



CENTURIONPRO

XL MEGABUCKER

The World's First Industrial Scale Destemming Solution



Manual
Version 1.0

Caution! Read all safety warnings before continuing!

Safe operation is the responsibility of the user. Failure to observe and follow safety warnings will result in unsafe operating conditions which may cause serious injury, damage, or death.



WARNING

**MOVING PARTS CAN CRUSH OR CUT.
KEEP HANDS CLEAR AT ALL TIMES
DURING OPERATION.**



**UNPLUG MACHINE BEFORE CLEANING
OR DISASSEMBLING.**

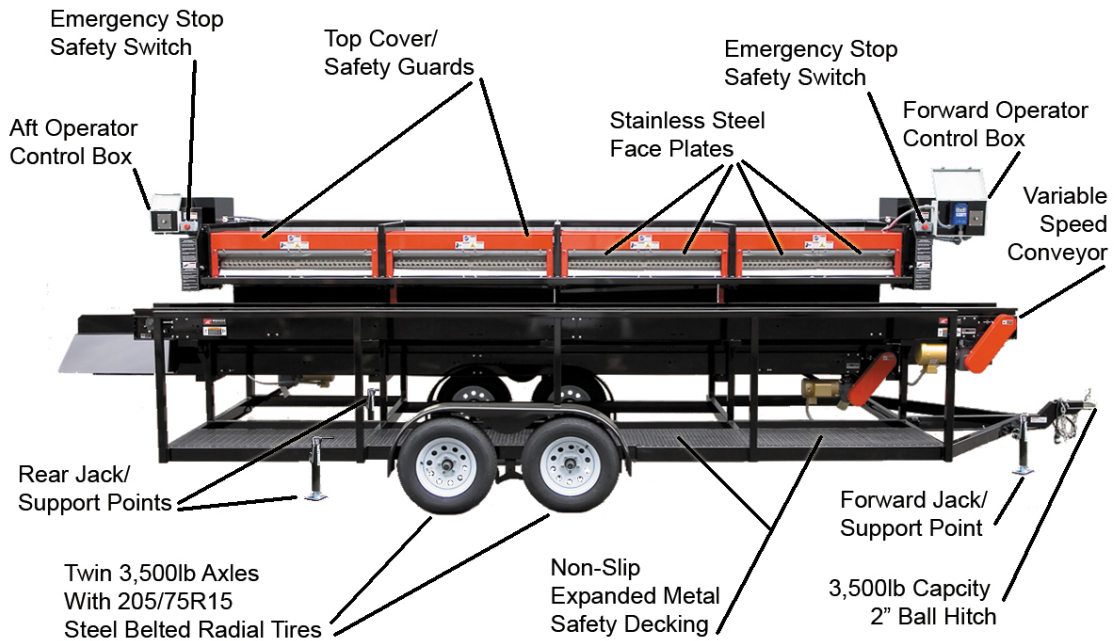


**ENTANGLEMENT HAZARD! DO
NOT OPERATE WITH LOOSE
CLOTHING OR JEWELRY.
KEEP HAIR TIED BACK.**

Electrical generators may cause voltage fluctuations which can damage power supplies, or other sensitive electronics of the machine. An adequately rated surge protector must be used if the machine is to be powered by an electrical generator.

Specifications

- 220 volt, 60hz, 70amp maximum power draw
- Two fixed speed conveyors for stem and flower removal.
- One variable speed conveyor for unprocessed product delivery to operators.
- Variable Roller RPM, 0-140 RPM
- 0-220 feet per minute, maximum roller feed rate



Operation Overview

- Before operating the machine, a section of level ground, clear of debris, hazards and obstructions should be selected. The machine should be disconnected from the towing vehicle and leveled using the three leveling jack-screws provided with the machine. Failure to properly level or support the machine can result in unsafe working conditions and should be avoided.
- Cut plants into single stems or shoots with 4-5 inches (10-12cm) of stem exposed at base of branch or shoot.
- Ensure all guards are installed and safety precautions are met before powering on machine.
- Turn on power switch and variable speed controls to the desired speeds. Faster speeds work best for wet material and slower speeds work best for dry material. The roller speed control knob will “click” with each incremental increase in speed, allowing for precise replication of roller speed whenever desired (3 clicks, 4 clicks, etc.).
- For best results, insert base of stem or shoot into smallest sized nozzle on faceplate that it will fit without jamming. Once stem or shoot engages rollers, let go and allow machine to draw stem or shoot through face plate nozzle, removing all flowers in the process.
- If a jam occurs, stop the machine with the emergency stop button, then reset the emergency stop button by turning it to unlock. Restart the machine in the reverse direction to extract the jammed stem or shoot. Once the jam is cleared, the speed

control knob can be returned to the forward direction for continued use. It is recommended that all jammed stems or shoots be cleared immediately to keep from wearing rollers (which are not warranted against wear).

Cleaning and General Maintenance

- Lock out power and unplug machine before removing any covers, guards or chutes. Close and secure the covers of the operator control boxes at each end of the machine before attempting to clean the machine.
- The machine should be cleaned regularly and especially after every day of use or before a prolonged time of storage, to keep all aspects of the machine functioning properly and like new.
- It is best to remove any guards, chutes and safety panels for ease of access to the machine internal areas and for the cleaning of the guards and safety panels, separate of the machine.
- If pressure washing equipment is used, extreme caution must be observed to direct blast and spray away from electrical components, bearings, chains, etc. Water accumulation in or around these parts may cause increased wear and damage to the machine, as well as severe injury or death to anyone operating or nearby the machine when power is returned to the unit (especially by electrical shock). All pressure washing of the machine should be kept to a minimum, directed only to specific areas, or avoided completely due to the potential hazards involved.
- If desired, bare metal parts removed from the machine may be cleaned with denatured, or isopropyl alcohol. The use of proper safety equipment such as gloves and a face shield is recommended.
- Rubber rollers are best cleaned by hand scrubbing with mild soap and water for longest life. The use of solvents or other oil based products may severely damage rollers. Never use harsh solvents, mineral spirits, or caustic cleaning materials to clean the rollers. Rollers do wear out over time and are not covered under warranty.
- Use a light spray of drive chain oil on drive chains weekly.
- Grease “Zerk” fittings on bearing blocks annually and after every 40 hours of use to ensure proper grease supply to roller shaft bearings.

Troubleshooting Common Problems

- Occasionally stems or shoots may become wrapped around rollers and can pack up behind the face plate of the machine. If this occurs, the machine may labor to operate or stop the rollers completely due to an overloaded condition. To remedy this problem we recommend the machine be powered down and electrically locked out. The face plates can then be removed and the jammed stems cleared.

Once cleared, replace all faceplates and guards before unlocking and re-engaging power to the machine for further operation.

- When using the machine with freshly harvested or “wet” product, the rollers may become loaded with residue and lose their ability to grab and pull stems or shoots through the faceplate nozzles. Likewise, if the same exact nozzle is used repeatedly by an operator, buildup of residue will occur on the roller segment at that specific nozzle. We therefore recommend operators vary the use of the different nozzles presented to them as they work. When harvests are made in the rain, it is best to remove the excess water from the stems or shoots before being fed to the machine, to decrease roller wetness and increase efficiency.

Fixed Speed Conveyor Operation

- The two fixed speed conveyors for flower and stem/shoot extraction are powered by a single 15amp circuit breaker on the main power panel, shown in figure 1. When power is applied and this circuit breaker is on, the fixed speed conveyors will start automatically and run continuously for as long as the main power switch is engaged. Unplugging the machine, turning off the main power switch (power lockout) or turning off the 15amp circuit breaker will shut off the fixed-speed conveyors. Note: the 15amp circuit breaker is for overload/emergency protection only and should not be used as an “on/off” switch for the fixed speed conveyors.

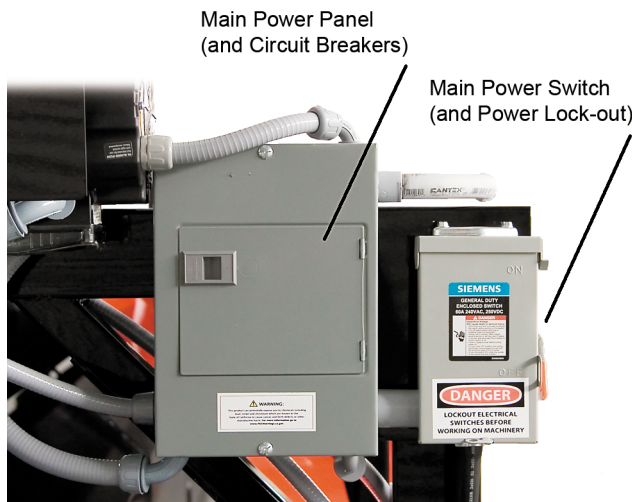


Figure 1

Variable Speed Conveyor Operation

- Like the two fixed speed conveyors, the variable speed conveyor is powered by its own 15amp circuit breaker and will run in accordance with the settings of the

variable speed control unit, located in the forward operator control box (see figure 2). This unit provides controls for both speed and direction of the variable speed conveyor, allowing for fast or slow belt speed in accordance with the number of operators present and their respective workload.

- To START the variable speed conveyor, momentarily press the RUN button and the variable speed conveyor will begin to accelerate to its presently set speed.
- To INCREASE the speed of the conveyor, press and hold the UP arrow until the desired speed is reached on the display panel (note: the conveyor speed may lag slightly behind the indicated speed on the display panel, as the conveyor cannot speed up as quickly as the numbers on the display). The indicated speed numbers allow for a reference that can be used to recreate belt speeds which work for best efficiency with a given number of operators and material types.
- To DECREASE the speed of the conveyor, press and hold the DOWN arrow until the desired, reduced speed of the conveyor is met. The conveyor will slow down more quickly than it speeds up and the indicated speed will more closely match the actual speed during deceleration.
- To REVERSE the direction of the conveyor belt, momentarily press and release the R/F direction button and then momentarily press and release the M input button. The belt direction can be changed when the conveyor is either stopped or running. If the conveyor is running, it will quickly slow down and then accelerate again in the reversed direction. To reinstate the previous direction, repeat the outlined steps above.
- For further information regarding the use, programming and troubleshooting of the variable speed conveyor belt, see the supplied manufactures manual packed inside of the forward operator control box of the machine from the factory.

Forward Operator Control Box

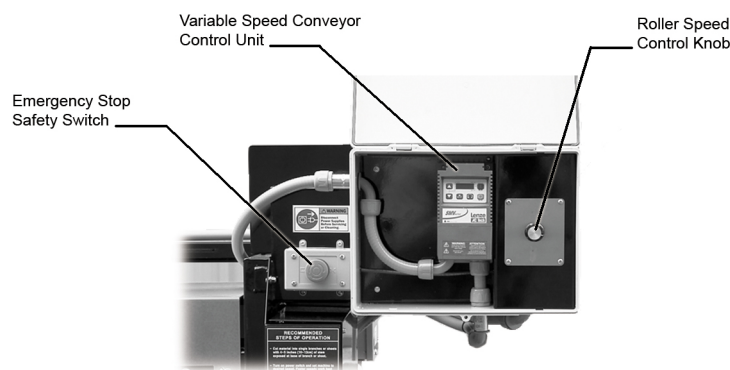


Figure 2

Roller Motor Overview and Replacement.

- The motors used for powering the rollers are an advance design with integral power supply and factory programmed control module. These motors are not designed to be user serviceable and the included firmware is proprietary to the machine and manufacture. Alterations will void the warranty and may result in severe injury or death. End user service should be limited to the removal and replacement of the motor and gearbox only. Neither the manufacture nor its agents or representatives assume responsibility for improperly assembled components or alterations made to the original design or manufacture of the machine after service has been performed. If you have any questions, we recommend you consult a certified electrical technician to do this job for you.

To replace the motor:

1. Lock out the main power switch and unplug the machine from the power source.
2. Remove the main motor cover and chain guards as needed for access.
3. It will be necessary to slacken the tension on the drive chain via the chain adjuster sprocket (see figure 3).
4. Remove the auxiliary cooling fan from the back of the motor via the four #__ torx head screws. It is not necessary to disturb any wiring to the auxiliary fan.
5. The clear plastic cover on the bottom of the motor must be removed via the four #__ torx head screws.
6. With the cover removed, the three main power wires must be removed by loosening the two clamp screws and ground connection shown in figure C.
7. Unplug the blue cable from its respective connection port by squeezing the unlock lever and pulling it from the port.
8. The two bulkhead connection nuts must be loosened and removed and the wiring withdrawn from the motor.
9. The four 3/8” bolts securing the gearbox/motor assembly to the machine may now be removed and the motor lifted off the machine. Care must be taken, as the motor/gearbox assembly is very heavy and difficult to handle. Additionally, the drive chain will still be engaged to the drive sprocket on the end of the gearbox and must be lifted off prior to the motor being removed.
10. With the motor removed, it may be separated from the gearbox assembly by removing the four 3/8” bolts from around the periphery of the gearbox to motor junction.
11. If necessary, the chain drive sprocket can be removed from the gearbox by using an X/X hex wrench to loosen the securing set-screw and withdrawing the sprocket from the output shaft.
12. Reassembly is the reverse of removal, with the following important points noted.
 - Be sure to replace and center all keys within their respective keyways before tightening securing screws or bolts.
 - The chain drive sprocket must be aligned with the other three sprockets over which the chain rides to keep the chain riding true and without binding. This should be done after securing the gearbox to the machine and before securing the sprocket to the shaft via the X/X set screw.

Roller Overview and Replacement.

- The rollers used are the result of extensive research and development and feature a specialized, abrasion resistant rubber of optimal durometer hardness, best suited to the hemp and cannabis industries. While exhaustive research has shown this material to be the least wearing (while still giving excellent grip and performance), it is not indestructible, and just like the rubber tires on your car, will not last forever. Because of this, we cannot offer a warranty on our rollers.
- Roller replacement is an extensive task, but not one beyond most mechanics in the field. The following steps should guide you on proper roller replacement procedures.
 1. Lock out the main power switch and unplug the machine from the power source. (Figure 1)
 2. Remove all the chutes, guards and safety panels necessary to gain full access to the rollers, bearing blocks and drive chains.
 3. Slacken the chain adjuster sprocket and remove the roller sprockets from the roller shafts. It will be necessary to loosen the two X/X set screws from each sprocket before removing the sprockets from the roller shafts. The chains can then be removed from the machine to give full access to the bearing blocks (see Figures 3 and 4)
 4. Remove the 8 X/X sized hex head securing screws from each roller coupler before removing the coupler halves from the roller shafts. Each coupler unit has two keys to couple it to the roller shaft, which must be retained for reassembly.
 5. The top rollers can now be removed by removing the four bearing block securing bolts and nuts, and then lifting the rollers free from the machine. It is advisable to have help with this operation, as the rollers are very heavy and two or more people are needed to safely remove and replace them.
 6. With all the top rollers free, the lower rollers are removed in the same manner.
 7. After removing the rollers from the machine, the two X/X set screws securing each bearing block to the roller shaft can be loosened and the bearings removed from the shafts.
 8. Slide bearings over roller shafts with the collar facing inward. Do not tighten the securing set screws at this time.
 9. Install the lower roller first, being sure to center each one between the bearing blocks. The bolts and nuts securing the bearing blocks should be only tightened enough to take up the slack at this point.
 10. With all the lower rollers positioned in place. The shaft alignment should be checked by using a long straight edge or string pulled against the top or bottom of the rollers. If the roller shafts are not aligned, adjustment can be made by raising or lowering each bearing block as needed. A x/x hex head adjustment screw is located under each lower roller bearing block to make this adjustment very precise. (see Figure 5)

11. With roller shafts aligned and each roller centered between the bearing blocks, tighten the bearing block nuts completely, so as not to come un-tight in use.
12. Tighten the bearing collar set screws at this time. (see Figure 6)
13. Attach the top rollers, again leaving the bearing block bolts and nuts just tight enough to eliminate sloppiness, but with freedom of moment vertically.
14. Carefully roll an xxx” thick shim (easily made from card stock or layers of paper) in-between the top and bottom rollers on each end simultaneously and tighten the bearing block securing nuts and bolts fully. This allows for very slight running clearance and free movement of the upper and lower rollers for ease of assembly when installing the drive chain.
15. The roller shaft coupler can now be installed between each roller set. Be sure to center and install the keys in the keyways before tightening the 8 hex head screws evenly.
16. Reinstall the chain to the motor sprocket before installing the roller drive sprockets.
17. Install each roller drive sprocket into the chain as you install them on their respective shafts.
18. The roller drive sprockets must align with the adjuster sprocket, so as to keep the chain from being pulled sideways, bending or kinking. (see Figure 7)
19. The xx” key must be installed in each roller drive sprocket and set flush with the face of the sprocket, before the drive sprocket securing set-screws are tightened.
20. The drive chain must now be tensioned via the adjuster sprocket to give only minor slack when the long side is deflected.
21. Once the correct tension is achieved, secure the adjuster sprocket by fully tightening the xx/” bolt and nut.
22. Replace all guards, chutes and safety panels before testing or operating unit.

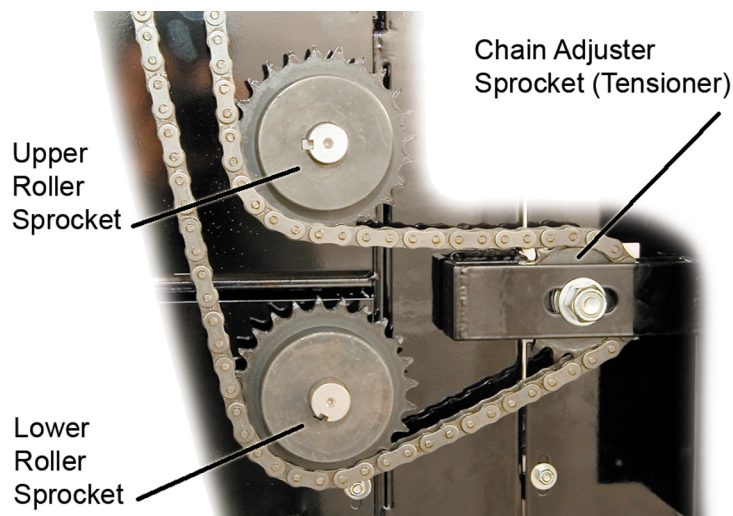


Figure 3

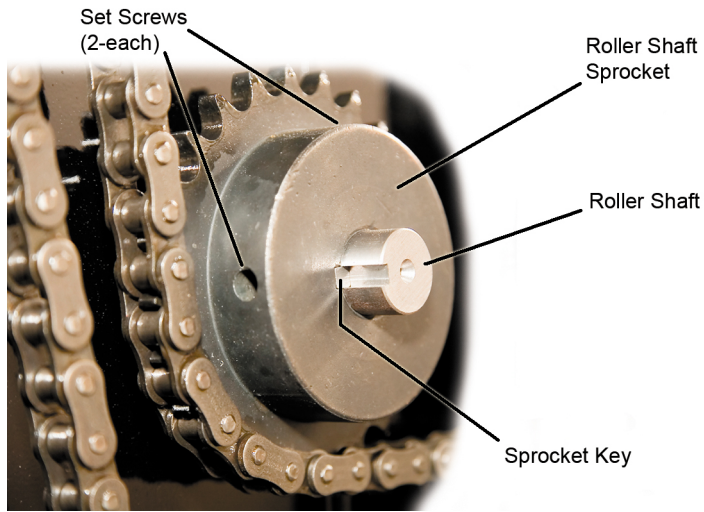


Figure 4

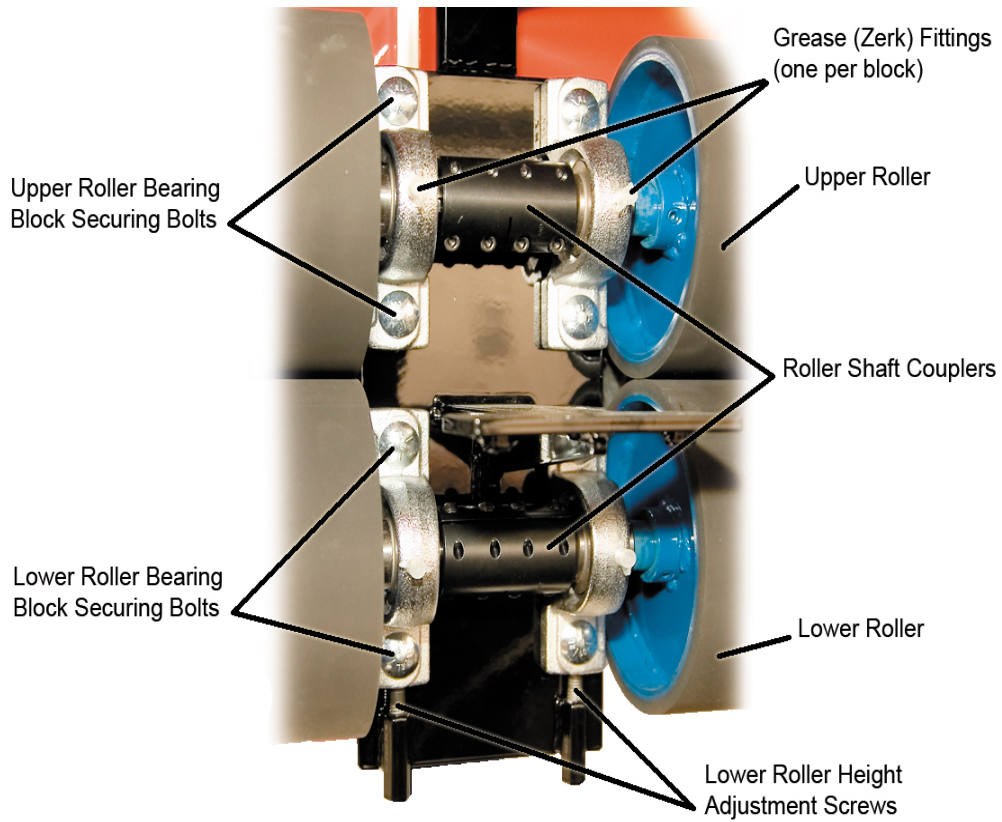
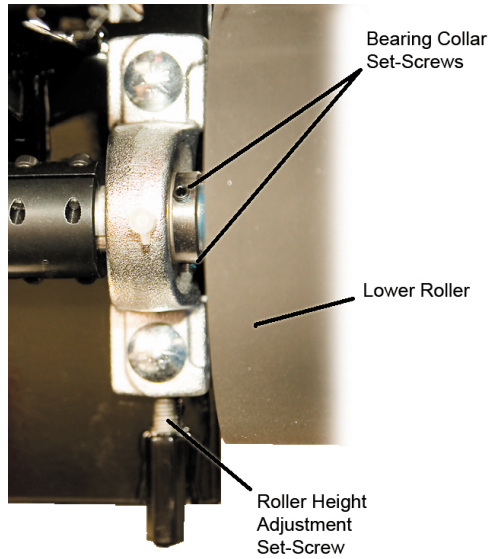
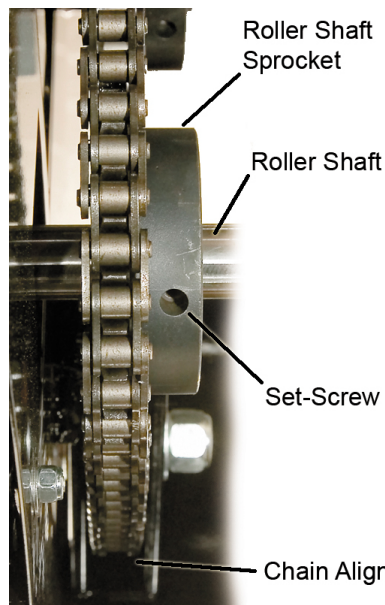


Figure 5



Tighten Bearing Collar Set-Screws Only After Making Sure Rollers Are Centered Between Bearing Blocks.

Figure 6



Chain must be in-line with adjuster sprocket when set-screws are tightened to roller shafts.

Make sure roller sprocket key is centered inside roller sprocket before tightening set-screws.

Figure 7