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VS9 & VS9H

Vegetable Slicing & Shredding Units

**VS9 & VS9H**

**Operation & Maintenance Manual**

VS9 & VS9H



Persons under the age of 18 are not permitted to operate or have accessibility to operate this equipment per U.S. Dept. of Labor Employment Standards Administration Fact Sheet No. ESA91-3.

TO INSURE BOTH SAFE AND TROUBLE-FREE PERFORMANCE WE STRESS THAT ALL PERSONNEL THAT WILL BE INVOLVED WITH YOUR NEW UNIVEX VS9/VS9H VEGETABLE SLICER MUST READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE ATTEMPTING TO OPERATE THIS UNIT.

.....

WE APPRECIATE YOUR COOPERATION AND YOUR BUSINESS. SHOULD THERE BE A QUESTION OR IF WE CAN BE OF FURTHER ASSISTANCE, PLEASE CALL US,  
**1-603-893-6191.**

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## INSTRUCTION MANUAL

### INTRODUCTION

This manual contains instructions for the inspection, installation, safe operation, care, and maintenance of the VS9 Vegetable Cutter. Disassembly, repair, replacement, and re-assembly instructions are included. A trouble shooting guide is provided. A complete replacement parts list with identifying figure diagrams is included to aid in identification and ordering of replacement parts. Please review this manual carefully - particularly all safety precautions - before trying to put the VS9 into service.

### SAFETY INSTRUCTIONS

- **Never insert hands into the hopper.**
- **Never insert any utensil into the hopper.**

1. Note that the front housing of the VS9 has a feed hopper [Fig. 1 (2)]. It is also equipped with a feed plate [Fig. 1 (8)]. Food to be processed must always be fed to cutting surfaces by way of the hopper, and compressed against cutting surfaces with the feed plate. Never try to feed product to cutting surfaces with your hands or any other way!
2. If during operation of a product jam occurs, immediately turn off and disconnect the electrical supply to the power source equipment. Make sure rotation has stopped. Unlatch the VS9's front housing, swing it toward you, and then clear the obstruction. Do not try to clear obstructions while the VS9 is under power, and again, never insert fingers or utensils into the hopper!
3. Wear protective gloves whenever handling the VS9's knives, cutting plates, or cutting assemblies. They are very sharp and can cut you. For safety, wash knives and cutting plates with a long handled scrub brush.
4. When assembling or disassembling the VS9, make sure it rests on a stable working surface. Never rest knives, cutting plates, or cutting assemblies on surfaces that could be marred.
5. Before assembling the VS9 and mounting it to power source equipment, make sure that a comfortable working clearance has been provided around the machinery. Always install the machinery where it will save the operator steps.
6. Before assembling the VS9 and mounting it to power source equipment, or dismounting the VS9 after use, disconnect or lock-out the electrical supply to the power source equipment. This will prevent any chance of accidental start-up.
7. Before mounting the VS9 to power source equipment, make sure the front housing [Fig. 1 (8)] is securely latched to the rear housing [Fig. 1 (9), (10), (11)].
8. Before mounting the VS9 to power source equipment, review the power source equipment manual for instruction on the use of its power take-off hub. The hub should be equipped with a thumb screw. The thumb screw should be firmly snugged immediately after mounting the VS9 to secure the VS9 in place. Do not operate the VS9 if there is no securing device present on the power take-off hub.
9. Never hose down a VS9 mounted to power source equipment. Hosing down a mounted VS9 invites electrical shock.

## INSPECTION AND MODEL VARIATION EXPLANATION

The Univex VS9 is tested and inspected at the factory. The standard VS9 comes equipped with only the slicer plate assembly illustrated in Figure 2. The VS9H comes equipped with the hub and shaft assembly illustrated in Figure 3, and one 3/16" shredder plate. The remaining plates are optional purchase items. The person making the installation should re-inspect the VS9/VS9H immediately upon receipt for loose, damaged, or missing parts. Any damages should be reported to the carrier immediately, and any shortage of parts to Univex Corporation.

## INSTALLATION

The Univex VS9 is an attachment with no internal power source. To function, it must be mounted to a food mixing machine or a power base unit. Again, make sure that a comfortable working clearance is provided around the machinery, and that the machinery is installed where it will save the operator steps. Make sure the power source equipment power take-off assembly includes a thumb screw or other means of securing the VS9 in place (see Diagram 3).

## OPERATOR'S INSTRUCTIONS

### SLICING, GRATING, AND SHREDDING

The Univex VS9 is designed to slice, grate, and shred a wide range of food products when fitted with the proper plates and operated at the proper speeds. Before mounting the VS9 to power source equipment, refer to the application chart below. If the power source equipment is a power base unit, your choice of operating speeds is limited.

CUTTER	APPLICATION	MIXING MACHINE SPEED CONTROL SETTING
Slicer Plate	Cole slaw, potatoes, fruits, vegetable. Adjusting nut (Fig. 2. 6) is turned to set slice thickness. Prior to slicing cabbage or head lettuce, quarter the heads and remove cores. Firm heads process a better product.	High speed, indicator setting "2".
Julienne Plate	French fried potatoes, carrots, turnips, beets, salads, etc.	Medium speed, indicator setting "2".
Grater Plate	Grated nutmeg, cheese, coconut, bread, cracker crumbs.	Medium speed, indicator setting "2".
Shredder Plate	Various coarsenesses of cheese, carrots, etc.	Medium speed, indicator setting "2".

**NOTE:** For best results keep knives very sharp.

## PLATE UNITS - ASSEMBLY AND USE

**CAUTION:** Again, wear hand protection when working with these units.

### THE ADJUSTABLE SLICER PLATE UNIT

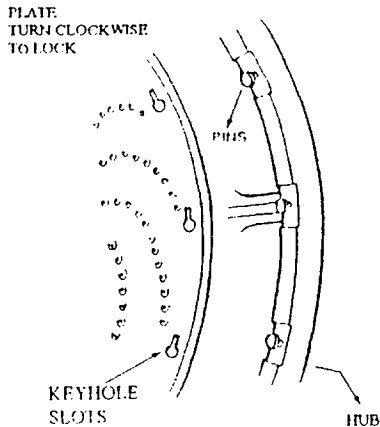
To assemble the slicer plate, see Figure 2 and Diagram 5 component assembly order and fit as shown. The plate, when assembled, can be adjusted to slice product to different thicknesses by turning the "adjusting nut" per the directions accompanying Diagram 5.

**WARNING:** Adjustments for thickness must never be attempted while the VS9 is under power or severe personal injury can occur. See safety precautions - Paragraph 2.

### GRATER, SHREDDER AND JULIENNE PLATE UNITS [Figure 3]

To fit the plate of your choice to the hub and shaft [Figure 3], line up the key hole slots on the plate with the locating pins on the hub as shown below. Slip the plate over the pins and secure it by turning the plate in a clockwise direction until it shoulders up firmly on the pins. This can be done most safely by resting the plate face down on a butcher's block and turning the hub home from above.

**DIAGRAM 1  
SLOT AND PIN ALIGNMENT**



Do not remove thrust bearing for cleaning.

Make sure that the "Thrust Bearing" [Figure 3(3)] is properly positioned on the shaft. Make sure that the set screw [Figure 3(2)] on the thrust bearing is securely snugged. A loose thrust bearing will allow clatter and damage the VS9. Do not remove thrust bearing for cleaning.

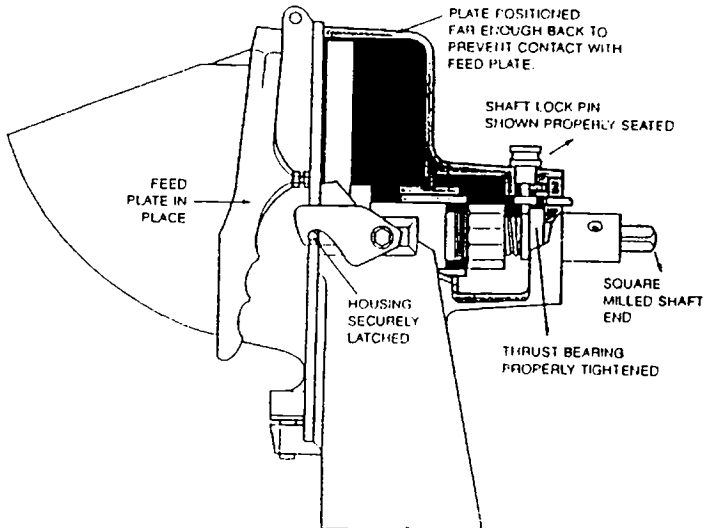
## LOADING PLATE UNITS INTO THE VS9 HOUSING

With the VS9 resting on a stable working surface, unlatch the front housing [Figure 1(8)] and swing it toward you. Lift the assembled plate unit and insert it into the rear housing [Figure 1(10)]. Lift the shaft lock pin [Figure 1(19)] and seat the plate unit with a gentle twist. Make sure that the thrust bearing on the shaft has carried fully into place, and that the square milled end of the shaft has fully cleared the rear hub [Figure 1(15)]. Release the shaft lock pin, then close and securely latch the front housing.

The VS9 is now ready to mount to power source equipment.

### DIAGRAM 2

#### PROPERLY LOADED VS9:VS9H

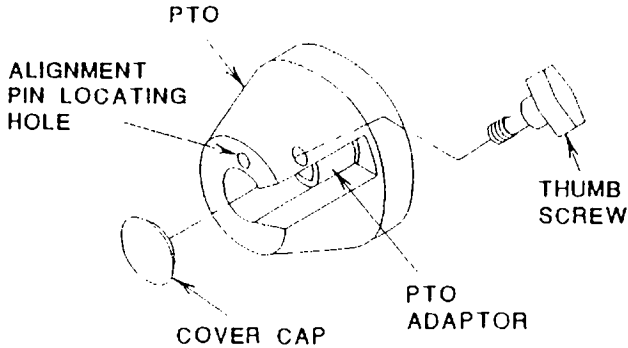


## MOUNTING THE VS9 TO POWER SOURCE EQUIPMENT

Again, before mounting the VS9, make sure that the power source equipment is turned off and its electrical supply disconnected or locked out. Review the power take-off hub information in the manual for the power source equipment. then proceed as follows:

**DIAGRAM 3**

### TYPICAL POWER TAKE-OFF HUB

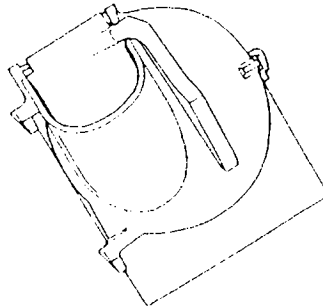


Remove the chrome cover cap from the power take-off hub. Carefully lift the VS9 and insert the square milled shaft end into the hub intake port (See diagram above), while holding the VS9 at the angle pictured below.

Slide the VS9 forward until the square milled shaft end firmly seats in the PTO adaptor [Diagram 3]. Gently twist the VS9 to a fully upright position, slide locating pin [Figure 1(17)] into PTO locating hole and snug the thumb screw [Diagram 3]. NOTE: Only the #12 tapered hub is fitted with a locating pin. the VS9 is now ready to process product.

**DIAGRAM 4**

### MOUNTING ANGLE (NOT OPERATING ANGLE)





## PROCESSING PRODUCT

Before processing product, please review the application chart on Page 3, and please note that the feed plate [Figure 1(2)] is equipped with an adjusting nut and screw [Figure 1(6-7)]. This assembly should be adjusted until there is no chance of the feed plate being compressed against cutting surfaces. If the feed plate meets a rotating cutting surface, both components will be damaged.

### TO PROCESS:

Reconnect the electrical supply to the power source equipment, turn the power source equipment on, and where possible adjust the speed of the power source equipment to a medium setting.

Lift the feed plate to expose the plate unit, and drop product into the feed hopper. Keep hands clear. With your hand holding the feed plate grip, gently compress product against the rotating plate unit. Adjust the speed of the power source equipment - where possible - up or down until you get the best results.

If you experience problems in processing, shut down the power source equipment and refer to the Trouble Shooting Guide on Page 9, and the safety precautions paragraph.

## DISMOUNTING AND DISASSEMBLY FOR CLEANING AND MAINTENANCE

### DISMOUNTING

To dismount the VS9, simply follow the mounting instructions on Page 6 in reverse order. Set the VS9 on a stable working surface.

### DISASSEMBLY

To disassemble the VS9 for cleaning or maintenance:

Unlatch the front housing and swing it toward you.

Lift the feed plate up and urge it to the left until it pivots off the front housing and set it aside.

Lift the front housing from its pivot holes and set it aside.

To disassemble the plate units, follow the assembly instructions on Pages 4-6 in reverse order. Set the components aside.

### CLEANING

To avoid damaging the VS9's highly polished finish, never put any VS9 component through a dishwashing machine. Wearing hand protection, wash all components by hand with a mild soap and water solution. Use a long handled scrub brush on all plate units to avoid finger cuts. Again, do not rest knives, grater plates, or shredding plates on any surface which will mar. Do not remove thrust bearings from Julienne or Shredder plate shafts. Dry component parts with a soft dry rag.

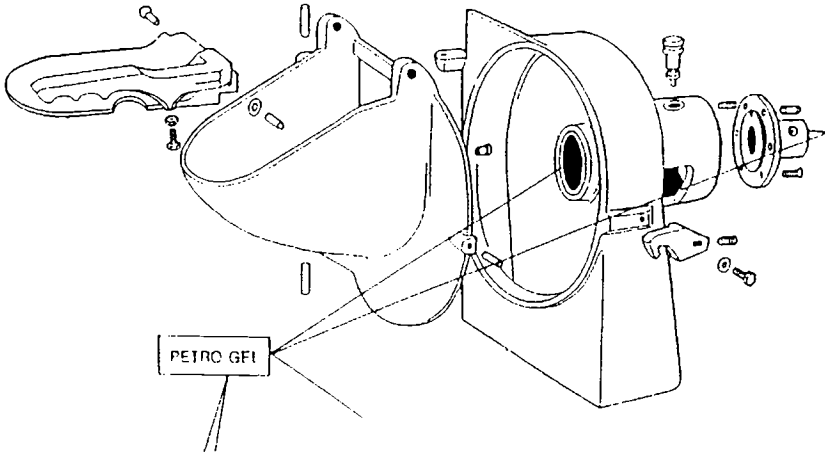
For the best and most sanitary product, clean the VS9 immediately after use of before switching food products.

## LUBRICATION INSTRUCTIONS

Enclosed is a sample tube of Petro-Gel which we recommend you use in all your food preparation equipment.

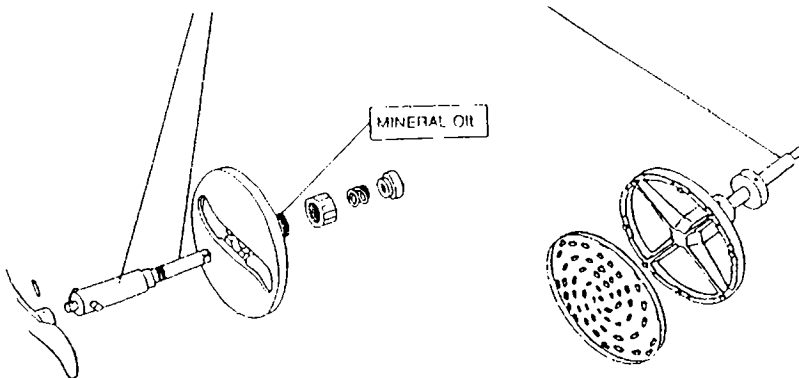
It may be purchased at your local food equipment supply company, or purchased directly from: (Part No. 4400408)

Univex Corporation  
3 Old Rockingham Road  
Salem, NJ 03079  
1-800-258-6358



## LUBRICATION

After every cleaning, apply a thin coating of sterile petroleum jelly to all bearing surfaces. Do not use vegetable oil. It becomes gummy. If adjusting nuts and screw become stiff to work with, apply a drop of sterile mineral oil.



## MECHANICS MAINTENANCE

Before trying to maintain the VS9, review the safety precautions paragraph carefully, and read all assembly-disassembly instructions on Pages 2-6. Wear gloves when handling plate units.

Since the VS9 contains no internal power source, most problems can be immediately traced to improper assembly, improper adjustment or worn parts. The Trouble Shooting Guide on Page 7 lists the most common problems and corrective measures.

### REPLACEMENT PARTS AND ASSEMBLIES

Replacement parts and assemblies are displayed in Figure 1 through 3. When ordering, always include Univex part numbers and item descriptions. Common hardware parts are identified in normal nomenclature.

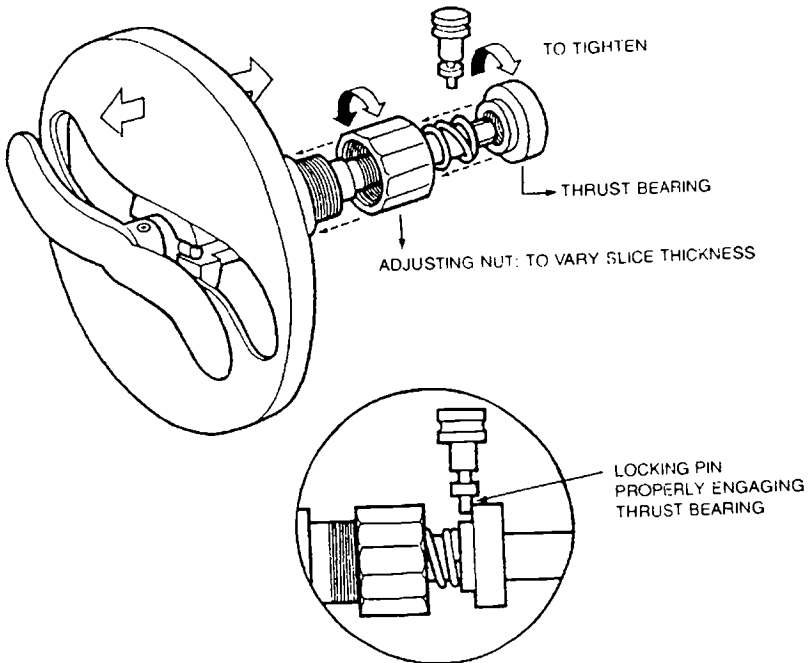
### TROUBLESHOOTING GUIDE

Caution: Review all safety notes and disconnect electricity to power source equipment before attempting corrective measures.

TROUBLE	POSSIBLE CAUSE	SOLUTION
1. Power source equipment is under power but plate will not turn.	PTO adaptor missing from power take-off assembly	Replace PTO adaptor.
2. Knife or plate scraping front housing.	Thrust bearing loose, or lock pin not fully engaged.	Tighten thrust bearing immediately, make sure lock is properly engaged pin
3. Shredding plates loose or rattling.	Plate is loose on hub pins.	Inspect shredder plate assembly to assure plate is shouldered firmly up on pins. Inspect shredder plate to assure it is not bent
4. Front housing will not shut tightly.	Latch set screw out of adjustment.	Adjust set screw at rear of latch [Figure 1(12)].
5. Mounted VS9 unit rattles when under power.	Thumb screw or securing mechanism on power take-off assembly missing or too loose.	Tighten or replace.
6. Feed plate scraping plates.	Feed plate adjusting unit out of adjustment.	Back off feed plate adjusting nut.

## DIAGRAM 5

## PROPER ASSEMBLY OF THE SLICER PLATE ASSEMBLY



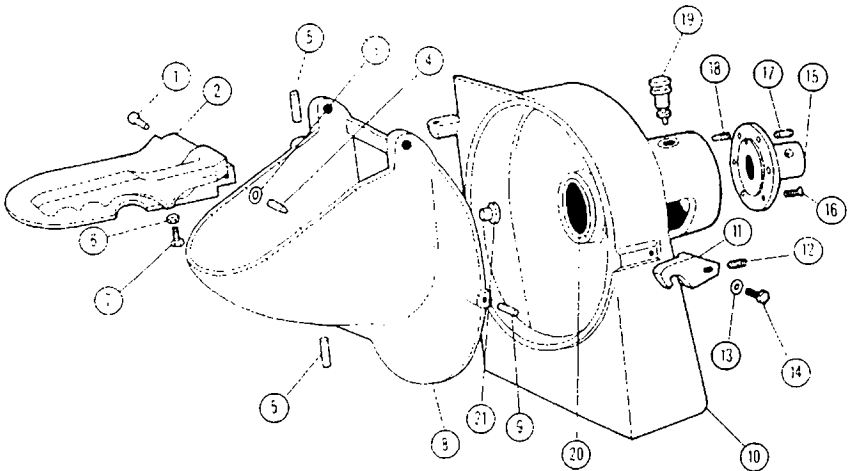
**CAUTION:** The thrust bearing must be securely tightened before the slicer plate assembly is loaded into the housing. Failure to tighten will damage the VS9 and the power source equipment. **NOTE:** The thrust bearing requires a left hand twist to tighten.

## VS9/VS911 HOUSING ASSEMBLY

FIGURE 1

ILL.U.S. NO.	PART NO.	DESCRIPTION	QTY.
1.	4400028	PUSHER PIN - LEFT	1
2.	1000903	FEED PLATE	1
3.	4400097	NYLON WASHER 1/2" O.D. X 1-8" X 3/8" I.D.	1
4.	4400029	PUSHER PIN - RIGHT	1
5.	0090004	HINGE PINS	2
6.	4400057	STOP NUT 1/4-20	1
7.	1200025H	SET SCREW 1/4-20 X 3/4"	1
8.	1000902	FRONT HOUSING	1
9.	4400400	DOWEL PIN 1/4" X 1" S/S	1
10.	1000901	REAR HOUSING	1
11.	1000806	LATCH	1
12.	4400193	SET SCREW 10-32 X 3/8"	1
13.	1200377	WASHER, BEVEL 5/16" I.D.	1
14.	0090000	LATCH SCREW	1
15.*	1000918	#12 TAPERED HUB (STANDARD)	1
	0090005	UNIVEX REAR HUB (OPTIONAL)	
16.	4400091	PAN HEAD SCREW 1-4-20 X 3/4"	6
17.	0090002	LOCATING PIN 5/16" X 1"	1
18.	4400184	FULL DOG SET SCREW 5/16" -24 X 1/2	1
19.	1000811	SHAFT LOCK PIN (INCLUDES 4400180)	1
20.	1000914	BRONZE BUSHING	1
21.	1000923	PLASTIC BUTTON - FRONT COVER	1

\* When ordering, specify #12 tapered hub or Univex rear hub. The Univex rear hub does not have accommodation for a locating pin (17), and will only fit older Univex manufactured power source equipment.

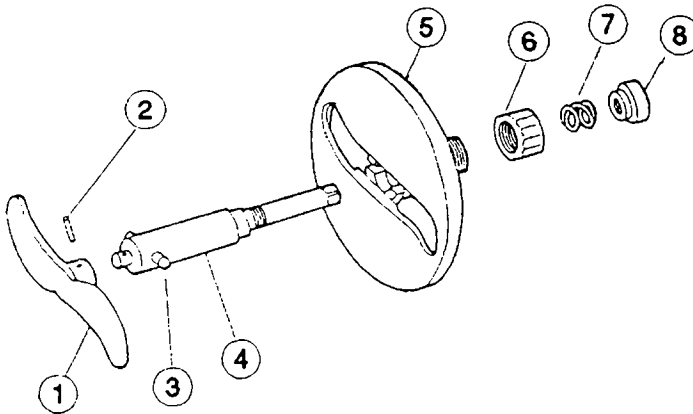


## KNIFE AND SHAFT ASSEMBLY

FIGURE 2

ILLUS. NO.	PART NO.	DESCRIPTION	QTY.
1.*	1000922	KNIFE	1
2.*	4400004	ROLL PIN 1-4" X 1-1/8"	1
3.*	4400092	DRIVE PIN	1
4.*	1000820	DRIVE SHAFT	1
5.*	1000904	PLATE ADJUSTING	1
6.	1000808	NUT - ADJUSTING	1
7.	1000917	SPRING - NUT ADJUSTING	1
8.	1000809	BEARING - THRUST	1

\* Illustrations 1 through 5 are presented for illustration purposes only. Replacement of any one of those illustrated parts requires the replacement of all five. They may be purchased as Assembly No. 1000912.



**SHREDDER PLATE ASSEMBLY  
WITH OPTIONAL PLATES**

**FIGURE 3**

ILLUS. NO.	PART NO.	DESCRIPTION	QTY.
1*	1000116	SHAFT	1
2**	1200036	SET SCREW 5/16" -24 X 3/8"	1
3*	1000973	THRUST BEARING	1
4*	4400116	ROLL PIN 3/16" x 1-1/2"	1
5*	1000975	PLATE PINS	8
6*	1000115	PLATE HOLDER	1
7.	1000906	GRATER PLATE	OPTIONAL
8.	1000907	SHREDDER PLATE 3/32" DIA	OPTIONAL
9.	1000908	SHREDDER PLATE 1/2" DIA	OPTIONAL
10.	1000909	SHREDDER PLATE 3/16" DIA.	OPTIONAL
11.	1000910	SHREDDER PLATE 5/16" DIA.	OPTIONAL
12	1000911	JULIENNE PLATE	OPTIONAL

\* Illustrations 1, 4, 5, and 6 are presented for illustration purposes only. Replacement of any one of those illustrated parts requires the replacement of all. They may be purchased as Assembly No. 1000913.

\*\* Illustration 2 must be purchased with Illustration 3.

