
- **Applications:** Suited for sewing thick materials such as:
  - Leather
  - Canvas
  - Upholstery fabric
  - Shoes, bags, and other structured items
- **Stitch Options:**
  - Most industrial machines offer only one primary stitch: **straight stitch**.
  - For finer fabrics and a variety of stitch types (zigzag, decorative, etc.), use a **domestic machine**.

### b. The Walking Foot:

- A built-in mechanism that helps feed multiple layers of fabric evenly by walking over the material.
  - Reduces slipping or misalignment – especially important for thick or slippery materials.
- 

## 2. Threading the Machine

### a. Thread Types:

- Industrial machines use stronger, more durable threads:
  - **Bonded nylon**
  - **Heavy-duty polyester**
- These threads can handle stress and abrasion better than standard threads.

### b. Thread Size & Tex Number:

- **Tex number** = thread weight. The higher the number, the thicker the thread.
- For most industrial projects, use **Tex 40 to 70** depending on the fabric weight and stitch visibility.

### c. Recommended Sources:

- **Techsew** is a great supplier. Look for:
  - *“Bonded Nylon Sewing Thread”*

### d. Threading Steps:

- Demonstrate the step-by-step threading process slowly.
  - Emphasize thread tension adjustments, especially for thicker threads.
  - Always thread with the presser foot lifted to ensure tension discs are open.
- 

## 3. Winding and Inserting the Bobbin

- Show how to properly **wind the bobbin** using the machine’s winder.
  - Demonstrate how to **insert the bobbin** into the case and thread it correctly.
  - Tip: Make sure the bobbin spins in the correct direction to avoid thread jams.
- 

## 4. Basic Operation and Sewing Tips

### a. Before You Sew:

- Always **test on scrap fabric** similar to your final material.
- Adjust tension and presser foot pressure accordingly.
- Ensure the walking foot is engaged.

### b. While Sewing:

- Keep a steady hand – let the machine do the work.
- Use tools like **fabric guides** or **magnetic seam guides** for straight lines.

### c. Safety Tips:

- Keep fingers clear of the needle path.
  - Use the knee lift or foot pedal carefully – industrial machines can be fast!
- 

## **5. Machine Maintenance**

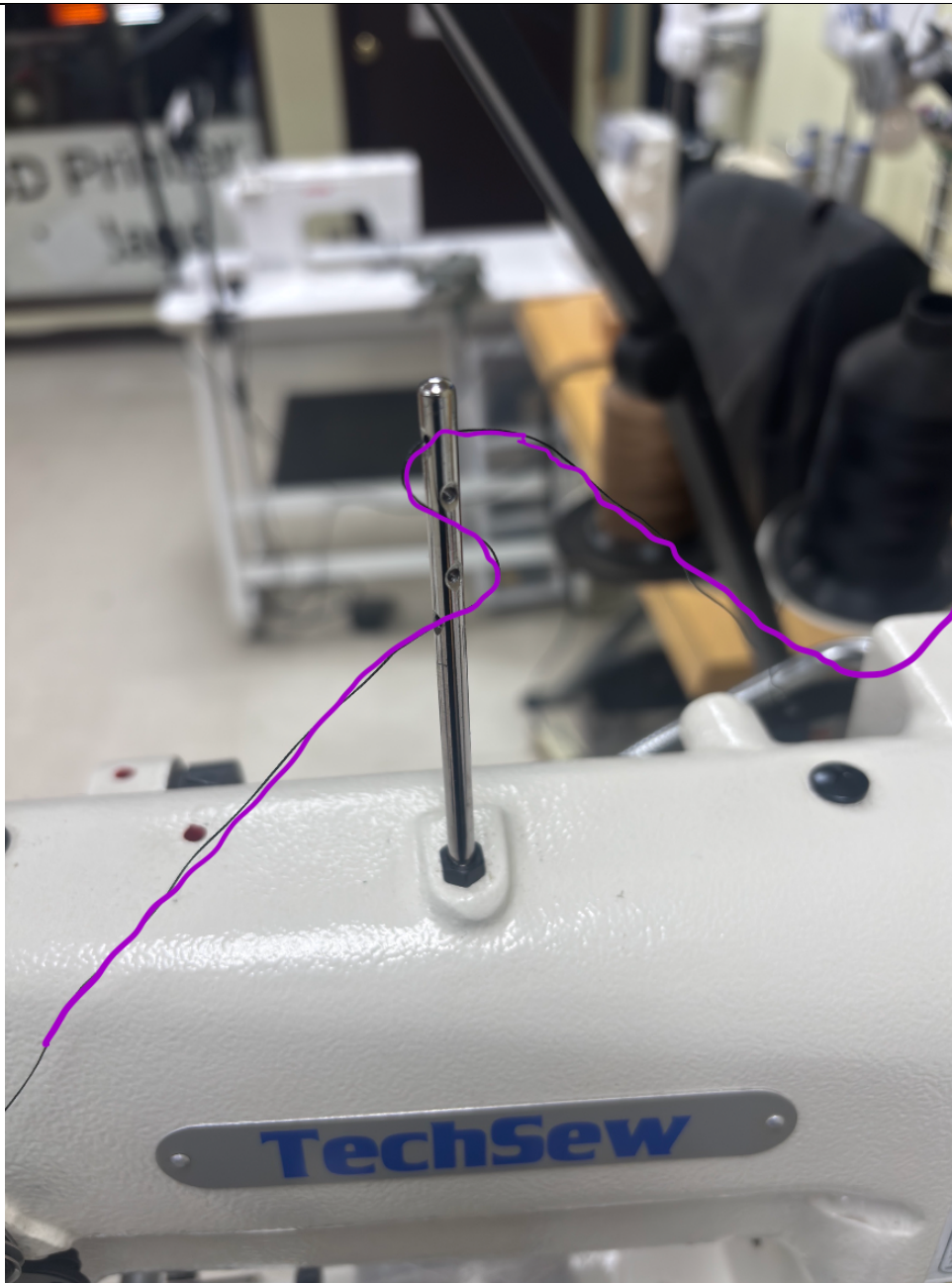
### **a. Lubrication:**

- Industrial machines require regular oiling.
  - Before and after heavy use.
  - Use sewing machine oil (not WD-40 or substitutes).
- Show oiling points – some machines are self-lubricating; others have specific ports.

### **b. General Maintenance:**

- Clean lint and dust buildup after each project.
- Check for needle wear and replace dull or bent needles promptly.

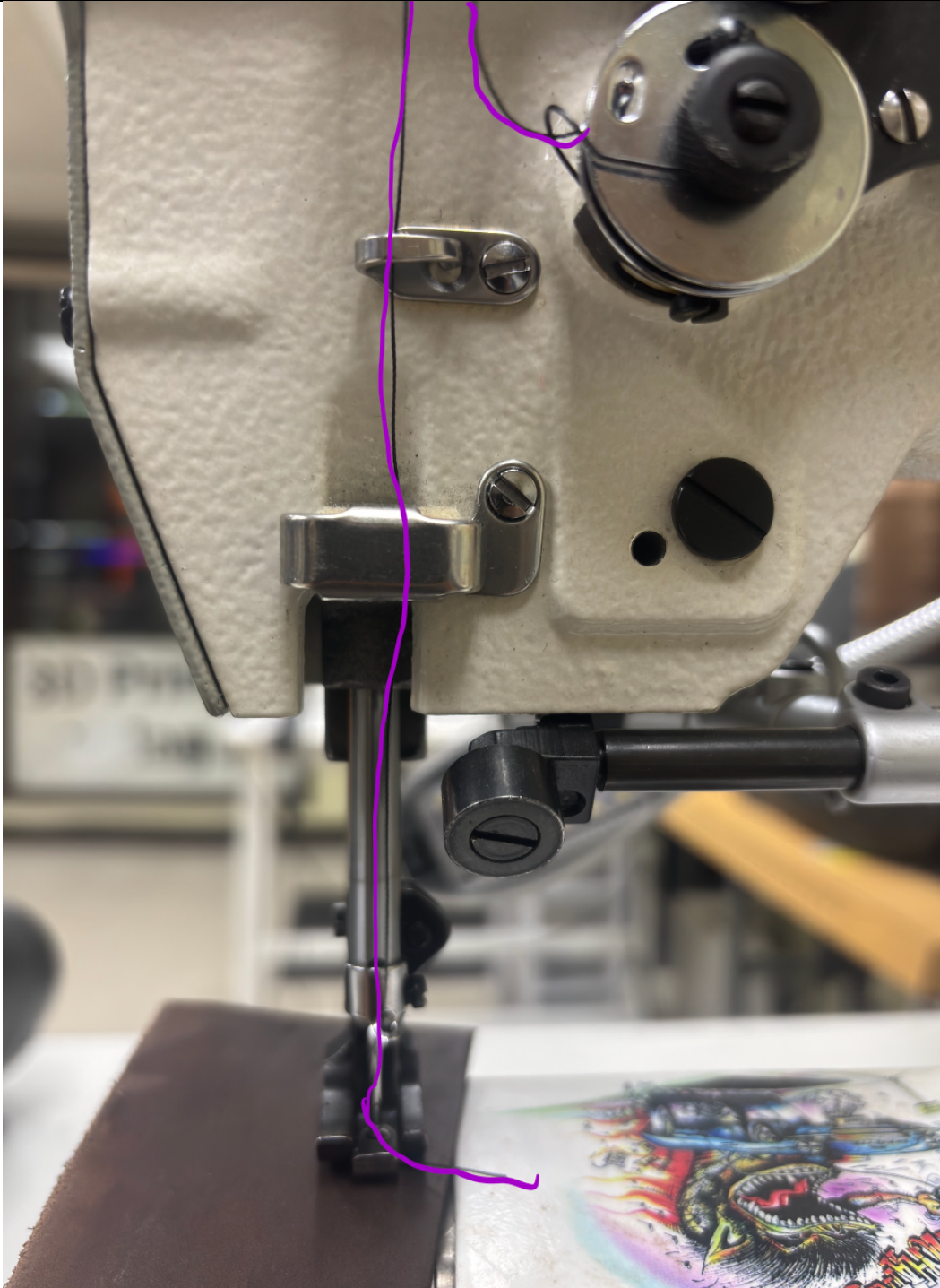
1. Threading through the upper rod



## 2. Tensioner pullies



1. Threads go down and through the needle from the right to left side.





### 3. Completed threading

