OKTOBER CAN SEAMERS Model 7

Operation Manual



CAN SEAMERS



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Oktober Can Seamers 5 Colfax St. NE, Grand Rapids, MI 49505

<u>SET-UP</u>

Check out the how-to videos on our website!

To remove your seamer from its box, lift as shown below. It is heavy (~45lbs) so use caution while lifting.



Locate your seamer on a flat, level tabletop or bar-height surface. Make sure there is enough room around the seamer to move around it easily.

Attach the lever arms (located in the accessories box that comes with the seamer) by threading them into the holes located on the roller housings. *!ATTENTION! Make sure the locking spring washer (wavy washer) is between the handle and the roller housing and tighten it securely. If the handle's threads loosen they will bend or break over time.*

ATTENTION! Canning is done in a wet environment, so always plug the seamer into a <u>GFCI</u> outlet to avoid shocking hazards.

The power cable is located "under" the seamer inside a 2in opening in the base plate.

!!!SAFETY PRECAUTIONS!!!

-Since canning is likely to create a wet environment, make sure the flooring and footwear worn around the seamer is non-slip.

-Always plug the seamer into a GFCI outlet to avoid shocking hazards.

-Pay attention to things like loose clothing, long hair, etc. The can and upper and lower chucks will be spinning and can cause injury if anything gets wrapped around them.

-Never reach into area around the upper chuck and rollers while operating. The rollers can pinch or draw-in fingers and objects and cause injury.

-Never remove the top cover while operating. The spinning belt and motor will be exposed and can cause injury.

-Never remove the switch enclosure box, or the motor connection panel while the seamer is plugged in. There are open live connections inside each that risk a shocking hazard.

POWER REQUIREMENTS

Short Circuit Current Rating:

115V: 21amps 230V: 10amps

Rated Frequency

115V: 60Hz 230V: 50Hz

Full Load Current

115V: 5.6amps 230V: 2.8amps



CAPABILITIES

The MODEL 7 Oktober Can Seamer is designed to seam aluminum beverage cans. Aluminum beverage cans come in many different sizes, and the model 7 can be configured to seal many of them. Cans with the same "end" size (can top) can generally be sealed using the same "tooling" set (upper chuck, seaming rollers, base assembly). Tooling sets are available for end sizes 200, 202, 206, 209, and 300. Each seamer includes one tooling set. Changing tooling sets requires recalibration. Each set comes with one or two standard lower adapters. Other lower adapters are also available, including custom adapters.

Tooling Sets:

A: Size 200 ends. Comes with lower adapter for 250ml cans.

- B: Size 202 ends. Comes with lower adapters for 12oz and 16oz cans.
- C: Size 202 ends. Comes with lower adapters for 330ml and 500ml cans.
- D: Size 202 ends. Comes with lower adapters for 19.2oz and 16oz cans.
- E: Size 206 ends. Comes with lower adapters for 24oz cans.
- F: Size 209 ends. Comes with lower adapters for 1000ml cans.
- G: Size 300 ends. Comes with lower adapters for 32oz cans.

GETTING STARTED

Your seamer comes calibrated and ready to go so you shouldn't need to adjust anything. If you do have an issue, check the troubleshooting list at the end of the manual. There are a few things that may need to be adjusted due to shipping issues, etc.

Seaming (check out the how-to videos on our website!)

Seaming is super simple. The basic idea is to rotate the right handle until it contacts a hard-stop, back it off to its starting position, then do the same for the left handle. The can spins fast enough that the speed the operation levers rotate can vary, but you also don't want to slam the handles. Keep in mind that it doesn't take much force to seam a can. As soon as the lever has hit its hard-stop the operation is completed. Make sure to read through the detailed instructions

below. It is a good idea to run through the steps a few times without a can to get a feel for it.

Helpful tip: The can-guides (two extended screws below the upper chuck) are designed to hold the can upright and in the correct position to close the splash guard door. Set the can onto the lower adapter and lean it back against the guides. Pull your hand out of the machine and then close the splash guard door.



Make sure the correct adapter is in place for the can size you plan to use. Adapters generally snap onto the top of the standard adapter like a "LEGO©" piece.

- 1. Rotate both operation levers outward to their starting positions.
- 2. Open the splash guard door by pulling the splash guard handle out and downward.
- 3. Set a filled can (and end) onto the lower adapter and rotate the can back into the seamer. The can should rest against the "Can Guides." The can should stay upright on its own once placed against the can guide.
- 4. Close the splash guard door. It should feel a bit heavy as it clamps the can and will lock in-place with a solid feeling. **note closing the splash guard will not feel the same without a can loaded into the seamer*.
- 5. Turn the power switch to the "on" position. The can will start to spin.
- 6. Rotate the first operation lever (right side of the seamer when facing it) until the roller makes contact with the edge of the can end.
- 7. Once the roller makes contact, continue to rotate the lever until it stops. It should take 1-2 seconds for the roller to rotate between initial contact and the hard-stop.
- 8. Once the lever has reached the hard-stop, hold for 1second, then <u>return the</u> <u>lever to its starting position.</u>
- 9. Repeat the same process for the second operation lever.
- 10. Turn the power switch to the "off" position
- 11.Once the can has stopped rotating, open the splash guard door and remove the can.

Sometimes it's helpful to explain the things to NOT do. These include:

Do Not: use the left handle first

Do Not: hold both handles IN at the same time

<u>Do Not</u>: run either operation more than once.

<u>Do Not</u>: go back and do the first operation after the second operation is completed.

Daily Maintenance

-Wipe down the seamer with warm water and a rag to keep it clean of sticky residue. You can add a small amount of sanitizer or dish soap, but it is NOT suggested to use other cleaners. Warm water is all that is needed to break up sticky residues. Make sure to dry everything off thoroughly.

-The Splash Guard can be cleaned more easily by removing the two "ring" quickrelease pins located between the base lever and base shaft. This allows the handle to be removed from the base and the door to swing away from the seamer to allow better access to the inner surfaces. You can also lift the base shaft up and out for better access to the stainless panel for cleaning.

-Make sure to empty and rinse the drip tray often to avoid spills.

Weekly Maintenance

-Pull the white plastic lower adapter off the base shaft bearing and use a rag and warm water to wipe down the bearing, washer(s) and wave spring (see diagram above). Dry them off and add a dab of grease into the bearing and rub some onto the spring and washer(s). Replace them in the same order they were removed.

-Remove the base shaft by pulling out the upper quick-release pin. The shaft can then be pulled upward and out of the machine. Wipe down the shaft and the bore that the shaft rides in with water and a rag. Dry them off and rub a dab of grease onto the shaft. If this isn't done regularly, the shaft will eventually become sticky and the splash guard handle will become difficult to close. **DO NOT** force the handle if it becomes sticky or you will **<u>IBEND OR BREAK!</u>** the base adjuster.

Helpful Hint: remove and clean the base shaft at the end of the day and leave the assembly on the counter next to the seamer so that the morning shift opener sets it back into the seamer. This way there is a reminder that it is getting cleaned often.

Seam Inspection

Check out our how-to videos on the website!

Our method of seam inspection requires a "tear-down tool," some nippers or wire cutters, and a set of calipers. The tear-down tool and calipers are available on the Oktober website.

When measuring the seam thicknesses, the calipers should be parallel to the inside taper of the can (as shown below), rather than parallel to the straight sides of the can.

Make sure to not squeeze the calipers too tightly when measuring. Use the lightest pressure possible to allow the calipers to close against the seam. If too much pressure is used, the seam will appear smaller than reality.









1) Complete the first operation ONLY, remove the can from the seamer, and measure the first operation seam thickness as shown.

First Operation Seam Thickness:

Size 200 and 202 ends .074in - .078in Size 206 ends .074in-.078in Size 300 ends .104in - .112in

2) Place the can back into the seamer and run the second operation. Remove the can and measure the final seam thickness as shown.

Second Operation Seam Thickness:

Size 200 and 202 ends .043in - .046in Size 206 ends .046in-.050in Size 300 ends .064in - .068in

3) Using a tear-down tool, cut the top of the can off.





4) Using nippers or wire cutters, cut a notch through the entire remaining seam.

5) Pull the seam out of the can body as shown. Start from the notch that you cut with the nippers.



6) Measure the "cover hook length" in at least 3 places around the <u>inside</u> lip of the removed seam.

<u>Cover Hook Length:</u> Size 200 and 202 ends .053in - .065in Size 206 ends .060in -.70in Size 300 ends .065in - .085in



7) Measure the "body hook length" in at least 3 positions around the perimeter of the can.

Body Hook Length:

Size 200 and 202 ends .055in - .075in Size 206 ends .060in - .080in Size 300 ends .072in - .088in

Calibration

If any of the measurements from the seam inspection aren't within the specifications, it may be time to adjust the seamer's calibration.

Infeed Calibration

If the first or second operation seam thickness is incorrect, you can adjust them by adjusting the infeed adjuster screws (see diagram) The adjusting screws and their locknuts can be accessed with the back cover still attached to the seamer through access slots. The nut requires a 3/8in wrench and the screw requires a 5/32in allen key.

To decrease the operation seam thickness, loosen the adjuster screw nut, and turn the screw counterclockwise.

If the seam is too small turn the screw clockwise.

Each rotation adjusts the thickness approximately .001in.

After adjusting the screw, run the operation again and measure the new seam thickness. Continue to adjust, test, and re-measure until the seam thickness is within the specification.





The gap between the roller and the top surface of the upper chuck needs to be set to a minimum (see diagram above).

Basically, the gap should be as small as possible, while allowing free rotation of the roller when it is engaged over the chuck (operation handle is against the hard stop).

To set the gap, first loosen the vertical position locking screw. The roller assembly should now be free to move up and down.

Position the roller above the chuck (as shown) by rotating the operation lever to the hard-stop position.

Allow the roller to rest on the chuck and re-tighten the vertical position locking screw.

With the roller still located on top of the chuck, rotate it to make sure it doesn't get difficult to spin. If it feels tight, loosen the locking screw, and retighten it slowly while rotating the roller. Repeat if necessary, until the roller spins freely.

Base Force Adjustment

The clamping force between the lower adapter and the upper chuck is critical to a good seam. In particular, the base force has a significant effect on the seam's body hook (more base force typically will create a larger body hook).

In general, the base force is set to just less than the maximum that the can will take before it collapses. If your cans are denting and/or collapsing when closing the splash guard door then it is possible that the base force is too high. (Note: cans that are empty are much more likely to crush than a full can)

Before adjusting the base force, make sure the wave spring and washers are located correctly inside the lower adapter (see MODEL 7 SEAMER DIAGRAM).

To adjust the base force, first back off the lower base adjuster nut a couple turns. Note: the lower nut's function is to take up play in the base adjuster. The upper nut is used to set the actual base force.

You will need an un-seamed can and end to set the base force.

Turning the upper base adjuster nut clockwise will increase the base force, while turning it counterclockwise will decrease it.

To RESET the base force:

1) With a can loaded into the seamer, use the upper nut to lower the base force to nearly zero. As you adjust the nut, the handle will feel lighter and lighter until the can never fully clamps. Its helpful to disconnect the splash guard from the handle.

2) Once the force is set to zero, rotate the upper nut:

1-5/6 turns for 200 and 202 ends (11-12 "flats" of the side of the nut)

2-5/6 turns for 206 ends (16-18 "flats" of the side of the nut)

2-1/2 turns for 300 ends (15-16 "flats" of the side of the nut)

3) Snug up the lower base adjuster nut

4) Test a can by seaming it and measuring the body hook. If it is sufficient then the base force is also sufficient.

Changing Tooling

To change between different end sizes, you will need to swap out the upper chuck, 1st and 2nd operation roller assemblies, the base shaft assembly, and the can guide spacers. You will also need to re-calibrate the base force and roller positions (see instructions above).



Upper Chuck

-First remove the top cover.

-Remove the drive belt by pushing an edge of it off the large pulley and spinning that pulley by hand. The belt should slide off easily.

-loosen the set screw located on the side of the hub of the large pulley (3/32in allen wrench)

-remove the large pulley's locknut. Make sure to hold onto the upper chuck while removing the nut to make sure the chuck doesn't fall out of the bearings.

-Pull the upper chuck down and out of the bearings. Pay attention to the orientation of the bearings, as they must face a certain direction.





This side faces out

This side faces the inside of the housing

-Place the new upper chuck into the bearings and housing. The chuck fits very precisely into the bearings but should slide in without a lot of force. Don't force the chuck into the bearings or it can get stuck.

- See diagram below. Reassemble the washers and spring washer and pulley as shown. Make sure the concave side of the spring washer faces down.

-Position the FLAT SURFACE on the upper chuck in-line with the hub set screw.

-Thread on the Locknut and tighten it by hand.

-Turn the pulley hub set screw in just enough so that it lightly touches the flat surface on the upper chuck.

-Tighten the pulley locknut just enough to completely flatten the spring washer.

-Tighten the hub set screw.

-Replace the belt by first placing it over the small pulley, then pull it over the large pulley while rotating the pulley by hand.





Roller Assemblies

-Loosen both vertical adjust locking screws.

-Remove the roller assembly retaining nuts and pull the roller assemblies down and out of the housing.

-Rub a small amount of grease onto the roller assembly axle and place the new roller assemblies up and into the housing. Make sure the brass washers are oriented as shown below.

-Loosely re-tighten the roller assembly retaining nut until you feel a slight drag when rotating the roller assembly arm. DO NOT OVERTIGHTEN.



Base Shaft Assembly and Can Guide Spacers

-Remove the base shaft assembly by removing the upper quick release pin and pulling the shaft up and out of the housing. Replace with the new assembly.

-Remove the two button head screws retaining the can guide spacers and replace them with the new spacers.

Other Maintenance

Seaming Rollers:

The bearings in the seaming rollers are oil-impregnated bronze bearings and are nearly maintenance free. If the rollers become sticky, they probably need to be thoroughly rinsed with water to break up the sticky residue.

In extreme cases, you can remove the entire roller assembly out of the seamer and soak it in warm water (see diagram above). 15 minutes should be enough to loosen up sticky residues. Work the roller by hand until it becomes free and easy to rotate. Dry everything off and add a few drops of food-safe oil (like super-lube) above and below the roller. Spin the roller to work the new oil into the bearing and its axle.

Re-assemble as described above.

Troubleshooting

Can does not spin when seamer is turned on

Sometimes during shipping, the motor gets displaced enough for the drive belt to slip off the pulleys. <u>Unplug the seamer</u> and remove the top cover and check to make sure the belt hasn't fallen off the pulleys. If it has, you should be able to slip the belt back on by first placing the belt over the small pulley, then pull it over the large pulley while rotating the pulley by hand.

If the belt continues to fall off after it has been placed back on the pulleys, you may need to align the driver pulley. This can happen when the box is dropped during shipping and the motor becomes misaligned, but it is easy to fix. There is a small set screw on the side of the pulley. Loosen the set screw and raise or-





lower the pulley to be in-line with the larger pulley. Tighten the screw, place the belt onto the pulleys, and test by spinning the large pulley by hand. If the belt stays on both pulleys it is aligned properly.

If the seamer does not turn on, it may be because either the thermal overload switch (located on the bottom of the motor) or circuit breaker (white button located on the backside of the electrical box) has tripped. You will need to remove the seamer's back cover to access the motor's thermal switch. The circuit breaker is a white button on the bottom of the switch housing. Pushing either of these reset buttons in will reset them. *One common cause for them tripping is pulling both operation levers at the same time.*



Seaming problems that can occur when you first receive your seamer

Seamers should arrive calibrated and ready to use. If you are having trouble with seams initially:

First make sure you are using the RIGHT handle first. Then the LEFT. Re-read the seaming instructions to make sure the procedure is followed correctly.

Check to ensure that the wave spring and washer are located properly under the lower adapter (see MODEL 7 SEAMER DIAGRAM). The base force (clamping pressure) will not be correct without the spring in place.

Make sure you have the correct type of end for the upper chuck. There are several can end "profiles" available, and they are not compatible with each other. The B64 profile comes standard on Oktober seamers, others are available when you place your seamer order. They can also be swapped out easily.



Broken Handle

If you do happen to break a handle off, it is easy to replace. Chances are, the broken threads are still in the roller housing. To remove them, use a small drill bit (1/8in works well) to "drill out" the threads. You won't actually drill into the metal, but the bit will use friction to spin the threads out the other side of the hole. When replacing the handle with a new one, make sure to tighten it in using the nut between the handle and the black knob.

Hint: The threads that hold the black knob on the handle are exactly the same as the ones that attach the handle to the roller housing. If you remove the knob you can turn it around and use the handle without the knob until a new handle arm arrives.

Contact Us Feel free to contact us if you have any other questions! Our team is always happy to help.

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