



# 14" Dry Metal Cutting Saw

# OPERATOR'S MANUAL

# **⚠** WARNING!

TO REDUCE THE RISK OF INJURY, USER MUST READ AND UNDERSTAND INSTRUCTION MANUAL.



EYE PROTECTION REQUIRED



HEARING PROTECTION REQUIRED



NEVER PLACE FINGERS NEAR CUTTING AREA. BEWARE OF ROTATING



LINE VOLTAGE PRESENT



MODEL **\$**14 (120 or 230V) (50 or 60 Hz single phase)

Senai # Date of Purchase	Serial # Date of Purchase
--------------------------	---------------------------

## 14" Dry Metal Cutting Saw

Congratulations on your purchase of a Steelmax brand Dry Metal Cutting Saw. Please complete and mail your product registration card. Doing so will validate your machine's warranty period and ensure prompt service if needed. We sincerely thank you for selecting a product from Steelmax.

#### TABLE OF CONTENTS

Limited Warranty
General Safety Rules and Specific Instructions
Specific Safety Rules and Symbols5-7
Functional Drawings
Exploded View9
Parts List
Assembly View11
Operation
Emptying the Chip Chamber
Maintenance / Changing Saw Blades
Troubleshooting Checklist
Specifications
Accessories
Warranty Card

#### LIMITED WARRANTY

Steelmax Tools LLC (STEELMAX) will, within twelve (12) months from the original date of purchase, repair or replace any goods found to be defective in materials or workmanship, provided the product warranty registration card has been returned to STEELMAX within thirty (30) days of purchase date (proof of purchase required). This warranty is void if tool is used on materials thicker than those specified under normal use, has been damaged by accident, neglect, improper service, or other causes not arising out of defects in materials or workmanship. This warranty does not apply to machines and/or components which have been changed, or modified in anyway, or subjected to use beyond recommended capacities and specifications. Electrical components are subject to manufacturers' warranties. All goods returned defective shall be returned prepaid freight to STEELMAX, which shall be the buyer's sole and exclusive remedy for defective goods. In no event shall STEELMAX be liable for loss or damage resulting directly or indirectly from the use of merchandise or from any other cause. STEELMAX is not liable for any costs incurred on such goods or consequential damages. No officer, employee or agent of STEELMAX is authorized to make oral representations of fitness or to waive any of the foregoing terms of sale and none shall be binding on STEELMAX.

STEELMAX RESERVES THE RIGHT TO MAKE IMPROVEMENTS AND MODIFICATIONS TO DESIGN WITHOUT PRIOR NOTICE.

#### STEELMAX TOOLS LLC

#### **GENERAL SAFETY RULES**

## MARNING! Read and Understand all Instructions.

Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

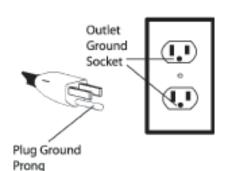
SAVE THESE INSTRUCTIONS

#### **Work Area**

- ·Keep Your Work Area Clean and Well Lit.
- ·Cluttered benches and dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
- ·Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

#### **Electrical Safety**

- Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
- · Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
- · Don't expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.



- Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
- · When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W." These cords are rated for outdoor use and reduce the risk of electric shock.

(Note) When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. **The recommended minimum is a 12 gauge extension cord not exceeding 50 feet.** 

## GENERAL SAFETY RULES (continued)

#### Personal Safety

- \*Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- Avoid accidental starting. Be sure switch is off before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
- Remove adjusting keys or switches before turning the tool on or plugging it in. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
- Use safety equipment. Always wear eye protection. Always wear hearing protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

#### **Tool Use and Care**

- \*Use machine vise to secure and support the workpiece. Drop piece or long material profiles must be supported. Holding the work by hand is unstable and may lead to loss of control. Always use machine vise.
- Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
- Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.
- Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool, may become hazardous when used on another tool.

#### SERVICE

- Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
- When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

### SPECIFIC SAFETY RULES AND SYMBOLS



DO NOT OPERATE MACHINE IF WARNING AND/OR INSTRUCTION LABELS ARE MISSING OR DAMAGED. CONTACT STEELMAX FOR REPLACEMENT LABELS.















HEARING PROTECTION REQUIRED



NEVER PLACE FINGERS NEAR **CUTTING AREA** 



LINE VOLTAGE

Symbol	Description
V	volts
AHz	amperes
min	minutesalternating current
	no load speed

- 1. Only use Steelmax brand approved saw blades. Unauthorized blades may be dangerous!
- 2. Keep saw blades securely fastened. Check blade flanges for debris before installing any new blade.
- 3. Do not use dull or broken blades. Check blades often for condition and wear.
- 4. Check blade cover for proper fit to minimize the risk of flying debris.
- 5. Beware of ejecting chips. They become HOT both during and after cutting.
- 6. Always make provisions for safe handling of excess material.
- 7. Keep saw base free from dirt and other debris.
- 8. Beware of ejecting drop piece. Thinner slices pose a significant ejection hazard.

To obtain an additional copy of your manual please contact Steelmax at:

Ph. 303-690-9146

Fx. 303-690-9172

www.steelmax.com

## SPECIFIC SAFETY RULES (continued)

- **DANGER!** Keep hands and body away from and to the side of the blade. Contact with blade will result in serious injury.
- **WARNING!** To reduce the risk of injury, check lower guard. It must close instantly! Keep free hand away from blade at all times during operation. Support and clamp work. Wear eye and hearing protection.

#### Additional Specific Safety Rules:

**DANGER!** Keep hands away from cutting area and blade. Keep your second hand on auxiliary handle, or motor housing. If both hands are holding the saw, they cannot be cut by the blade.

- ·Keep your body positioned to either side of the saw blade, but not in line with the saw blade. KICKBACK could cause the material to jump backwards. (See "Causes and Operator Prevention of Kickback.")
- •Do not reach underneath the work. The guard can not protect you from the blade below the work.
- Check lower guard for proper closing before each use. Do not operate saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position. If saw is accidentally dropped, lower guard may be bent. Raise the lower guard and make sure it moves freely and does not touch the blade or any other part, at all angles and depths of cut.
- •Check the operation and condition of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use. Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a buildup of debris.
- ·An unprotected, coasting blade will cause the saw to cut whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.
- •NEVER hold piece being cut in your hands. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- ·Contact with a "live" wire will also make exposed metal parts of the tool "live" and shock the operator.
- ·Always use blades with correct size and shape arbor holes. Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- •Never use damaged or incorrect blade washer or bolts. The blade washer and bolt were specially designed for your saw, for optimum performance and safety of operation.
- ·Always clamp workpiece in vise and check security of vise bolts and position often. Vise can loosen due to vibration.

## SPECIFIC SAFETY RULES (continued)

#### CAUSES AND OPERATOR PREVENTION OF KICKBACK

Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled workpiece to lift up and out of the saw toward the operator. When the blade is pinched or bound tightly by the kerf (saw cut) closing down, the blade stalls and the motor reaction drives the workpiece rapidly backward. If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the material causing the material to climb out of the blade and jump back toward operator. Kickback is the result of tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:

Maintain a firm grip with both hands on the saw. KICKBACK forces can be controlled by the operator, if proper precautions are taken.

When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the workpiece from the saw or pull the material backward while the blade is in motion or KICKBACK may occur. Investigate and take corrective actions to eliminate the cause of blade binding.

When restarting a saw in the workpiece, center the saw blade in the kerf and check that saw teeth are not engaged into the material. If saw blade is binding, it may walk up or KICKBACK from the workpiece as the saw is restarted.

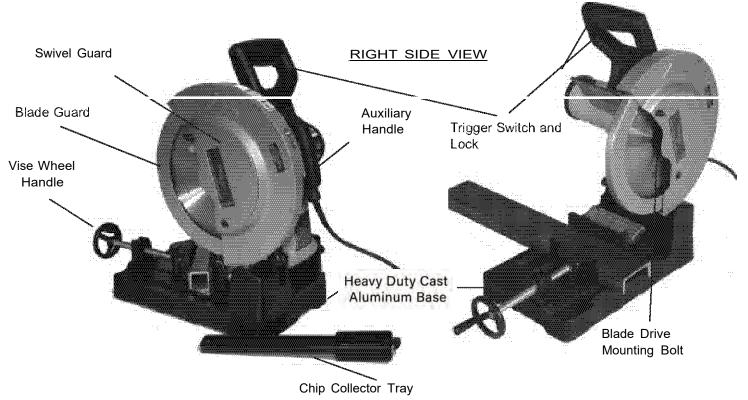
Support large panels to minimize the risk of blade pinching and KICKBACK. Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.

Do not use dull or damaged blade. Dull or improperly set blades produce narrow kerf causing excessive friction, blade binding and KICKBACK.

Blade depth and miter adjusting locking levers must be tight and secure before making a cut. If blade adjustment shifts while cutting, it may cause binding and KICKBACK.

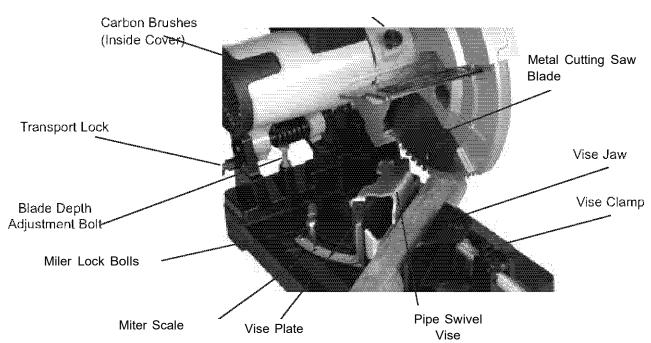
## FUNCTIONAL DRAWINGS

**Caution!** Always unplug saw before changing blades, servicing or adjusting saw.

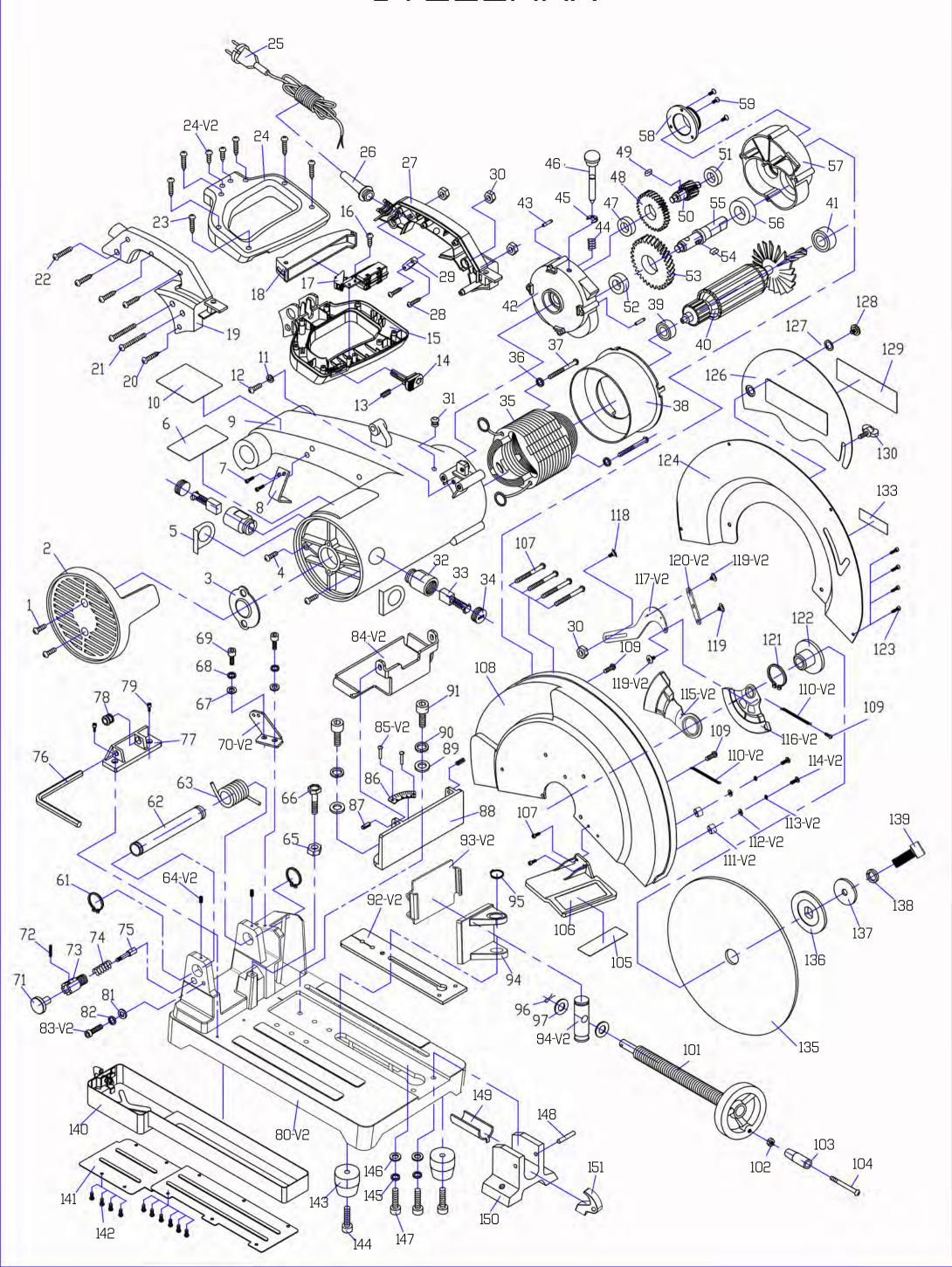


Blade Lock

#### **LEFT SIDE VIEW**



# STEELMAX



	STEELMAX S-14 PARTS LIST			STEELMAX S-14 PARTS LIST		
ITEM	DESCRIPTION	QTY	PART NUMBER	ITEM	DESCRIPTION	QTY
1	SCREW M5X15	2	SMS14-1	93	VISE CLAMP	1
3	END COVER BEARING CAP	1	SMS14-2 SMS14-3	94 95	VISE JAW RETAINING RING22	1
4	SCREW M5X10	2	SMS14-3 SMS14-4	96	PIN 3X26	1
5	PAPER PAD	2	SMS14-5	97	WASHER 12	2
6	NAME PLATE HEX SCREW M5X15	1 2	SMS14-6 SMS14-7	98	VISE JAW AXIS THREAD HANDLE	1
8	DEPTH LIMIT	1	SMS14-7 SMS14-8	100	NUT M6	1
9	MOTOR HOUSING	1	SMS14-9	101	WHEEL HANDLE	1
10	WARNING LABEL SPRING WASHER	1	SMS14-10 SMS14-11	102	SCREW M6X54 EYE PROTECTION WARNING LABEL	1
12	SCREW M5X10	1	SMS14-11 SMS14-4	103	EYE PROTECTION  EYE PROTECTION	1
13	SPRING	1	SMS14-13	105	SCREW M4X12	2
14	THUMB SWITHCH HANDLE-BOTTOM HALF	1	SMS14-14 SMS14-15	106	SAFETY COVER SCREW M5X90	1 4
16	SCREW ST4.2X12	1	SMS14-16	108	SCREW M5X90	1
17	MAIN SWITCH	1	SMS14-17	109	SCREWM4X10	2
18	SWITCH PADDLE  CARRY HANDLE-LEFT HALF	1	SMS14-18 SMS14-19	110	LOAD SPRING RUBBER RING	2 2
20	SCREW ST4.2X25	1	SMS14-19 SMS14-20	112	FLAT WASHER 4	2
21	SCREW M5X60	2	SMS14-21	113	SPRING WASHER 4	2
22	SCREW M5X30 SCREW ST4.2X19	9	SMS14-22 SMS14-23	114	SCREW M4X10 SMALL MOVABLE COVER	2
24	SCREW ST4.2X15	2	SMS14-28	116	BIGGER MOVABLE COVER	1
25	HANDLE-TOP HALF	1	SMS14-24	117	LEVER 3	1
26 27	POWER CORD CORD BOOT	1	SMS14-25 SMS14-26	118 119	SCREW 4 SCREW 1	3
28	CARRY HANDLE-RIGHT HALF	1	SMS14-27	120	LEVER 4	1
29	SCREW ST4.2X15	2	SMS14-28	121	RETAINING RING 42	1
30	CORD CLAMP CARRY HANDLE NUT M5	3	SMS14-29 SMS14-30	122	INNER FLANGE SCREW M4X16	1 4
32	RUBBER SLEEVE	1	SMS14-31	124	STEEL COVER	1
33	BRUSH HOLDER	2	SMS14-32	125	BLADE WARNING LABEL	1
34	CARBON BRUSH BRUSH CAP	2 2	SMS14-33 SMS14-34	126 127	SWIVEL GUARD WASHER	1
36	STATOR	1	SMS14-35	128	SCREW	1
37	SPRING WASHER 5	2	SMS14-36	129	LOGO LABEL	1
38	SCREW M5X80 WIND BAFFLE	1	SMS14-37 SMS14-38	130	WING NUT SAW BLADE	1
40	BEARING (6200)	1	SMS14-39	132	OUTTER FLANGE	1
41	ARMATURE	1	SMS14-40	133	WASHER	1
42	BEARING (6202) GEAR HOUSING-LEFT	1	SMS14-41 SMS14-42	134	WASHER 10 HEX BOLT M10X25	1
44	PIN A5X18	2	SMS14-43	136	CHIP BOX	1
45	SPRING	1	SMS14-44	137	CHIP BOX SEAT	1
46 47	RETAINING RING8 SPINDLE LOCK	1	SMS14-45 SMS14-46	138	SCREW M4X10 RUBBER FOOT	10
48	BEARING(6000)	1	SMS14-47	140	HEX BOLT M8X35	2
50	KEY 5X12	1	SMS14-49	141	FLAT WASHER8	2
51 52	OUTPUT SHAFT BEARING (6200)	1	SMS14-50 SMS14-51	142	SPRING WASHER 8 HEX BOLT M8X30	2 2
53	BEARING (6001)	1	SMS14-52	144	PIN	1
54	BIGGER GEAR	1	SMS14-53	145	CLAMP	1
55 56	KEY 6X12 OUTPUT SHAFT	1	SMS14-54 SMS14-55	146	SUPPORT PAD	1
57	BEARING (6204)	1	SMS14-56	11,		-
58	GEAR HOUSING-RIGHT	1	SMS14-57			
59 60	BEARING CAP SCREW M4X12	3	SMS14-58 SMS14-59			
61	RETAINING RING	2	SMS14-60			
62	ARM AXIS	1	SMS14-61			
63	LOAD SPRING SREW M5X13	2	SMS14-62 SMS14-64			
65	NUT M8	1	SMS14-65			
66	BOLT M8X50	1	SMS14-66			
67 68	WASHER 6 SPRING WASHER 6	2 2	SMS14-67 SMS14-68			
69	HEX SCREW M6X20	2	SMS14-69			
70	RETRACTING LEVEL SEAT	1	SMS14-70			
71 72	TRANSPORT LOCK PIN 3X18	1	SMS14-71 SMS14-72			
73	LOCK SEAT	1	SMS14-73			
74	SPRING	1	SMS14-74			
75 76	PIN HEX SCREW 8MM	1	SMS14-75 SMS14-76			
77	WRENCH SEAT	1	SMS14-70			
78	RETAINNING RUBBER	1	SMS14-78			
79 80	SCREW M5X15 SAW BASE	2	SMS14-1 SMS14-170			
80	WASHER 8	1	SMS14-170 SMS14-145			
82	SPRING WASHER 8	1	SMS14-146			
83	HEX BOLT M8X35	1	SMS14-144			
84 85	SWIVEL VISE RIVET 3X8	1 2	SMS14-88 SMS14-89			
86	MITER SCALE	1	SMS14-90			

87

88

89

90

91

92

MITER SCALE

PIN 6X14

VISE PLATE

WASHER

SPRING WASHER 10

HEX BOLT M10X25

INLAY

2

2

2

2

SMS14-90

SMS14-91

SMS14-92

SMS14-81

SMS14-94

SMS14-95

SMS14-171

PART

NUMBER SMS14-172 SMS14-96

SMS14-97

SMS14-98 SMS14-99

SMS14-100 SMS14-101

SMS14-84

SMS14-103 SMS14-104

SMS14-105 SMS14-106

SMS14-107

SMS14-108

SMS14-109 SMS14-110

SMS14-112 SMS14-113 SMS14-173 SMS14-174 SMS14-127 SMS14-112 SMS14-175

SMS14-176 SMS14-177 SMS14-122

SMS14-123

SMS14-182

SMS14-116 SMS14-183

SMS14-184 SMS14-126 SMS14-129

SMS14-130

SMS14-131

SMS14-132

SMS14-133 SMS14-134

SM-BLL-014 SMS14-136

SMS14-137

SMS14-82 SMS14-95 SMS14-140

SMS14-141

SMS14-112

SMS14-143 SMS14-144 SMS14-145 SMS14-146 SMS14-147

SMS14-148A SMS14-149A SMS14-150A SMS14-151

#### **ASSEMBLY**

Your Steelmax® brand saw is shipped complete and protected inside its shipping box.. Remove all contents from the box and inspect to ensure no damage was incurred during shipping. Your S14 Metal Cutter package should also include the following:

D E S C R I P T I O N	PART#Q	ΤΥ
OPERATOR'S MANUAL EARPLUGS (2)	STEELMAX80289	1
SAFETY GOGGLES	STEELMAX80290	1
8MM WRENCH	SMS14-76	1
14" STEEL BLADE (OPTIONAL)	SM-BLL-14	1

#### **GETTING STARTED**



ALWAYS DISCONNECT THE SAW FROM POWER SOURCE BEFORE MAKING ADJUSTMENTS.

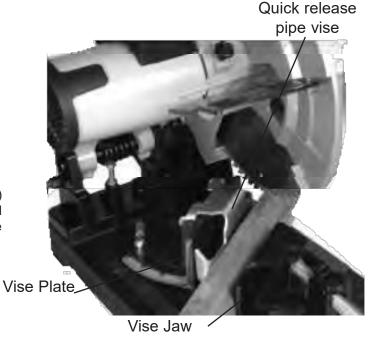
Refer to the "Functional Description" on page 8 and "Exploded View" drawing on page 10. If required, install an authorized metal cutting saw blade by first loosening wingnut (item 134) and rotating the swivel guard (item 130) up and out of the way. Then loosen the 8mm blade hex bolt and remove the outer blade flange and washer. Verify the correct seat of blade onto the inner blade flange lip. Always check blade installation for proper direction of rotation. From the front of saw, blade travels downward. Improper mounting will cause blade wobble and a possible hazardous condition. Reinstall blade bolt and flanges. Position Swivel guard and secure with thumb screw (item# 134).

#### ADJUSTING THE VISE

The vise has two positions for optimal cutting and a quick release swivel vise (item 88) for use with pipe, tub- ing and round profiles. Always use the vise in the most forward position that will completely cut through the material. Smaller profiles can lift out of the vise more easily when the vise is in the rear most position. Larger material requires the vise be moved to the rear position. To move the vise, proceed as follows:

Loosen the right side hex bolt and remove (item 95) using the supplied 8mm hex wrench. Loosen and remove the left side miter lock bolt (item 91). Move the vise to the desired position and reinstall.

The thread vise wheel handle and movable vise jaw should be positioned to tightly grip material to be cut.



#### WHAT YOU SHOULD KNOW BEFORE SAWING



NEVER START THE SAW WITH CUTTING EDGE OF SAW BLADE CONTACTING WORK SURFACE. DO NOT RETRACT BLADE GUARD (ITEM# 115) MANUALLY. GUARD RETRACTS AUTOMATICALLY.

ALWAYS CHECK BLADE DOWN-STOP BOLT AND LOCK NUT (ITEM # 65-66) FOR CORRECT POSITIONING BEFORE FIRST USE AND AFTER EACH BLADE CHANGE. FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY DUE TO BLADE CONTACT WITH SAW BASE OR CHIP BOX.

1. After installation of saw blade or before first use, adjust down-stop bolt so that blade does not contact chip tray bottom when blade is in the full down position.

#### WHAT YOU SHOULD KNOW WHILE SAWING

- 1. Select the correct saw blade appropriate to the material being cut. (mild steel, thin steel, stainless steel or aluminum)
- 2. The material surface should be clean and level, free from rust, dirt, scale, and other debris.
- 3. Material may become heat treated if flame cut. Always avoid cutting near these areas whenever possible.
- 4. Adjust the vise plate to the desired miter angle by loosening the left and right Miter Lever Lock bolts (item# 91) at the left of the vise plate and the right Miter Lock (item 95) at the right side of vise. Refer to "Exploded View".
- 5. When cutting smaller profiles, vise plate may be moved forward to aid in cutting quality and to minimize pull-out from the vise. Miter can be set by observing index marks printed on vise bracket.
- 6. Connect machine to power source.
- 7. Firmly grasp guide handle and trigger handle switch (item# 14, 15 and 24).
- 8. Position material in the saw vise and align cutting line with blade. Adjust the front and rear vise plates as necessary to firmly hold material in the desired position.
- 9. When ready, start saw motor by activating trigger switch (item# 17).
- 10. Slowly approach material edge and gently apply pressure until saw blade has established a cutting groove in the material.
- 11. Apply smooth, constant pressure without over-loading saw motor.



IF SAW MOTOR SHOULD STALL OR STOP BEFORE A COMPLETE CUT IS MADE ALWAYS REMOVE BLADE FROM MATERIAL BEFORE ATTEMPTING TO RESTART MOTOR. FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY.

#### AFTER COMPLETING THE CUT

- 1. After the cut, release trigger switch to the "OFF" position.
- 2. When saw motor completely stops, clear both drop piece and material from vise.

## **OPERATION** (continued)

#### FOR BEST PERFORMANCE, EMPTY THE CHIP COLLECTOR BOX OFTEN.

#### EMPTYING THE CHIP COLLECTOR BOX

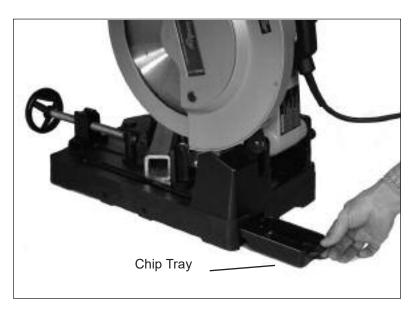


ALWAYS DISCONNECT THE SAW FROM POWER SOURCE BEFORE CHANGING BLADES, CLEARING CHIPS OR MAKING ADJUSTMENTS.

- 1. Turn the Chip Collector Box retaining thumbscrew (see below).
- 2. Remove chip collector box from the back of saw.
- 3. Empty chip collector completely. Clean all debris from saw body.
- 4. Install chip collector box in saw and fasten securely by tightening thumbscrews.

## **MARNING!**

FAILURE TO INSTALL COLLECTOR BOX TOTALLY AND SECURE MAY RESULT IN UNCONTROLLED DISCHARGE OF CHIPS AND OPERATOR INJURY. ALWAYS VERIFY PROPER INSTALLATION OF CHIP BOX AND CHECK FREQUENTLY.



## ↑ WARNING!

MOTOR DOWN-STOP BOLT AFFECTS HOW FAR BLADE TRAVELS INTO THE CHIP COLLECTOR BOX. AN IMPROPERLY ADJUSTED DOWN-STOP CAN HIT THE BOTTOM OF BOX, CAUSING AN EJECTION HAZARD. ALWAYS CHECK DOWN-STOP ADJUSTMENT AFTER REPLACING SAW BLADES OR SERVICING MACHINE.

#### **MAINTENANCE**

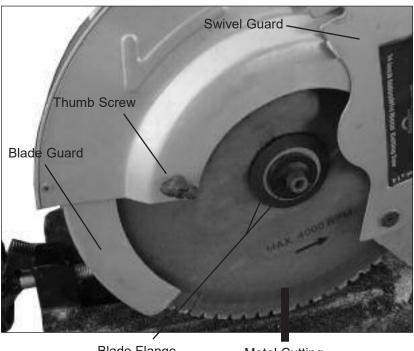


ALWAYS DISCONNECT THE SAW FROM POWER SOURCE BEFORE CHANGING BLADES, CLEARING CHIPS OR MAKING ADJUSTMENTS.

#### **CHANGING SAW BLADES**

Refer to the diagram to the right.

- 1. Place saw on a level, secure surface.
- 2. Move the swivel guard (item #130) by loosening the thumb screw (item #134) and rotating it to expose the blade retaining bolt.
- 3. Engage spindle lock (item# 46).
- Using supplied hex wrench, loosen and remove the blade drive mounting bolt, washer and outer blade drive flange (items# 136-139).
- 5. Move the blade guard up and out of the way (item # 115).
- 6. Remove saw blade. (item 135)
- 7. Thoroughly clean inner and outer blade drive flanges and blade mounting surface before installing new blade.
- 8. Verify blade rotation is correct.
- 9. Reverse process to install new blade.



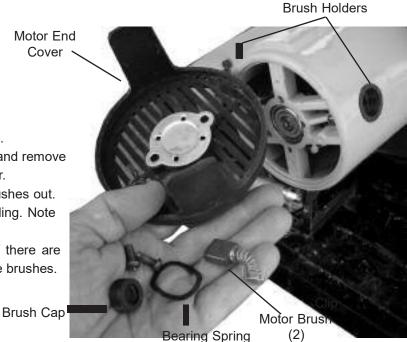
Blade Flange and Bolt

Metal Cutting Saw Blade

#### **REPLACING MOTOR BRUSHES**

Refer to the diagram to the right.

- 1. Place saw on level, secure surface.
- 2. Tip saw on its right side (blade side down).
- 3. Remove two (2) motor end cover screws and remove the cover and motor bearing spring washer.
- 4. Remove the two brush caps and slide brushes out. Caution! Do not rotate brushes if re-installing. Note exact position when re-installing brushes.
- 3. If the carbon rod is less than 6mm or if there are signs of burning or other wear, replace the brushes.
- 4. Reverse the process to re-assemble saw.



### TROUBLESHOOTING CHECKLIST

#### S14 14" METAL CUTTER



ALWAYS DISCONNECT THE SAW FROM POWER SOURCE BEFORE TROUBLESHOOTING.

#### 1. Machine will not turn on

- ·Inspect power cord for damage. Check continuity. Replace if needed. (PN SMS14-25)
- ·Inspect brushes for excessive wear. Replace if needed. (PN SMS14-33) (2)
- ·Do not exceed 30 minutes run time without cool down of saw.
- ·Check trigger switch for continuity. Replace if needed. (PN SMS14-17)

#### 2. Losing Power

- ·Inspect brushes and replace if needed. (PN SMS14-33) (2)
- ·Extension cord too long. Limit cord length to 50' or less.
- ·Extension cord too thin. Use 12 AWG or larger.

#### 3. Blade Guard Sticks

- ·Remove guard and remove any foreign material.
- Guard must move freely. Use light grease on mating contact surfaces to aid in movement.
- ·Check guard return spring for sufficient tension. Replace if spring is weak. (PN SMS14-113)
- ·Check guard for distortion. Replace if distorted or damaged. (PN SMS14-115)

#### 4. Blade Spins on Spindle

- •Check for proper tightness and installation. Inspect inner blade flange (PN SMS14-117) and outer blade flange (PN SMS14-136) for wear or damage. Replace if wear is excessive.
- ·Check flange mating surfaces for flatness. Replace if excessive distortion exists.
- ·Check to ensure flat washer is present between bolt head and outer blade drive flange.

#### 5. Low Blade Life/Teeth Chipping

·Wrong blade for the type of material.

SM-BLL-14 for mild steel up to 1" solid.

SM-BLL-14-AL for aluminum up to 1" solid.

SM-BLL-14-SS for stainless steel up to 1/2" solid.

SM-BLL-14-TS for thin steel up to 1/4" solid.

- ·Aggressive contact with blade into material. The blade must be allowed to do the work.
- •Too much vibration due to insufficient clamping, worn or bent blade, or worn parts (see "Saw Vibrates" below).

#### 6. Saw Vibrates

- ·Check blade for tightness.
- ·Inspect inner blade flange (PN SMS14-117) and outer blade drive flange (PN SMS14-136) for wear or damage. Replace if needed.
- ·Check to ensure work is properly clamped. Both primary and cut-off piece can cause vibration.
- ·Check miter lock for tightness. (PN SMS14-91)
- ·Check blade teeth for missing carbide, bends or cracks.

## **SPECIFICATIONS**

## Model S14

DIMENSIONS AND SPECIFICATIONS				
Height	340mm (13.4")			
Width	340mm (13.4")			
Length	466mm (18.4")			
Weight	58.5lbs 26.8 kg			
Motor	120V (14.6 A) or 230V (7.6 A) - 1750W			
	50~60 Hz / 1450 RPM			
Blade Arbor	25.4mm (1.0")			
Blade Diameter	355mm (14.0")			
Depth of Cut/Pipe or Angle (maximum)	82.5mm (3.25")			
Depth of Cut/Plate or Bar (maximum)	13mm Mild Steel (1")			
	13mm Aluminum (1")			
	8mm Stainless Steel (1/2")			

## **ACCESSORIES**

Saw Blades				
Application	Part #			
For cutting mild steel to 1"	SM-BLL-014			
For cutting thin steel to 1/4"	SM-BLL-14-TS			
For cutting aluminum to 1"	SM-BLL-14-AL			
For cutting stainless steel to 1/2"	SM-BLL-14-SS			

#### Steelmax Tools LLC.

Phone 303-690-9146 Fax 303-690-9172

## PRODUCT REGISTRATION AND WARRANTY CARD

Thank you for purchasing a Steelmax® product! Please fill out this form and return promptly so that we may register your purchase.

/lodel#	Serial # _		D	ate of Purchase
	121 Southpointe D Phone 303-69	max Tools LLC Drive, Bridgeville PA, 1501 00-9146 Fax 303-690-9172 n e-mail: sales@steeln	2	
	Please detach and retain	n this top portion for your record	ds.	Fax 303-690-9172
Mr.  Mrs.  Ms.  Ms.	Miss □			
First Name	Last Na	me		
Company Name				
Street Address				
City	State		Zip	
Phone Number	Fax Nu	mber	E-mail Address	
May we contact you by: Mail	□ Fax □ E-mail Address □			
Model	Serial#		Date of Purchas	e
Where did you purchase your	Steelmax product from			
What are the top two reasons th	nat influenced your purchase of this Steelma	x brand product?		
Reputation □ Safety features □ Recommendation □	Value for price □ Magazine ad □ Reputation of retailer □	Web site □ Availability □		
Style/Appearance □	Quality/Durability □	Other □		
In your opinion, what is the BES	ST industry publication you regularly read?			
Is this: A first time purchase?	☐ An additional unit? ☐ A replacemen	t unit? □ For which brand?		

Thank You! We value your answers and input.  $\Box$  Yes, put me on the Steelmax email list for special offers.

 .ening.	Please tape here before ma	 	
			First Class Postage Required
		_	

Steelmax Tools LLC 121 Southpointe Drive, Bridgeville PA, 15017

ATTENTION: WARRANTY DEPARTMENT