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TECHNICAL MANUAL
FOR

MEAT SLICER UNIVEX MODEL 8512

(JAMESTOWN METAL MARINE)
(CONTRACT NO. N00024-98-C-2306)



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CHANGE RECORD

CHANGE NO.	DATE	TITLE AND/OR BRIEF DESCRIPTION/PREPARING ACTIVITY

FOREWORD

This Technical Manual provides information necessary for installation, operation, maintenance, repair, and parts support for the Meat Slicer, UNIVEX Model 8512 manual.

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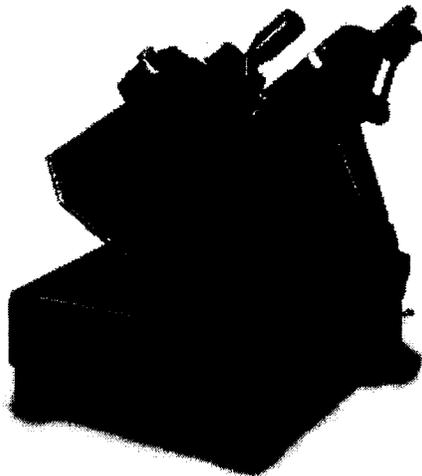
<http://nsdsa.phdnswc.navy.mil/tmder/tmder.asp?lvl=1>

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8512 AUTOMATIC SLICER

MAX SERIES



The Univex Max 8512 is a heavy duty 12" gear driven automatic slicer with a 1/2 hp motor and a net weight of 108 lbs. Weight and horsepower play an important role in slicing. Cheese, in particular, demands both horsepower and weight for continued production of precision slices. The Max 8512 slices at a rate of 35 strokes per minute providing both stability and precision slicing. As with all Univex slicers, the Max 8512 comes equipped with a German hollow ground cutting blade and built in sharpener. An easily accessible switch arm can convert the Max 8512 from automatic to manual operation.

ELECTRICAL: 115/60/1 - 5.4 Amps

Optional Voltages

MOTOR: 1/2 HP Capacitor start, capacitor run, 1725 RPM

SPEEDS: Carriage (35 strokes per minute)
Blade Speed = 280 rpm

BLADE DIAMETER: 12"

CARRIAGE: Gear driven, permanently lubricated with automatic clutch

FINISH: Polished Anodized Aluminum



STANDARD EQUIPMENT: 10" (251mm) German hollow ground hardened steel, high carbon chrome-plated blade. Built in sharpener. Pilot Light indicating Knife and Motor (ON). Heavy duty multi-position meat holder.

OPTIONAL ACCESSORIES: Vegetable Chute

BODY DIMENSIONS: 16 1/4" (413mm) wide, 24" (610mm) long and 21 1/4" (540mm) high

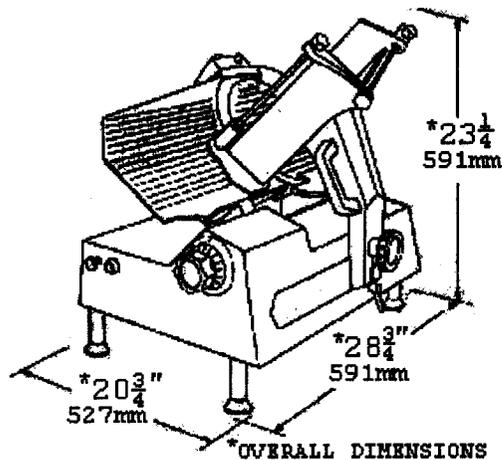
NET WEIGHT: 108 lbs. (49 kg)

SHIPPING WEIGHT: 129 lbs. (58 kg)

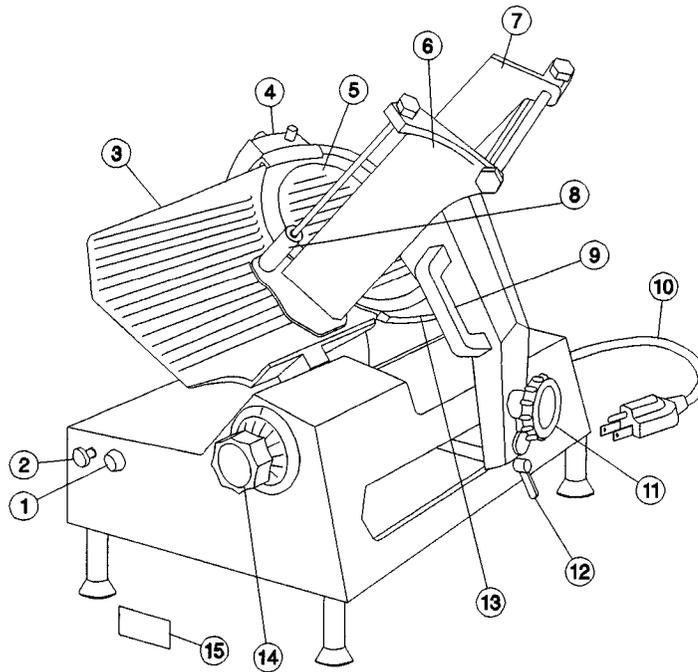
BOX DIMENSIONS: 26" (660mm) high, 32 1/2" (826mm) wide, 26" (660mm) long

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**OVERALL VIEW OF MEAT SLICER
MODEL 8512
Figure 1**



- | | | | |
|---|-------------------|----|-----------------------------|
| 1 | INDICATOR LIGHT | 9 | CARRIAGE ARM |
| 2 | ON-OFF SWITCH | 10 | ELECTRIC CORD |
| 3 | FENCE | 11 | CARRIAGE ARM KNOB |
| 4 | KNIFE SHARPENER | 12 | AUTO CLUTCH LEVER |
| 5 | KNIFE GUARD | 13 | PROTECTIVE GUARD |
| 6 | CARRIAGE | 14 | GRADUATED KNOB |
| 7 | ADJUSTMENT SPACER | 15 | SERIAL NAME PLATE (ON REAR) |
| 8 | LAST SLICE DEVICE | | |

INSTRUCTION MANUAL

INTRODUCTION

This manual contains instructions for the Installation, Operation, Care, Maintenance and Repair of the Meat Slicing Machine. Disassembly, Repair, Replacement and Reassembly Instructions are included. A trouble shooting guide is provided. A complete Replacement Parts List with identifying figures is also included to facilitate identification and ordering of replacement parts.

INSTALLATION INSTRUCTIONS

INSPECTION

All Univex slicers are inspected and tested at the factory; however, they should be reinspected carefully by the person making the installation for loose, damaged or broken parts. Detached parts and fixtures should be checked against packing list to determine all are present. Any damages should be reported to the carrier immediately, and any shortage of parts or fixtures reported to Univex Corporation.

Warning: After slicer has been inspected, wash slicer completely with warm water and mild soap. For SAFETY, follow the cleaning instructions on Pages 5 & 6.

INSTALLATION

The most efficient installation of your Univex slicer will depend upon the layout of your kitchen. Locate your slicer where it will save steps for the operator and be sure to provide sufficient clearance around it for ease of maintenance and cleaning, as well as for efficient and safe use.

Slicer should be operated on a sturdy bench or table with the height determined to suit the operator. It is most important that the forearm of the operator be at the proper level for ease and safety of operation, as well as for maximum production. This height is considered optimum when the carriage handle (Figure 1 [9]) of the slicer is at approximately the height of the operator's elbow when standing.

IMPORTANT

Warning/ Caution: Electrical wiring instructions are found in the wiring diagram (Figure 9) Before making electrical connections, CHECK the specifications on the nameplate to make sure that they agree with those on your electrical service. A grounding type three-terminal plug is provided for safety. If you do not have a mating receptacle, have a qualified electrician provide one with grounding provisions in accordance with local safety codes.

IMPORTANT SAFETY WARNINGS

Warning: The slicer knife is extremely sharp! Never touch the knife, always keep hands and fingers clear of the knife. Never run slicer without the guard or other parts in place and securely fastened. Take extra care to avoid accidents by keeping the knife guard and sharpening assembly cover ON at all times. When the machine is not in use, the slice adjustment knob should be turned fully back to the closed position (beyond "0") so that the knife edge is not exposed.

Observe the cleaning instruction on Pages 5 and 6 for best results and for safety. Also remember to always turn off the slicer and disconnect the electrical supply cord. When slicing, always work the carriage using only the carriage arm handle (Figure 1 [9]). Do not hold or push the carriage from any other place.

OPERATION INSTRUCTIONS

The Univex slicer is designed to meet the cook's demand for an efficient, sturdy slicer. The Univex slicer will give unfailing performance over a period of years, when operated and maintained according to instructions contained herein.

START/STOP SWITCH

The slicer is started by pulling the ON/OFF switch (Figure 1 [2]) out to the ON position. An indicator light (Figure 1 [1]) is provided to indicate when the slicer is turned on.

SLICE ADJUSTMENT

Warning: Dial-type knob adjustment (Figure 1 [14]) allows for slice thicknesses ranging from paper thin up to 1 3/16". Dial graduations allow you to precisely set up specific slice thicknesses for various needs. When not in use, always return knob back to its fully closed position (beyond "0") so that the knife edge is not exposed.

POSITIVE HOLD CARRIAGE

Caution: A last slice gravity feed grip (Figure 1 [8]) is provided which can be locked out of the way when not required. Do not use this last slice device to work the carriage back and forth. Use only the carriage arm handle (Figure 1 [9]).

Always make sure the carriage is positively secured to the slicer by checking to see that the carriage arm knob (Figure 1 [11]) is fully tightened. Failure to do this could result in the carriage striking and damaging the knife edge.

PROTECTIVE GUARD

WARNING: The protective guard (Figure 1 [13]) covers the knife edge completely except under the sharpener cover and the forward edge where slicing will be performed. This forward edge is covered by the edge of the fence, but only when the slice adjustment is completely closed.

The knife guard (Figure 1 [5]) can be removed for cleaning by unscrewing the knife guard knob (Figure 4 [14]). For safety, keep the knife guard on at all times except when cleaning. Never operate the slicer with the knife guard removed.

SHARPENING INSTRUCTIONS

This slicer is equipped with a knife having a concave or hollowed rear surface for superior slicing quality. Of course, any knife, however superior, must be sharpened regularly and properly in order to produce not only the highest quality slices, but also to allow it to maintain its productivity. The knife sharpener (Figure 1 [4]) on this machine is a top mounted built-in design simplicity and ease of use. It even has an automatic aligning feature.

Warning: The following sharpening procedure will provide high quality sharpening results and should also be followed for safety considerations:

1. **WARNING:** Keep away from the knife edge.
2. Completely close the slice adjustment (beyond "0") so that the knife edge is not exposed.

3. The knife cutting area should be clean and free from food, especially grease. Grease will ruin the ability of a grinding stone to sharpen an edge. The stone simply will not cut. If cleaning is necessary, follow the procedure outlined on Page 6. Remember to unplug the electrical supply cord.
 4. Loosen sharpener lock pin (Figure 8 [27]) which bears against sharpener post, then lift sharpener assembly (Figure 1 [4]) and rotate it 1/2 turn (180°). Then seat it down over the knife.
 5. Tighten sharpener lock pin (Figure 8 [27]). As the lock pin is tightened, it bears on the sharpener post and automatically aligns the grinding and deburring stones to the precise orientations which are preset at our factory.
 6. Turn slicer ON. Depress the sharpener button on the back side of blade and hold in, which will start the grinding wheel rotating. Run until the beveled cutting surface cleans up. This can take from 30 seconds to several minutes depending on how dull the blade was allowed to become.
Release sharpener button.
 7. Turn slicer OFF and check for the formation of a very slight burr on the side of knife opposite the bevel which indicates complete grinding of the bevel. This slight burr can be detected either visually or by picking with a small piece of stiff paper.
 8. Turn slicer ON. Lightly press deburring (honing) button on the front side of blade and hold for 1 to 2 seconds while you turn OFF the slicer. Blade should now be completely sharpened and honed.
- Caution:** It is important for best slicing results not to deburr the knife too long or the keen edge will be destroyed due to the formation of an undesirable second bevel on the opposite side. This condition tends to be the primary cause of unsatisfactory slicing results.
9. Turn slicer OFF. Loosen lock pin, (Figure 8 [27]) then lift and return sharpener to its storage position. Tighten lock pin.
 10. Clean slicer and knife according to the cleaning procedure on Pages 5 and 6 thoroughly remove grinding debris.

OPERATORS CARE OF SLICER

CLEANING

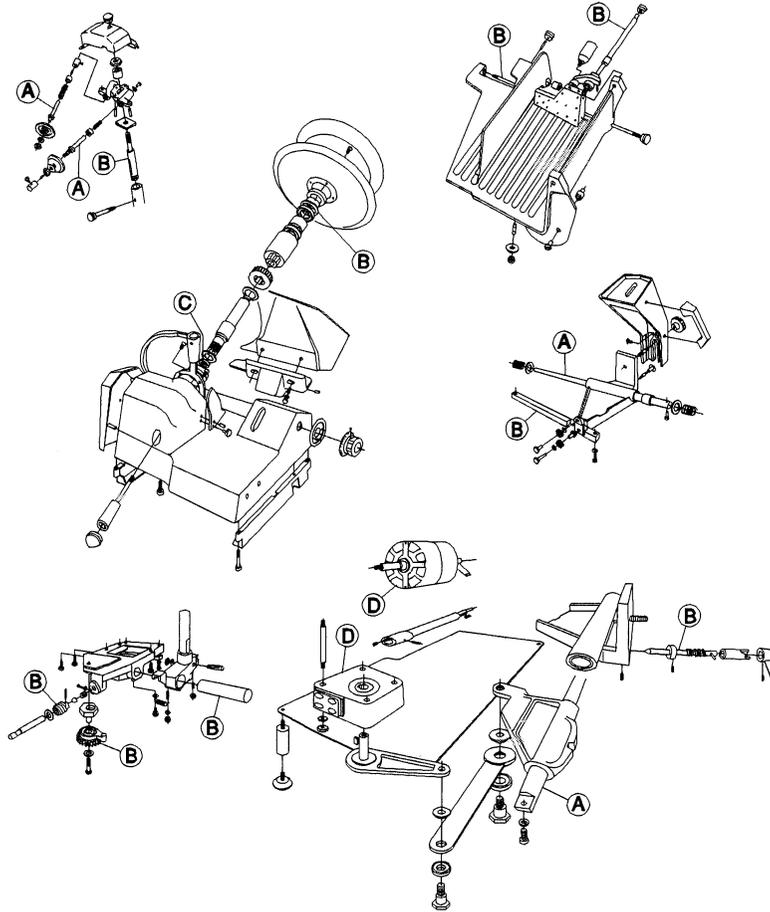
- Warning:** 1. Never touch the knife. Always keep your hands, fingers and arms clear of knife.
- Warning:** 2. Turn off slicer and DISCONNECT ELECTRICAL CORD (Figure 1 [10]) before cleaning. Leave protective guard in place.
3. Turn slice adjustment knob (Figure 1 [14]) to the fully closed position (beyond "0") so that the knife edge is not exposed.
- Caution:** 4. Remove carriage assembly (Figure 1 [6]) which may be washed in a sink. Use care in washing the sharply pointed prongs on the last slice feed grip, (Figure 1 [8]). Wash this area thoroughly. A small bristle brush is recommended. Use only warm water and mild soap. Rinse carriage assembly with warm water and dry thoroughly using a clean soft cloth.

Never use detergents nor wash the slicer or any of its parts in a dishwashing machine or the clear protective finish will be damaged.

- Warning** 5. Wash body of slicer using warm water and mild soap using a clean soft cloth. Under no circumstances should the slicer be hose rinsed. It is recommended that the cloth be folded over a thin wooden stick when cleaning between the fence plate and the knife.
6. Remove knife guard (Figure 1 [5]) by loosening knife guard knob (Figure 4 [35]) and pushing the long stud upward to lift knife guard above surface of knife. Then carefully lift and remove guard.
7. Remove deflector (Fig. 4 [33]) by unscrewing knob (Fig. 4 [31]).
- WARNING:** 8. CAREFULLY wash the front and rear of the knife with a cloth using warm water and mild soap. It is recommended that the cloth be folded over a thin wooden stick as a further caution to avoid accidental contact with the knife. CAREFULLY wash between the knife edge and protective guard using a soft cloth inserted between knife edge and guard on both front and rear of knife using extreme caution to never touch the knife edge. Rinse with warm water applied with a cloth. Dry thoroughly with a clean soft cloth.
- Caution:** 9. Following cleaning, a commercial non-toxic sanitizer may be wiped on the clean surfaces with a soft clean cloth or sprayed as recommended on the container labeling. It is important that the sanitizer be compatible with anodized aluminum or the clear protective finish on the slicer will be damaged. Surface should be wetted completely, but not to the point of running or puddling.
- Warning:** 10. Replace the knife guard. Never leave the slicer without its knife guard installed!
11. Replace Knife deflector (Fig. 4 [33]).

LUBRICATION INSTRUCTIONS

Figure 2



A = Clean and apply mineral oil weekly.

B = Apply Petro-Gel (4400408) often as required to maintain light film.

C = 140 WT USDA oil.
Change when changing gears

D = Lubricated for life.

Table 1 TROUBLESHOOTING GUIDE

TROUBLE	POSSIBLE CAUSE	REMEDY
1. Slicer will not operate.	1.1 Electrical service down. 1.2 Burned switch contacts. 1.3 Motor capacitor defective. 1.4 Burned out motor.	1.1 Check electrical service. Replace fuse or reset circuit breaker as necessary. 1.2 Clean or replace. 1.3 Replace 1.4 Remove, test, repair or replace.
2. Motor running, blade not turning, (carriage still operating).	2.1 Broken gear	2.1 Replace gear
3. Carriage not operating (blade is operating).	3.1 Loose or broken belt 3.2 Cone clutch assembly not engaging. 3.3 Connecting rod support jammed.	3.1 Adjust belt tension or replace belt. 3.2 Adjust spring bushing. 3.3 Check for foreign objects in mechanism.
4. Excessive noise.	4.1 Blade contacting knife guard. 4.2 Deflector contacting blade. 4.3 Sharpener contacting blade 4.4 Connecting rod support hitting bottom cover. 4.5 Fan hitting motor cover. 4.6 Damaged belt hitting against motor cover. 4.7 Reduction gearbox.	4.1 Check for loose knife guard knob. Shim tapered bushing. 4.2 Adjust deflector. 4.3 Adjust cover from hitting blade. 4.4 Pull bottom cover from support. 4.5 Remove cover and adjust fan. 4.6 Replace belt. 4.7 Replace.
5. Not cutting properly.	5.1 Dull blade. 5.2 Soft cheese.	5.1 Sharpen blade following outlined procedures. 5.2 Chill for best slicing results.

REPAIR INSTRUCTIONS
(including disassembly, replacement and reassembly)

KNIFE (Removal) (Figure 4)

1. **WARNING** Disconnect electrical power cord.
2. Remove carriage assembly (Fig. 7).
3. Remove knife guard knob (Fig. 4 [35]) and carefully remove knife guard (Fig 4 [14]).
4. Loosen sharpener lock pin (Fig. 8 [27]), lift and relock in up position.
5. **WARNING** Using caution to avoid the sharp knife edge, remove the four screws (Fig. 4 [15]).
6. Carefully remove knife and set aside with its flat side down flush on a bench so the edge is not exposed.
7. Reinstall new knife in the reverse procedures outlined above.
8. Even though a new knife is very sharp, the sharpening procedure specified on pages 4 and 5 should be performed to true the new knife's bevel to the slicer.

WARNING: Worn knife should be disposed of in a safe responsible way, showing concern for others who may handle it. It recommended that the edge of the knife be wrapped several times with heavy tape and that a caution (CAUTION, SHARP EDGE) be written on both sides of the knife.

KNIFE SEAL (Figure 4)

1. Remove knife per above instructions.
2. Unscrew and remove tapered bushing (Fig. 4 [12]). Maintain shims that may have been used in assembly.
3. Using a small screwdriver, carefully pry and remove the knife seal (Fig. 4 [13]) from knife support (Fig 4 [8]).
4. Apply light film of mineral oil on outer diameter and lip of rubber seal.

KNIFE SUPPORT Figure 3

1. KNIFE SUPPORT ASSEMBLY

- A. Remove knife per above instructions.
- B. Loosen lama (Fig. 4 [36]) by holding tapered bushing (Fig. 4 [12]) while turning lama with allen wrench.
- C. Elevate left side or lama side of machine 3-1/2" to prevent oil from spilling.
- D. Remove oil and dispose of according to EOSS procedures. When replacing oil use 140 WT USDA oil or equivalent.

- E. Remove lama by turning counter-clockwise.
- F. Push knife support assembly from bottom and remove.

2. GEAR REPLACEMENT

- A. With knife support assembly removed, check gear (Fig. 4 [7]) for wear. If worn, replace.
- B. Remove snap ring (Fig. 4 [6]).
- C. Pry gear off of shaft.
- D. Replace gear in reverse procedures.

3. BEARING REPLACEMENT

- A. Remove tapered bushing (Fig. 4 [12]).
- B. Press shaft (Fig. 4 [5]) from top of blade support assembly.
- C. Remove shim washers (7120040) if present.
- D. Using a small screwdriver, carefully pry and remove the knife seal (Fig. 4 [13]).
- E. Remove retaining ring (Fig. 4 [11]).
- F. Invert assembly on bench and drive bearings and spacer from back side.
- G. Put new bearing in by reversing above procedure.

MOTOR REPLACEMENT/OR BELT REPLACEMENT

1. Follow procedure for removing blade support assembly.
2. Remove acorn nuts (Fig. 3 [47]).
3. Remove motor cover (Fig. 3 [45]).
4. Loosen and pull fan (Fig. 3 [48]).
5. Pivot idler arm (Fig. 3 [43]) to ease tension on belt.
6. Remove belt (Fig. 3 [50]).
 - a. If only replacing belt, put on new belt at this point and reassemble in reverse procedure.
7. For motor replacement, continue disassembly by loosening set screw (Fig. 3 [2]) and removing pulley (Fig. 3 [49]).
8. Remove the bushing nut (Fig. 9 [5]).
9. Pull motor (Fig. 9 [1]) from housing.
10. Disconnect all wiring from motor and after installation of new motor use wiring diagram on page 22 to determine motor leads termination points.
11. Reverse above procedures to complete installation of new motor.

ELECTRICAL ASSEMBLY

1. **WARNING** DISCONNECT ELECTRICAL SUPPLY
2. Remove four rubber feet (Fig. 3 [24]) and 4 extension legs (Fig. 3 [52]).
3. Remove bottom cover (Fig. 3 [19]).
4. Remove casing cover (Fig. 9[22]) after removing three screws (Fig 9 [21]).
5. Discharge capacitors by jumping across terminals with electrically protected screwdriver.
6. Remove reduction gear rod (Fig. 3 [34]) by removing two bolts (Fig. 3 [38]) and removing set screw at reduction gear end.
7. Remove switch shaft (Fig. 9 [16]) by loosening nut (Fig. 9 [15]) near switch end.
8. Remove capacitor on left to access ground screw holding electrical equipment casing.
9. Remove electrical equipment casing by removing three screws (Fig. 9 [13]).
10. Replace capacitors (Fig. 9 [24]) if found to be defective.
11. Relay (Fig. 9 [7]) and switch (Fig. 9 [20]) can also be checked from this procedure.
12. Replace any defective electrical component and reverse procedures to reassemble.

BASE ASSEMBLY

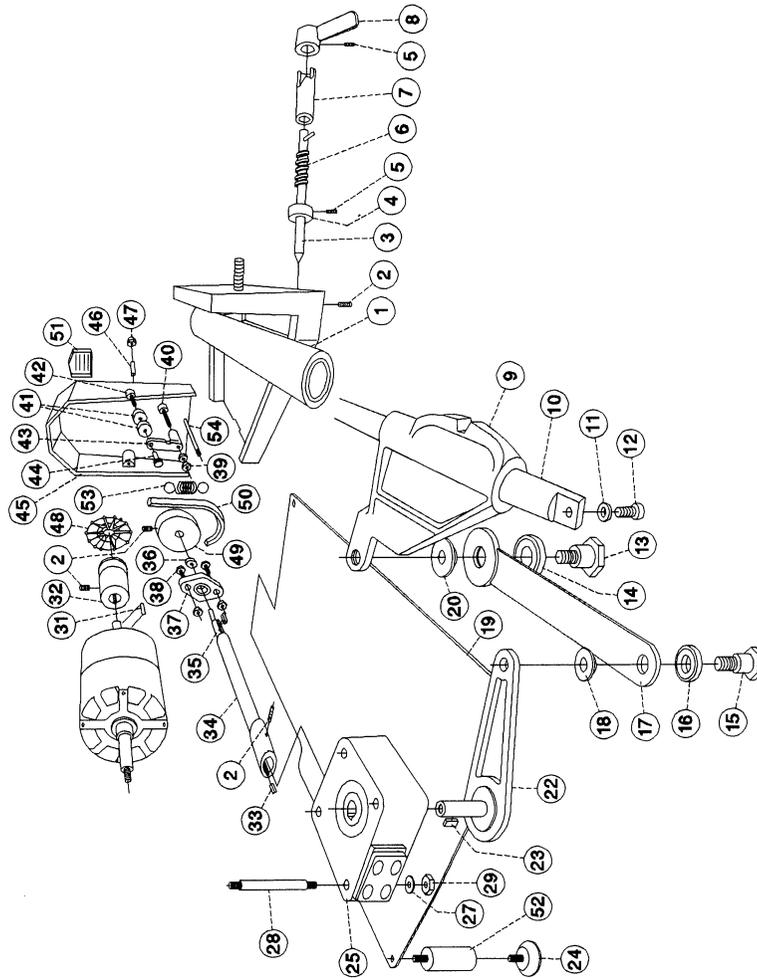
Figure 3

ILLUS.NO.	PART NO.	DESCRIPTION	QTY.
1.	8512300A	SUPPORT, CARRIAGE, ALSO FIG.4 [6]	1
2.	6509098	SET SCREW, M6-1.0 X 8MM	4
3.	8512823	BOLT, CONE CLUTCH	1
4.	8512826	BUSHING, SPRING	1
5.	8512827	SET SCREW, M5-0.8 X 5MM	2
6.	8512828	SPRING	1
7.	8512824	CAM	1
8.	8512829	KNOB, CONE CLUTCH	1
9.	8512818	BUSHING, AUTOMATIC	1
10.	8512819	ROD, ROUND GUIDE	1
11.	6509028	WASHER, M8	2
12.	6509040	SCREW, SOC HD CAP M8-1.25 X 25MM	2
13.	8512817	SCREW, CRANK ATTACHMENT	1
14.	1012167	BALL BEARING	1
15.	8512814	SCREW, CRANK ATTACHMENT	1
16.	8512812	BALL BEARING	1
17.	8512811	CRANK	1
18.	8512813	SPACER	1
19.	8512853	COVER, BOTTOM	1
20.	8512816	SPACER	1
21.		RESERVED	
22.	8512805	SUPPORT, CONNECTION ROD	1
23.	8512808	KEY	1
24.	8512855	FOOT	4
25.	8512803A	GEAR, REDUCTION	1
26.		RESERVED	
27.	8512516	WASHER, M6	4
28.	8512803	STUD	4
29.	6509143	NUT M6-1.0	4
30.		RESERVED	
31.	8512846	KEY	4
32.	8512862	PULLEY, MOTOR	1
33.	8512831	KEY, REDUCTION GEAR	1
34.	8512830	ROD, REDUCTION GEAR	1
35.	8512836	KEY	1
36.	8512834	BALL BEARING	1
37.	8512832	FLANGE, BEARING	2
38.	8512833	SCREW, M6-1.0 X 20MM	2
39.	6509131	NUT, JAM M8-1.25	2
40.	1204044	SCREW M8-1.25 X 50MM	1
41.	8512863	BEARING, IDLER	2
42.	1204045	SCREW, M6-1.0 X 20MM	1
43.	8512864	ARM, IDLER	1
44.	8512870	AXLE, IDLER BEARING	1
45.	8512201	COVER, MOTOR	1
46.	8512851	STUD	2
47.	8512852	ACORN NUT, M6-1.0	2
48.	8512868	FAN	1

BASE ASSEMBLY

Figure 3 (CONT.)

ILLUS.NO.	PART NO.	DESCRIPTION	QTY.
49.	8512865	PULLEY	1
50.	8512867	V BELT	1
51.	8512637	VENT, PLASTIC	1
52.	8512248	LEG, EXTENSION	4
53.	8512866	SPRING, EXTENSION	1
54.	8512869	POST, SPRING	1



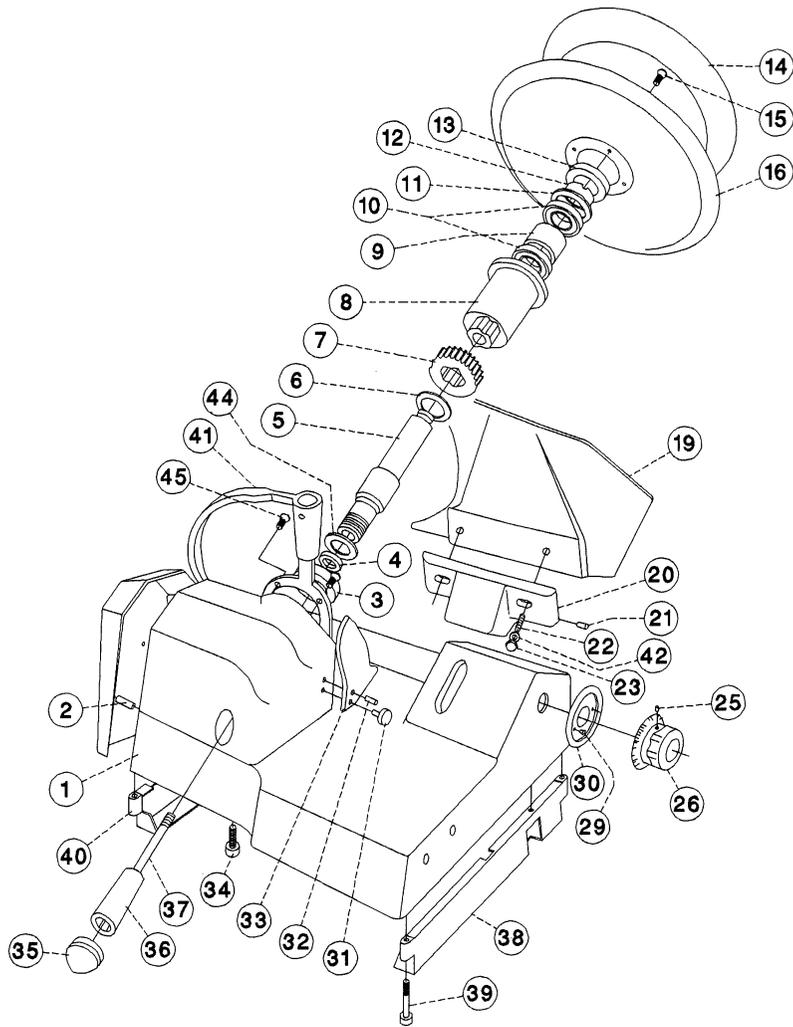
CASTING and BLADE ASSEMBLY

Figure 4

ILLUS.NO.	PART NO.	DESCRIPTION	QTY.
1.	8512736	CASTING	1
2.	8512203	PIN	2
3.	8512215	SEAL	1
4.	8512216	SEAL, O-RING	1
5.	8512729	ROD, CUTTER SUPPORT	1
6.	8512218	RETAINING RING	1
7.	8512220	GEAR	1
8.	8512730	SUPPORT, BLADE, INCLUDES 4 THRU 13	1
9.	8512731	SPACER, BEARING	1
10.	1030019	BEARING	2
11.	8512225	RETAINING RING	1
12.	8512226	BUSHING, TAPERED	1
13.	8512227	SEAL	1
14.	8612009	GUARD, KNIFE	1
15.	8512229	SCREW, FLAT HD M5-0.8 X 12MM	4
16.	8512228	BLADE	1
17.	8512240	BLADE SCRAPER	1
18.	8512241	SCREW, BLADE SCRAPER	1
19.	8512234	FENCE	1
20.	8512861	SUPPORT, FENCE	1
21.	8512237	SET SCREW	2
22.	6509080	STUD, FENCE ADJUSTING	2
23.	6509081	ACORN NUT, M8	2
24.		RESERVED	
25.	8512214	SET SCREW, M6-1.0 X 16MMB	1
26.	7510084	KNOB, GRADUATED	1
27.		RESERVED	
28.		RESERVED	
29.	8512209	RIVET	2
30.	8512208	GRADUATED KNOB BUSH	1
31.	6509024	KNOB, GUARD ATTACHMENT	1
32.	8512206	DOWEL PIN	1
33.	8512733	DEFLECTOR	1
34.	7510067	SCREW, SOC HD CAP M6-1.0 X 20MM	4
35.	8512233	KNOB, KNIFE GUARD	1
36.	8512232	LAMA	1
37.	8512231	ROD, KNIFE GUARD	1
38.	8512928	RIGHT SUPPORT	1
39.	8512930	SCREW M8-1.0 X 45MM	4
40.	8512929	LEFT SUPPORT	1
41.	8512734	PROTECTIVE GUARD	1
42.	6509082	WASHER	1
43.	4400339	LABEL, MAX (NOT SHOWN)	1
44.	7510012	SPACER, .81 ID X 1.18 OD X .12THK	1
45.	8512735	SCREW, SOC HD M5-0.8 X 25MM	4

CASTING and BLADE ASSEMBLY

Figure 4 (CONT.)

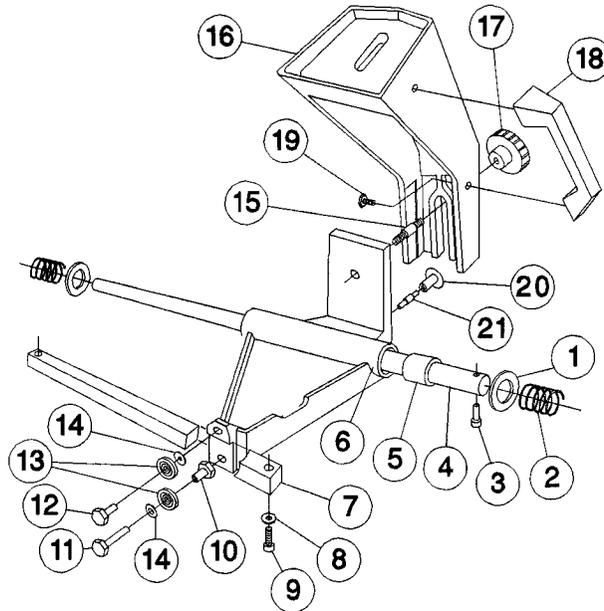


ARM ASSEMBLY

Figure 5

ILLUS.NO.	PART NO.	DESCRIPTION	QTY.
1.	7510038	RUBBER SHOCK ABSORBER	2
2.	8512314	SPRING, DAMPER	1
3.	8512313	SCREW, SOC HD CAP M8-1.25 X 30MM	2
4.	8512312	ROD, ROUND GUIDE	1
5.*	8512301	BUSHING	2
6.	8512300	ARM SUPPORT	1
7.	8512316	BAR, FRAME	1
8.	8512318	WASHER, EXTERNAL TOOTH	2
9.	8512317	SCREW	2
10.		RESERVED	
11.		RESERVED	
12.	8512308	BOLT, BEARING LOCKING	1
13.	6509031	BEARING	2
14.	6509028	WASHER, M8	1
15.	6509042	STUD, ARM ATTACHMENT	1
16.	8512319	CARRIAGE ARM	1
17.	6509044	KNOB, CARRIAGE ARM	1
18.	6509045	HANDLE, CARRIAGE ARM	1
19.	6509046	SCREW, HEX HD WASHER M6-1.0X15MM	2
20.	8512325	CARRIAGE ANCHOR	1
21.	8512326	STUD, CARRIAGE ANCHOR	1

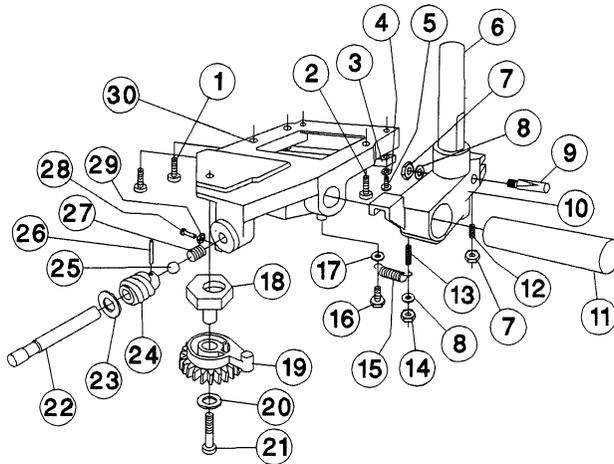
* 8512301 PART OF ILLUS NO. 6, CAN NOT BE PURCHASED



SLICE CONTROL ASSEMBLY

Figure 6

ILLUS.NO.	PART NO.	DESCRIPTION	QTY.
1.	7510067	BOLT, SOC HD CAP M6-1.0 X 20MM	2
2.	8512527	BOLT, HEX HD M8-1.25 X 30MM	1
3.	8512526	JIB	1
4.	8512525	WASHER, EXTERNAL TOOTH M6	2
5.	7510065	SCREW, HEX HD M6-1.0 X 20MM	2
6.	7512076	SUPPORT, TAPER	1
7.	8512839	NUT, M8-1.25	1
8.	6509028	WASHER, M8	2
9.	6509071	STUD, CRANK	1
10.	8512511	BLOCK, SLICE CONTROL MOVING	1
11.	8512512	SHAFT, SLICE CONTROL	1
12.	7510073	STUD, JIB ATTACHMENT	1
13.	8512326	SET SCREW, M8-1.25 X 20MM	1
14.	6509131	NUT, THIN M8-1.25	2
15.	7510061	SPRING	1
16.	8512518	SCREW, HEX HD M6-1.0 X 10MM	1
17.	6509046	WASHER, M6	1
18.	8512501	ECCENTRIC PIN	1
19.	8512502	GEAR	1
20.	8512503	WASHER, SPECIAL	1
21.	8512504	BOLT, HEX HD M8-1.25 X 50MMT	1
22.	8512510	SHAFT, GRADUATED KNOB	1
23.	6509086	FLEXIBLE WASHER	1
24.	8512507	WORM GEAR	1
25.	8512506	BALL	1
26.	8512508	ROLL PIN	1
27.	8512505	BALL STUD	1
28.	8512529	SCREW, PAN HD M5-0.8 X 25MM	1
29.	8512530	NUT, M5-0.8	1
30.	8512500	SLICE CONTROL GUIDE UNIT	1

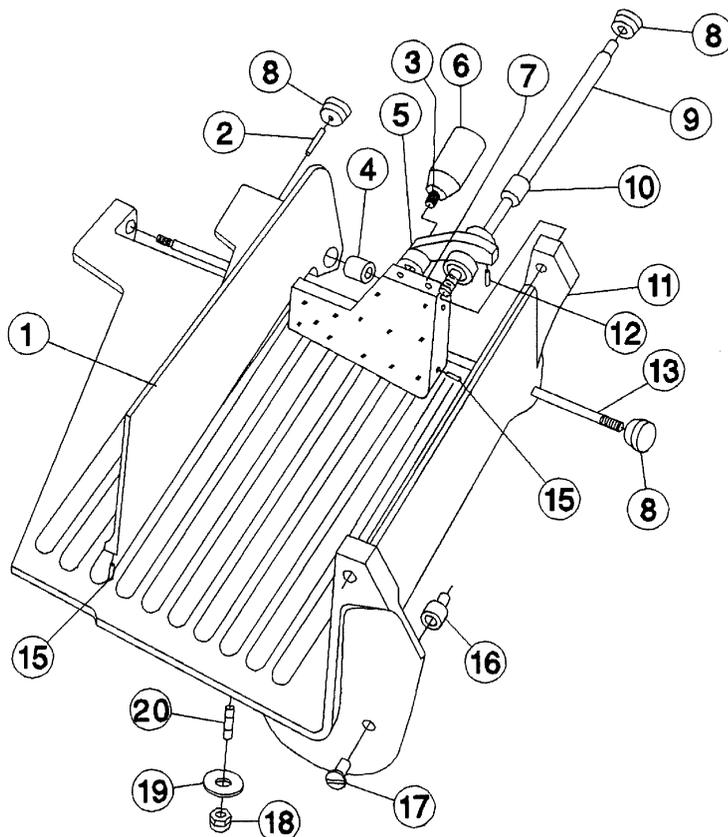


CARRIAGE ASSEMBLY

Figure 7

ILLUS NO.	PART NO.	DESCRIPTION	QTY.
1	8512432	SPACER, ADJUSTMENT	1
2	8512437	STUD & KNOB, ADJUSTMENT SPACER	1
3	8512448	STUD	1
4 *	8512433	BUSHING, ADJUSTMENT SPACER	1
5	8512925	SUPPORT, LAST SLICE DEVICE	1
6	8512924	HANDLE, LAST SLICE DEVICE	1
7	8512926	LAST SLICE DEVICE	1
8	6509153	KNOB, LAST SLICE DEVICE SHAFT	3
9	8512428	SHAFT, LAST SLICE DEVICE	1
10 **	8512427	BUSHING, LAST SLICE DEVICE	1
11	8512425	CARRIAGE	1
12	8512438	NYLON PIP, ADJUSTMENT SPACER	1
13	8512434	SHAFT, ADJUSTMENT SPACER	1
14	RESERVED		
15	8512431	NYLON PIP, LAST SLICE DEVICE	8
16	8512927	STUD, LAST SLICE DEVICE	1
17	6509038	SCREW, FLAT HEAD	1
18	6509058	BOX NUT, M10-1.5	1
19	6509059	WASHER, SPECIAL	1
20	8512439	STUD, CARRIAGE	1

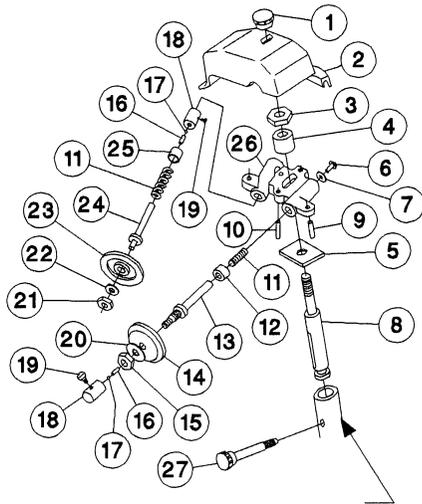
* = PART OF ILLUS 1 (8512432), CANNOT BE PURCHASED SEPARATELY.
 ** = PART OF ILLUS 5 (8512925), CANNOT BE PURCHASED SEPARATELY.



SHARPENER ASSEMBLY

Figure 8

ILLUS NO.	PART NO.	DESCRIPTION	QTY.
	7510151	SHARPENER ASSEMBLY WITH COVER	
1	6509153	KNOB, COVER	1
2	6509151	COVER, SHARPENER	1
3	6509150	NUT, COVER SPACER	1
4	6509149	SPACER, COVER	1
5	6509125	WASHER, SET PIN	1
6	6509137	SCREW	1
7	6509138	WASHER	1
8	7510120	SET PIN, SHARPENER	1
9	8512728	PIN, SHARPENER CASTING	2
10	6509147	BOLT, SHARPENER GUIDE	1
11	6509127	SPRING	2
12	6509128	BUSHING	1
13	6509129	STUD, HONING STONE	1
14	6509130	STONE, HONING	1
15	6509131	NUT	1
16	6509134	SPRING	2
17	6509133	BALL	2
18	6509135	BUTTON, DEPRESS	2
19	6509136	SET SCREW, DEPRESS BUTTON	2
20	6509132	WASHER, HONING STONE	1
21	6509143	NUT, SHARPENING STONE	1
22	6509144	WASHER, SHARPENING STONE	1
23	6509142	STONE, SHARPENING	1
24	6509141	STUD, SHARPENING STONE	1
25	6509128	BUSHING	1
26	6509126A	MOUNT, SHARPENER STONE	1
27	7510150	LOCKING PIN, SHARPENER	1



Part of Figure 4, Illustration 41

ELECTRICAL ASSEMBLY

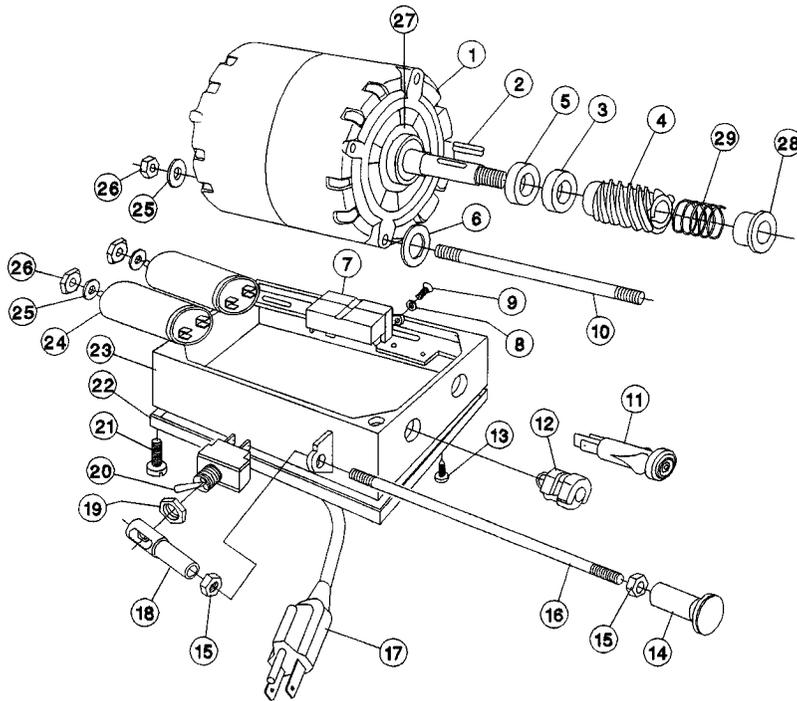
115v, 60hz, 1ph

Figure 9

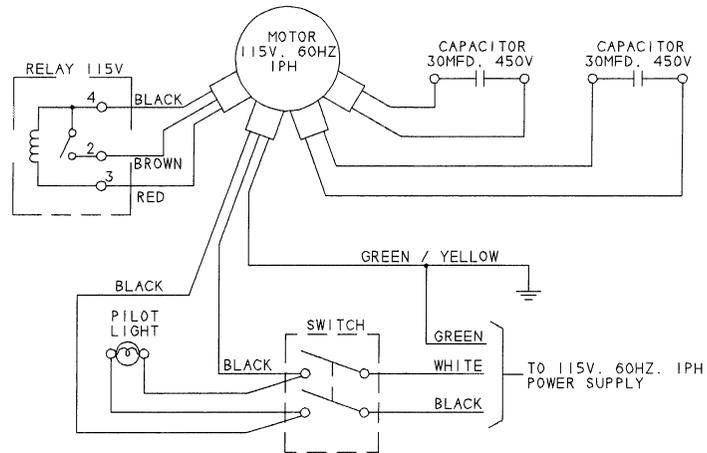
ILLUS. NO.	PART NO.	DESCRIPTION	QTY.
1.	8512844	MOTOR, 115V, 60HZ, 1PH, 1/2HP, 100V,50/60HZ, 1PH	1
2.	8512601	KEY	1
3.	8512602	RUBBER SHOCK ABSORBER	1
4.	8512932	WORM GEAR	1
5.	8512935	BUSHING / NUT	1
6.	8512644	CORK WASHER	4
7.	8512620	RELAY, 115V ONLY	1
8.	8512622	NUT, M4-0.7	1
9.	8512621	SCREW, PAN HD M4-0.7 X 10MM	1
10.	8512606	BOLT, MOTOR SHORT	4
11.	1814069	LAMP, WARNING, 115V/100V	1
12.	8512624	FASTENER, CABLE	1
13.	8512627	SCREW, PHIL HD SHEET METAL	3
14.	8512615	KNOB, SWITCH	1
15.	8512614	NUT, M6-10	2
16.	8512613	SHAFT, SWITCH	1
17.	4400053	CORD AND PLUG, 115V/100V	1
18.	8512612	JOINT	1
19.	8512611	NUT	1
20.	7120009	SWITCH	1
21.	8512609	SCREW, M5-0.8 X 12MM	3
22.	8512626	COVER, CASING	1
23.	8512608	ELECTRICAL EQUIPMENT CASING	1
24.	8512616	CAPACITOR, 30MFD, 450V, (115V/100V)	2
25.	6509028	WASHER, M8	2
26.	8512617	NUT, M8-1.25	6
27.	8512643	WASHER	1
28.	8512934	SPACER	1
29.	8512933	SPRING	1

ELECTRICAL ASSEMBLY

Figure 9 (CONT.)



SCHEMATIC
115V, 60HZ, 1PH
100V, 50/60HZ, 1PH
Figure 10



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