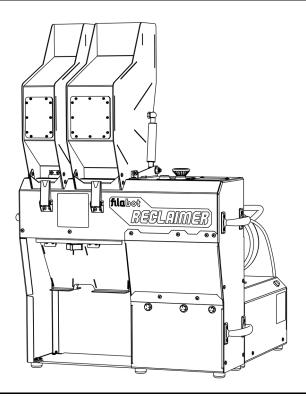


#### **Filabot Reclaimer**

# **Operation Manual**



This manual applies to the Filabot Reclaimer.

Triex LLC. Barre. VT 05641. USA

### **CAUTION! Read Carefully**

- **HEAVY** Fully assembled Reclaimer weighs 125lbs. DO NOT attempt to lift or assemble the Reclaimer alone.
- SHARP ROTATING BLADES Never operate the Reclaimer with out all hoppers closed and secured. Never operate the Reclaimer if any parts appear missing or damaged. NEVER ATTEMPT TO MODIFY OR BYPASS SAFETY SWITCHES OR CIRCUITRY.
- SHARP PLASTIC SHRAPNEL Crushing, cutting, or otherwise breaking down plastics such as PLA and others will create high speed projectiles and sharp edges. Always wear proper eyewear and gloves when working with the Reclaimer and processing plastic.
- **In Case of Emergency** hit the EMERGENCY STOP button or pull the power cord out of the machine.
- Only use the Reclaimer to process thermoplastic polymers. No other use has been tested or approved by Filabot.
- Always STOP the Reclaimer before opening the hoppers.
- The Reclaimer is designed for indoor use only. Operate in a clean, dry area.
- Check the AC input voltage specified on the S/N Label near the power inlet. Only use the specified input voltages to operate the Reclaimer or damage to the components will occur.
- Do not use this device if any parts appear missing or damaged.
- Do not modify this device without authorization from Filabot.

Contact Filabot with any questions 1-802-505-6772 contact@filabot.com

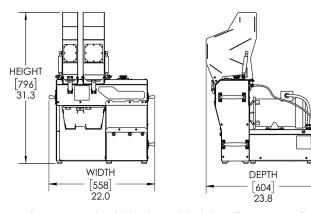
### **General Specifications**

**Power Input:** 115VAC-10A or 230VAC-6.5A 50/60Hz 1-phase

> 1550W MAX - varies with settings Input Connector Type: IEC 320-C14

Weight: 57kg (125 lbs)

#### **Overall Dimensions:**



230V 3-phase Variable Frequency Drive **Drive Control:** 

4.2A Motor Current Limit

Jam Detection and Automatic Reversing

**Drive Motor:** 1HP 230V 3.2A 3-phase

> 62Hz 1780 RPM Inverter duty

**Final Drive:** 20:1 Worm gearbox into

2.5:1 #50 roller chain

**Final Drive Output: 35 RPM** 

216 ft-lbs (Calculated)

Rotating Blades: 0.25" Wide A2 Hardened Steel Shredder:

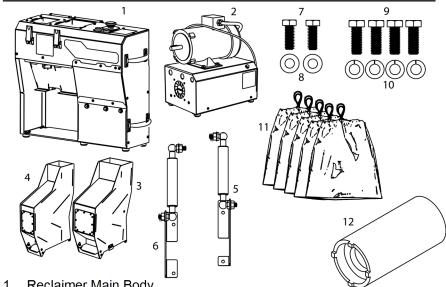
Fixed Blades: Reversible 0.50" 4140 Steel Plate

Rotating Drum: 0.20" x 0.20" Cutting Teeth **Granulator:** 

17-4 SS Hardened

Fixed Blades: Reversible 0.50" 4140 Steel Plate

#### **Parts Included**



- 1. Reclaimer Main Body
- 2. Motor Base Assembly
- 3. Shredder Hopper
- 4. Granulator Hopper
- 5. Shredder Hopper Gas Spring Assembly
- 6. Granulator Hopper Gas Spring Assembly
- 7. (2) 5/16"-18 x 7/8" Hex Head Bolts
- 8. (2) 5/16" Washers
- 9. (4) 3/8"-16 x 1" Hex Head Bolts
- 10. (4) 3/8" Split Lock Washers
- 11. (20) Plastic Drawstring Bags 10" Wide, 14" High
- 12. Main Bearing Tool

### **Tools Required:**

9/16" Wrench 1/2" Wrench

#2 Philips Screw Driver

Rigid table capable of supporting at least 200lbs

Call 1-802-505-6772 or visit Filabot.com for additional/replacement parts

2

#### **Assembly**

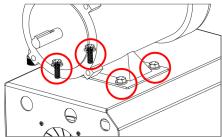
**WARNING:** Fully assembled Reclaimer weighs 125lbs. DO NOT attempt to lift or assemble the Reclaimer alone.

**Two** people are required to assemble the Reclaimer.

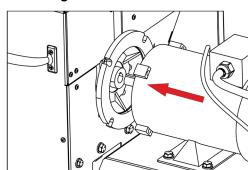
Assemble the Reclaimer on a rigid table capable of supporting at least 200lbs. If such a table is not available, assemble and operate the Reclaimer on the floor.

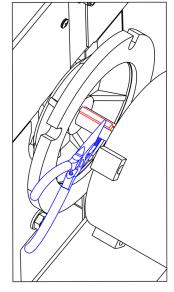
**WARNING:** The Reclaimer Main Body tips easily when not attached to the Motor Base Assembly. Someone must steady the Reclaimer Main Body while assembling it to the Motor Base Assembly.

 Loosen the 4 motor base bolts using a 1/2" wrench. Do not remove the bolts.



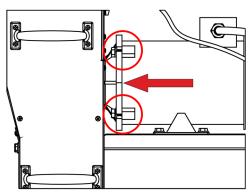
 Line up the motor shaft with the gearbox input on the Reclaimer. Use a pair of pliers to hold the shaft key from sliding back while inserting the shaft. Caution! Reclaimer can tip over easily. Have someone support the Reclaimer while attaching the motor.



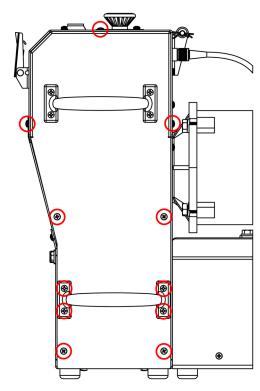


#### **Assembly**

3. Push the motor face flat against the gearbox face. Make sure there is not gap between the motor face and gearbox face. Install the (4) 3/8"-16 x 1" motor bolts with lock washers and tighten them using a 9/16" wrench.

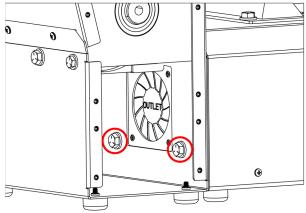


4. Remove the (7) highlighted panel screws and (4) handle screws with a #2 Philips screwdriver and remove the Reclaimer right side panel.

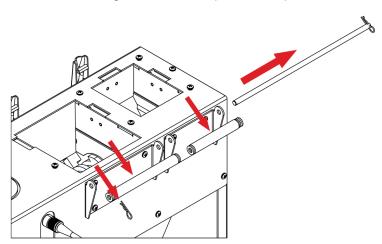


### **Assembly**

5. Behind the Reclaimer side panel and below the gearbox, install the (2) 5/16"-18 x 7/8" lower drive enclosure bolts with washers and tighten using a 1/2" wrench. The motor base enclosure may need to be shifted under the motor to allign the holes.

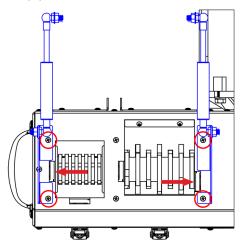


- 6. Reinstall the panel and (7) highlighted panel screws and (4) handle screws and handle which were removed in step 4.
- 7. Using a 1/2" wrench, tighten the (4) base bolts which were loosened in step 1.
- 8. Remove the inner cotter pin from the hopper hinge and slide out the rode while removing the aluminum spacers and plastic washers.

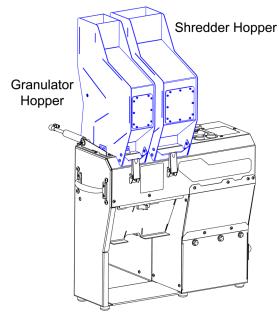


## **Assembly**

9. Remove the (4) top panel screws using a #2 Philips screw driver. Line up the two gas spring assembly brackets with the holes in the top panel as shown and reinstall the screws. Be sure the square cutouts in the gas spring assembly brackets match with the sensor cutouts on the top panel.

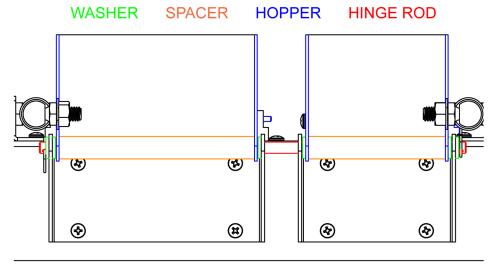


10. Set the hoppers on top of the Reclaimer in the orientation shown.

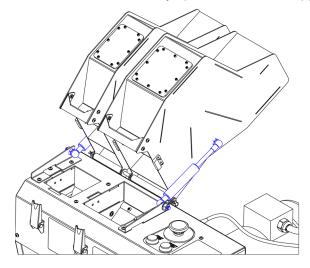


### **Assembly**

11. Reinstall the hopper hinge rod, spacers, plastic washers and cotter pin in the order shown.

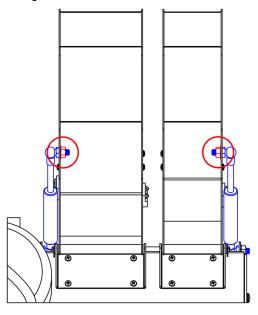


12. Remove the nuts from the end of the gas springs not attached to the bracket on the top panel. One at a time, tip each hopper back and insert the threaded stud on the end of the gas spring the nut was removed from into the hole midway up the back of the hopper.

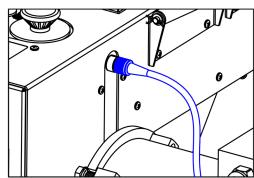


# **Assembly**

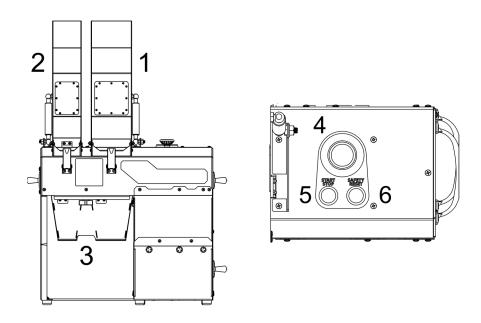
13. Reinstall the nuts on the gas spring studs on the inside of the hopper and tighten using a 1/2" wrench.



14. Plug the grey control cable from the back of the drive enclosure into the bulkhead located on the back of the Reclaimer above the motor and tighten the thumbnut to secure the connector. Make sure to allign the notch in the connector with the bump on the inside of the bulkhead.

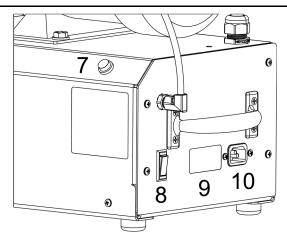


#### **Controls & Inputs**



- 1. Stage 1 Shredder Hopper Max part size 3 inches in any dimension (must fit in 3" sphere).
- 2. Stage 2 Granulator Hopper Max material size 1/2 inch.
- 3. Output hopper.
- 4. Emergency stop button Press for emergency stopping only, use Start/Stop button for normal stopping.
- 5. Start and Stop button Press to start the machine, press while running to stop the machine.
- 6. Safety Reset button Press at initial power on or after the E-stop or hopper saftey switches are tripped to reset the safety circuit.

#### Controls & Inputs cont.



7. Drive status indicator LED. Output code:

**Solid green** – Drive power on, ready to start

Flashing green – Drive operating normally, motor is running

**Solid red** – Safety trip (Safety switches or Emergency Stop)

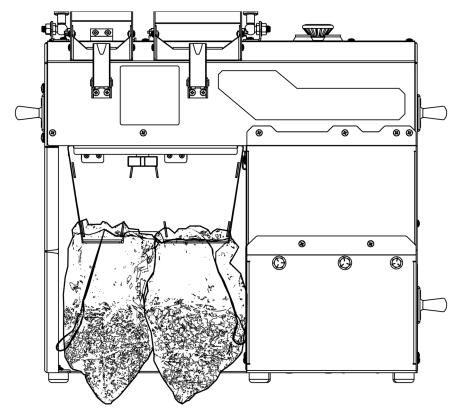
**Off** – No drive power (If Main Power is illuminated and indicator is off then safety circuit must be reset.

**Flashing red (code 8)** – (8 flashes followed by pause) Over current detection, check Reclaimer for jam. To reset over current detection, power off or hit Emergency stop and wait until indicator LED turns off before pushing the Safety Reset button.

- 8. Main power switch and main power indicator.
- 9. Serial Number & Voltage Input Label
- 10. Power inlet IEC C14 110VAC

#### **Operation**

- 1. Make sure all 3 hoppers are fully closed and latched.
- Secure the drawstring collection bags to the flanges on the bottom of the ouput hopper as shown:



- Plug the power cable into the power inlet on the machine and into a 110VAC outlet.
- 4. Turn on the main power switch. It should illuminate if the machine has power.
- Make sure the E-stop button is pulled up and push the Safety Reset button to power up the drive. The status indicator should illuminate green if the drive has powered on.
- 6. Press the Start/Stop button to start the machine.
- 7. To begin shredding, place parts with a maximum dimension of 3 inches in the top of the Shredder hopper. Do not fill the hopper past the bottom of the view

- window to avoid feed issues in the hopper. During operation you may need to adjust the bags so they fill completely.
- 8. At anytime during shredding, or when the collection bag for the Shredder is full, the Shredder output can be loaded into the Granulator hopper. Press the Start/Stop button to stop the machine and transfer the output of the Shredder into the Granulator hopper.

**NOTE:** It is recommended to screen the output of the Shredder to remove material smaller than 1/4 inch before transfering it to the Granulator. This reduces over granulating of smaller material to help make sure final granule size is as consistent as possible.

9. Replace the drawstring bag on the Shredder output and press the Start/Stop button to begin granulating. If granulated material consistency is not satisfactory, it can be screened and run through the Granulator again.

**NOTE:** Material can be loaded into both hoppers while running allowing for simultainious Shredding and Granulating.

12

2019, Triex LLC, Barre VT, USA. No part of this manual may be copied, stored, transmitted, or otherwise released without the express written consent of Triex LLC. This manual applies only to the Filabot EX6. While Triex LLC has applied all possible caution in producing this manual, we urge the customer or user of this device to contact Triex LLC with any questions or concerns about operation, before operating the device or making any adjustments. Triex LLC provides no assurance of applicability of the product to customers' requirements.