

ShopSeries

by **Wood-Mizer**

Dual Toothsetter 060550 rev. A.04



Safety is our #1 concern! Read and understand all safety information and instructions before operating, setting up or maintaining this machine.

March 2010

Form #1616

Table of Contents

Section-Page

SECTION 1	GENERAL INFORMATION	1-1
1.1	Safety	1-1
1.2	Component ID	1-3
1.3	Dimensions	1-4
SECTION 2	SETUP & OPERATION	2-1
2.1	Assembly	2-1
	<i>Blade Support Arms</i>	<i>2-1</i>
	<i>Auto Feed Installation (Optional).....</i>	<i>2-3</i>
2.2	Operation	2-8
	<i>Blade Installation/Setup.....</i>	<i>2-8</i>
	<i>Manual Feed Operation.....</i>	<i>2-15</i>
	<i>Auto Feed Operation.....</i>	<i>2-16</i>
SECTION 3	MAINTENANCE	3-1
	<i>Every 2 Weeks</i>	<i>3-1</i>
	<i>Every 3 Months</i>	<i>3-2</i>
SECTION 4	REPLACEMENT PARTS	4-1
4.1	Shop Series Dual Toothsetter (Complete).....	4-1
4.2	Shop Series Dual Toothsetter Assembly	4-2
4.3	Base Housing Assembly.....	4-3
4.4	Feed Drive Assembly	4-4
4.5	Blade Setters	4-6
4.6	Blade Set Arm Assembly	4-8
4.7	Clamp Assembly	4-10
4.8	Index Assembly	4-12
4.9	Blade Support Arm Assembly	4-14
4.10	Auto Feed Kit (Optional).....	4-16
4.11	Auto Feed Control (Optional)	4-17
4.12	Auto Feed Motor (Optional).....	4-19
4.13	Auto Feed Sensor (Optional).....	4-20
SECTION 5	ELECTRICAL INFORMATION	5-1
5.1	Schematic	5-1
5.2	Component Layout Diagrams.....	5-2
5.3	Component List	5-3

INDEX

I

SECTION 1 GENERAL INFORMATION

1.1 Safety



This symbol calls your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions. This symbol accompanies a signal word. The word **DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. **WARNING** suggests a potentially hazardous situation which, if not avoided, could result in death or serious injury. **CAUTION** refers to potentially hazardous situations which, if not avoided, may result in minor or moderate injury to persons or equipment. Read all safety instructions before operating this equipment and observe all safety warnings!

Read and observe all safety instructions before operating this equipment! Also read any additional manufacturer's manuals and observe any applicable safety instructions including dangers, warnings, and cautions.

Always be sure that all safety decals are clean and readable. Replace all damaged safety decals to prevent personal injury or damage to the equipment. Contact your local distributor, or call your Customer Service Representative to order more decals.

Safety instructions are listed in this section by the following operations:

- Electrical Safety
- Blade Handling
- Machine Operation

Electrical Safety (Optional Auto Feed Only)



DANGER! Make sure all electrical installation, service and/or maintenance work is performed by a qualified electrician and is in accordance with applicable electrical codes.

DANGER! HAZARDOUS VOLTAGE can cause shock, burns, or death. SHUT OFF & LOCK OUT POWER before performing service in any area of this machine. DO NOT restore power until all access panels are replaced and secured.



WARNING! Always turn off and disconnect power at control console AND at main supply circuit breaker before performing any service to the machine.

Blade Handling

WARNING! Always wear gloves and eye protection when handling bandsaw blades. Keep all persons away from area when coiling or carrying a blade.

Machine Operation

DANGER! Make sure all guards and covers are in place and secured before operating the toothsetter. Failure to do so may result in serious injury.

DANGER! Keep all persons away from moving parts when operating this machine. Failure to do so will result in serious injury.

DANGER! Always keep hands away from moving bandsaw blade. Failure to do so will result in serious injury.



WARNING! Always wear eye protection when operating this machine. Failure to do so may result in serious injury.

WARNING! Secure all loose clothing and jewelry before operating this machine. Failure to do so may result in serious injury or death.

1.2 Component ID

See Figure 1-1. Major components of the ShopSeries dual setter are shown below.

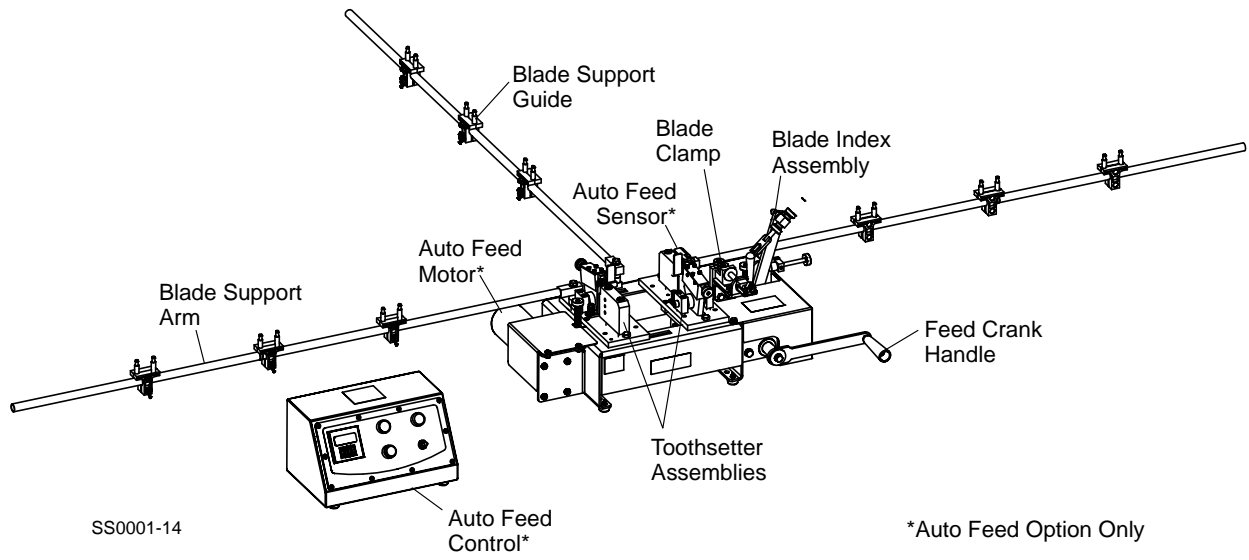


FIG. 1-1

1 General Information

Dimensions

1.3 Dimensions

See Figure 1-2. Dimensions of the ShopSeries dual setter are shown below.

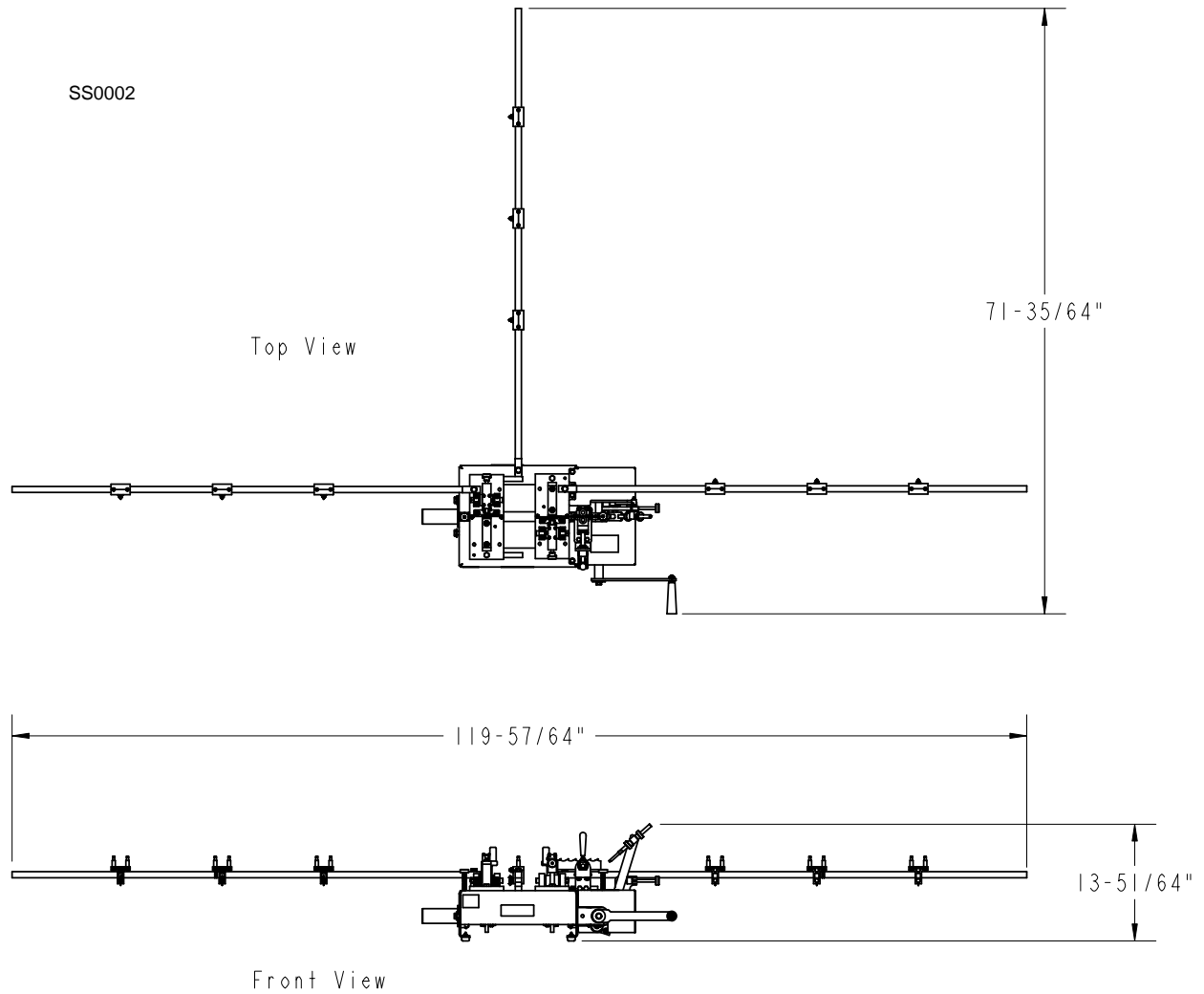


FIG. 1-2

SECTION 2 SETUP & OPERATION

2.1 Assembly

Place the setter on a table or workbench sturdy enough to support the weight of the machine. Be sure there is enough room on either side of the setter to allow for the blade to travel.

The unit will rest on the rubber feet on the bottom of the machine. If desired, the unit can be bolted to the table through the holes provided in the bottom of the base frame.

Blade Support Arms

NOTE: The blade support arms supplied with the setter are capable of supporting most blades up to 1 1/2" wide. An upgrade kit is available to increase the support arm capability to support heavier blades ([See Section 4.1](#)).

See Figure 2-1. There are arm mounting locations at the right side, left side and rear of the machine. Install two spacer bushings and one arm mount block at each location. Secure each block with a provided 3/8" lock washer and 3/8-16 x 3" hex head bolt.

NOTE: If setting very wide blades, you may need to exclude one or both of the spacers from each location to ensure the blade is positioned properly in the clamp. If installing the optional arm kit for heavier blades, replace the arm mounting blocks with the extension arms. Install the long extension arms to the left and right positions and the short arm to the rear position.

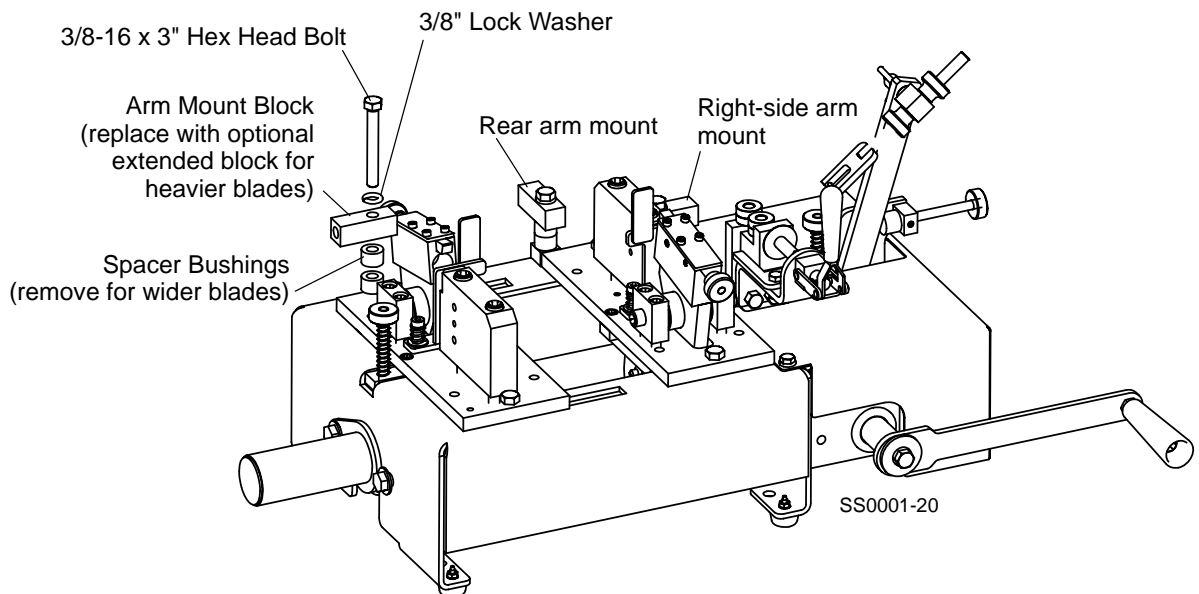


FIG. 2-1

2

Setup & Operation

Assembly

See **Figure 2-2**. Thread a blade support tube into the threaded holes in the three mounting blocks. Assemble a blade support extension tube to each blade support tube.

NOTE: If installing the optional arm kit for heavier blades, assemble the blade support extension tubes to the extended mounting arms.

Install at least one blade support guide to each support tube with two 1/4-20 x 1 1/2" hex head bolts, flat washers, self-locking nut and wing nut. The position of the guides will be adjusted later. Three guide assemblies are provided for each arm so you can setup for different blade lengths without having to adjust the guide assembly.

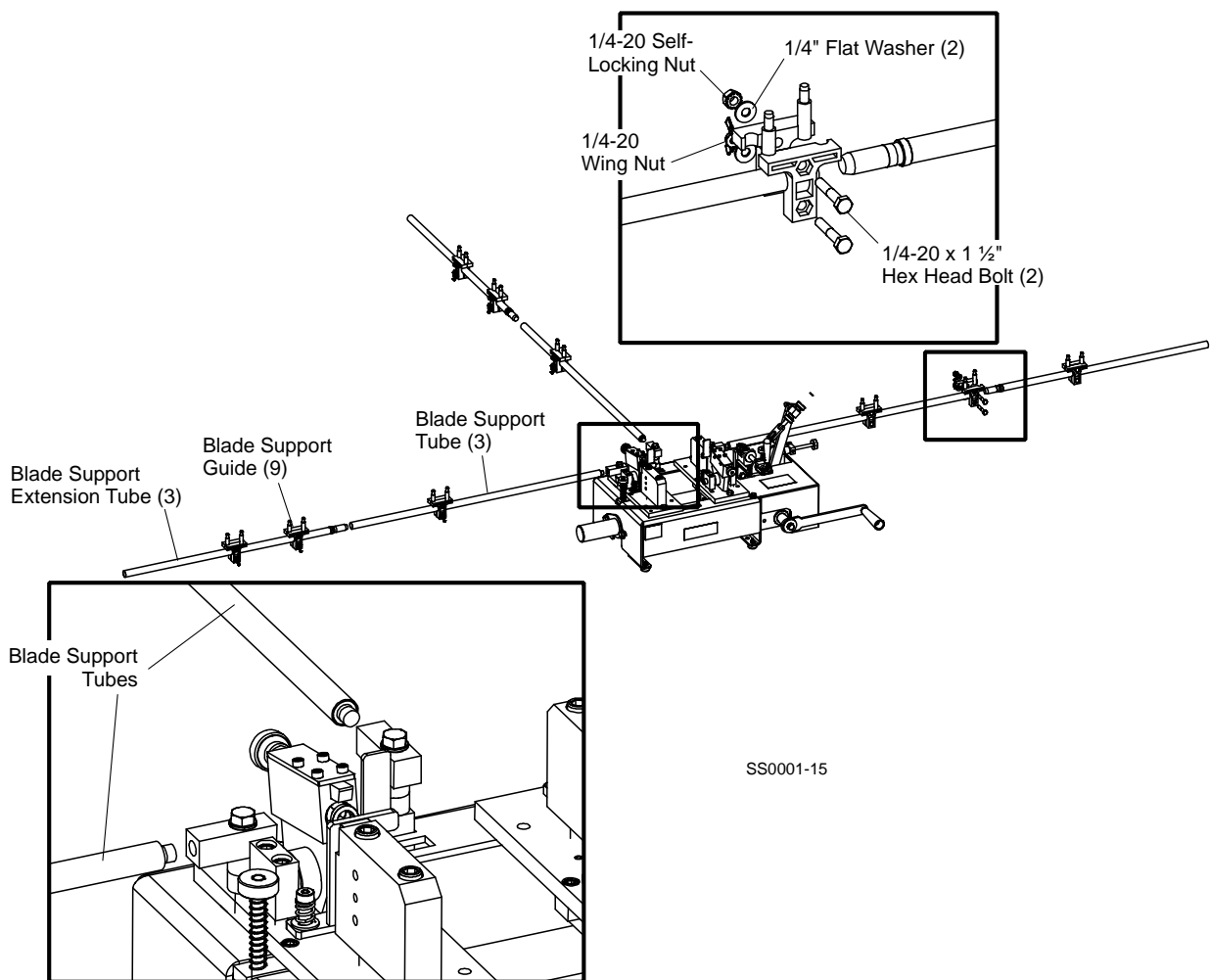


FIG. 2-2

Auto Feed Installation (Optional)

The Auto Feed Option includes an electric motor with a sensor and control to automate the setting process.

See Figure 2-3. Before installing the Auto Feed, remove the manual feed crank handle. Disassemble the bolt, lock washer and fender washer to remove the handle. Remove two shaft end bolts, flat washers, nylon lock nuts and the shaft cover mounted to the left side of the setter assembly. Use the provided 3/8-16 x 3/4" hex head bolt and split lock washer to reinstall the shaft cover over the manual feed shaft.

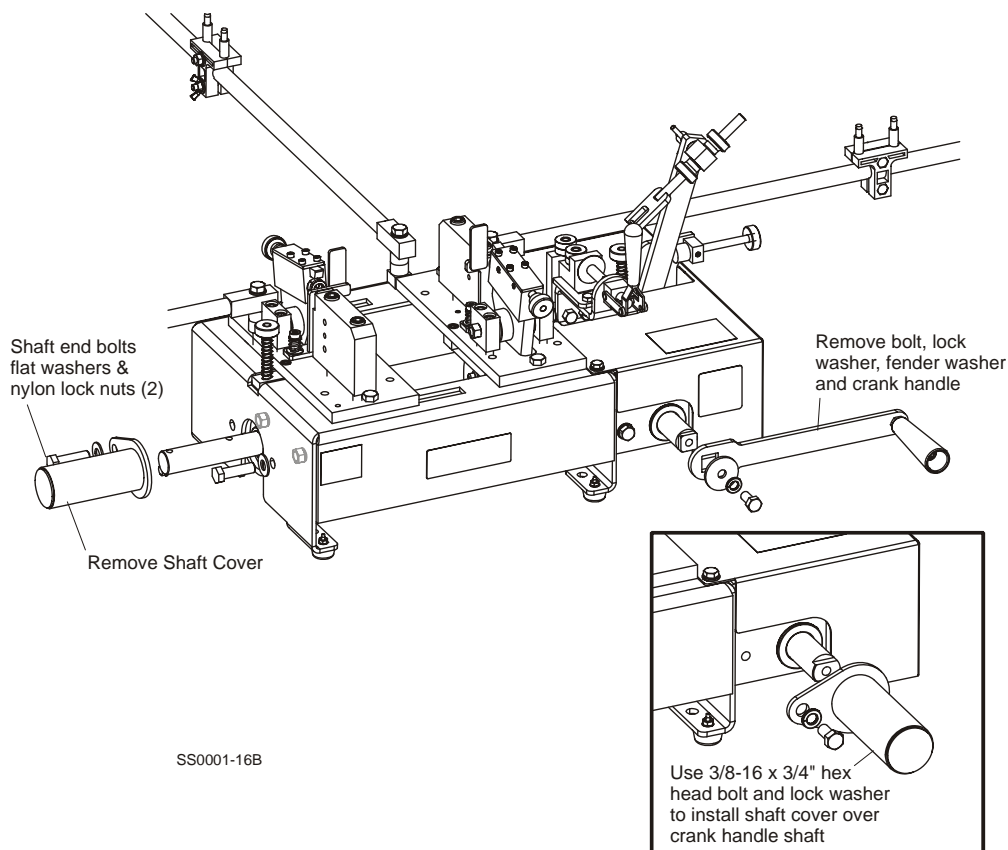


FIG. 2-3

2 Setup & Operation

Assembly

See **Figure 2-4**. Install the feed motor mount bracket around the feed shaft and secure with the shaft end bolts, flat washers and nylon lock nuts. Leave the bolts slightly loose until the motor is pinned to the feed shaft as described later.

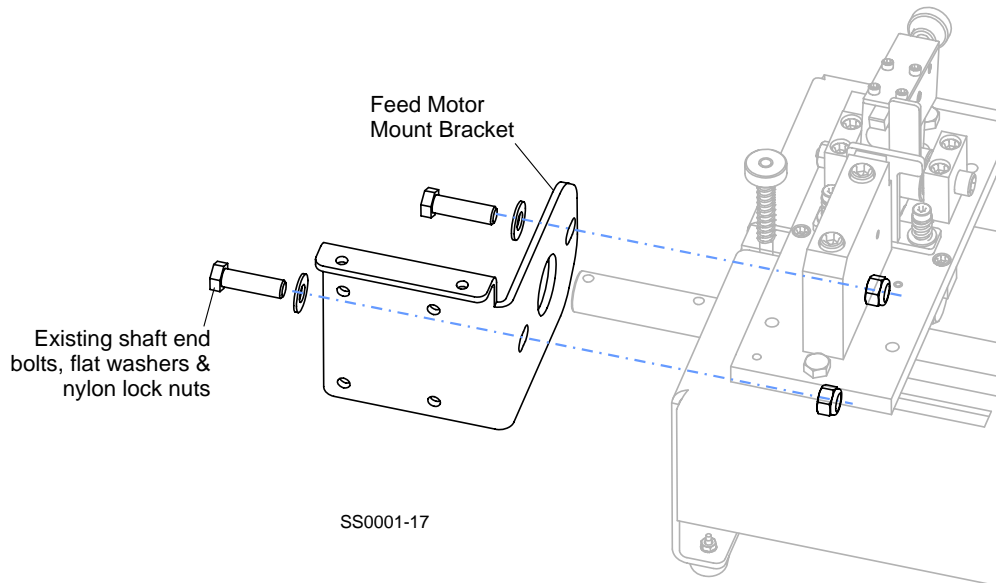


FIG. 2-4

See **Figure 2-5**. Install the motor side brackets to the feed motor with eight 1/4-20 x 3/8" flanged hex head bolts.

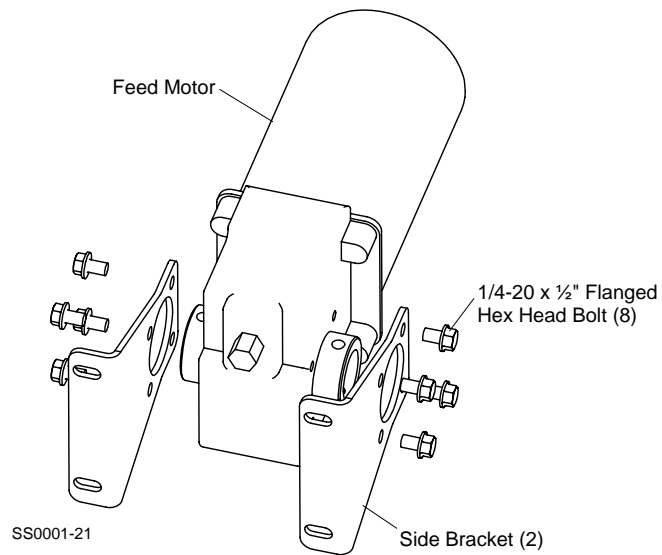


FIG. 2-5

See Figure 2-6. Slide the motor/bracket assembly onto the feed shaft and secure to the motor mount bracket with four 1/4" flat washers, lock washers, 1/4-20 x 3/4" hex head bolts and self-locking nuts. Leave the bolts slightly loose until the motor is pinned to the feed shaft as described later.

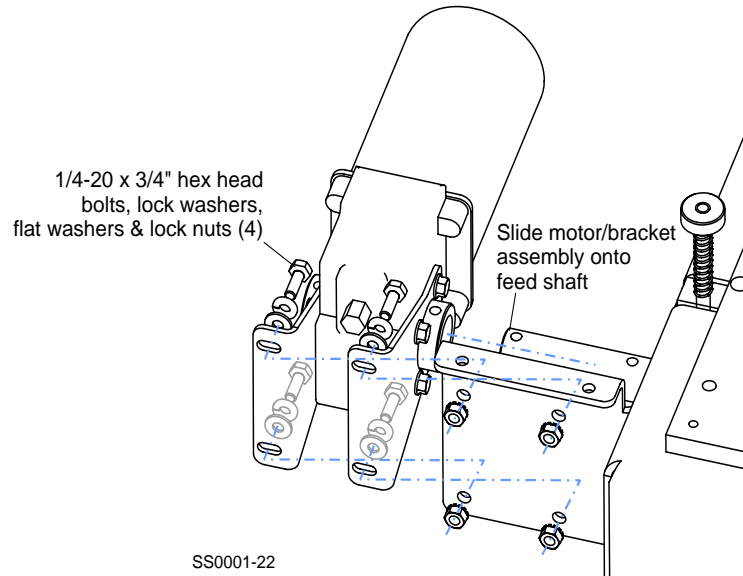


FIG. 2-6

See Figure 2-7. Use a 1/2" wrench on the front hex knob to rotate the motor shaft to align the hole in the outer collar with the hole in the feed shaft. With the motor mount bolts still loose, adjust the assembly if necessary until the holes line up exactly. Install the provided 1/4" x 1 1/2" roll pin to secure the collar to the shaft. Tighten the feed shaft end bolts and motor mount bolts and install the motor top cover with two 1/4-20 x 1/2" button head screws and self-locking nuts.

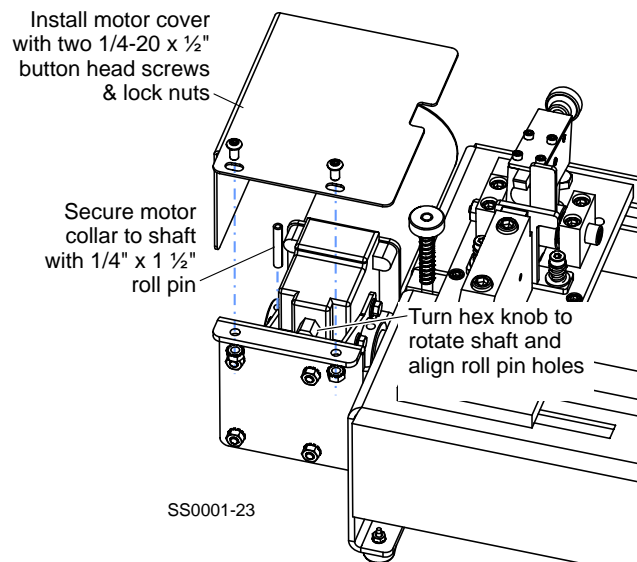


FIG. 2-7

2

Setup & Operation

Assembly

See Figure 2-8. Install the Auto Feed sensor to the sensor mount plate with two #4-40 x 7/8" flat head socket screws and hex nuts. Be sure the sensor is oriented so it faces toward the front of the setter when installed. Install the sensor assembly to the rear set block of the right setting assembly (closest to blade clamp). Install the two provided 1/4" x 1/2" roll pins to the holes in the block. Use the provided 1/4-20 x 5/8" hex head bolt, lock washer and flat washer to secure the sensor bracket to the set block. Leave the bolt slightly loose to allow adjustment of the sensor described later.

Install sensor to mount plate with two #4-40 x 7/8" flat head socket screws and hex nuts

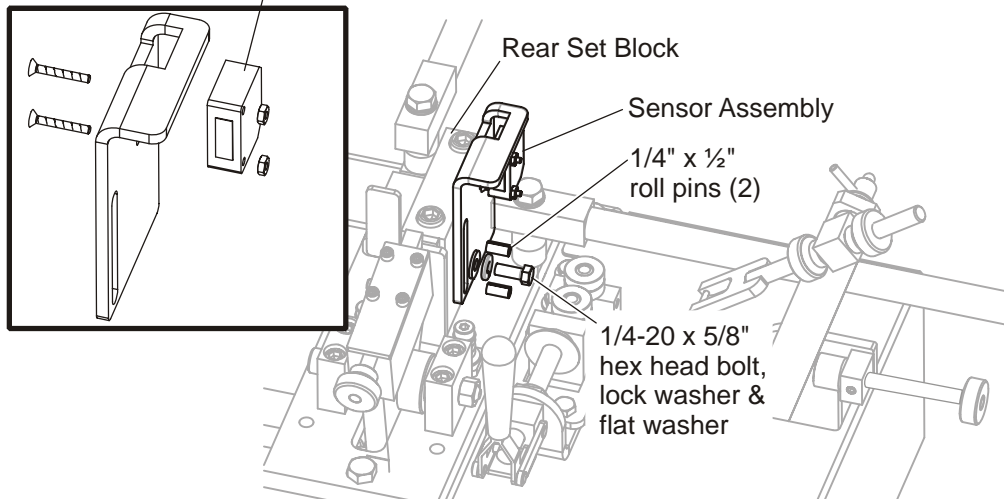


FIG. 2-8

See Figure 2-9. Set the Auto Feed control box near the setter at a convenient operating location. Route the motor and sensor harnesses to the harnesses extending from the control box. Connect the motor harnesses with two-pin connectors together and the sensor harnesses with three-pin connectors together. Holes are provided in the back of the setter base that can be used to secure the harnesses to the setter base with wire ties provided.

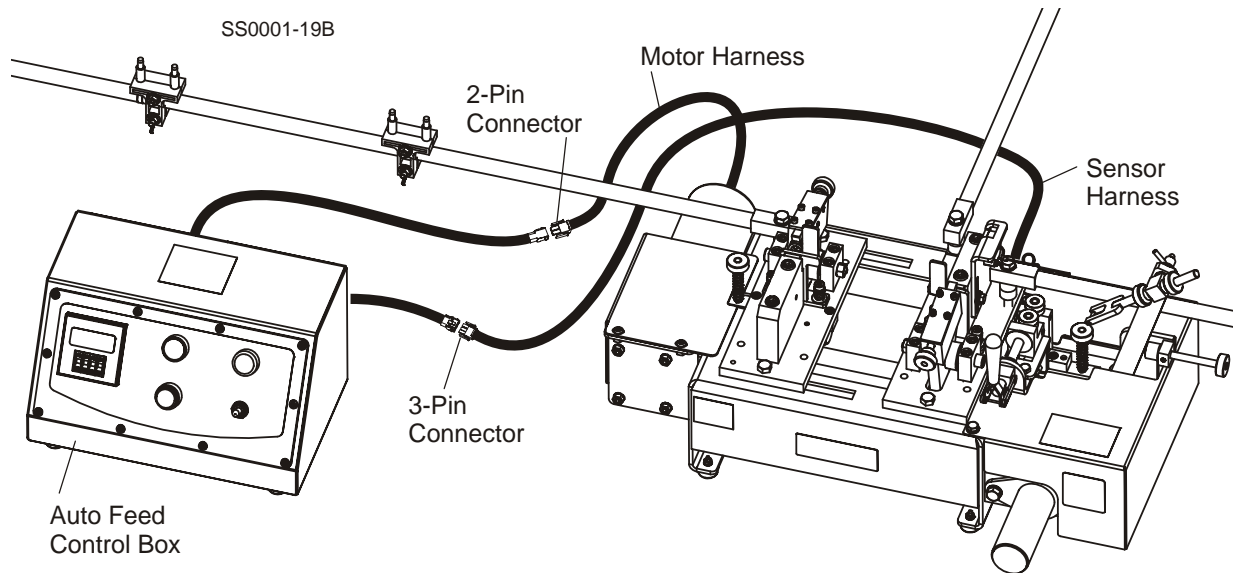


FIG. 2-9

Plug the power cord from the control box into a grounded 110-120 volt receptacle.



DANGER! For the user's safety, the power cord on this product has a grounded plug. This power cord should only be used with correctly grounded (3-hole) receptacles to avoid electrical shock.

NOTE: The setter is configured at the factory for 110-120V operation. To operate with 220-240V power, perform the following:

The control is equipped with an auto-voltage detect feature. Simply use an adaptor plug or modify the power cord to match your 220V receptacle.

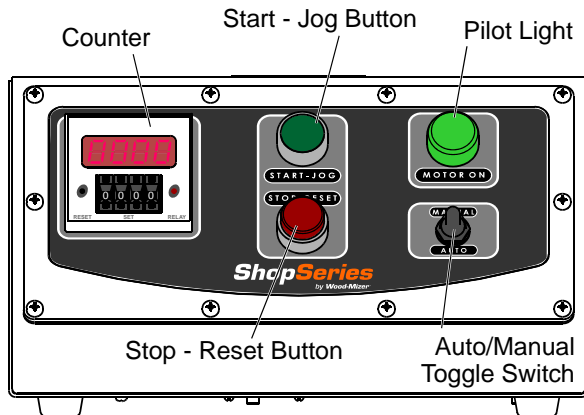
2.2 Operation

Blade Installation/Setup

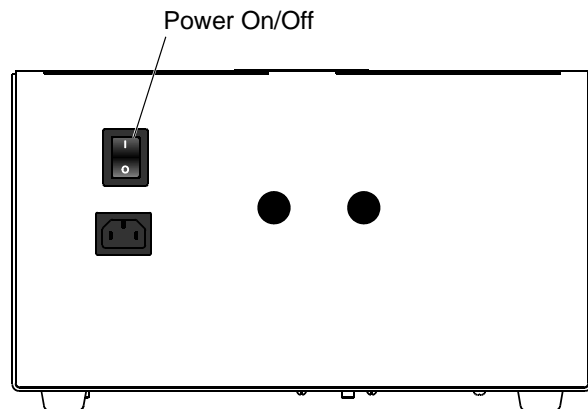


WARNING! Always wear gloves and eye protection when handling bandsaw blades. Changing blades is safest when done by one person! Keep all other persons away from area when coiling, carrying or changing a blade. Failure to do so may result in serious injury.

See Figure 2-10. **AUTO FEED option only:** Toggle the power ON/OFF switch on the back of the control box to the ON (I) position. Be sure the AUTO/MANUAL toggle switch is in the MANUAL position.



Control Box Front



Control Box Rear

SS0005

FIG. 2-10

See Figure 2-11. Pull the blade clamp lever open and flip the index arm up. Turn the feed handle counterclockwise (or push and hold the Auto Feed option START - JOG button) to advance the setter until the setter assemblies open.

Loop the blade over the setter and position between the posts of the blade support guides. Place the blade between the clamp rollers and between the setter blocks, resting on the blade height adjustment knobs.

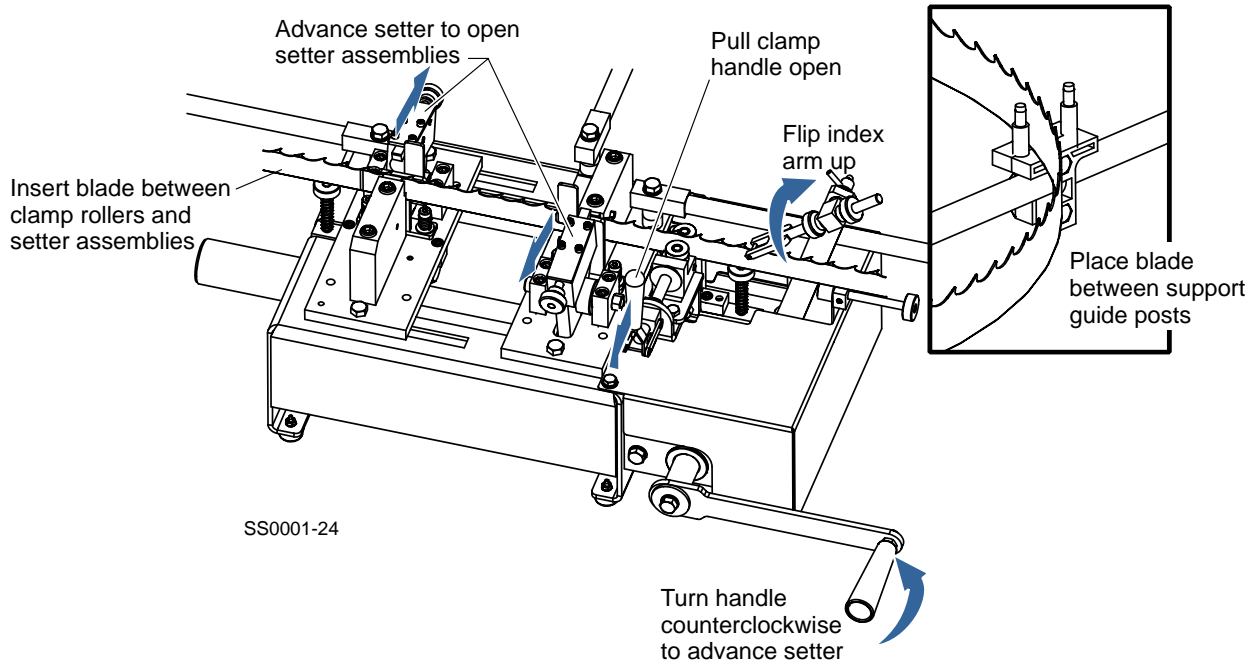


FIG. 2-11

2

Setup & Operation

Operation

See Figure 2-12. Loosen the wing nut on each blade support guide and adjust so the blade is positioned between the support posts. Tilt the guide slightly forward in the direction the blade travels and retighten the wing nut.

Make sure the blade support does not lift the blade. The blade should sit flat on the blade height adjustment knobs. Bend the support arm down slightly if necessary to prevent it from lifting the blade.

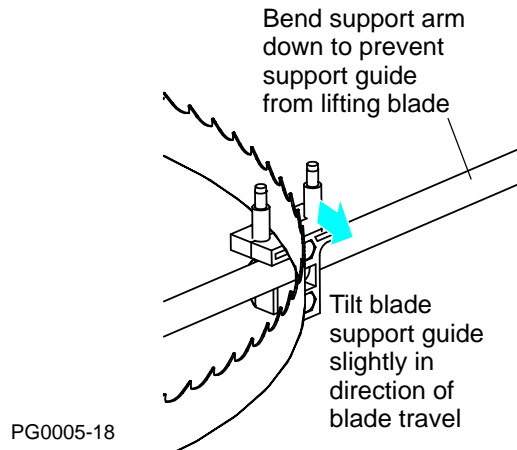


FIG. 2-12

See Figure 2-13. Adjust the blade height adjustment knobs so the gullet of the blade is positioned approximately 1/16" below each setter clamp plate. Push the clamp handle closed and flip the index arm down onto the blade.

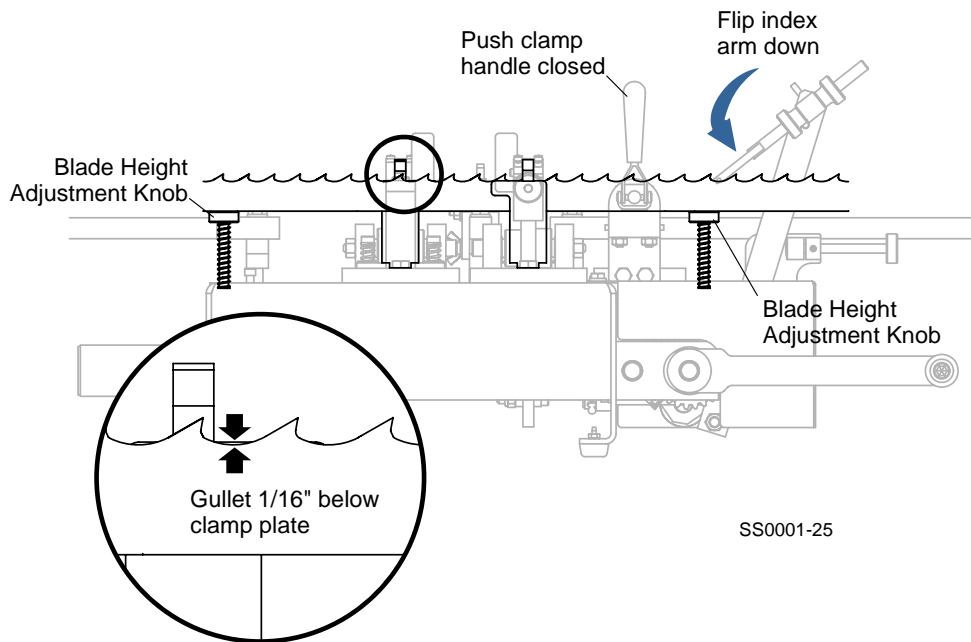


FIG. 2-13

Turn the feed handle counterclockwise (or push and hold the AUTO FEED option START - JOG button) to advance the setter until the index arm pushes the blade forward. Stop the setter before the setter assemblies start to close.

Pull the clamp handle open and lift the index arm. Adjust the blade in the setter until a tooth set toward the rear of the setter is positioned in front of the right setter block. Lower the index arm and push the blade to the right until a tooth is snug against the index pin.

See **Figure 2-14**. Check the position of the rear-set tooth in relation to the right setter block. The tooth should be centered with the block. Turn the adjustment knobs on the index arm if necessary so that rear-set tooth is centered with the setter block. Push the clamp handle closed.

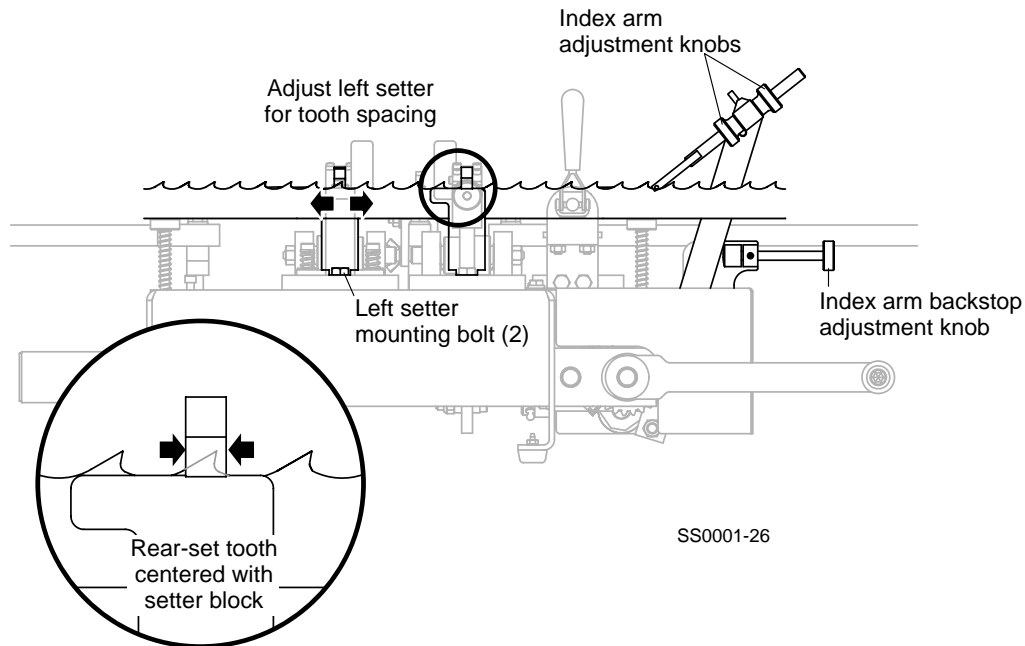


FIG. 2-14

Continue advancing the setter until the index arm retracts and just starts to move forward. The index arm should move three teeth from the one previously indexed. Turn the back-stop adjustment knob in to increase the index return travel or out to decrease travel.

NOTE: The setter is factory-set for blades with 7/8" tooth spacing. Once a rear-set tooth is indexed in front of the right setter block, a forward-set tooth should be positioned in front of the left setter block. To adjust the setter for different tooth spacing, loosen the left setter mounting bolts and slide the assembly to position the setter block behind a forward-set tooth. Retighten the mounting bolts.

See Figure 2-15. Continue advancing the setter to index the blade to the next set of teeth. Stop the setter when the setter assemblies are completely closed. Turn the setter block adjustment knobs until the blocks just contact the blade teeth. Advance the setter to open the setter assemblies and turn the setter block adjustment knobs a few more turns.

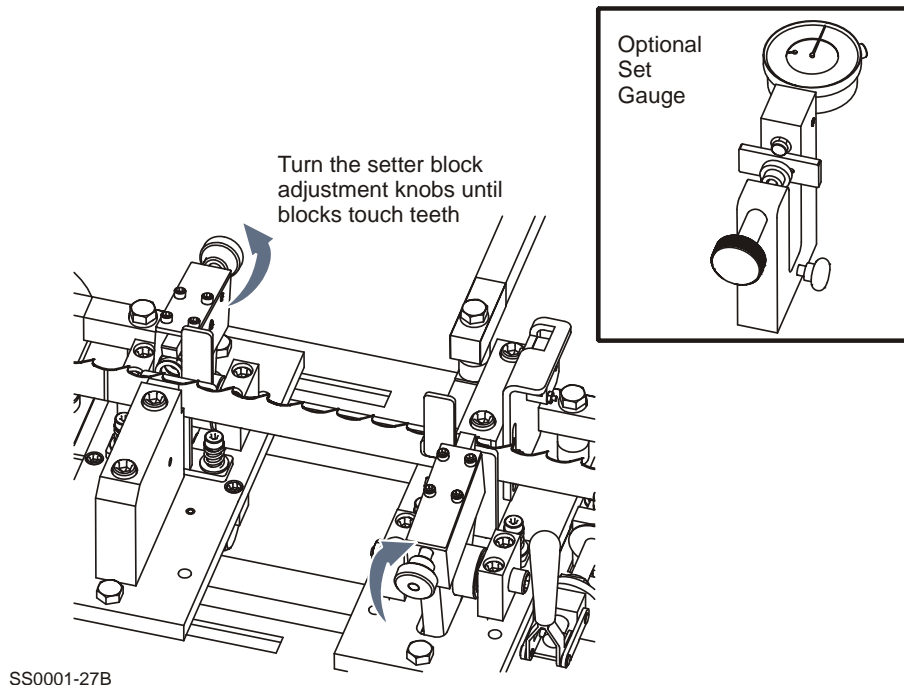


FIG. 2-15

Advance the setter to index the blade to the next set of teeth. Continue advancing the setter until the setter blocks bend the teeth and indexes to the next set of teeth. Use a gauge to measure the set of both the rear-set and forward-set teeth. Wood-Mizer offers a set gauge separately (Part No. 060490).

If a tooth is bent too far, use the supplied set correction tool to bend the tooth back. Adjust the appropriate setter block adjustment knob to increase or decrease how far the teeth are bent.

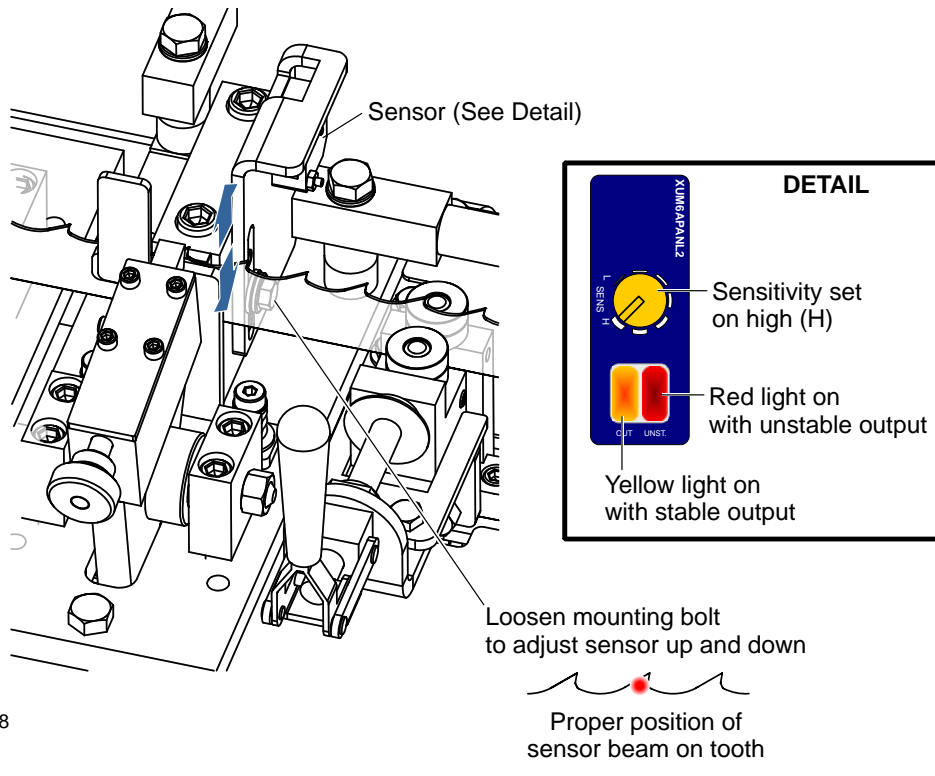
Repeat the steps above until the desired amount of set is achieved in both the rear-set and forward-set teeth.

2

Setup & Operation

Operation

See Figure 2-16. Auto Feed Option Only: Adjust the photosensor height so the beam is properly located on the blade teeth. Loosen the sensor mounting bolt and move the sensor up or down as necessary. Retighten the mounting bolt. Check to be sure the sensitivity adjustment is turned to the highest setting. When the sensor is properly adjusted, the yellow OUT light will be illuminated. If the red UNST. light comes on, the sensor needs to be adjusted to achieve a stable output.



SS0001-28

FIG. 2-16

Manual Feed Operation



WARNING! Always wear eye protection when operating the setter. Failure to do so may result in serious injury.

Turn the feed handle clockwise to advance the setter until the setter assemblies open. Pull the clamp handle open and rotate the blade around the setter until the blade weld is positioned to the left of the left setter assembly. Position the blade against the index arm pin with a rear-set tooth aligned with the right setter block.

Push the clamp handle closed. Turn the feed handle counterclockwise to set teeth. Continue setting teeth around the blade until the weld is reached. Advance the setter to open the setter assemblies.

Flip the index arm up and pull the clamp open to remove the blade.

Auto Feed Operation

Push the START - JOG button to advance the setter until the setter assemblies open. Pull the clamp handle open and position the blade against the index arm pin with a rear-set tooth aligned with the right setter block.

NOTE: Most blades manufactured by Wood-Mizer are made so the set pattern across the weld is consistent with the rest of the blade. When this is the case, you can start setting teeth anywhere on the blade and the Auto Feed will automatically stop when the counter reaches the tooth total entered. If the set pattern across the weld is not consistent, start the blade with the weld to the left of the left side setting clamp and end the cycle when the weld gets to the right of the right setting clamp. To prevent resetting the teeth in the opposite direction, count the number of teeth between the two clamp blocks, subtract the number from the total quantity of teeth on the blade, and enter the result in the setter tooth counter. Use the provided bend back tool (023774) to set the teeth that are between the setter clamps.

Push the clamp handle closed. Enter the appropriate number of teeth on the counter. Push the +/- buttons to adjust the counter setting.

See Table 2-1. The quantity of teeth on any particular blade depends on the length and tooth spacing of the blade. Common blade tooth quantities are provided below.

		Tooth Spacing		
		0.656"	0.875"	1.125"
Blade Length	144"	220	165	128
	158"	241	180	140
	178"	272	203	200
	184"	280	210	163
	205"	312	234	182
		No. of Teeth		

TABLE 2-1

See Figure 2-17. Use the +/- buttons to set the counter to the desired tooth count.

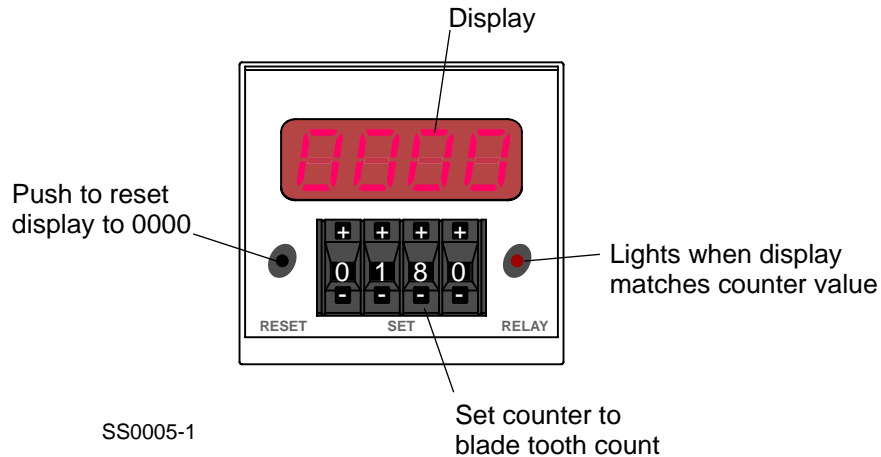


FIG. 2-17

Place the AUTO/MANUAL toggle switch in the AUTO position. Push the START - JOG button to start setting the blade. The display value will increase as the blade passes through and the setter will stop when the display matches the counter value.

IMPORTANT: When setting Wood-Mizer blades with a raker-style pattern (one tooth bent left, one bent right and a straight tooth) the counter display should increment in multiples of three. If the counter does not increment in multiples of three before the setters activate, adjust the sensor ([See page 2-14](#)).

Push the STOP - RESET or the RESET button on the counter to reset the display to zero. Flip the index arm up and pull the clamp open to remove the blade. When done setting blades, toggle the power ON/OFF switch on the back of the control box to the OFF (O) position.

SECTION 3 MAINTENANCE



WARNING! Always turn off and disconnect power at control console AND at main supply circuit breaker before performing any service to the machine.

See Figure 3-1. Maintenance items referenced in the instructions below.

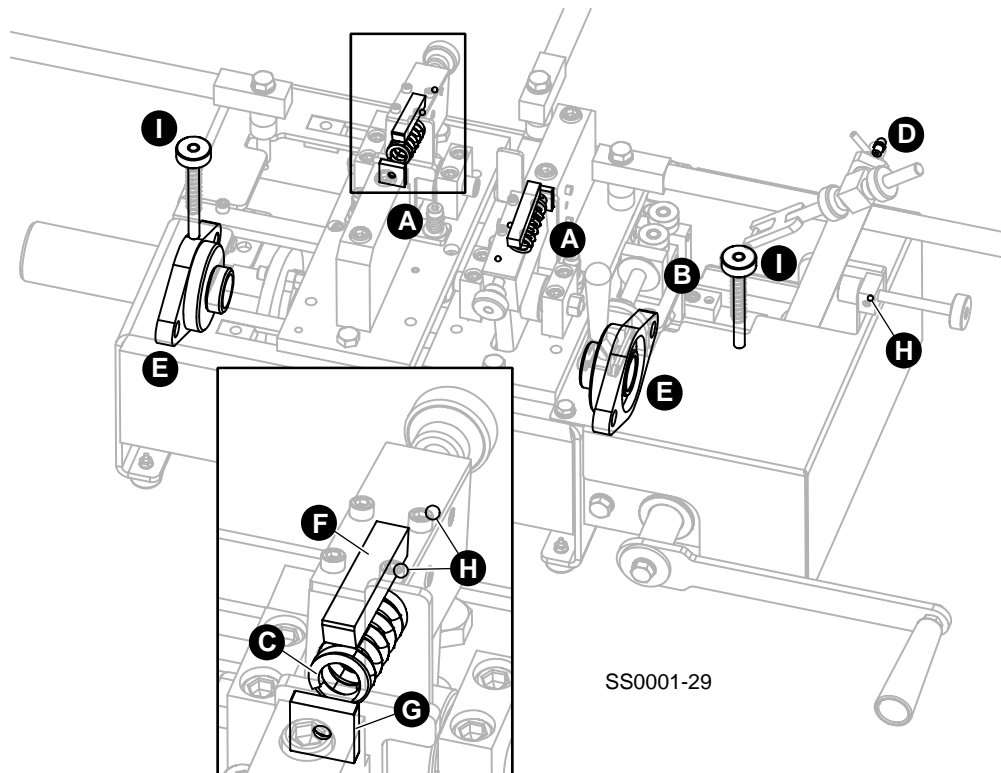


FIG. 3-1

Every 2 Weeks

Use compressed air to clean any debris from the setter assemblies (A) and blade clamp (B).

Apply NLGI No. 2 grade lithium grease to the ends of the die spring (C) of each setter assembly.

Every 3 Months

Lubricate the index arm pivot (D) and the feed shaft bearings (E). Apply NLGI No. 2 grade lithium grease to the grease fittings.

Check the setter blocks (F) and clamp pads (G) for wear. If the top edge of the clamp pad is worn, remove the mounting screw and rotate the pad 90° and replace the screw. When all four sides are worn, replace the pad. If the setter block is worn, regrind the block to 22° or replace.

Check adjustment knob tensions. The setter block and index arm backstop adjustment screws are secured with set screw/nylon ball mechanisms (H). These should be adjusted so the adjustment screws are held snugly, but still turn freely.

Check the blade height adjustment knobs (I) for wear and replace as necessary.

Clamp Adjustment

The clamp assembly is installed and properly adjusted at the factory. If it is necessary, use the adjustment set screw to readjust the clamp assembly as shown below.

See Figure 3-2. The right end of the clamp mounting block should be 1/16" above the blade support plate.

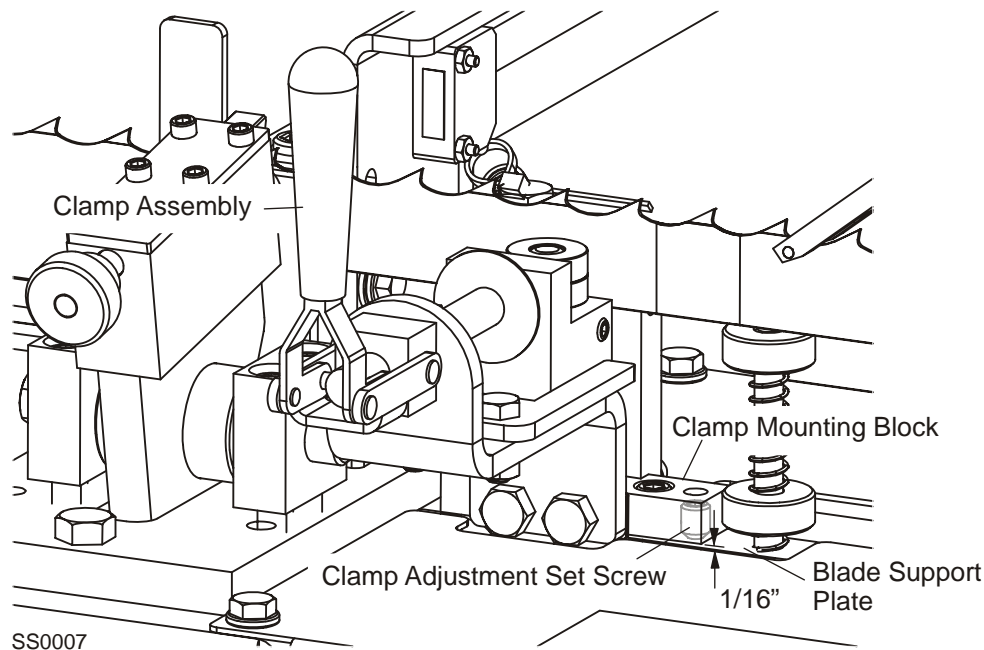
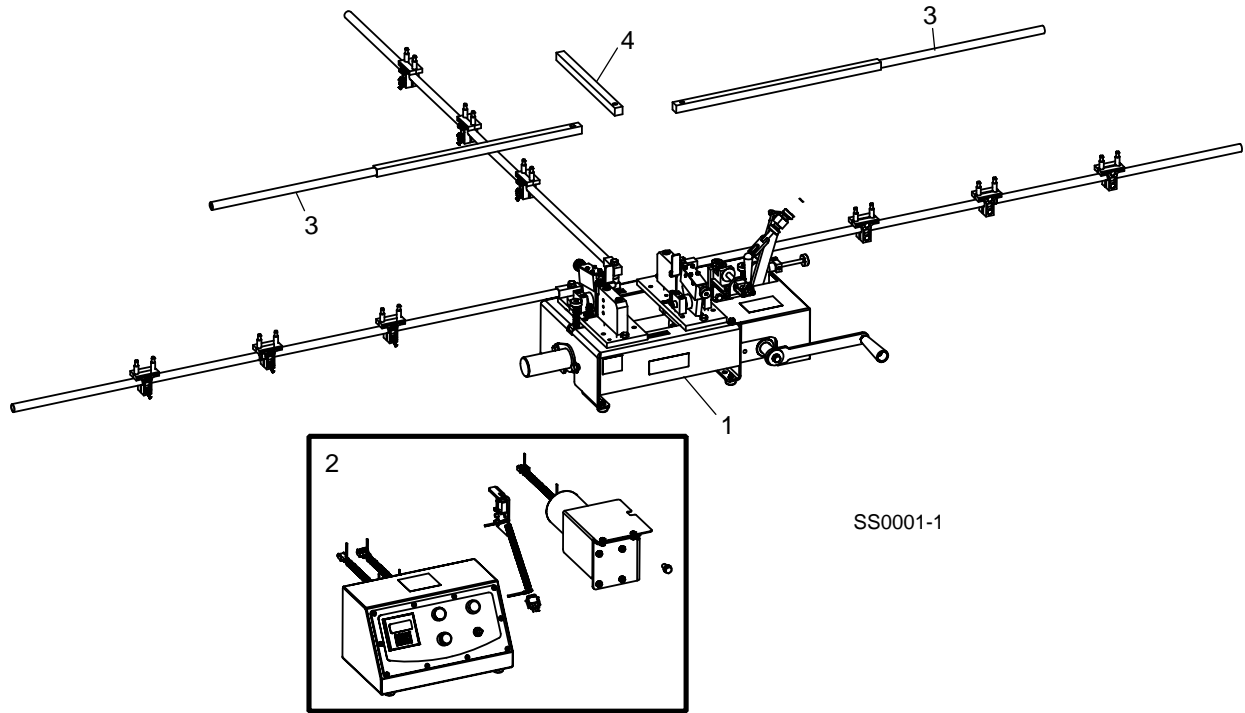


FIG. 3-2

4 Replacement Parts
Shop Series Dual Toothsetter (Complete)

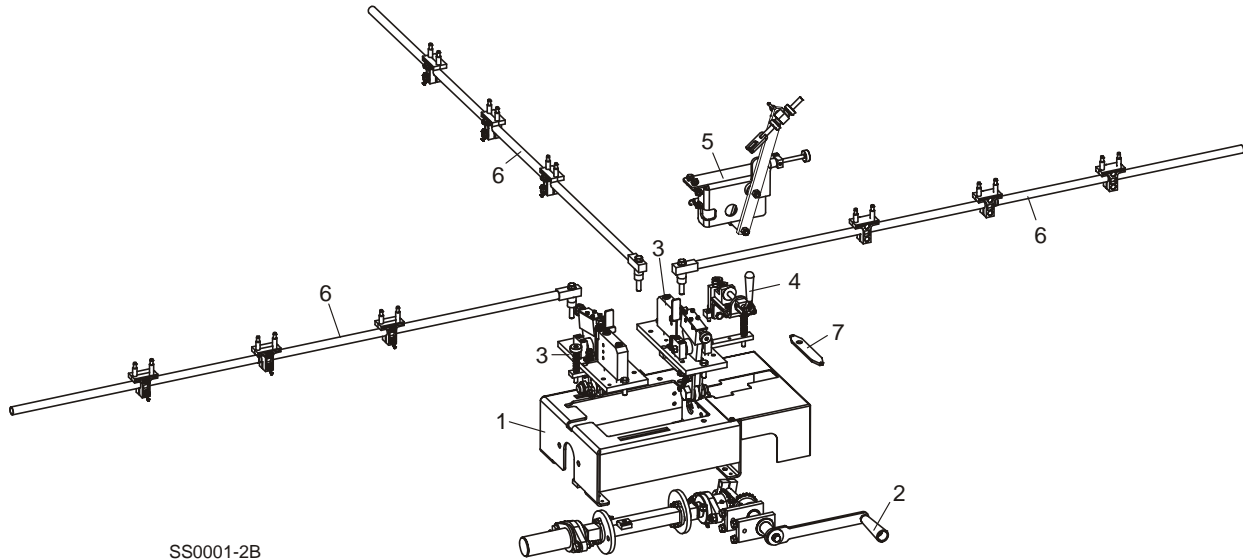
SECTION 4 REPLACEMENT PARTS

4.1 Shop Series Dual Toothsetter (Complete)



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	TOOTHSETTER PARTS (See Section 4.2)		
2	AUTO FEED OPTION PARTS (See Section 4.10)		
	ARM KIT, LONG BLADE SUPPORT UPGRADE	061756	1
3	Arm, 36" Blade Support Extension	060411	2
4	Arm, 12" Blade Support Extension	060412	1

4.2 Shop Series Dual Toothsetter Assembly

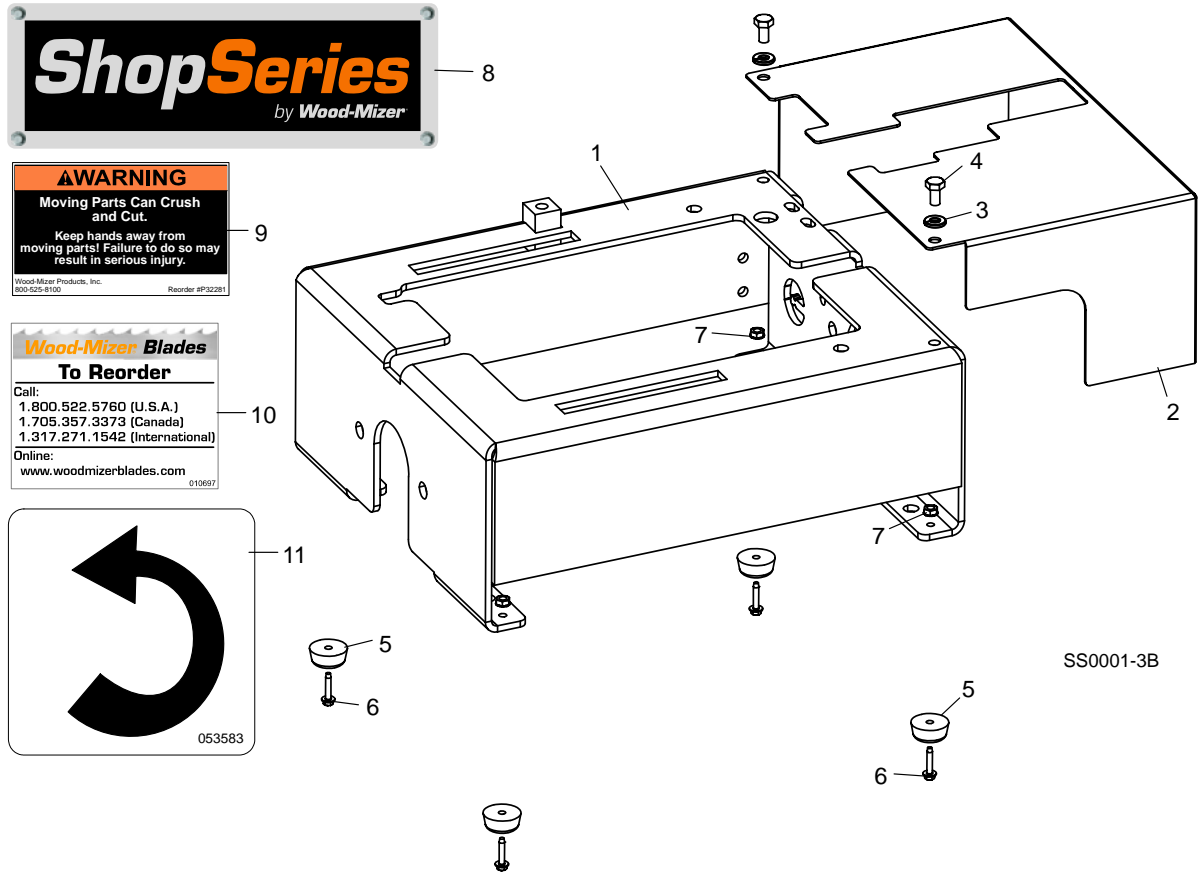


REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	TOOTHSETTER ASSEMBLY, SHOPSERIES II DUAL	060550	1
1	Base Housing Parts (See Section 4.3)		
2	Feed Drive Parts (See Section 4.4)		
3	Blade Setter Parts (See Section 4.5)		
4	Clamp Parts (See Section 4.7)		
5	Index Parts (See Section 4.8)		
6	Blade Support Arm Parts (See Section 4.9)		
7	Tool, Bend Back	023774	1
	Manual, Shop Series II Dual Setter	M1616	1

4

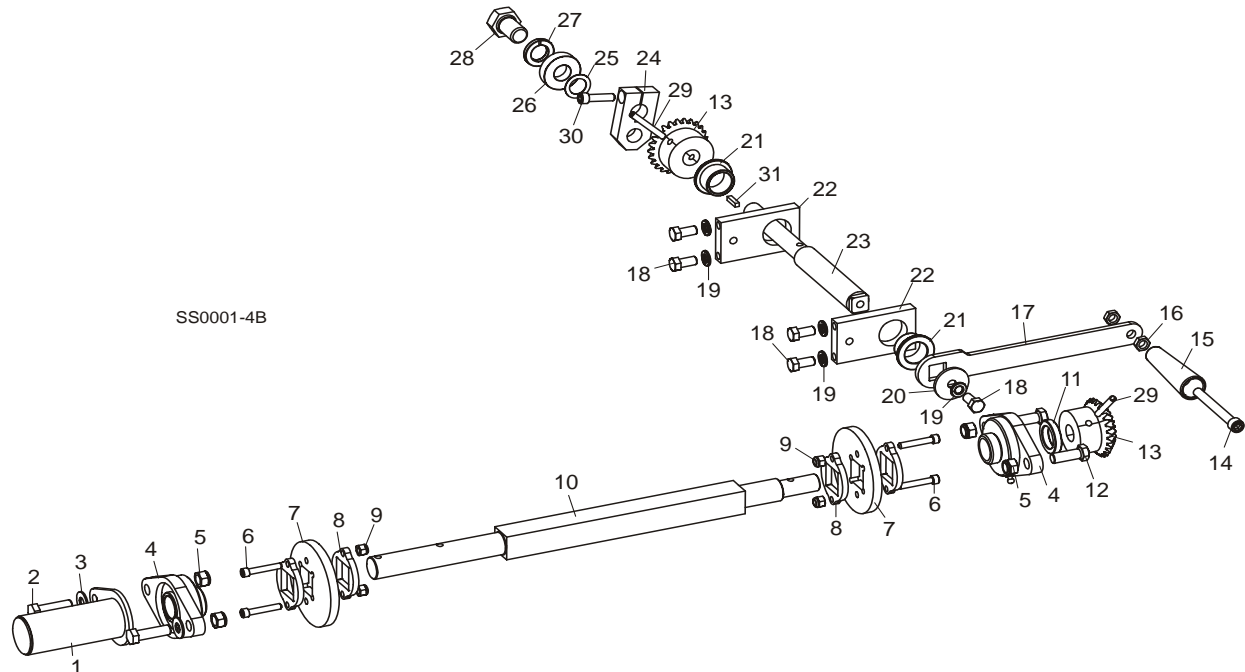
Replacement Parts Base Housing Assembly

4.3 Base Housing Assembly



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BASE WELDMENT, SHOPSERIES TOOTHSETTER	060568	1	◆
2	COVER, INDEX	060551	1	
3	WASHER, 1/4" SPLIT LOCK	F05011-14	2	
4	WASHER, 1/4-20 X 1/2" HEX HEAD	F05005-15	2	
5	FOOT, RUBBER	P06104	4	
6	SCREW, #8-32 X 3/4" SLOTTED HEX WASHER HEAD TYPE F	F05015-23	4	
7	NUT, #8-32 HEX SELF-LOCKING	F05010-41	4	
8	DECAL, SHOPSERIES LOGO	057793	1	
9	DECAL, KEEP HANDS AWAY WARNING	P32281	1	
10	DECAL, WOOD-MIZER BLADE REORDER	010697	1	
11	DECAL, FEED DIRECTION	053583	1	

4.4 Feed Drive Assembly

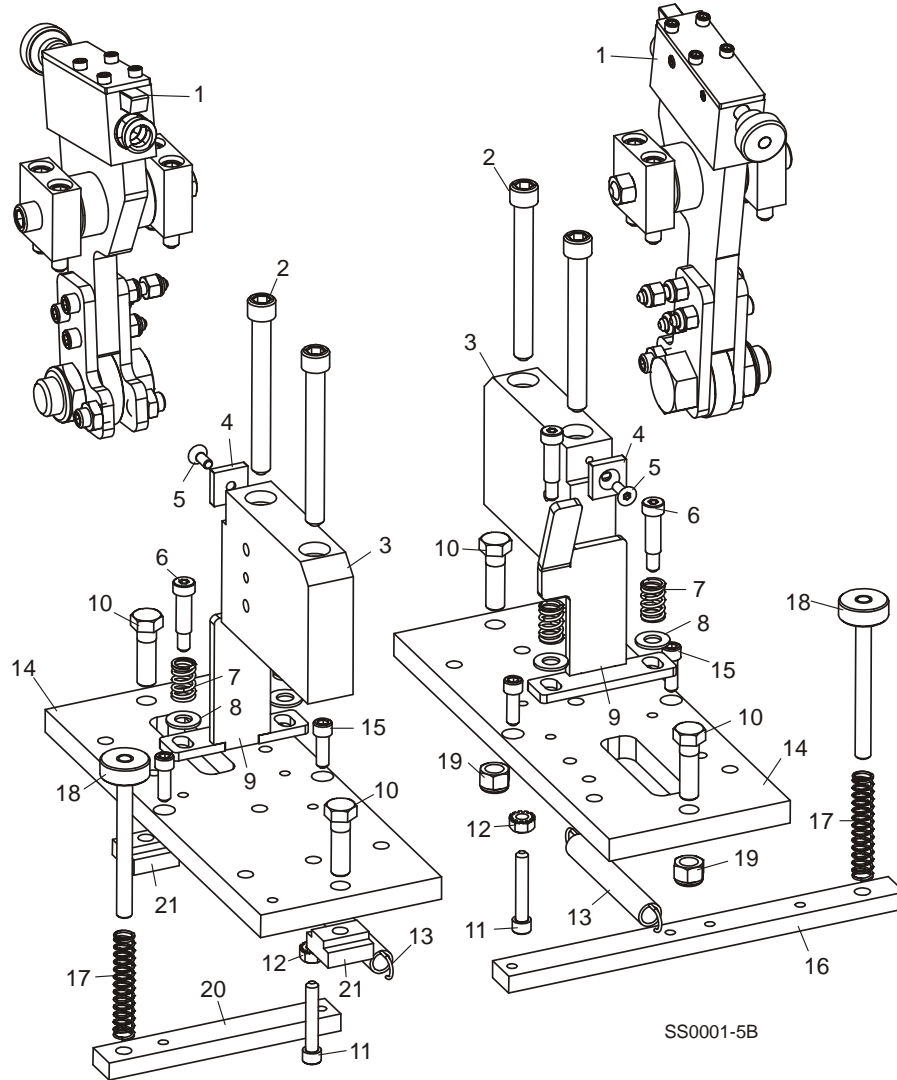


REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	COVER WELDMENT, SHAFT	060524	1
2	BOLT, 7/16-14 X 1 1/2" HEX HEAD GRADE 5	F05007-138	2
3	WASHER, 7/16" SAE FLAT	F05011-43	2
4	BEARING, 1" FLANGED VF2S 216	038124	2
5	NUT, 7/16-14 HEX NYLON LOCK	F05010-135	4
6	SCREW, 1/4-20 X 1 1/2" SOCKET HEAD	F05005-74	4
7	PLATE, CAM	060578	2
8	PLATE, CAM SUPPORT	060566	4
9	NUT, 1/4-20 HEX NYLON LOCK	F05010-69	4
10	SHAFT, DUAL SETTER	060537	1
11	SPACER, BEARING	060545	1
12	BOLT, 7/16-14 X 1 1/4" HEX HEAD GRADE 5	F05007-144	2
13	GEAR, 10 PITCH X 2.5 PITCH DIA. X 1" BORE	060565	2
14	SCREW, 3/8-16 X 3 1/2" SOCKET HEAD	F05007-111	1
15	KNOB, 3/8" BORE TAPERED PLASTIC	060170	1
16	NUT, 3/8-16 HEX JAM	F05010-29	2
17	ARM, FEED CRANK	060562	1
18	BOLT, 3/8-16 X 3/4" HEX HEAD GRADE 5	F05007-118	5
19	WASHER, 3/8" SPLIT LOCK	F05011-4	5
20	WASHER, 3/8" ID X 1 1/2" OD X 1/8" THK HARDENED	F05011-104	1

4**Replacement Parts***Feed Drive Assembly*

21	BUSHING, 1" ID X 1 1/4" OD X 3/4" FLANGED BRONZE	P737	2	
22	BLOCK, SHAFT MOUNT	060564	2	
23	SHAFT, SETTER INDEX	060563	1	
24	BLOCK, CAM	060555	1	
25	WASHER, 3/4" ID X 1 1/8" OD X .031 THK	060576	1	
26	BEARING, R12-2NSL	P32044	1	
27	WASHER, 3/4" SPLIT LOCK	F05011-6	1	
28	BOLT, 3/4-10 X 1 1/4" HEX HEAD GRADE 8	F05009-126	1	
29	PIN, 1/4" X 2" ROLL	F05012-46	2	
30	SCREW, 5/16-18 X 1 1/4" SOCKET HEAD	F05006-58	1	
31	KEY, 3/16" SQUARE X 3/4"	S03060	1	

4.5 Blade Setters



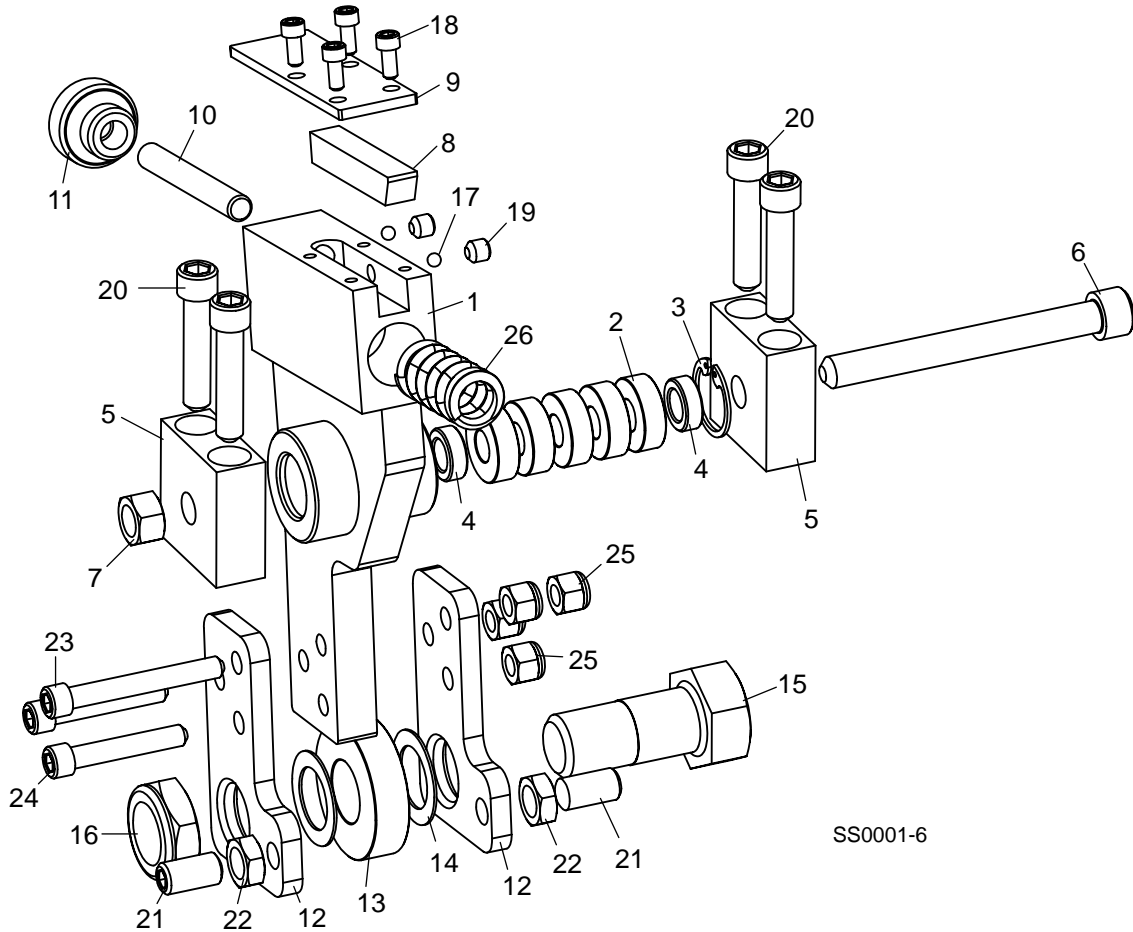
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	SET ASSEMBLY, DUAL BLADE	060594	2
1	Blade Set Arm Parts (See Section 4.6)		
2	Bolt, 3/8-16 x 3 1/2" Socket Head	F05007-111	2
3	Block, Rear Set	060596	1
4	Insert, 3/4" x 3/16" Clamping	060541	1
5	Screw, 1/4-20 x 1/2" Flat Head	F05004-61	1
6	Bolt, 5/16" x 7/8" Socket Head Shoulder	F05006-64	2
7	Spring, .48" OD x 3/4" Long x .063" Wire Compression	060539	2
8	Washer, 5/16" SAE Flat	F05011-17	2
9	Clamp Weldment, Setter	060587	1

4

Replacement Parts*Blade Setters*

10	Bolt, 3/8-16 x 1 1/4" Hex Head Grade 5	F05007-123	2	
11	Screw 1/4-20 x 1 1/2" Socket Head	F05005-74	1	
12	Nut, 1/4-20 Hex Self-Locking	F05010-9	1	
13	Spring, LE-063E-8MW	P08848	1	
14	Plate, Blade Setter Base	060595	1	◆
15	SCREW, 1/4-20 X 3/4" SOCKET HEAD	F05005-26	4	
16	PLATE, BLADE SUPPORT INFEED	060554	1	
17	SPRING, .453" OD X 2.5" LONG X .049 WIRE COMPRESSION	060501	2	
18	PIN ASSEMBLY, BLADE HEIGHT	060570	2	
19	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	2	
20	PLATE, BLADE SUPPORT OUTFEED	060528	1	
21	T-NUT, 3/8-16	060552	2	

4.6 Blade Set Arm Assembly



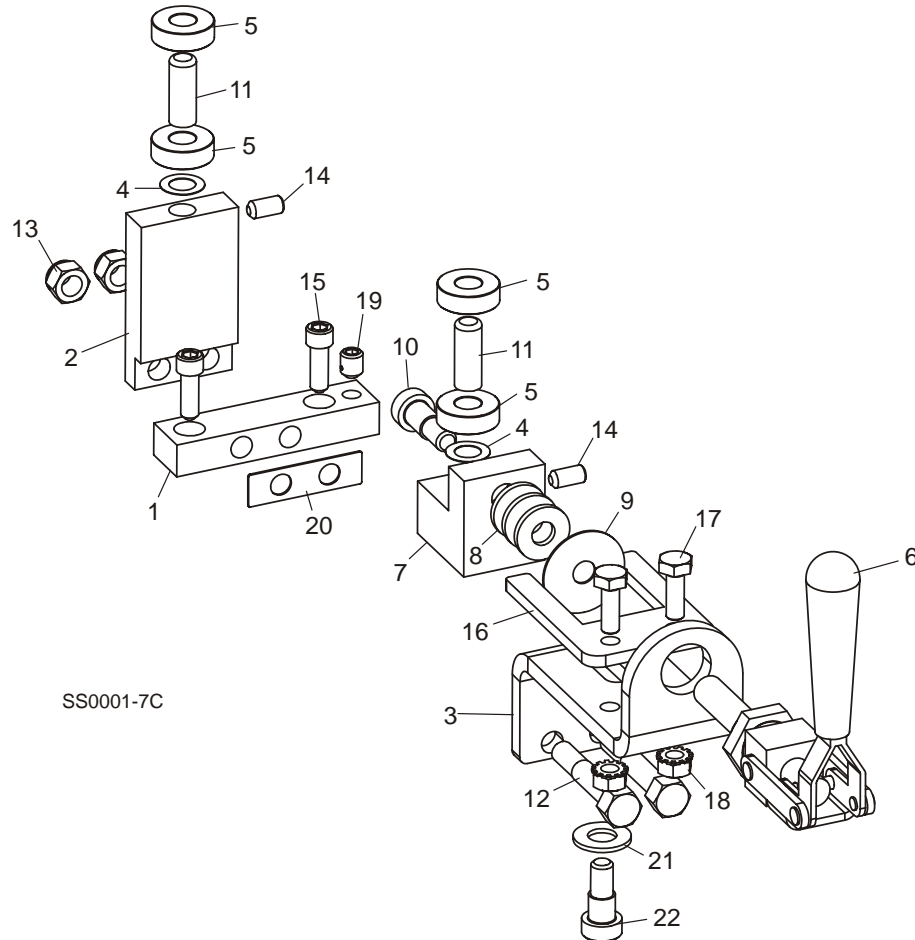
SS0001-6

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	ARM ASSEMBLY, BLADE SET	060591	2
1	Arm Weldment, Blade Set	060592	1
2	Bearing, R6-2NSL SRI-2 ABEC-1	P10688	5
3	Ring, 7/8" Interior Retaining	F04254-23	1
4	Spacer, Bearing	S32032	2
5	Block, Pivot	S32033	2
6	Screw, 3/8-16 x 3 1/2" Socket Head	F05007-111	1
7	Nut, 3/8-16 Hex Lock	F05010-25	1
8	Pusher, Blade Setter	060597	1
9	Plate, Setter Pusher Top	060586	1
	Pin Assembly, Setter Pusher	060583	1
10	Rod, 5/16-24 x 2 3/8" Threaded	060584	1
11	Knob, Knurled Pusher Pin	060573	1
12	Plate, Setter Arm Cam	060579	2

4**Replacement Parts***Blade Set Arm Assembly*

13	Bearing, R12-2NSL	P32044	1	
14	Washer, 3/4" ID x 1 1/8" OD x .031" Thk	060576	2	
15	Bolt, 3/4-10 x 1 3/4" Hex Head	F05013-12	1	
16	Nut, 3/4-10 Hex Nylon Half Lock	F05010-122	1	
17	Ball, 3/16" Dia. High-Impact Polystyrene	060549	2	
18	Screw, #8-32 x 3/8" Socket Head	F05004-85	4	
19	Screw, 1/4-20 x 1/4" Cup Point Socket Set	F05005-131	2	
20	Screw, 5/16-18 x 1 1/2" Socket Head	F05006-66	4	
21	Screw, 3/8-16 x 3/4" Oval Point Socket Set	F05007-66	2	
22	Nut, 3/8-16 Hex Jam	F05010-29	2	
23	Bolt, 1/4-20 x 2" Socket Head	F05005-57	1	
24	Bolt, 1/4-20 x 1 1/2" Socket Head	F05005-74	2	
25	Nut, 1/4-20 Hex Nylon Lock	F05010-69	4	
26	Spring, 3/4" OD x 1 1/2" Long x .165" x .125" WI	060499	1	

4.7 Clamp Assembly



SS0001-7C

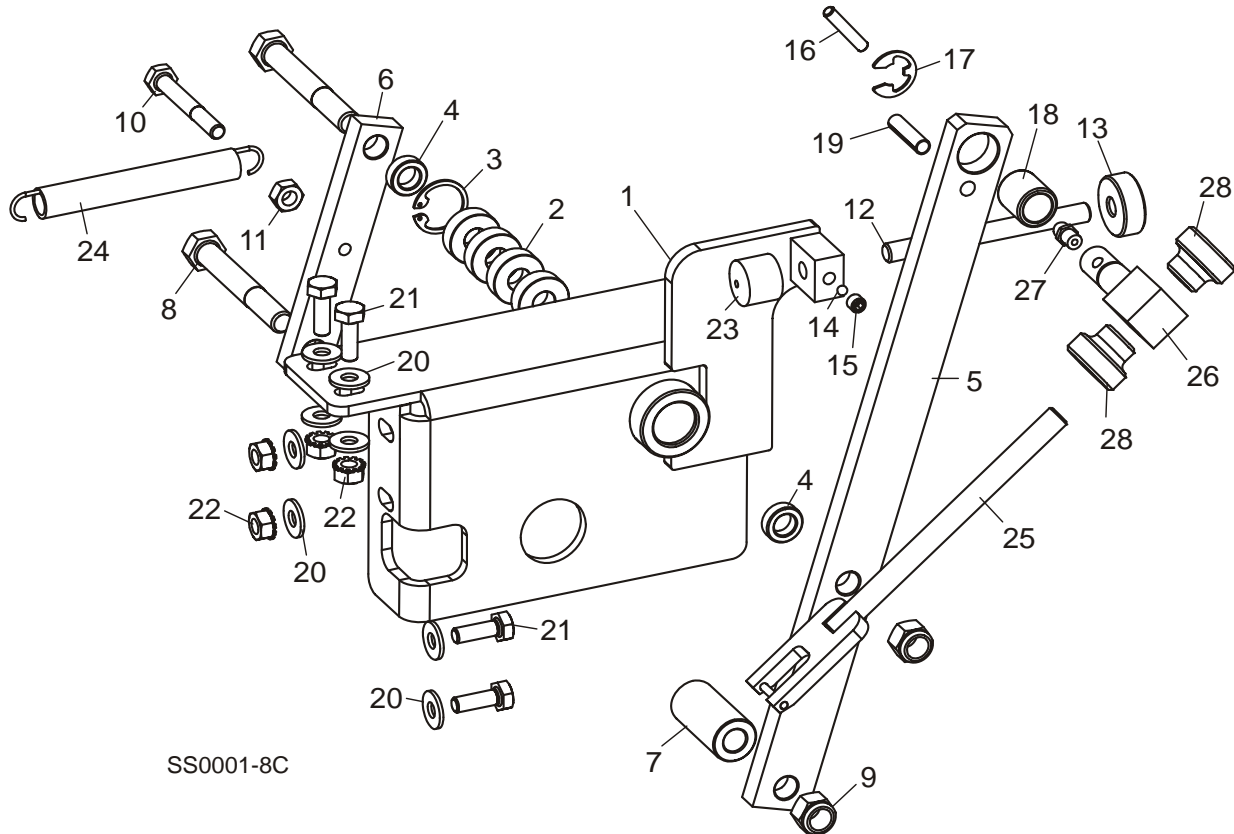
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	CLAMP ASSEMBLY, DUAL SETTER	060533	1
1	Block, Clamp Mounting	060536	1
2	Plate, Clamp Bearing	060535	1
3	Plate, Clamp Handle Support	060534 ¹	1
4	Washer, .010" Shim	032344	2
5	Bearing, R60-2NSL SRI-2 ABEC-1	P10688	4
6	Clamp Handle, Dual Setter	035821	1
7	Block, Clamp Bearing	060532	1
8	Washer, 3/8" ID x 13/16" OD x .093" Rubber	060531	3
9	Washer, 5/16" ID x 1 1/4" OD Fender	F05011-50	1
10	Bolt, 3/8" x 1/2" Socket Shoulder	F05006-56	1
11	Pin, 3/8" x 1" Hardened Dowel	F05012-25	2
12	Bolt, 5/16-18 x 2" Hex Head Grade 5	F05009-79	2
13	Nut, 5/16-18 Hex Nylon Lock	F05010-58	2

4**Replacement Parts***Clamp Assembly*

14	Screw, 1/4-20 x 1/2" Cup Point Nylon Lock Socket Set	F05005-55	2	
15	Screw, 1/4-20 x 3/4" Socket Head	F05005-26	2	
16	Plate, Setter Clamp Guide	060503	1	
17	Bolt, 1/4-20 x 3/4" Hex Head Grade 5	F05005-123	2	
18	Nut, 1/4-20 Hex Self-Locking	F05010-9	2	
19	Screw, 5/16-18 x 3/8" Flat Point Nylon Lock Socket Set	F05006-115	1	
20	Plate, Shim	060482	3	
21	Washer, 3/8" SAE Flat	F05011-3	1	
22	Bolt, 3/8" x 3/8" Socket Shoulder	F05007-159	1	

¹ If replacing Support Plate 060534, order two Shims 060482 to compensate for any bend variances. Two additional shims added to assembly 060533 8/10 to allow for variances in bent plate.

4.8 Index Assembly



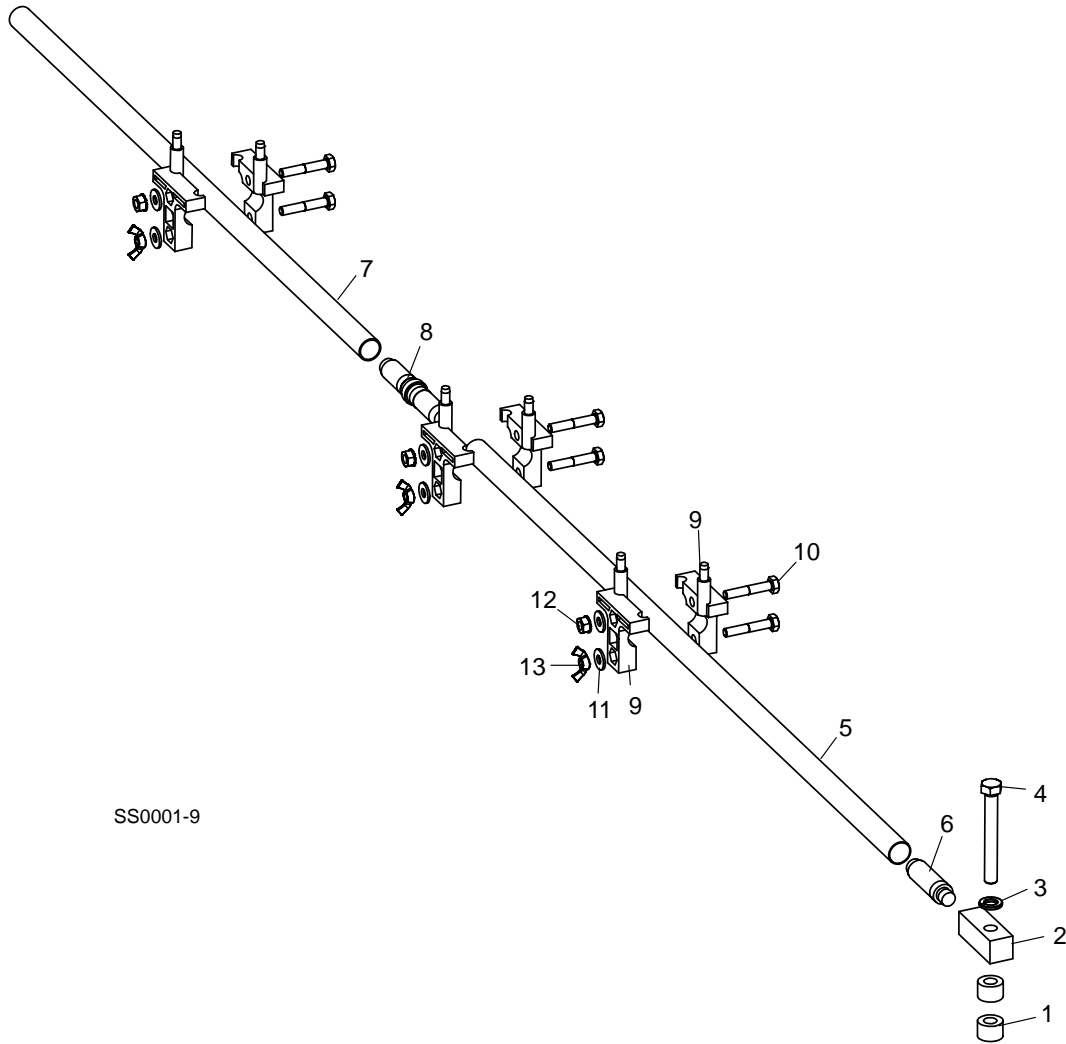
SS0001-8C

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	INDEX ASSEMBLY, DUAL SETTER	060538	1
1	Index Weldment, Dual Setter	060560	1
2	Bearing, R6-2NSL SRI-2 ABEC-1	P10688	4
3	Ring, 7/8" Interior Retaining	F04254-23	1
4	Spacer, Bearing	S32032	2
5	Arm, Setter Index	060558	1
6	Arm, Setter Index Wear	060557	1
7	Spacer, Index Arm	060556	1
8	Bolt, 3/8-16 x 2 3/4" Hex Head	F05007-29	2
9	Nut, 3/8-16 Hex Nylon Lock	F05010-10	2
10	Bolt, 1/4-20 x 2" Hex Head	F05005-125	1
11	Nut, 1/4-20 Hex	F05010-63	1
	Pin Assembly, Setter Index	060570	1
12	Rod, 5/16-24 x 3 1/2" Threaded	060571	1
13	Knob, Index Pin Knurled	060572	1
14	Ball, 3/16" Dia. High-Impact Polystyrene	060549	1
15	Screw, 1/4-20 x 1/4" Cup Point Socket Set	F05005-131	1

4**Replacement Parts***Index Assembly*

16	Pin, 3/16" x 1" Dowel	F05012-29	1	
17	Clip, 1/2" Shaft "E"	P10649	1	
18	Bearing 1/2" ID Needle	P30253	1	
19	Pin, 1/4" x 1" Roll	F05012-7	1	
20	Washer, 1/4" SAE Flat	F05011-11	8	
21	Bolt, 1/4-20 x 3/4" Hex Head Grade 5	F05005-123	4	
22	Nut, 1/4-20 Hex Self-Locking	F05010-9	4	
23	Bumper, 3/4" OD x 5/16-24 Threaded Rubber	060529	1	
24	Spring, LE-063E-8MW	P08848	1	
	Pawl Assembly, Setter Index	053321	1	
25	Pawl Weldment, Setter Index	053309	1	
26	Shaft, Index Pawl Pivot	053311	1	
27	Fitting, 1/4-28 Grease	P05060	1	
28	Knob, Knurled	S09733	2	

4.9 Blade Support Arm Assembly

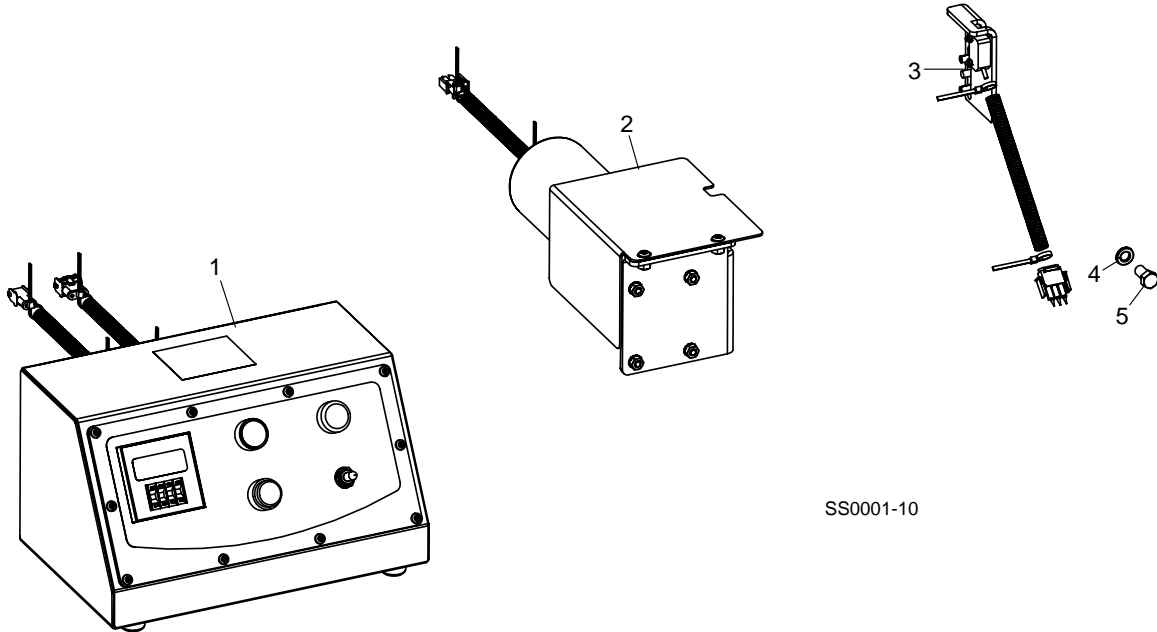


REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	ARM ASSEMBLY, BLADE SUPPORT	060031	3
1	Spacer, Blade Support Arm Mount	S22625	2
2	Block, Blade Support Arm Mount	035777	1
3	Washer, 3/8" Split Lock	F05011-4	1
4	Bolt, 3/8-16 x 3" Hex Head Full Thread	F05007-1	1
	Tube Assembly, Blade Support	A04550	1
5	Tube, Blade Support	M04551	1
6	Plug, Support Tube	P04552	1
	Tube Assembly, Blade Support Extension	060035	1
7	Tube, Blade Support Extension	060033	1
8	Plug, Support Extension Tube	060034	1

4**Replacement Parts***Blade Support Arm Assembly*

	Guide Assembly, Blade Support	A30008	3	
9	Guide, Blade Support w/Post	S10611	2	
10	Bolt, 1/4-20 x 1 1/2" Hex Head	F05005-5	2	
11	Washer, 1/4" SAE Flat	F05011-11	2	
12	Nut, 1/4-20 Hex Self-Locking	F05010-9	1	
13	Nut, 1/4-20 Wing	F05010-13	1	

4.10 Auto Feed Kit (Optional)



SS0001-10

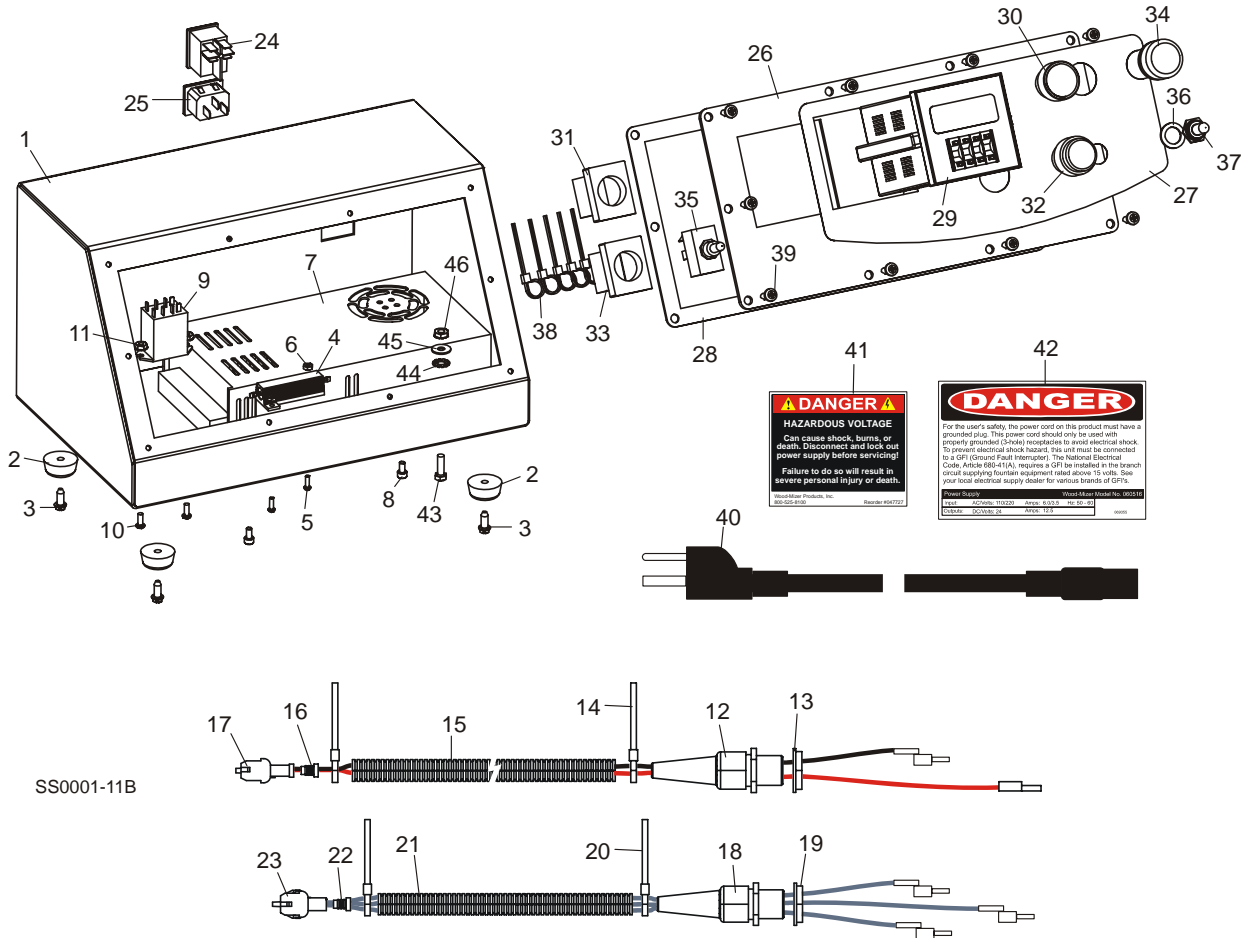
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	FEED OPTION, DUAL SETTER AUTO	060485	1
1	Control Parts (See Section 4.11)		
2	Motor Parts (See Section 4.12)		
3	Sensor Parts (See Section 4.13)		
4	Washer, 3/8" Split Lock	F05011-4	1
5	Bolt, 3/8-16 x 3/4" Hex Head	F05007-27	1
	Instruction Sheet, Shop Series II Auto Kit	060485-1618	1

4

Replacement Parts

Auto Feed Control (Optional)

4.11 Auto Feed Control (Optional)



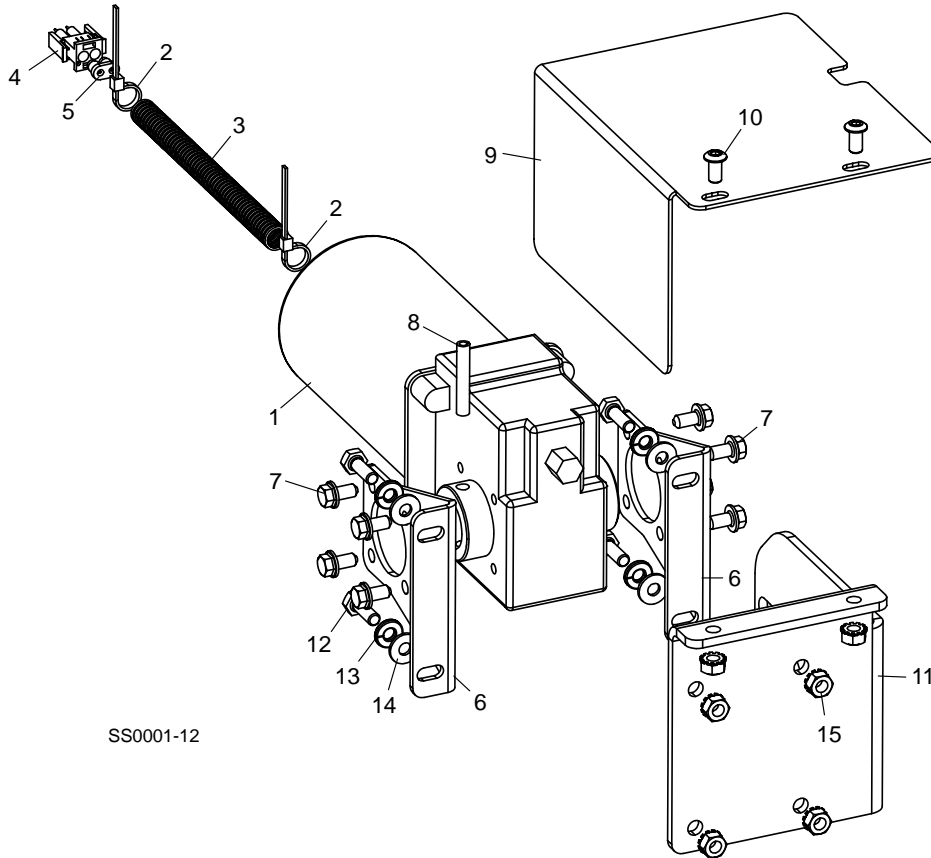
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	BOX ASSEMBLY, AUTO FEED CONTROL	060516	1
1	Box Weldment, Shop Series II Setter Control	060522	1
2	Foot, Rubber	P06104	4
3	Bolt, #8-32 x 1/2" Slotted Hex Head Self-Tapping	F05015-18	4
4	Resistor, 1 Ohm 50W Power	060498	1
5	Screw, #4-40 x 3/8" Slotted Round Head	F05004-9	2
6	Nut, #4-40 Hex	F05010-43	2
7	Power Supply, 110/220VAC - 320W 24VDC	060519	1
8	Screw, M4-.7 x 8mm Socket Head	F05004-255	2
9	Relay, 24VDC Tab-Mount DPDT Cube	060518	1
10	Screw, #6-32 x 3/8" Phillips Slot Round Head	F05004-142	2
11	Nut, #6-32 Hex Self-Locking	F05010-59	2
	Harness Assembly, Shop Series II Setter Motor	053459	1
12	Strain Relief, 3/8" NPT .15-.32" Flex	060507	1

13	Nut, 3/8" NPT Black Plastic	060506	1	
14	Tie Wrap, .100" x 4" Black	F05089-6	2	
15	Tubing, 1/4" Split Loom High-Temp	024323-25	48in.	
16	Seal, 2P Wire Univ Mate-N-Lok	024276-2	1	
17	Connector, 2P Socket Housing U-Mate-N-Lok	E10480	1	
	Harness Assembly, Shop Series II Setter Sensor	053460	1	
18	Strain Relief, 3/8" NPT .15-.32" Flex	060507	1	
19	Nut, 3/8" NPT Black Plastic	060506	1	
20	Tie Wrap, .100" x 4" Black	F05089-6	2	
21	Tubing, 1/4" Split Loom High-Temp	024323-25	6in.	
22	Seal, 3P Wire Univ Mate-N-Lok	024276-3	1	
23	Connector, 3P Socket Housing U-Mate-N-Lok	052504	1	
24	Switch, On/Off Rocker	060515	1	
25	Receptacle, Power Entry	060216	1	
	Panel Assembly, Shop Series II Setter Control	060508	1	
26	Panel Weldment, Shop Series II Setter Control	008938	1	
27	Decal, Shop Series II Setter Control	053456	1	
28	Gasket, Shop Series II Setter Control	053463	1	
29	Counter Assembly, Dual Setter Replacement	069348	1	
30	Switch Head, Flush Push Button Green	060509	1	
31	Switch Body, 1 NO Contact	060510	1	
32	Switch Head, Extended Push Button Red	060512	1	
33	Switch Body, 1NO/1NC Contact	060511	1	
34	Light, 24V LED Green Pilot	060513	1	
35	Switch, DPST Off/On Toggle	060514	1	
36	Washer, 1/2" ID x 3/4" OD x 1/16" Thk Nylon	P05251-1	1	
37	Boot, Toggle Switch Sealing	024589	1	
38	Tie Wrap, .100" x 4" Black	F05089-6	5	
39	Bolt, #10-24 x 1/2" Phillips Pan Head Type 23	F05015-17	10	
40	Power Cord, 125V 10A 3 Cond 6'-7"	050592	1	
41	Decal, Hazardous Voltage Danger	047727	1	
42	Decal, Shop Setter GFI Danger	069355	1	
43	Screw, #10-24 x 5/8" Unslotted Indented Hex Head Machine	F05004-18	1	
44	Washer, 1/4" Exterior Star Lock	F05011-37	1	
45	Washer, #10 SAE Flat	F05011-18	1	
46	Nut, #10-24 Self-Locking Hex	F05010-14	1	

4

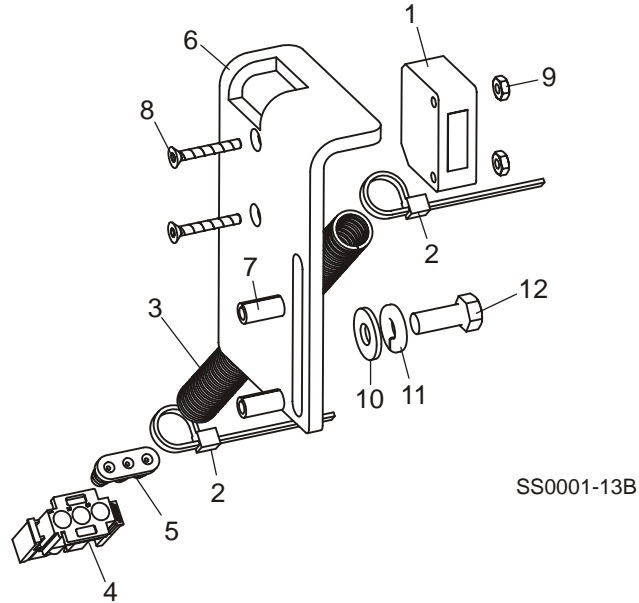
Replacement Parts Auto Feed Motor (Optional)

4.12 Auto Feed Motor (Optional)



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	MOTOR ASSEMBLY, AUTO FEED	060500	1
1	Motor, 24V 159:1 1/5HP 32RPM Gear	060548	1 ◆
2	Tie Wrap, .100" x 4" Black	F05089-6	2
3	Tubing, 1/4" Split Loom High-Temp	024323-25	7in.
4	Connector, 2P Plug Housing U-Mate-N-Lok	E10478	1
5	Seal, 2P Wire Univ Mate-N-Lok	024276-2	1
6	PLATE, MOTOR MOUNT SIDE	060544	2
7	BOLT, 1/4-20 X 3/8" FLANGED HEX HEAD	F05005-78	8
8	PIN, 1/4" X 1 1/2" ROLL	F05012-125	1
9	COVER, MOTOR	060543	1
10	SCREW, 1/4-20 X 1/2" SOCKET BUTTON HEAD	F05005-59	2
11	PLATE, MOTOR MOUNT	060546	1
12	BOLT, 1/4-20 X 3/4" HEX HEAD GRADE 5	F05005-123	4
13	WASHER, 1/4" SPLIT LOCK	F05011-14	4
14	WASHER, 1/4" SAE FLAT	F05011-11	4
15	NUT, 1/4-20 HEX SELF-LOCKING	F05010-9	6

4.13 Auto Feed Sensor (Optional)



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	SENSOR ASSEMBLY, AUTO FEED	053457	1
1	Sensor, Short Range Diffuse PNP NO Photo	060523	1 ◆
2	Tie Wrap, .100" x 4" Black	F05089-6	2
3	Tubing, 1/4" Split Loom High-Temp	024323-25	48in.
4	Connector, 3P Plug Housing U-Mate-N-Lok	052450	1
5	Seal, 3P Wire Univ Mate-N-Lok	024276-3	1
6	PLATE, SENSOR MOUNT	060526	1
7	PIN, 1/4" X 1/2" ROLL	F05012-123	2
8	SCREW, #4-40 X 7/8" FLAT SOCKET HEAD	F05004-254	2
9	NUT, #4-40 HEX	F05010-43	2
10	WASHER, 1/4" SAE FLAT	F05011-1	1
11	WASHER, 1/4" SPLIT LOCK	F05011-14	1
12	BOLT, 1/4-20 X 5/8" HEX HEAD GRADE 5	F05006-137	1

SECTION 5 ELECTRICAL INFORMATION

5.1 Schematic

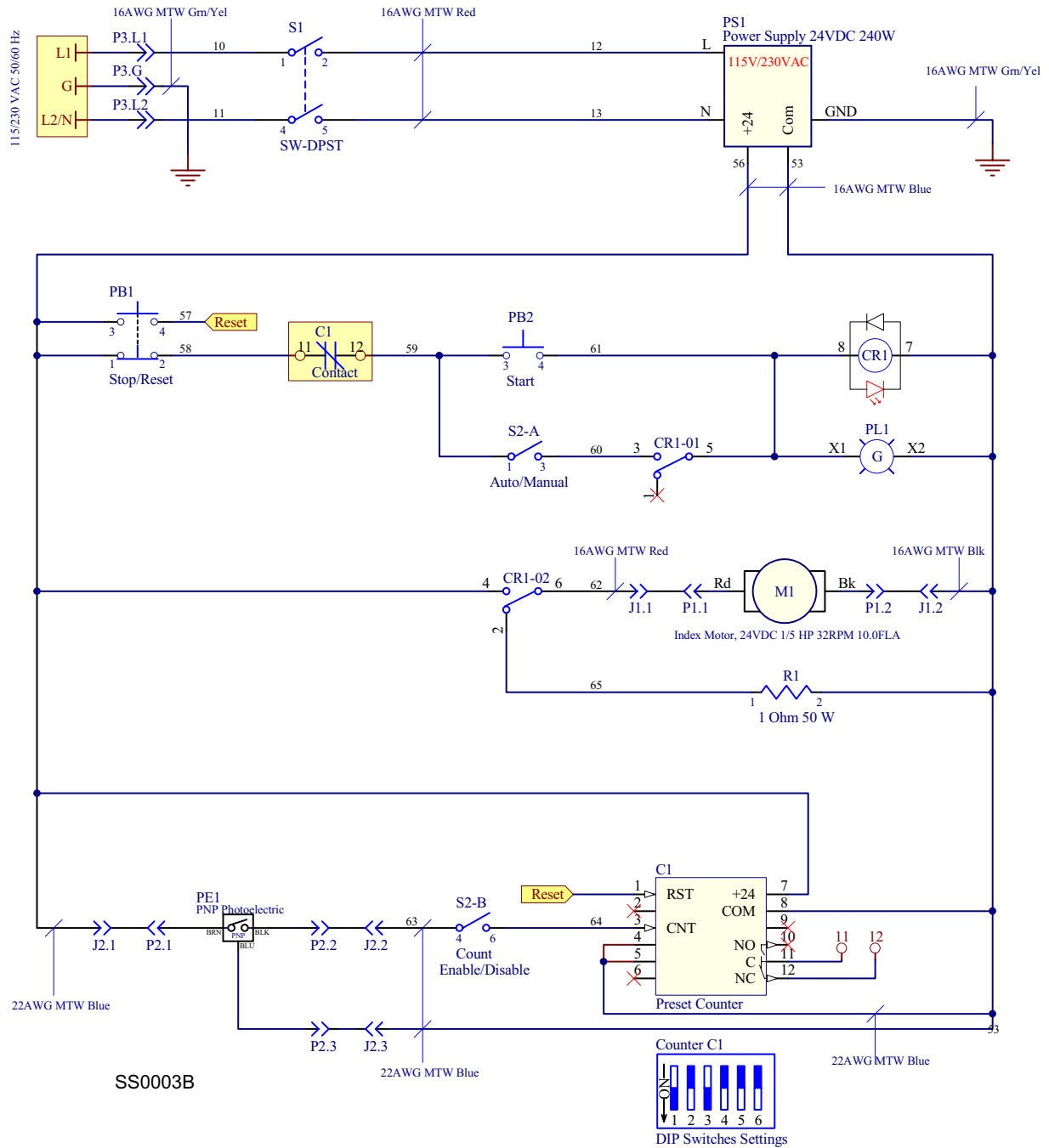


FIG. 5-1

5.2 Component Layout Diagrams

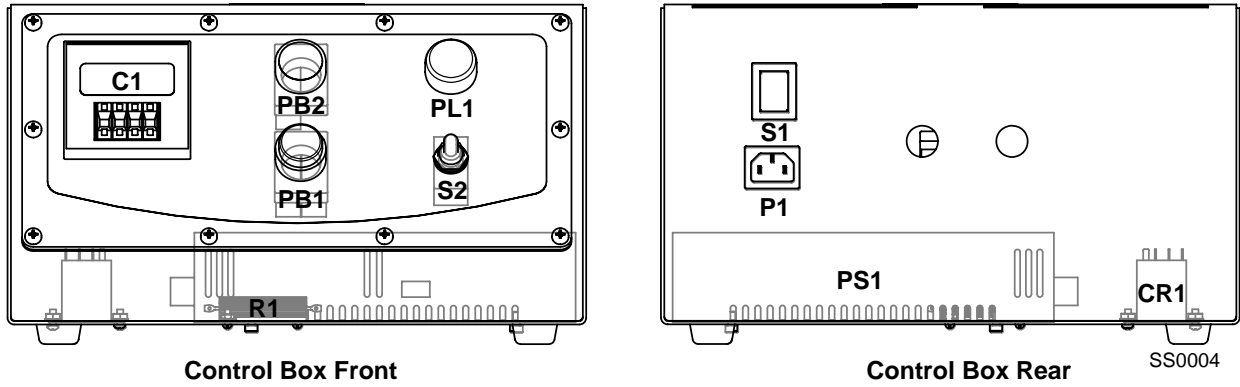


FIG. 5-2

5.3 Component List

ID	Manufacturer Part No.	Manufacturer	Wood-Mizer Part No.	Description
C1	069348	Wood-Mizer	069348	Counter Assembly, Dual Setter Replacement
CR1	PC113-2C-C1-24D-LD-X	Hughes Peters	060518	Relay, 24VDC Tab Mount DPDT Cube
M1	060500	Wood-Mizer	060500	Motor Assembly, Shop Series II Dual Setter
P1	701W-X2/04	Qualtek Electronics Corp.	060216	Receptacle, Power Entry
PB1	PB-BL4	ElecDirect	060512	Switch Head, Extended Push Button Red
	PB-BZ105	ElecDirect	060511	Switch Base, 1NO/1NC Contact
PB2	PB-BA3	ElecDirect	060509	Switch Head, Flush Push Button Green
	PB-BZ101	ElecDirect	060510	Switch Base, 1NO Contact
PE1	053457	Wood-Mizer	053457	Sensor Assembly, Shop Series II Dual Setter
PL1	ECX2052-24L	Automation Direct	060513	Light, 24V LED Green Pilot
PS1	S-320-24	TRC Electronics	060519	Power Supply, 110/220VAC 320W 24VDC
R1	28K6350	Newark InOne	060498	Resistor, 1 Ohm 50W Power
S1	908-0112	Allied Electronics	060515	Switch, On/Off Rocker
S2	765059	ElecDirect	060514	Switch, On/Off DPST Toggle

INDEX

C

component ID 1-3

D

dimensions 1-4

E

electrical information
 component layout 5-2
 component list 5-3
 schematic 5-1

M

maintenance 3-1

R

replacement parts
 auto feed option 4-16
 control box 4-17
 feed motor 4-19
 feed sensor 4-20
 base housing 4-3
 blade set arm 4-8
 blade setters 4-6
 blade support arms 4-14
 clamp 4-10
 feed drive 4-4
 index 4-12
 toothsetter assembly 4-2
 toothsetter complete 4-1

S

safety 1-1
 blade handling 1-2
 electrical 1-1
 operation 1-2

setup & operation
 assembly 2-1
 auto feed option 2-3
 blade support arms 2-1
 auto feed 2-16
 blade installation/setup 2-8
 manual feed 2-15
 operation 2-8