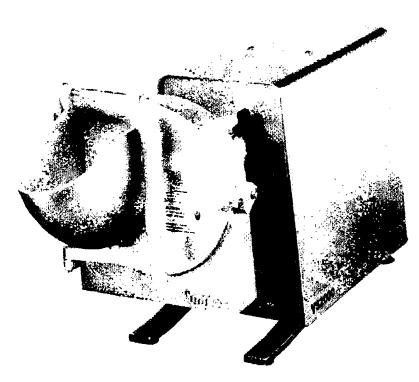
# INSTRUCTION MANUAL

# VS2000 VEGETABLE SLICER/SHREDDER



Persons under age 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.



# TABLE OF CONTENTS

### DESCRIPTION

LIST OF ILLUSTRATIONS 1 INTRODUCTION 2 SAFETY 2 INSPECTION 3 OPERATOR INSTRUCTIONS 3-6 PLATE ASSEMBLY 4 SHREDDER PLATE ASSEMBLY 4 LOADING PLATE UNITS INTO VS9 HOUSING 5 MOUNTING INSTRUCTIONS 6 PROCESSING PRODUCT 6 DISMOUNTING AND DISASSEMBLY FOR CLEANING 6 LUBRICATION 7 PLATES USAGE 7 MECHANIC'S MAINTENANCE 8	TABLE OF CONTENTS	1
INTRODUCTION	LIST OF DIAGRAMS	1
INTRODUCTION	LIST OF ILLUSTRATIONS	1
SAFETY       2         INSPECTION       3         OPERATOR INSTRUCTIONS       3-6         PLATE ASSEMBLY       4         SHREDDER PLATE ASSEMBLY       4         LOADING PLATE UNITS INTO VS9 HOUSING       5         MOUNTING INSTRUCTIONS       6         PROCESSING PRODUCT       6         DISMOUNTING AND DISASSEMBLY FOR CLEANING       6         LUBRICATION       7         PLATES USAGE       8         MECHANIC'S MAINTENANCE       8	INTRODUCTION	2
INSPECTION	SAFETY	2
OPERATOR INSTRUCTIONS       3-6         PLATE ASSEMBLY       4         SHREDDER PLATE ASSEMBLY       4         LOADING PLATE UNITS INTO VS9 HOUSING       5         MOUNTING INSTRUCTIONS       6         PROCESSING PRODUCT       6         DISMOUNTING AND DISASSEMBLY FOR CLEANING       6         LUBRICATION       7         PLATE USAGE       8         MECHANIC'S MAINTENANCE       8	INSPECTION	3
SHREDDER PLATE ASSEMBLY       4         LOADING PLATE UNITS INTO VS9 HOUSING       5         MOUNTING INSTRUCTIONS       6         PROCESSING PRODUCT       6         DISMOUNTING AND DISASSEMBLY FOR CLEANING       6         LUBRICATION       7         PLATES USAGE       8         MECHANIC'S MAINTENANCE       8		6
LOADING PLATE UNITS INTO VS9 HOUSING	PLATE ASSEMBLY	4
MOUNTING INSTRUCTIONS	SHREDDER PLATE ASSEMBLY	4
PROCESSING PRODUCT	LOADING PLATE UNITS INTO VS9 HOUSING	5
PROCESSING PRODUCT	MOUNTING INSTRUCTIONS	6
LUBRICATION	PROCESSING PRODUCT	6
LUBRICATION	DISMOUNTING AND DISASSEMBLY FOR CLEANING	6
PLATES USAGE	UBRICATION	7
MECHANIC'S MAINTENANCE	PLATES USAGE	8
	MECHANIC'S MAINTENANCE	8
TROUBLE SHOOTING GUIDE	TROUBLE SHOOTING GUIDE	9
REPLACEMENT PARTS AND ASSEMBLIES 10-13	REPLACEMENT PARTS AND ASSEMBLIES	13

### DIAGRAMS

## DIAGRAMS

# PAGE

DIAGRAM 1	SLOT AND PIN ALIGNMENT	3
DIAGRAM 2	PROPERLY LOADED VS9/VS9H	4
DIAGRAM 3	TYPICAL POWER TAKE-OFF HUB	5
DIAGRAM 4	MOUNTING ANGLE	5
DIAGRAM 5	PROPER ASSEMBLY OF THE SLICER PLATE	9

# LIST OF ILLUSTRATIONS

### **ILLUSTRATION**

# PAGE

FIGURE 1 FIGURE 2	POWER UNIT	12
FIGURE 3 FIGURE 4	KNIFE AND SHAFT ASSEMBLY SHREDDER ASSEMBLY	

# PAGE

# UNIVEX VS2000 HIGH VOLUME VEGETABLE SLICER/SHREDDER INSTRUCTION MANUAL

The UNIVEX VS2000 HIGH VOLUME VEGETABLE SLICER/SHREDDER is a 1 HP portable electric unit consisting of a poly "V" belt assembly with a No. 12 drive hub operating at 700 rpm. It is designed to support and power the UNIVEX VS9 Vegetable slicer, and the VS9H Shredder and Grater food processing attachments.

#### INTRODUCTION

This manual contains instructions for the inspection, installation, safe operation, care, and maintenance of the VS2000 Vegetable Slicer/Shredder. Disassembly, repair, replacement, and reassembly 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 VS2000 into service.

#### **INSPECTION**

The VS2000 drive assembly has been inspected and tested at the factory; however, it should be externally inspected and electrically checked prior to use. The electrical data listed on the nameplate should be the same as the user's electrical supply. Any damage should be reported to the carrier immediately, and any shortage or deviation of parts to UNIVEX Corp.

### **SAFETY**

The user should read and understand the VS2000 and the attachment instructions prior to operation. First time operators should be properly trained in safety precautions and in the proper use and servicing of this equipment and attachments.

Switch the power "OFF" and disconnect the electrical supply before mounting or disengaging an attachment, or for cleaning and servicing the equipment.

Before, connecting unit to power source it should also be in the "OFF" position.

- 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. 2 (2)]. It is also equipped with a feed plate [Fig. 2 (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!
- 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.
- Before assembling the VS9 and mounting it to power source equipment, or dismounting the VS9 after use, disconnect or lockout the electrical supply to the power source equipment. This will prevent any chance of accidental startup.

- 7. Before mounting the VS9 to power source equipment, make sure the front housing [Fig. 2 (8)] is securely latched to the rear housing [Fig. 2 (9), (10), (11)].
- The thumb screw [Fig. 1 (22)] 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 takeoff hub.
- Never hose down a VS9 mounted to power source equipment. Hosing down a mounted VS9 invites electrical shock.

### CIRCUIT BREAKER.

If the circuit breaker HAS TRIPPED, turn the power switch to "OFF," and disconnect the electrical supply, determine and then correct the fault before resetting. To prevent unauthorized use, remove the switch key.

Be sure the attachment is properly cleaned, assembled, and installed, tighten thumb screw before sonnecting to power source. Do not attempt to service the drive assembly. Please contact Univex Corp. for the number of the nearest authorized service agent in your area.

### **OPERATION INSTRUCTIONS**

The VS2000 should be setup in an area that is convenient for operation, and has sufficient clearance for safety. Before installing the VS9 attachment, make sure the PTO adapter [Fig. 1 (24)] is properly installed on the drive shaft. The vegetable slicer should be attached with a twisting motion and in an upright position. Make sure to tighten the thumb screw . When processing foods please observe operating and safety instructions. When processing is completed, turn power to "OFF" and disconnect power source. Remove the attachment, disassemble, clean, dry and sanitize before storing in a clean, dry environment.

### CAUTION

The VS2000 should not be used for any of the applications listed below. Failure to observe these guidelines may result in damage to VS2000 and will void the manufacturer's warranty.

Do not use the VS2000 to drive a meat grinder accessory.

Do not use the VS2000 to process hard cheese with the grater plate or any other plate.

Do not use the VS2000 to process soft cheese

### PLATE ASSEMBLY

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

### ADJUSTABLE SLICER PLATE ASSEMBLY [Figure 3]

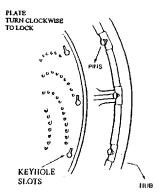
To assemble the slicer plate, see Figure 3 and Diagram 5 component assembly order and fit as shown. The plate, when assembled, can be adjusted to slice product to different thickness by turning the "adjusting nut" per the directions accompanying Diagram 5.

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.

### SHREDDER PLATE ASSEMBLY [Figure 4]

To fit the plate of your choice to the hub and shaft [Figure 4], 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

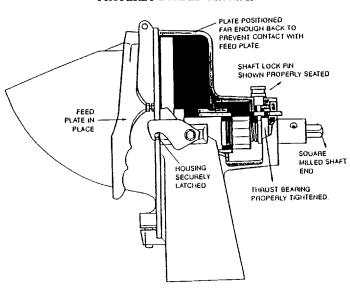


Do not remove thrust bearing for cleaning.

### LOADING PLATE UNITS INTO THE VS9 HOUSING

With the VS9 resting on a stable working surface, unlatch the front housing [Figure 2 (8)] and swing it toward you. Lift the assembled plate unit and insert it into the rear housing [Figure 2 (10)]. Lift the shaft lock pin [Figure 2 (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 2 (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.





## MOUNTING THE VS9 TO POWER SOURCE

Again, before mounting the VS9, make sure that the power source equipment is turned off and its electrical supply disconnected or locked out.

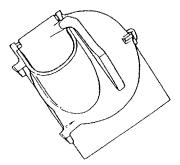
**DIAGRAM 3** 

# TYPICAL POWER TAKEOFF HUB PTO ALIGNMENT PIN LOCATING HOLE THUMB SCREW PTO ADAPTOR

Remove the chrome cover cap from the power takeoff 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 adapter [Diagram 3]. Gently twist the VS9 to a fully upright position, slide locating pin [Figure 2 (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 plate usage chart on Page 8, and please note that the feed plate [Figure 2 (2)] is equipped with an adjusting nut and screw [Figure 2 (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 VS2000, on.

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.

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 5 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

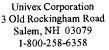
To avoid damaging the VS9's highly polished finish, never put any VS9 component through a dishwashing machine. Wearing hand protection, wash all components by hand with a mild soap and water solution. Use a long handled scrub brush on all plate units to avoid finger cuts. Again, do not rest knives or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

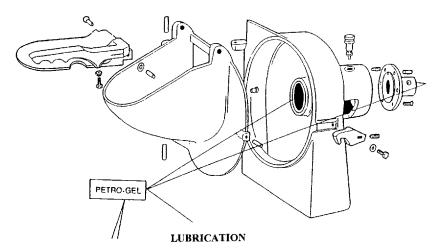
For the best and most sanitary product, clean the VS9 immediately after use of before switching food products.

### LUBRICATION INSTRUCTIONS

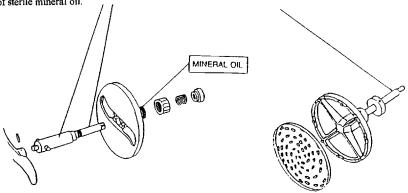
Enclosed is a sample tube of Petro-Gel which we recommend you use in all your food preparation equipment.

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





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.



### PLATE USAGE

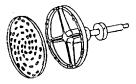
STANDARD EQUIPMENT Satin finish Aluninum Housing with hinged chute door, latch and feed pusher, N0. 12 rear hub and locking pin.



Slicing adjustable "S" knife assembly with stainlessSteel knife. Typical usageLETTUCERADISHESCHINESE VEGETABLESCUCUMBERSCABBAGECARROTSPEPPERSZUCCHINICELERYPOTATOES



Shredding assembly, with 5/16 Shredder Plate



### CAUTION

The VS2000 should not be used for any of the applications listed below. Failure to observe these guidelines may result in damage to VS2000 and will void the manufacturer's warranty.

Do not use the VS2000 to drive a meat grinder accessory.

Do not use the VS2000 to process hard cheese with the grater plate or any other plate.

Do not use the VS2000 to process soft cheese

FOOD PRODUCT	1/2" SHREDDER PLATE 000	5/16" SHREDDER PLATE 0	3/16" SHREDDER PLATE 3	3/32" SHREDDER PLATE 7
COLE SLAW	•	•		
BREAD CRUMBS		•		
POTATOES			•	•
CARROTS FOR COLORING			•	

### **MECHANICS MAINTENANCE**

Before trying to maintenance 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 9 lists the most common problems and corrective measures.

# REPLACEMENT PARTS AND ASSEMBLIES

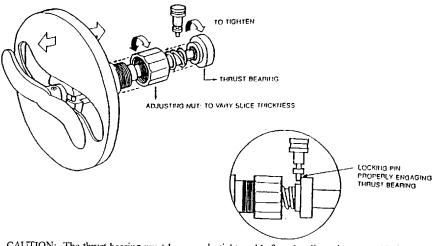
Replacement parts and assemblies are displayed in Figure 1 through 4. When ordering, always include Univex part numbers and item descriptions. Common hardware parts are identified in normal nomenclature.

### **TROUBLESHOOTING GUIDE**

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

TROUBLE	POSSIBLE CAUSE	SOLUTION
<ol> <li>Power source equipment is under power but plate will not turn.</li> </ol>	PTO adapter missing from power takeoff assembly	Replace PTO adapter.
<ol> <li>Knife or plate scraping front housing.</li> </ol>	Thrust bearing loose, or lock pin not fully engaged.	Tighten thrust bearing immediately, make sure lock pin is properly engaged.
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 2 (12)].
<ol> <li>Mounted VS9 unit rattles when under power.</li> </ol>	Thumb screw on power takeoff 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



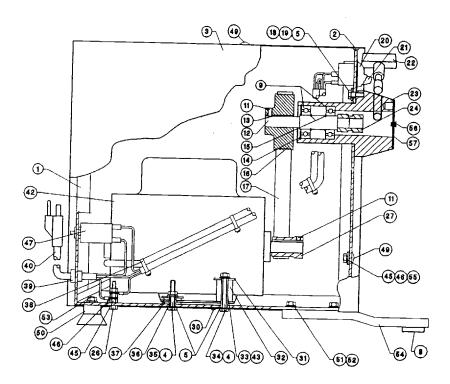
CAUTION: The thrust bearing must be securely tightened before the slicer plate assembly is loaded into the housing. Failure to tighten will damage the VS9 and the power source equipment. NOTE: The thrust bearing requires a left hand twist to tighten.

	v	S2000 POWER UNIT Figure 1	
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	8700001	Housing	1
2	8700014	Foam, Rubber Strip	2
3	8700002	Cover, Housing	1
4	4400141	Nut, Kep 1/4-20	4
5	1200075	Washer, Steel Flat 1/4	7
6		RESERVED	
7		RESERVED	
8	8700104	Feet	4
9	1030019	Ball Bearing 6204LL	2
10		RESERVED	-
11	4400072	Set Screw 5/16-18 x 3/8	2
12	8800010	Shaft, P T O	1
13	4400230	Key 3/16 Square	2
14	1200117	Retaining Ring Int.	1
15	1200119	Retaining Ring Ext.	2
16	8700311	Pulley, Driven	1
17	8700310	Belt, Drive 320J10	1
18	1200025H	Screw, Hex HD 1/4-20 x 3/4	3
19	4400005	Lock washer 1/4	5
20	8700035	Switch, With Key	1
21	8700034	Key, Switch (Key only)	1
22	8700019	Knob Assembly, P T O	1
23	4400045	Housing, P T O	1
24	8800012	Adapter, P T O	1
25		RESERVED	
26	1200440	Bolt, 10-32 x 1	1
27	8700024	Pulley, Drive	1
28		RESERVED	
29		RESERVED	
30	1200012	Screw, Phil HD 10-32 x 1/2	6
31	4400414	Washer, Flat 1/4	4
32	8700026	Spring, Compression	2
33	4400415	Sleeve (Long)	2
34	1200411	Screw, Hex HD 1/4-20 x 2	2
35	1200413	Screw, Hex HD 1/4-20 x 1 1/2	2
36	4400416	Sleeve (Short)	2
37	8700032	Spacer, Isolator	4
38	4400398	Cable Tie	3
39	1012042	Strain Relief	1
40	8800100	Cord, Electric 115V	1
	8800100-2	Cord, Electric 220V	1
41	4400351	Label, Stop Unplug (Not Shown)	1
42	1031307E	Motor, 1 HP, 115\230V, 60 HZ	1
	1031309	Motor, 1 HP, 220V, 50 HZ	1
43	4400417	Sleeve, Spring	2
44	1024010	Label, Univex (Not Shown)	1
45	1200060	Nut, Hex 10-32	3
46	4400065	Lock washer, #10	2
49	1200442	Screw, 10-32 X 1/2 Thuss Head	4
50	7510094	Feet	2
51	1200039	Screw 5/16-18 x <sup>3</sup> / <sub>4</sub>	4
52	1200077	Lock washer 5/16	4
53	4400410	Nut 8mm x 1.25	2
54	8700106	Legs	2
55	1200076	Washer no. 10	2

### VS2000 POWER UNIT Figure 1 (Cont.)

56 57 58 FOR CSA ON	8900019 4400210 4400352 LY	Screw SFHD 6-32 X 3/8 Washer P.T.O. Label, VS2000 (Not Shown)	2 1 1
ITEM NO.	PART NO.	DESCRIPTION	OTY.
40 47 48	8800100-1 4400249 4400227	Cord, Electric 115V Circuit Breaker Label, Reset (Not Shown)	1 1 1

# VS2000 POWER UNIT

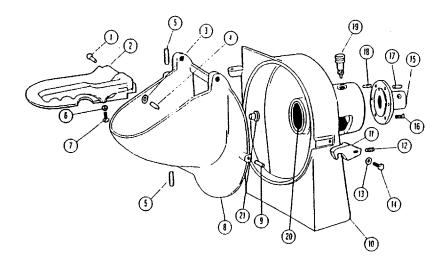


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### VS9/VS9H HOUSING ASSEMBLY FIGURE 2

ILLUS, 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	SCREW, Hex HD 1/4-20 x 3/4	1
8.	1000902	FRONT HOUSING	1
9.	4400400	DOWEL PIN 1/4" X 1" SS	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 5/8"	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

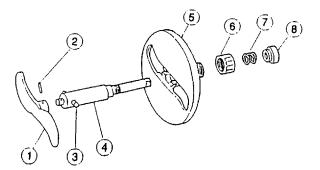
\* When ordering, specify #12 tapered hub or Univex rear hub. The Univex rear hub does not have accommodation for a locating pin (17), and will only fit older Univex manufactured power source equipment.



# KNIFE AND SHAFT ASSEMBLY FIGURE 3

ILLUS, NO,	PART NO,	DESCRIPTION	
1.*	1000922	KNIFE	QTY.
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
* Illus 1 . 5 are	for illustration		1

\* Illus. 1 - 5 are for illustration only. They can only be purchased as Assembly No. 1000912.

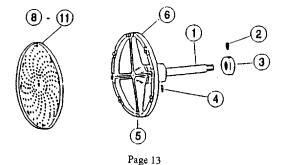


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# SHREDDER PLATE ASSEMBLY WITH OPTIONAL PLATES FIGURE 4

ILLUS, NO,	PART NO.	DESCRIPTION	
1.*	1000116	SHAFT	QTY,
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	1
6.*	1000115	PLATE HOLDER	8
7,		RESERVED	1
8.	1000907	SHREDDER PLATE 3/32" DIA	
9.	1000908	SHREDDER PLATE 1/2" DIA	OPTIONAL
10,	1000909	SHREDDER PLATE 3/16" DIA.	OPTIONAL
11.	1000910	SHREDDER PLATE 5/16" DIA.	1
* ****			ODTION

\* Illus, 1, 4, 5, & 6 are for illustration only. They can only be purchased as Assembly No, 1000913. \*\* Illustration 2 must be purchased with Illustration 3.



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