

ZOOM

Technologies



Instruction Manual

Zoom Pro 2022

Model X5E

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WARNING!!!!

This machine is a high-speed commercial double barrel leaf-cutting machine, all safety precautions must be observed to eliminate and reduce the risk of personal injury. Improper or careless use may result in serious or fatal injury.

Notice

Make sure that all people running this machine fully understand the operation and safety precautions before using. All maintenance needs to be followed to ensure safety and proper use.

First time users will need to read and understand the instruction manual for proper and safe use.

Make sure this instruction manual is always supplied to other operators who are not familiar with this specific machine operation for the first time.

IMPORTANT SAFETY INSTRUCTIONS

READ THESE INSTRUCTIONS CAREFULLY

Read all instructions completely before machine is operated

KEEP THESE INSTRUCTIONS

Retain instructions for future reference for all users.

PAY ATTENTIONS TO ALL WARNING LABELS

All warnings on the machine and in the instruction manual should be precisely followed.

WARNING: To reduce risk of fire or electrical shock, do not expose this machine to water while plugged in.

The machine must have a properly grounded receptacle to meet local code.

Refer to machine labeling to determine correct electrical requirements.

The machine requires a 2 pole 20A circuit breaker.

Observe all electrical codes and regulations for your area.

This machine requires a minimum of 12AWG copper conductor. Maximum cord length should not exceed 50ft/15meters. An undersized cord will result in loss of power, overheating and possible fire.

The machine must be unplugged before any protective covers are removed.

Do not attempt to service electrical components on this machine, as there is a high risk of dangerous voltage, possible fire and electrical shock.

Read all WARNINGS listed below

DO NOT operate this machine without all the protective covers installed.

Do not operate the machine while tired or under the influence of drugs, alcohol or other medications.

Do not reach inside barrels while the machine is plugged in for safety.

Keep visitors a safe distance from the work area and children away at all times.

Do not allow lubricants to build up around the machine. This could cause a slipping hazard for the operator and others.

Replace warning labels if they become obscured, unreadable or removed. Please request new labels from your retailer.

Zoom Pro Double Barrel Trimmer

WARNING!

Never put objects into barrels that cannot be processed by the trimmer. Hard objects the operator does not notice can cause damage and/or bodily harm and will void the warranty.

Abide by all warning labels. Never plug in the trimmer with shrouds, cover, or guards removed.

DO NOT change or modify any part of the trimmer or accessories.

Never run the trimmer unattended.

Only service this trimmer as directed in the manual. Do not make any changes to the trimmer that is not listed in the manual as this may expose you to dangerous voltage and/or other hazards.

Only qualified service personal should service this trimmer if not covered in the instruction manual. If the trimmer does not operate normally by following the operation instructions, adjust only the controls that are covered in the instruction manual and seek a qualified service technician for other issues.

Only original replacement parts supplied by the original manufacture must be used on this trimmer. Non-certified parts will void warranty.

WARNING!

Careless or improper use of this trimmer may cause serious or fatal injury. Follow all safety guidelines listed in the manual and on the trimmer.

Safety glassed must be worn to reduce risk of injury.

To reduce the risk of injury, keep all body parts, long hair and loose clothing away from all moving parts. Do not wear long sleeve or gloves, as this will be a hazard.

Zoom Pro Double Barrel Trimmer

Operation

The Zoom double barrel trimmer has been adjusted and tested by the manufacture before shipping. Material buildup and normal wear will require you to check the trimmer each day before the initial startup for the proper settings. Please refer to the section on page 8

Before you start using your Zoom trimmer you should familiarize yourself with all the components and operation of the trimmer. To do this you will need to go through the entire instruction manual. Anticipate disassembly/assembly for cleaning will need to be done once or more per day depending on cutting material type and usage.

Trimmer & Vacuum Assembly

The Zoom Pro will need to be removed from crate and unpacked. Once this is completed the wheels will need to be installed. The jack can be raised to install the 2 end wheels. The other end will need to be raised to install the last 2 wheels and this all can be done on the bottom pallet.

The vacuum will need to be assembled per the boxed instructions.

WARNING!

The following should only be done when the power supply is disconnected.

Routine checking and cleaning procedures that should be followed daily.

Trimmer and Vacuum electrical:

Make sure the cord is 12/3 - 25ft in length or less. Using 14/3, 16/3 or 18/3 cords will **void the warranty** and damage the motors.

This trimming machine and vacuum are **220V**. You may need to consult a qualified electrician for making 220V connections. Make sure trimmer and vacuum will not overload circuit(s).

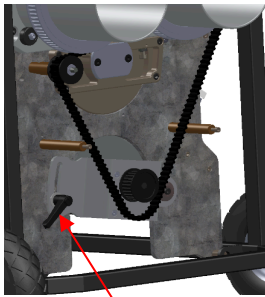
Do not overload electrical outlets. Failure to comply with electrical code could result in fire or electrical shock. It's best to have a dedicated circuit for the machine. Consult an electrical contractor for assistance.

Getting familiar with the machine:

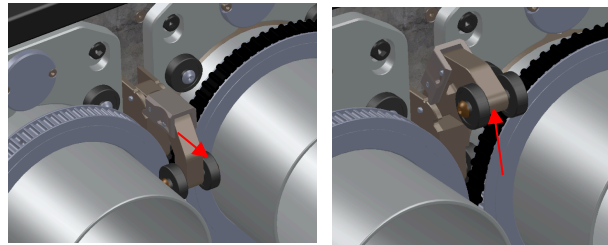
Warning!!! The following should only be done when the power is off and disconnected.

Barrel belt removal & installation

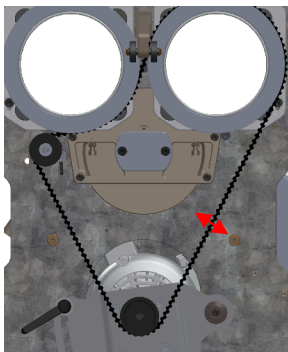
Unlock the barrel motor lever and pull the belt towards you (raising the motor) and lightly tighten the handle. Pull the barrel guide assembly slide out and raise the arm. Remove the belt from the idler and barrel pulleys



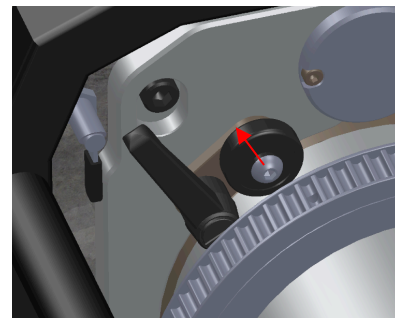
Release lever and raise motor



Pull slide out and rotate up



1-1.5" of movement



Barrel removal: Loosen handle, rotate bearing away from barrel and retighten.

Barrel install: Loosen handle, move bearing against barrel and retighten handle.

When installing the barrel belt keep 1" of free movement in the belt. Making the barrel belt tight will damage the barrel bearings. Move the tensioner arm bearing down to touch barrel surface (bottom right picture).

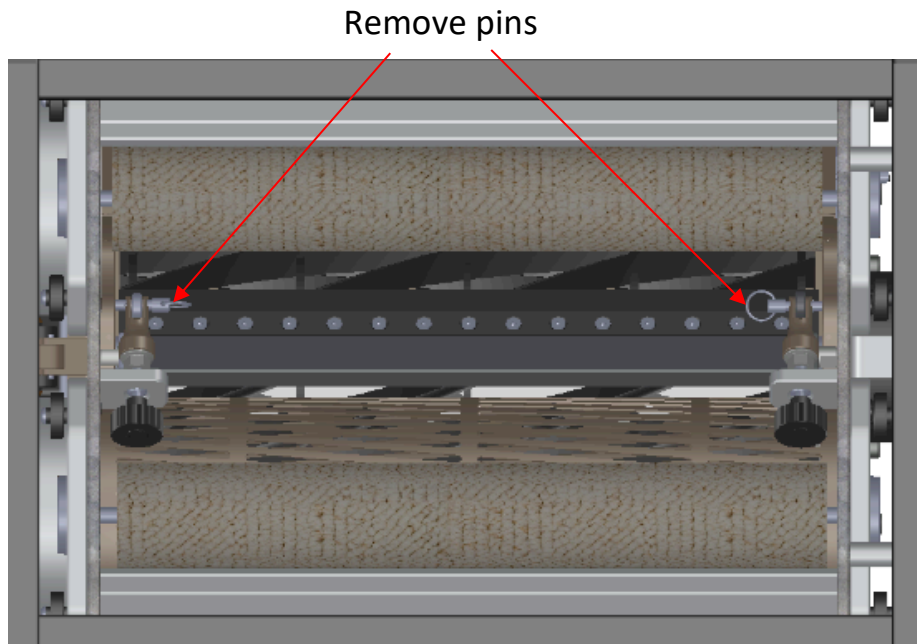
Barrel removal

Remove belt, rotate left bearing up and pull from the barrel pulley side, slide one barrel out at a time by pulling and rotating. As the barrel is being pulled out keep them as parallel as possible to the machine to avoid damage.

Be **EXTREMELY CAREFUL** not to damage the barrels. Any damage to the barrels will directly affect cutting performance.

Stationary Swing Blades

Both upper and lower stationary blades have 2 pins as indicated below. Pull each pin out and raise the mating fork on each side to rotate and access the back side of the stationary blades for cleaning.

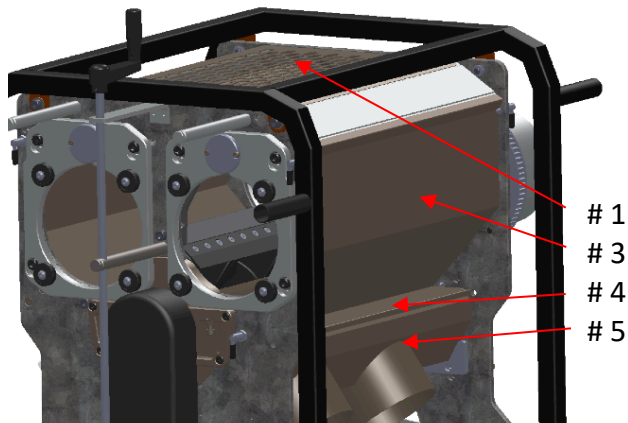


Safety Guards

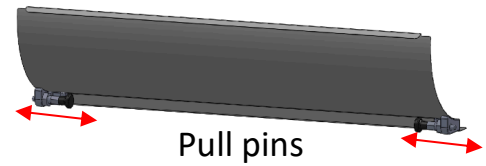
There is a total of 6 removable guards around the 2 barrels and reel cutter. All guards except for the top guard & vacuum bottom guard have retracting cam pins for locking engagement. Cam pins retract and lock by rotating the levers 180 degrees. Make sure all pins are fully engaged before operating.

1. Top barrel guard
2. Control side barrel guard – 2 cam pins
3. Vent side barrel guard – 2 cam pins
4. Vacuum top guard – 2 cam pins
5. Vacuum bottom guard – no cam pins
6. Reel guard – 2 retractable pins, pull out and turn 90 degrees – **Turn & push pins out for full engagement**

Rotate pins 180 degrees to
remove guards 2, 3 & 4



Reel Guard # 6



Install guard under bolt
head on each side below
stationary blade assembly

Guard removal – Rotate the side pin levers to release the shroud covers on both sides and remove the top of the bottom vent cover and set aside.

Trimmer startup

Before plugging the machine into the 220v power receptacle it's extremely important to make sure all the guards are in place and the reel blade and barrels spins freely. Please refer to page 13-16 of this manual then continue with this procedure.

Move the Zoom into position on a somewhat flat surface and adjust the jack(s) accordingly with the hand cranks to get the correct barrel slope and levelness from side to side for the hopper. This will anchor the machine in place and allow you to set the rate of travel with the machine angle and barrel rotation speed control.

Setup the vacuum behind the trimmer and attach the two vacuum hoses to both sides. Use the hose band clamps on the vacuum side and slide the hoses onto the machine vacuum ports.

Make sure all hands and other objects are clear of the machine before beginning startup.



Start/Stop, Barrel Speed Control & Emergency Stop

Step 1:

Proceed with the **BARREL** motor switch (Labeled **BARREL**) by pushing the switch **ON**.

Step 2:

Toggle the trimmer **REEL** motor switch **ON/OFF**. (Labeled **REEL**) to make sure it's spins smoothly before proceeding. No contact with barrel or stationary blades. Press the switch again and leave the reel blades running. Any metal noise will require adjustment.

Step 3:

Adjust the barrel speed knob to the medium position for beginning.

Step 4:

Turn on the vacuum system and start feeding the hopper

Both barrels can receive material at the same time. The material should consistently travel through the barrels and exit the opposite side into a clean container. You may need to adjust the trimmer angle with the jack(s) as the machine is running to find the proper material flow rate.

Always monitor trimmed material coming out of the barrels as it may change over time as the machine gets used. Vacuum loss trimming wet material is usually the biggest contributor.

Keep in mind that the trimmer will have specific noises with it has been properly adjusted. Factory setting and adjustments may change in shipping. The operator should become familiar with the sounds and characteristics to identify abnormal sounds so they can be corrected.

All materials cut differently so we have designed the trimmer to be precisely adjusted with the adjustable barrels speed and trimmer jacks for proper material flow.

Suggested Cutting Tips

- Wet cutting – keep high resin material fresh, cool and moist for cutting
- Dry trimming use cloth or plastic bags on vacuum bottom set
- Keep barrels ½-3/4 full of material
- Find the correct material flow rate for each material
- Material density determines material flow rate
- Light materials may take multiple passes as it may bounce around
- Keep material in cutting zone with correct barrel speed and barrel material volume
- Adjust barrel speed based on density, weight and leaf size
- Vacuum loss will greatly decrease cutting performance and needs to be monitored
- Clean barrel when leaf's stick and block barrel slots
- Any foreign matter will damage the reel blades
- Listen for abnormal sounds when running the machine

Trimmer Cutting Adjustments

There are very few adjustments that will need to be made on this machine over time. These machines have been adjusted and tested at the factory before being shipped. You may need to check and readjust the blades as necessary over prolonged use. To do this it will need to be done by a person that understands how this works, as this is a very precision machine and can be damaged if done incorrectly.

Warning!

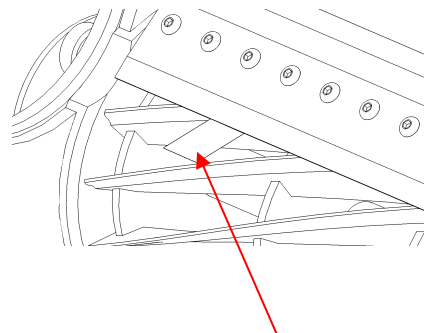
The following should only be done when the machine is disconnected from the power. Never slide fingers down edges of the blades lengthwise, as they are extremely sharp and dangerous.

Stationary Blade Adjustment

Remove the shrouds around the barrels then remove both barrels from the machine to access the 2 blades. The machine blades should be completely clean before any adjustments are made.



Release lock nut on each side before turning adjuster knob.



Paper

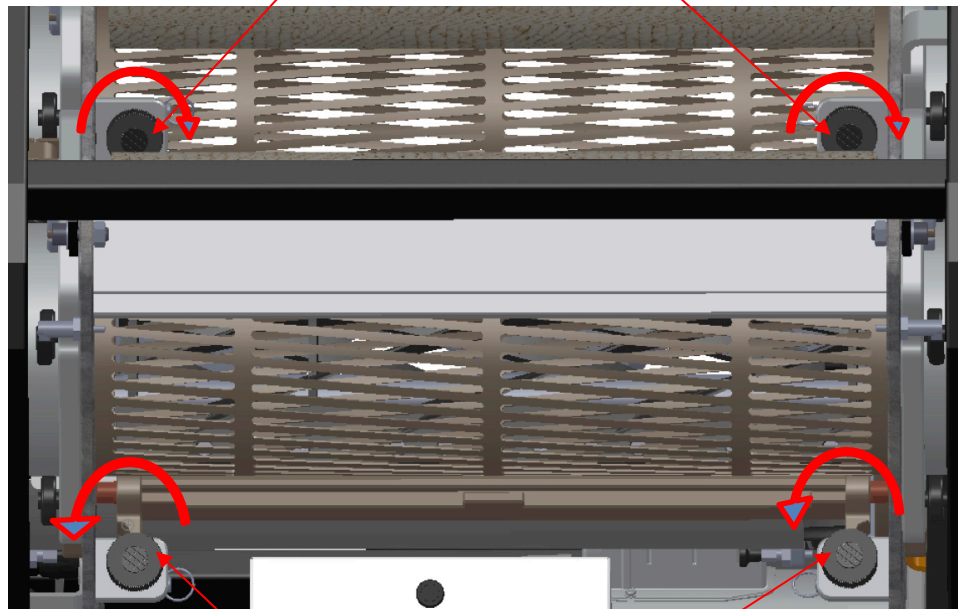
Locate the adjustment screw handles for each blade end. Only attempt to adjust one blade at a time. It's best to adjust the blade away from the reel to make sure the reel spins freely first.

Stationary blades

To do this you will need to loosen the **lock nut below the knob** and turn the adjustment knob the correct direction based on the Upper or Lower position. Adjust both sides of the same blade until the reel turns freely. Once it spins freely insert the paper and adjust until you can feel the paper get snug and retighten lock nut.

Upper Stationary Blade Adjustment

Turn CW to move blade away from reel.



Lower Stationary Blade Adjustment

Turn CCW to move blade away from reel.

Lower stationary blade - Turn **CCW** to move stationary blade away from reel cutter

Slowly turn the adjustment knob clockwise on each end of the blade while checking for paper tightness while turning the reel. Refer to page 9 for paper position. Once the paper is touching then retighten the lock nut under the knob and proceed to the opposite side.

Upper stationary blade – Turn **CW** to move stationary blade away from reel cutter

Paper inserted below stationary blade on page 9.

Check for light contact force on both sides of the reel with the paper. Adjust each side until the paper is lightly pinched. Remove the paper and turn the blade with a block of wood. You should not feel or hear any contact with the reel blade. Tighten all lock nuts below handles before starting machine.

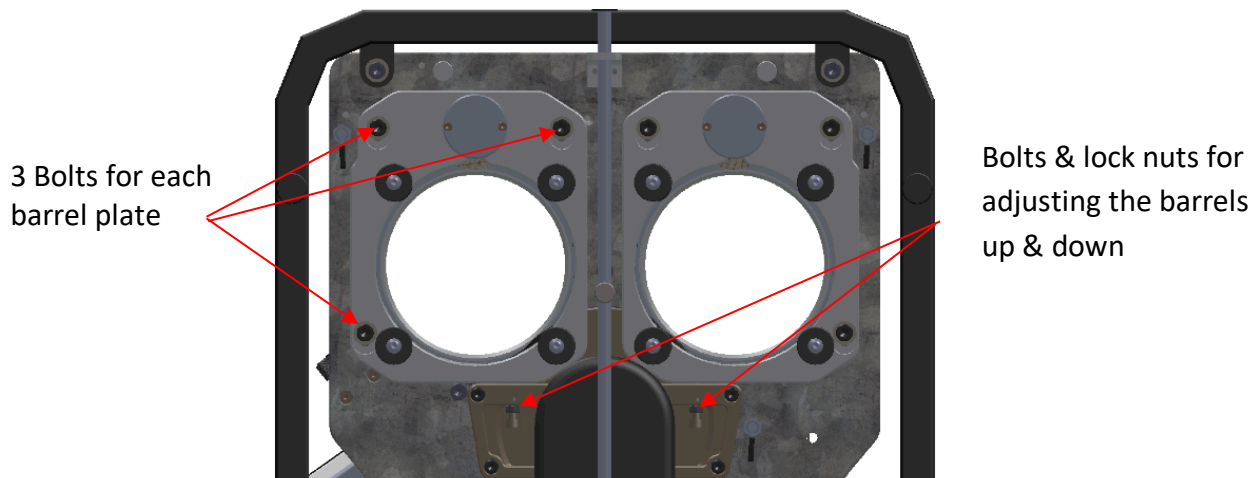
Assembly the guards, plug the machine into the power cord and turn on the reel motor. If you hear any ticking or noise readjust the side causing the contact until the noise goes away.

The self-sharpening blades cannot correct damage on the reel blades. An authorized service technician must replace damage to the reel blades.

Barrel adjustments

Barrel adjustment has been set at the factory but may change in shipping. Unloosen the three-barrel plate screws and unlock the bottom adjuster lock nut. Turn the adjustment screw clockwise (CW to the screw head) to raise the barrel and adjust barrel away from reel cutter. Retighten the three-barrel plate screws to hold the barrel/plate in position.

Turn each barrel by hand without the belt to make sure it is not interfering with the reel blade. Once positioned tighten the adjuster lock nut. Each barrel end can be adjusted individually.



End view showing adjustable bolts with hopper removed

Notes:

- Ensure that all loosened nuts and bolts are tight before applying power.
- Make sure barrels spins freely before applying power. **Rotate barrels by hand to verify**

Make sure to turn the barrel by hand before applying power. This is a good check to see if there are any problems before applying power to make sure it spins freely. Once you have done so then turn the barrel power on and make sure it does not rub the reel or stationary blades.

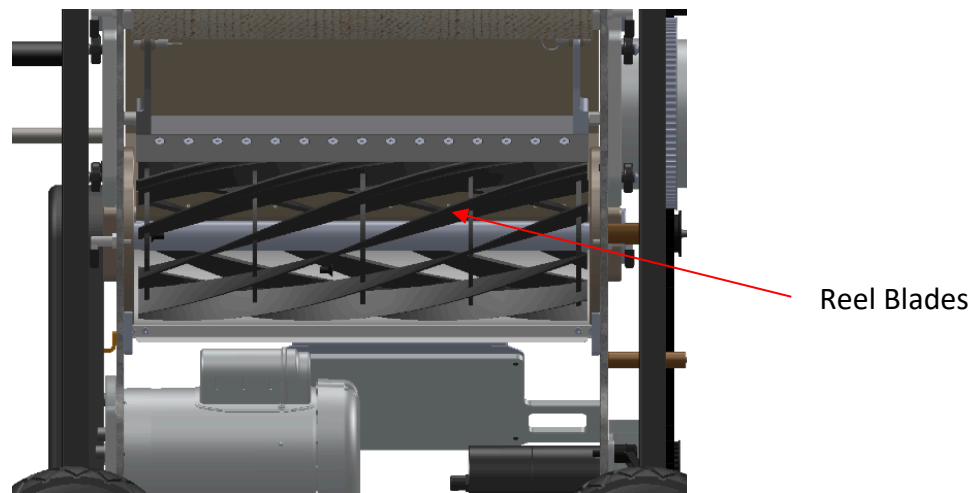
Blade Inspection

WARNING!! The following should only be done when the power is disconnected. Never slide your fingers across the reel blades as they are very sharp and may injure you.

With the shroud covers removed visually check for any damage on the cutting edges. To rotate the reels blades, use a small block of wood (2x2 or 2x4) and never your fingers. Refer to Figure 1.6

Note:

If there is damage to the reel blades that will not allow for smooth rotation, the machine will need to be serviced by an authorized service technician. Damage from rocks and other hard objects are not covered under warranty.



Reel blades

It's best to use a block of wood to rotate the blades as they are very sharp and may very easily cut your hands or fingers.

Make sure the reel turns freely. The reel blades should have **NO** contact with the knife blade but will be extremely close. This will ensure proper cutting action and will help maintain a sharp cutting edge on reel blades . Please refer to the adjustment section if the reel blades need to be adjusted.

Cleaning instructions

A thorough cleaning of the trimmer should be done at the end of every day with interval barrel cleaning during the day depending on wet or dry trimming. Material buildup can cause poor performance, overheating of motors and possible damage to motors at startup. Recommended cleaning will ensure proper performance and extend life of the trimmer. As the material residue dries it will become hard and more difficult to remove. Be extremely careful and never slide your fingers along the reel cutter or blade lengthwise.

Warning!

All cleaning must be done when the machine power is disconnected and unplugged.

High Pressure Water Cleaning (<2,000psi)

High pressure water cleaning (under 2,000psi) cold and/or less than 180 degrees F. is the most efficient way to clean the reel cutter. Carefully remove the barrels, side and top shrouds and leave the bottom vent cover in place. This will help keep the motors from getting wet. Cover the barrel motor and control box with plastic bags and start spraying the brushes; do not get too close to the bristles. Once brushes are first cleaned then move down to the reel blades and lower shroud. Use a block of wood or nozzle end to rotate the reel blades for complete cleaning then spray the lower shroud. Keep direct spray away from the motors and electrical box. These items can get wet but should not be directly sprayed. You can then remove the lower with vents and clean it completely. Proceed and clean the remaining shrouds separately. Carefully clean the barrels and reassemble all the parts in reverse order.

Cleaning without high pressure water

Remove the top, side shrouds and barrels. Spray Simple Green on barrels, reel blades and brushes and let soak for a short time. Clean the barrels with brush and water. Carefully use a plastic scraper to remove material residue buildup on reel blades and stationary blades.

Barrel cleaning

Barrels can be soaked in a garbage can or large bin with Simple Green for one hour and sprayed with a water hose. Be extremely careful with handling the barrels, as they are easy to damage. Any damage to the barrels will greatly affect the cutting performance of the trimmer.

Brush cleaning

The brushes can be sprayed with Simple Green or bathroom cleaner with bleach then hosed off. High-pressure washer may damage bristles if sprayed to close.

Bottom Reel guard & Stationary Blades cleaning

The bottom curved reel guard can be removed by pulling the 2 sliding pins (Page 7) and dropping the lower guard down for clearance. When reinstalling the guard verify the guard is under the top bolt heads under the lower stationary blade (not in visible sight). **Make absolutely sure the pins are fully engaged on this guard when reinstalling into the machine frame.** The springs alone will not fully engage pins unless pushed out by hand.

The stationary blades have 2 pins each (Page 6) that can be removed to swing the blades over to access the underside for cleaning. Use a metal or plastic putty knife for cleaning then reinstall pins and check for proper blade adjustment.

End of day cleaning

A thorough cleaning of the machine should be done on a daily basis. Material buildup can cause poor performance, overheating and hard startup for later use. As the residue dries it will become hard and more difficult to remove. Be extremely careful to avoid sliding your fingers along the blade lengthwise. Refer to the cleaning section of this manual on page 14.

Vacuum maintenance

Change or empty the bottom debris bag daily on the vacuum. Keeping the top bags clean for maximum airflow will give you the best performance possible. Disconnect power before cleaning around impeller.

General Maintenance

Maintenance will depend on the amount of use the machine is operated. This will describe what you should do if the machine is used on a daily basis.

Warning!!!

General maintenance should only be done when the machine power is disconnected.

Grease lubrication

The reel bearings with grease fittings should be greased once per year.

Adjustments

The cutting reel and each barrel should be check for damage each day and adjustments made as necessary before cutting.

Note:

Operating the machine with damaged blades could result in further damage or personal injury. An authorized technician or the manufacture must repair damage.

Machine Lubrication

This machine has been engineered to run as maintenance free as possible. The reel bearings have been engineered with grease fittings for good lubricated. Refer to below directions for greasing. Improper cleaners and cleaning procedures can damage seals and will void warranty.

Simple Green (mild detergent) and denatured alcohol are the recommended cleaners.

Brushes

The brush bearings are sealed and do not need to be lubricated. Replace bearings if they do not turn freely.

Reel bearings

Reel bearings can be greased with the grease fittings located on each reel end plate. Grease once each year and make sure seals are flush to the inside plate surface after greasing. Over greasing will cause seals to be pushed out of proper location.

Reel belt replacement

Remove belt guard by removing the two Allen head bolts holding guard on. Loosen the 4 bolts and lift motor with pulling belt then retighten the one bolt in the upper position and remove belt. Reverse this procedure to install the new belt. Make sure the belt is not lose or overtightened.

Trouble shooting

Barrel makes grinding noises

This could be due to damage on the tumbler barrel surface causing it to rub the reel blade. It will need to be adjusted further away from the reel and blade knife.

Barrel motor shakes

This may be due to something in the belt or pulleys causing it to be unbalanced. Check for material adhered to the drive system or pulley using the proper safety.

Reel motor is very hot

The reel drive motor can get hot after prolonged use. Be sure to remove resin buildup on reel blades as this may overheat and damage the motor. It will shut off automatically if it overheats and will need to cool down before restarting.

High pitch squeal sound coming from the blades

This can be due to the blade rubbing the protective shrouds or covers. Check for damage on shroud covers and if the machine needs cleaning and readjust.

High speed ticking sound coming from the blades

There should be no sounds from the reel being turned on. If you're hearing a ticking sound the stationary blade will need to be adjusted so the noise will go away.

Debris is getting clogged up in the vacuum inlet

Clean periodically due to debris buildup of wet or dried material from current or previous usage.

Circuit breaker trips

This is typically caused by an undersized cord or breaker, a cord that is too long or a circuit breaker that is too small. Also check to make sure the machine is not sharing a circuit breaker with other electrical items.

The reel motor stops on startup

This is typically caused from using an undersized AWG cord that is too long. Check to make sure reel turns freely **without power** by turning belt under guard by hand.

Suction from the vacuum is weak

The suction is critical for proper cutting. Check to make sure there is no blockage in shroud, hose and around the vacuum housing of the impeller. Clean or change the upper filter bag in the vacuum and make sure all hoses are properly connected and clean. With the machine **unplugged** and the vacuum turned on check the proper vacuum suction in the barrels.

Excess material buildup on the brush & tumbler barrel

Clean brush and barrel more often and apply a light coat of coconut oil to brush to keep the cut material from sticking.

The material comes out of the machine under processed

This may be due to over feeding the barrels not allowing the material to tumble over the cutting zone or not enough vacuum. Check the vacuum hoses for a clog around the Y connection. Light material will bounce around and is more difficult to cut. It may require multiple passes.

The reel motor will not start

This is most likely due to hardened residue buildup on the reel blades, poor adjustment or lack of lubricant. Residue left on blades will harden and cause the motor not to start. Clean the reel blades thoroughly and make sure they turn freely.

The start button for the blade lights the LED indicator however the motor will not start.

This is a safety feature that protects the motors. The motor has overheated and needs to cool down to reset. The motor will overheat if the blades need to be cleaned/adjusted or possibly incorrect belt tension. Make sure the problem is resolved before continuing. It may take several minutes to reset.

Trimmer Specifications

Input voltage	220-240V
Current draw	10A
Weight	360lbs / 164kgs
Length	48" / 122cm
Width	31" / 79cm
Width – w/o wheels/axles	24" / 61cm
Height	40" / 101.6cm
Discharge diameters	6" / 15.2cm

Additional Requirements

Extension cords	12/3 AWG 25ft/7m
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Vacuum

Input voltage	220-240V
Amperage	12A
Motor	3hp
Overall foot print	46" x 20"
CFM	2800

Transporting & Storage

Tie down

The machine is easy to tie down to the tubular frame. Make sure you anchor low on the machine frame and your tie downs don't slide making the machine loose in transportation. Have sufficient number of tie downs on the front and back to keep the machine from shifting during transport. Remove the hopper to avoid damage if the machine shifts.

Storage

This machine is made with parts that resist corrosion. We recommend storing the machine in a dry place and to make sure to clean the machine thoroughly before storing. Any material left on the machine will harden and become harder to clean over time. Once cleaned and dry it is best to spray the reel blades and blade knives with a thin lubricant. Following these steps will ensure smooth startup on the following use.

Store the machine in a safe dry location with all guards and shields installed. Keep it out of reach of children and other unauthorized people.

Manufacturer's Warranty

The manufacture will repair or replace, without charge any parts proved defective in material or workmanship for a period of five years on trimmer and two years on vacuum or as stated in the specific product warranty; provided, however, that any repair of issues with the electrical system shall be at the sole discretion and option of the manufacturer.

This warranty does not apply to the motor or any of the parts of the motor. Any implied warranties relating to the motor or electrical parts are expressly disclaimed.

The warranty period will begin on the date the machine was purchased by the initial purchaser. Warranty defeats can be remedied at any authorized dealer or at the manufacturer. Delivery of the product to and from the manufacturer or authorized dealer will be at your cost. Any work deemed valid will be free of charge. Any manufacturer approved replacement parts may be used for warranty of repair.

You may be denied warranty coverage if your machine has failed due to abuse, neglect, improper maintenance, improper electrical connection, normal wear, accident or unapproved modifications.

The manufacture assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the product. In no event will the manufacture be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused whether by negligence of the manufacture or otherwise.

If warranty repair is required please contact the manufacture at info@doublebarrelzoom.us to obtain a repair authorization number with the following information.

1. Model and serial number
2. Proof of purchase date
3. A copy of the original Warranty Registration Card
4. Details of the defect or problem.

The machine or defective parts must be returned to the manufacture for analysis and replacement.

Please contact the manufacture with any questions on warranty at info@doublebarrelzoom.us.

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