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Plastics Shredder Training Guide

1. Product Overview

The **Plastics Shredder** is designed for recycling 3D printed plastics PLA and home recyclable softs plastics like HDPE.

****NOTE:** Use of the plastics shredder is a

3. Usage Instructions

1. **Material Prep:** Before using the shredder on your plastic waste, please ensure it is clean, dry, and sized for the shredder.

i. All household plastics such as HDPE need to be washed and dried w/ all labels removed.

a. One suggestion is to take all plastics, place in a cloth bag and wash in a dishwasher or washing machine. Then dry on low/no heat in dryer or layout to dry on a towel.

ii. **DO NOT** shred plastic with any form of a label attached.

iii. All 3D prints need to be broken into smaller pieces. The shredder will not shred large, whole prints.

2. **Load Materials:** Open the shredder's hopper and place the plastics inside. Ensure that the materials are clean and free from foreign objects.

i. Materials should be dry and free from moisture to ensure optimal shredding performance.

- ii. **Do not shred full-scale 3D printed objects.** Cut them into smaller pieces before loading them into the hopper.
 - iii. To improve shredding efficiency, reduce the size of the materials by cutting them into smaller pieces.
 - iv. Avoid overloading the hopper to prevent jamming and ensure smooth operation.
 - v. Always wear protective gloves and eye protection when handling materials.
 - vi. Never place foreign objects, such as metal or glass, into the shredder.
 - vii. Keep long hair and loose clothing away from the hopper and cutting chamber.
3. **Power On:** Connect the Mini Shredder to a power source (AC110V-240V). Make sure the power switch is in the "ON" position.

4. Start Shredding

- i. On the controller, move the black control switch to the left (counter-clockwise). The machine will begin shredding the materials.
5. **Obstruction Handling:** If the shredder encounters a blockage or ceases, reverse the shredder direction briefly to clear the jam.
- i. If you need to manually remove an obstruction, ensure that the shredder is stop and turn off power (unplug for safety).
 - ii. Remove any stuck pieces and resume shredding.

4. Technical Specifications

- **Motor:** The Mini Shredder features a 24V350W DC motor.
- **Blades:** Stainless steel blades ensure efficient cutting.
- **Frame:** The shredder is housed within a sturdy 2020 Aluminum Profile Frame.
- **Reducer:** It includes a worm reducer (NMRV050) for optimal torque and performance.
- **Power Supply:** The shredder operates on AC110V-240V power supply. Current supply is

Tool Captains

- **Michael Bender** - Tool Captain - 608-692-6035

Remember to follow safety precautions while operating the Mini Shredder. Always unplug the machine when not in use, and keep it away from water or moisture. Happy shredding! 🌟

5. Troubleshooting

- **Issue:** The shredder is not shredding materials effectively.

- **Solution:** Ensure that the materials are clean, dry, and free from foreign objects. Reduce the material size for better shredding performance.
- **Issue:** The shredder is jammed.
 - **Solution:** Reverse the shredder to clear the jam. If the jam persists, turn off the power and manually remove the obstruction.
 - **Solution:** Turn off the power, unplug the machine, and manually remove the obstruction. Resume shredding after clearing the jam.
 - **Solution:** If the jam persists, contact the Tool Captain for assistance.
- **Issue:** The shredder is making unusual noises during operation.
 - **Solution:** Turn off the machine immediately and inspect the cutting chamber for any foreign objects or obstructions. Remove any debris and resume operation.
- **Issue:** The shredder fails to start.
 - **Solution:** Check the power connection and ensure that the power switch is in the "ON" position. If the issue persists, contact the Tool Captain for further assistance.
 - **Solution:** If the shredder is not operating due to a technical fault, avoid attempting to repair it yourself. Contact the Tool Captain for professional support.
- **Issue:** The shredder overheats during operation.
 - **Solution:** Allow the shredder to cool down and avoid overloading the hopper. If the issue persists, contact the Tool Captain for guidance.
- **Issue:** The shredder's belt is slipping.
 - **Solution:** This may occur when the shredder is jammed or overloaded. Reverse the shredder to clear the jam. If the jam persists, turn off the power and manually remove the obstruction.
 - **Solution:** Turn off the machine, unplug it, and clear any obstructions.
 - **Solution:** If the belt continues to slip, contact the Tool Captain for assistance.