



# Operator's Manual



# Lettuce King® I 400N, 401N, 402NC, 403N Lettuce King® IV 4400N





Drum Ring shown sold separately.

Thank you for purchasing this Vollrath Food Processing Equipment. Before operating the equipment, read and familiarize yourself with the following operating and safety instructions. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE. Save the original box and packaging. Use this packaging to ship the equipment if repairs are needed.

# SAFETY PRECAUTIONS

To ensure safe operation, read the following statements and understand their meaning. This manual contains safety precautions which are explained below. Please read carefully.



## WARNING

Warning is used to indicate the presence of a hazard that can cause severe personal injury, death, or substantial property damage if the warning is ignored.



## **CAUTION**

Caution is used to indicate the presence of a hazard that will or can cause minor personal injury or property damage if the caution is ignored.

## **NOTE**

Note is used to notify people of installation, operation, or maintenance information that is important but not hazard-related.

# For Your Safety!

These precautions should be followed at all times. Failure to follow these precautions could result in injury to yourself and others or damage the equipment.

To reduce risk of injury or damage to the equipment:

- Check equipment before each use to insure the equipment is clean.
- Check for broken, nicked or dull blades and if found, replace the blade assembly.
- Check to insure that the pusher head sits down completely on the rubber bumpers.
- If necessary, lubricate guide rods using a light coating of mineral oil, Petro Gel, or food grade lubricant. DO NOT USE COOKING OIL AS IT WILL BECOME STICKY AND MAY PERMANENTLY DAMAGE THE PUSHER HEAD BEARINGS

# FUNCTION AND PURPOSE

Intended for cutting, dicing and wedging vegetables and fruits.

# FEATURES AND CONTROLS



Figure 1. Features and Controls Lettuce King I.

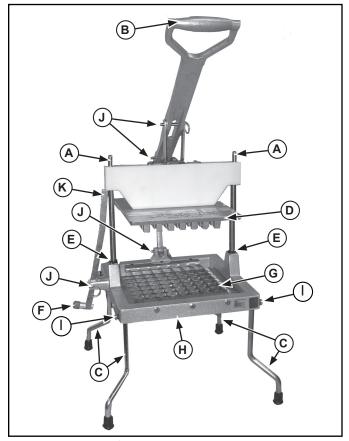


Figure 2. Features and Controls Lettuce King IV.



- A GUIDE RODS. Guides and align the pusher head onto the blade set.
- B HANDLE. Used to lower and raise the pusher head.
- © LEGS. Supports the equipment.
- D PUSHER HEAD ASSEMBLY. Made up of the guides and the pusher head block (and the handle for tabletop models).
- E BUMPERS. Cushions the stop of the pusher head.
- F SAFETY LOCK HANDLE. Used to secure the pusher head block in the up position.
- G BLADE ASSEMBLY. Houses the blades. Specifically sized to match the corresponding pusher head block.
- H BASE ASSEMBLY. Holds the guide rods and parts of the equipment.
- LEG SCREWS. Holds the legs in place.
- LOCKING PIN. Secures the pusher head to the handle. Secures the handle assembly to the base. Secures the safety lock to the base.
- K SAFETY LOCK ARM. Used to secure the pusher head block in the up position.

## UNPACKING THE EQUIPMENT AND INITIAL SETUP

Carefully remove crating or packaging materials from the equipment. Dispose of all packaging ,materials in an environmentally responsible manner.

# Leg installation Lettuce King I:

1. Use the screws (A) and washers (B) to install legs (C) tightening with wrench (D). See Figure 3.

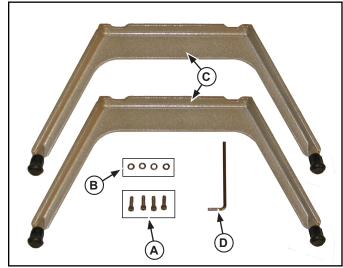


Figure 3. Legs, Hardware and Tool for the Lettuce King I.

Secure legs (C) to base (E) using screws (A) and washers (B). See Figure 4.

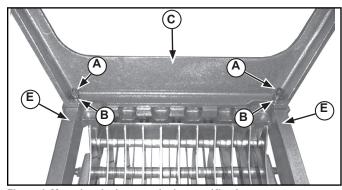


Figure 4. Mounting the Legs on the Lettuce King I.

# Leg installation Lettuce King IV:

1. Use the capscrews (A) and rubber washers (B) to install legs (C). See Figure 5.

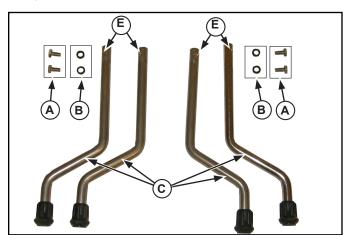




Figure 5. Legs and Hardware for the Lettuce King IV.

- Set legs (C) into the holes in the base assembly (D) so the angled part of the leg faces outward. See Figure 5.
- 3. Secure legs (C) to base assembly (D) using capscrews (A) and rubber washers (B). See Figure 5.
- 4. Tighten capscrews (A) slowly and rotate the legs slightly so that the end of the capscrew (A) enters the notch (E) in the leg (C). See Figure 5.



# **O**PERATION



# **WARNING**

# Sharp Blade Hazard.

Blades are sharp and can cause cuts. To avoid injury from sharp blades, handle with caution.

Prior to first use, it is important to clean the equipment. Wash new blades with warm soapy water and rinse thoroughly to remove the thin protective oil film.

- Before each use, check that the equipment is clean and the blades are in good condition. If loose or broken blades are found, blades must be serviced.
- Before each use, always check for proper blade alignment. Slowly set the pusher head (D) onto the blade assembly. See Figures 1 and 2. They should slide together with no obstructions. If there are obstructions, verify they are a matching set.
- Verify that the blade assembly and pusher head assembly are the desired size.
- 4. Prepare the food product to be processed.
- 5. Lift the handle (B) and place the food on the blade assembly (G) with the flat side down. See Figures 1 and 2.
- **6.** Lettuce King I: Remove hand from the blade assembly (G) area and place that hand on the leg (C). See Figure 1.
  - **Lettuce King IV**: Hold the handle (B), remove hand from the blade assembly area and place that hand on the lock lever (F). Push lock lever (F) in to release the lock arm from the locked position. See Figure 2.
- Using a strong, quick, downward thrust, force the food product through the blade assembly.
- 8. Repeat this process until you have prepared enough food product for your daily needs.
- Clean and lubricate your equipment immediately after each use. See the CLEANING section of this manual for more information.

### **CLEANING**



# **A** WARNING

#### Sharp Blade Hazard.

Blades are sharp and can cause cuts. To avoid injury from sharp blades, handle with caution.

To maintain the appearance and increase the service life, clean your daily.

### NOTE:

Food acids will make blades dull and corrode the metal. Always clean this food preparation equipment immediately after every use.

- 1. Raise the handle to put the highest position. See Figures 1 and 2.
- Clean large excess pieces of scrap with the special brush provided with this equipment.
- 3. Wipe, rinse or spray off equipment, pusher head and blade assembly thoroughly with HOT water.

- Do not wipe across the blades or use scrub pads on this equipment.
  Wiping across the sharp edge of the blade can cause injury and will dull
  the blades.
- The blade assembly (G) is best cleaned by forcing water under pressure through the blades from the unsharpened side. If necessary, use a nylon bristle cleaning brush to push food particles out from the unsharpened side of the blade assembly (G).
- 6. Do not put this equipment in a dishwasher or dish machine with soaps, detergents, or other alkaline chemicals that can harm the equipment.
- 7. After cleaning, let the equipment air dry.
- 8. Lubricate the sliding parts with mineral oil or Petro Gel after each use. Do not use cooking oil as it will become sticky and may permanently damage the equipment.

## PREVENTATIVE MAINTENANCE

- 1. Clean equipment after every use.
- Use for intended purposes only.
- 3. Change blades regularly based on usage.

# REPLACING BLADE ASSEMBLY



# **A** WARNING

#### Sharp Blade Hazard.

Blades are sharp and can cause cuts. To avoid injury from sharp blades, handle with caution.

Wash new blades with warm, soapy water and rinse thoroughly to remove the thin protective oil film. Keep the sharp edge away from you when handling blades.

#### Lettuce King I:

- Familiarize yourself with the parts diagram for your equipment.
   See Figure 6 (Spare Parts for Lettuce King I) for parts to reference for this procedure.
- 2. Allow ample room to work on a flat, dry surface.
- Raise the handle and pusher head as far up as it will go.
- 4. Verify that the pusher head bumpers (R) are installed. If missing, clean the surface and install new pusher head bumpers(s).
- 5. Remove the screws retaining the blade assembly (T). Carefully remove and dispose the blade assembly.
- 6. Examine the pusher head (J) fingers. If they are nicked or burred, smooth the rough edges with a small flat file. The spaces between the fingers must be uniform. Straighten any bent fingers.
- 7. Verify that blade shields (U) are installed on the blade assembly (T).
- 8. Place the blade assembly (T) into the base assembly (P) so the it is seated correctly and the sharp side up.
- Install the screws into the rear side of the blade assembly (T). Tighten until
  contact is made with the base assembly (P). Turn the screw until tight, do
  not exceed 1/2 turn or 40 in. lbs.
- 10. Place rubber washer between the base assembly (P) and the blade assembly (T). Insert the screws through the frame, and rubber washer into the blade assembly. Turn the screw until tight, do not exceed 1/2 turn or 40 in. lbs.



- 11. Slowly bring the pusher head (J) down to the blade assembly (T). If there is contact, the pusher head may need to be adjusted. To adjust, loosen the locking collar set screws (I) and position then adjust the pusher head fingers. Tighten the locking collar set screws.
- 12. Lubricate the pusher head pivot rod with mineral oil or Petro Gel after each use. Do not use cooking oil as it will become sticky and may permanently damage the equipment.

# Lettuce King IV:

- Familiarize yourself with the parts diagram for your equipment.
   See Figure 7 (Spare Parts for Lettuce King IV) for parts to reference for this procedure.
- 2. Allow ample room to work on a flat, dry surface.
- 3. Raise the handle and pusher head as far up as it will go.
- Remove the screws retaining the blade assemblies (CC) and (DD). Carefully remove and dispose the blade assemblies.
- Examine the pusher head (K). If they are nicked or burred, smooth the rough edges with a small flat file.
- 6. Verify that blade shields (BB) are installed on the blade assembly (CC) and (DD).
- 7. Place the lower blade assembly (CC) into the frame (H) so the it is positioned correctly and the sharp side up.

- 8. Install the screws into the left side of the blade assembly (CC). Tighten until contact is made with the frame (H). Turn the screw until tight, do not exceed 1/2 turn or 40 in. lbs.
- Place rubber washer between the right side frame (H) and the blade assembly (CC). Insert the screws through the frame, and rubber washer into the blade assembly. Turn the screw until tight, do not exceed 1/2 turn or 40 in. lbs.
- 10. Place the upper blade assembly (DD) into the frame (H) so the it is positioned correctly and the sharp side up.
- 11. Install the screws into the front side of the blade assembly (DD). Tighten until contact is made with the frame (H). Turn the screw until tight, do not exceed 1/2 turn or 40 in. lbs.
- 12. Place rubber washer between the back side frame (H) and the blade assembly (DD). Insert the screws through the frame, and rubber washer into the blade assembly. Turn the screw until tight, do not exceed 1/2 turn or 40 in. lbs.
- 13. Slowly bring the pusher head down to the blades.
- 14. Lubricate the main frame guide rods with mineral oil or Petro Gel after each use. Do not use cooking oil as it will become sticky and may permanently damage the equipment.

## TROUBLESHOOTING

If the equipment no longer processes food cleanly or without damage to the food product, the blades could be dull and be in need of replacement. Broken, bent, or nicked blades must be replaced.

Problem	It might be caused by	Course of Action
Broken Blade.	Blades were dull.	Pre-score whenever possible to avoid undue shock and stress to blades.  Replace the blade assembly.



# SPARE PARTS LIST - LETTUCE KING I

LETTER	PART NUMBER	DESCRIPTION
LETTER		
A	060	RUBBER FOOT (OLD STYLE)
	303	RUBBER FOOT, DEEP (NEW STYLE)
В	0655	RUBBER SEAL
C	414	SCREW FIL. HEAD., 1/4-20 X 3/4"
D	415	SCREW, HEX HEAD., 1/4-20 X 7/8"
E	420	BLADE BLOCK
F	424	BLADE BLOCK PIN
G	426	LEG CASTING, FRONT / REAR
Н	427	BLADE BLOCK SCREW, 1/4-20 X 2"
1	4422R	SET SCREW, SQ. HEAD., 1/4-20 X 3/8"
	379062	PUSHER HEAD 3/16" - (Item 400N) INCLUDES:
	379002	4 (0.88 LONG) SPACERS, 74 (0.93 LONG) SPACERS, 38 FINGERS, 2 RETAINING RODS, 4 NUTS
	402	PUSHER HEAD 1/4" - (Item 403N) INCLUDES:
	483	56 SPACERS, 29 FINGERS, 2 RETAINING RODS, 4 NUTS
J	400	PUSHER HEAD 3/8" - (Item 402NC) INCLUDES:
	482	38 SPACERS, 20 FINGERS, 2 RETAINING RODS, 4 NUTS
	452	PUSHER HEAD 3/4" - (Item 401N) INCLUDES:
		20 SPACERS, 11 FINGERS, 2 RETAINING RODS, 4 NUTS
K	453	PUSHER HEAD LOCKING COLLAR - INCLDS. COLLAR & SCREW
L	454	PUSHER HEAD PIVOT ROD
M	455	PUSHER HEAD HANDLE - INCLDS. HANDLE ROD & 2 PLASTIC GRIPS
N	456	PUSHER HEAD SIDE ARM - RIGHT HAND
0	457	PUSHER HEAD SIDE ARM - LEFT HAND
Р	468	BASE ASSEMBLY (CASTING)
Q	490	NYLON WASHER
R	506	PUSHER HEAD BUMPER
S	519	ACORN NUT, 1/4"
T	435	BLADE ASSEMBLY 3/16" - (Item 400N) INCLUDES:
		37 BLADES, 2 BLOCKS, 2 PINS, 2 SHIELDS
	485	BLADE ASSEMBLY 1/4" - (Item 403N) INCLUDES:
		28 BLADES, 2 BLOCKS, 2 PINS, 2 SHIELDS
	484C	BLADE ASSEMBLY 3/8" - (Item 402NC) INCLUDES:
		19 BLADES, 2 BLOCKS, 2 PINS, 2 SHIELDS
	434	BLADE ASSEMBLY 3/4" - (Item 401N) INCLUDES:
		10 BLADES, 2 BLOCKS, 2 PINS, 2 SHIELDS
U	N/A	BLADE SHIELD - PART OF BLADE ASSEMBLY
NOT SHOWN	4425	LETTUCE CUTTER BRUSH
INOT SHOWIN	4420	LETTUGE COTTER DRUGH



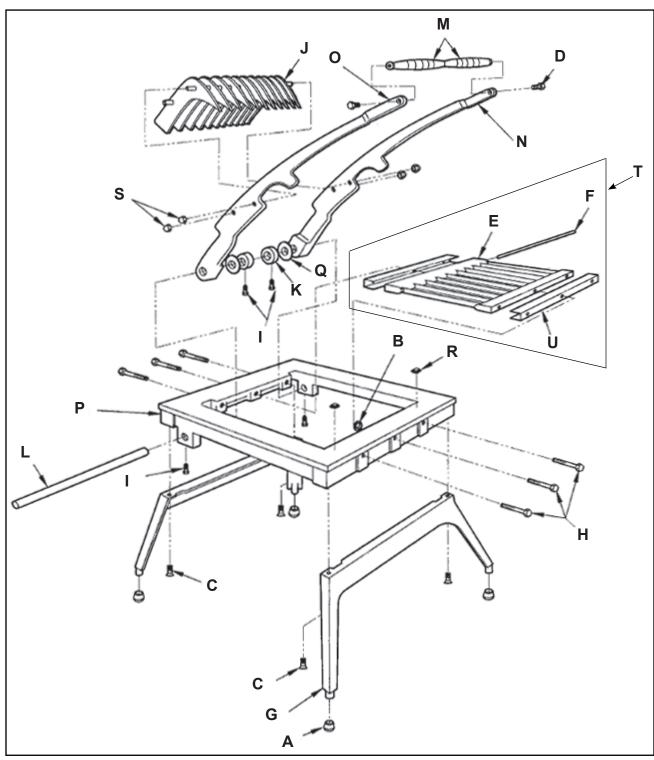


Figure 6. Spare Parts for Lettuce King I





# SPARE PARTS LIST - LETTUCE KING IV

LETTER	PART NUMBER	DESCRIPTION
A	0658	Rubber Seal
В	303	Rubber Foot
С	305	"O" ring
D	379017	Handle Bracket
Е	379018	Leg (new style - do not intermix with old style)
F	379019	Screw, Stainless, Hex, 3/8-24 x 1"
G	379020	Spacer
Н	850083	Guide Rod (also part of 4401)
I	4402	Blade Block (also part of blade assy 4408)
J	4403	Blade Pin (also part of blade assy 4408)
K	4404	Pusher Head
L	4405	Head Guide
М	4406	Screw, Hex, 1/4-20 x 4 1/2"
N	4407	Screw, Hex, 1/4-20 x 1 3/8"
0	4409	LEG (old style - do not intermix with new style)
Р	4411	Pull Pin with ring, short, 1 1/4"
Q	4412R	Pull Pin with ring, long 1 3/4"
R	4413	Operating Arm Linkage
S	4414R	Operating Handle
T	4416	Safety Pivot Base
U	4417	Safety Latch Assembly
V	4424	Screw, Hex, 1/4-20 x 1/2"
W	4427	Screw, Phillips, 1/4-20 x 1 1/4"
Х	N/A	Plastic Cap (also part of 4417)
Υ	N/A	Aluminum Stop (also part of 4417)
Z	N/A	Safety Latch (also part of 4417)
AA	N/A	Screw, Hex, 1/4-20 x 1" (also part of 4417)
BB	N/A	Blade Shield (part of blade assy 4408)
CC	4408	Blade Assembly (includes. 2 complete blade assy's w/ shields)
DD	N/A	Single Blade, 1/2" x 9-3/16" (packed 12 per carton) (part of blade assy 4408)
EE	4401	Main frame with guide rods
FF	N/A	Head Guide Link (Not Shown) discontinued, refer to "D")
NOT SHOWN	4425	Lettuce Cutter Brush
NOT SHOWN	2900	Drum Ring (Sold Separately)



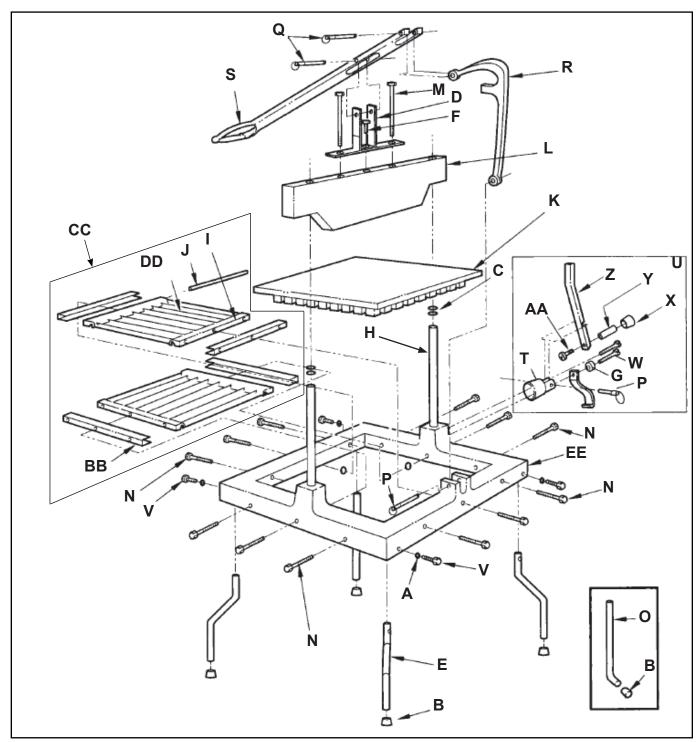


Figure 7. Spare Parts for Lettuce King IV.

# SERVICE AND REPAIR

Please contact Vollrath Technical Service from the list below.

# VOLLRATH Technical Service • 1-800-628-0832 (USA) • Email: techservicereps@vollrathco.com

When contacting Vollrath Technical Service, please be ready with the item number, model number (if applicable), serial number, and proof of purchase showing the date the equipment was purchased.

# WARRANTY STATEMENT FOR THE VOLLRATH CO. L.L.C.

This warranty does not apply to products purchased for personal, family or household use, and The Vollrath Company LLC does not offer a written warranty to purchasers for such uses.

The Vollrath Company LLC warrants each of its products listed below against defects in materials and workmanship for the applicable period provided below. All other products manufactured or distributed by The Vollrath Company LLC are warranted against defects in materials and workmanship for a period of one year. In all cases, the warranty runs from the date of the end user's original purchase found on the receipt. Any damages from improper use, abuse, modification or damage resulting from improper packaging during return shipment for warranty repair will not be covered under warranty.

- Vollrath Redco® products The warranty period is 2 years.
- Replacement parts The warranty period is 90 days.
- No remedy for normal use wear and tear or other causes not arising from defective material or workmanship. These components may be warranted if manufactured defective or due to material defect.

For complete warranty information, product registration and new product announcement, visit www.vollrath.com.



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Technical Services: 800.628.0832 Service Fax: 920.459.5462

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