MODEL S-7 XP

(Part Number: SM-S-7 XP)

7¼" METAL CUTTING CIRCULAR SAW

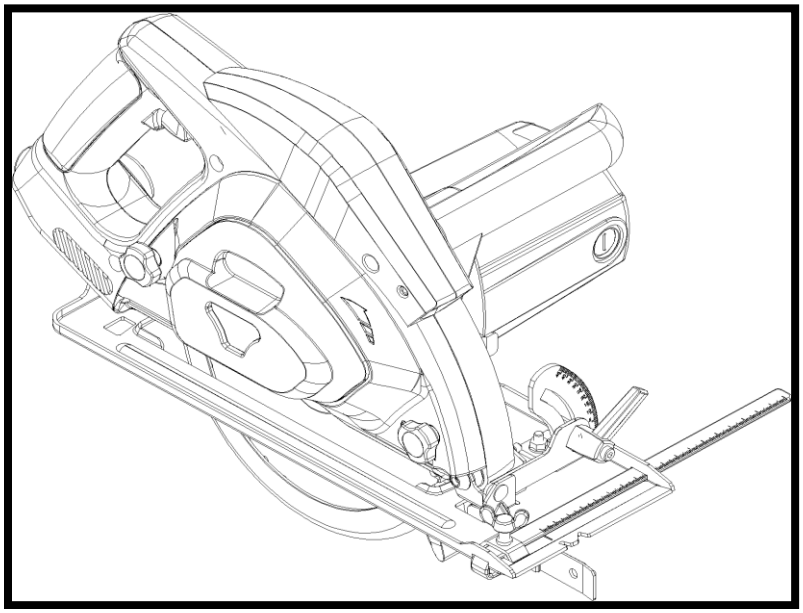
OPERATOR'S MANUAL

TO REDUCE THE RISK OF INJURY, READ AND THOROUGHLY UNDERSTAND THIS OPERATOR'S MANUAL.

Always Wear Eye and Ear Protection

Never Place Hands Near Cutting Area

Line Voltage Present



WWW.STEELMAX.COM

Steelmax S-7 XP Portable Metal Cutting Circular Saw

Congratulations on your purchase of a Steelmax® portable metal cutting saw. Please register your product on our web site at www.steelmax.com/product-registration. 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.

CONTENTS

STEELMAX LIMITED WARRANTY

Within twelve (12) months from the original date of purchase Steelmax will repair or replace any machine tool found to be defective in materials or workmanship, provided the product working registration card has been returned to Steelmax within thirty (30) days of the purchase date. This warranty is void if the tool being returned has been used beyond the recommendations in this Operator's Manual or if the machine 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 altered, changed, or modified in any way, or subjected to use beyond recommended capacities and specifications. Electrical components are subject to respective 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. Steelmax reserves the right to optionally repair or replace the machine with the same or equivalent item. There is no warranty for any consumable items, including, without limitation, saw blades, annular cutters, abrasive belts and cutting inserts. All machines must have the consumables used when the machine failed installed to determine if the machine has been overused or if it falls under Steelmax's warranty replacement program for defects in material and workmanship. In no event shall Steelmax be liable for loss or damage resulting directly or indirectly from the use of the 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 AND SPECIFICATIONS WITHOUT PRIOR NOTICE. IN ADDITION, STEELMAX RESERVES THE RIGHT TO MODIFY THESE TERMS AND CONDITIONS WITHOUT PRIOR NOTICE.

Intended Use and General Safety Guidelines

The Steelmax S-7 XP Metal Cutting Saw is designed to rapidly cut mild steel and other similar materials without heating either the saw blade or the material being cut. The S-7 XP can easily cut mild steel sheet metal up to ¼" (6 mm) thick.

WARNING! To reduce the risk of injury, read and thoroughly understand this Operator's Manual.

WARNING! Read all safety warnings and all instructions thoroughly and carefully. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

SAVE THIS OPERATOR'S MANUAL FOR FUTURE REFERENCE

Work Area Safety

- Keep work area clean and well lit. **Cluttered or 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 children and bystanders away while operating a power tool. **Distractions can cause you to lose control of the saw or the material being cut.**

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 adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. **If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.**
- 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 the 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.**
- **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 line voltage to drop, resulting in loss of power and overheating. The recommended minimum is a 14-gauge extension cord not exceeding 50 feet.**

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. 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.**
- Use safety equipment. Always wear eye and ear protection. **Dust mask, non-skid safety shoes and hard hat should be used as appropriate for conditions.**

Tool Use and Care

- Use clamps or other practical way to secure and support the workpiece to a stable platform. **Holding the work by hand or against your body is unstable and may lead to loss of control**.
- Do not force tool. Use the correct tool for your application. **The correct tool will do the job better and more safely**.
- 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 and will void the warranty.**

Specific Safety Rules and Symbols

- Only use Steelmax® saw blades. Unauthorized blades may be dangerous!
- Keep saw blades securely fastened. Check blade flanges for debris before installing a new blade.
- Do not use dull or broken blades. Check blades often for condition and wear.
- Check chip collector cover for proper fit to minimize the risk of flying debris.
- Beware of ejecting chips. They become HOT during cutting.
- Always make provisions for safe handling of excess material.
- Keep bottom of base plate free from dirt and other debris.

Additional copies of this manual are available on our web site at: www.steelmax.com or by contacting us directly at (303) 690-9146

- 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 quickly and automatically. Hold saw with both hands. Support and clamp work. Wear eye and ear 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 saw to jump backwards. (See "Causes and Prevention of Kickback.")
- Do not reach underneath the work. The guard cannot 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 automatically. 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, in 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.
- Always observe that the lower guard is covering the blade before placing saw down on bench or floor. An unprotected, coasting blade will cause the saw to walk backwards, cutting

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 or across your leg. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will also make exposed metal parts of the tool "live" and shock the operator.
- When ripping always use a rip fence or straight edge guide. This improves the accuracy of cut and reduces the chance for blade binding.
- Always use blades with correct size and shape (diamond vs. round) 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.

LASER ALIGNMENT GUIDE PRECAUTIONS

⚠ **DANGER! LASER RADIATION. AVOID DIRECT EYE EXPOSURE. DO NOT STARE INTO THE LASER LIGHT SOURCE.**

Never aim light at another person or object other than the workpiece. Laser light can damage your eyes.

WARNING!

DO NOT USE TINTED GLASSES TO ENHANCE THE LASER LIGHT. Tinted glasses will reduce overall vision for the application and interfere with the normal operation of the tool.

WARNING!

NEVER AIM THE BEAM AT A WORKPIECE WITH A REFLECTIVE SURFACE. Highly polished or similar reflective surfaces are not recommended for laser use where eye exposure is possible due to reflection. These surfaces could reflect the beam back toward the operator or bystanders. **ALWAYS CONSIDER THE PATH OF POSSIBLE BEAM DEFELCTION.**

CAUSES AND PREVENTION OF KICKBACK

Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece 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 unit rapidly back toward the operator. 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 blade to climb out of the kerf and the saw to 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 and position your body and arm to allow you to resist KICKBACK forces. 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 saw from the work or pull the saw 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.

Never attempt to cut with a dull or damaged blade. Dull or improperly set blades produce a narrow kerf which leads to excessive friction, blade binding and KICKBACK.

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

Lower Guard Safety Instructions

- Check lower guard for proper closing before each use. Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open

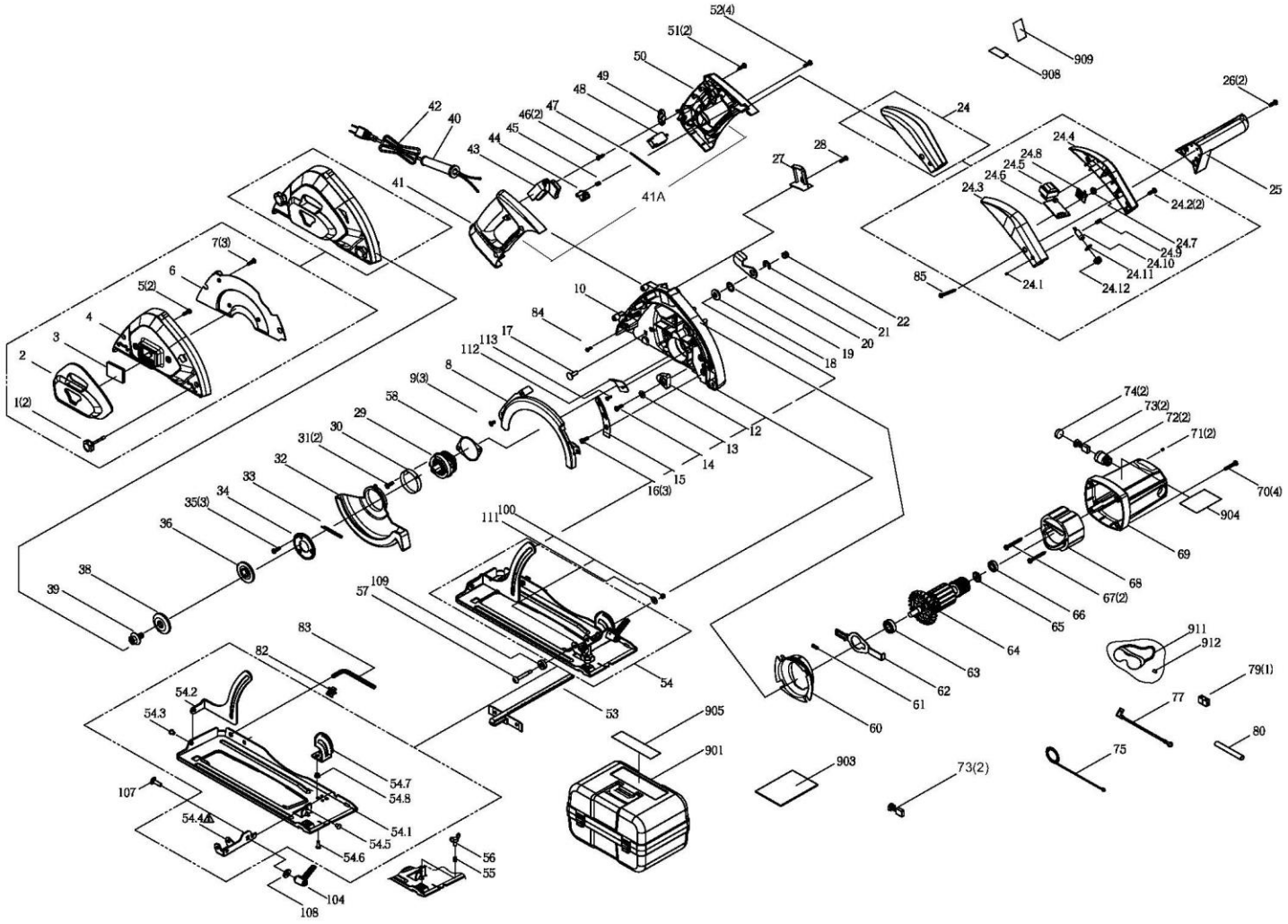
position. If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.

- Check the operation 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 build-up of debris.
- Lower guard manually only for special cuts such as "plunge cuts" and "compound cuts." Raise lower guard by retracting handle. As soon blade enters the material, release the lower guard. For all other sawing, the lower guard should operate automatically.
- Always observe that the lower guard is covering the blade before placing saw down on bench or floor. An unprotected, spinning blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

Additional Safety Instructions

- Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
- Keep your body positioned to either side of the blade, but not in line with the saw blade. KICKBACK could cause the saw to jump backwards (see Causes and Operator Prevention of Kickback and KICKBACK).
- Make sure nothing interferes with the movement of the lower blade guard.
- Make sure the saw is clean before use.
- Stop using this saw and have it properly serviced if any unusual noise or abnormal operation occurs.
- Be sure all components are mounted properly and securely before using tool.
- Wait until the motor has reached full speed before starting a cut.
- Keep handles dry, clean and free of oil and grease. Hold the tool firmly with both hands when in use.
- Always be alert, especially during repetitive, monotonous operations. Always be sure of position of your hands relative to the blade.
- Stay clear of end pieces that may fall after cutting off. They may be sharp and/or heavy. Serious personal injury may result.
- Replace or repair damaged cords. Make sure your extension cord is in good condition. Use only 3-wire (minimum 14 gauge) extension cords that have 3-prong grounding-type plugs and 3-pole receptacles that accept the tool's plug.

S-7 XP Parts Diagram



Steelmax S-7 XP Parts List

Ref. No.	Steelmax Part Number	Description	Quantity	Ref. No.	Steelmax Part Number	Description	Quantity
001	SMS7XP-1	Lock Bolt	2	**048**	SMS7XP-48	Overload Protection	1
002	SMS7XP-2	Outer Cover	1	**049**	SMS7XP-49	Cord Clamp	1
003	SMS7XP-3	Glass	1	**051**	SMS7XP-51	Self Tapping Screw	2
004	SMS7XP-4	Chip Shield	1	**052**	SMS7XP-52	Panhead Screw + Washer	4
005	SMS7XP-5	Self Tapping Screw	2	**053**	SMS7XP-53	Guide Ruler	1
006	SMS7XP-6	Guard	1	**054**	SMS7XP-54	Base Plate Set	1
007	SMS7XP-7	Flathead Screw	3	054.1	SMS7XP-54.1	Base Plate	1
008	SMS7XP-8	Table Insert	1	054.2	SMS7XP-54.2	Height Adjustment Bracket	1
009	SMS7XP-9	Panhead Screw + Washer	3	054.3	SMS7XP-54.3	Rivet	1
010	SMS7XP-10	Blade Housing	1	054.4	SMS7XP-54.4	Locker Support	1
012	SMS7XP-12	Cushion	1	054.5	SMS7XP-54.5	Rivet	1
013	SMS7XP-13	Flat Washwer	1	054.6	SMS7XP-54.6	Flathead Screw	2
014	SMS7XP-14	Panhead Screw + Washer	1	054.7	SMS7XP-54.7	Bevel Trunnion	1
015	SMS7XP-15	Left Plate	1	054.8	SMS7XP-54.8	Special Nut	2
016	SMS7XP-16	Flathead Screw	3	**055**	SMS7XP-55	Spring Shaft Lock Button	1
017	SMS7XP-17	Carriage Screw	1	**056**	SMS7XP-56	Wing Screw	1
018	SMS7XP-18	Flat Washer	1	**057**	SMS7XP-57	Socket Screw	1
019	SMS7XP-19	Wave Washer	1	**058**	SMS7XP-58	Oil Seal	1
020	SMS7XP-20	Secure Lever	1	**060**	SMS7XP-60	Baffle	1
021	SMS7XP-21	E-Ring (ETW)	1	**061**	SMS7XP-61	Spring	1
022	SMS7XP-22	Special Screw	1	**062**	SMS7XP-62	Stop Lever	1
024	SMS7XP-24	Complete Laser Set	1	**063**	SMS7XP-63	Ball Bearing	1
024.1	SMS7XP-24.1	Set Screw	1	**064**	SMS7XP-64	Armature Assembly	1
024.2	SMS7XP-24.2	Self Tapping Screw	2	**065**	SMS7XP-65	Insulation Ring	1
024.3	SMS7XP-24.3	Laser Cover - right	1	**066**	SMS7XP-66	Ball Bearing	1
024.4	SMS7XP-24.4	Laser Cover - left	1	**067**	SMS7XP-67	Panhead Self-tap Screw/washer	2
024.5	SMS7XP-24.5	Transformer	1	**068**	SMS7XP-68	Field Assembly	1
024.6	SMS7XP-24.6	AC to DC Transformer Modules	1	**069**	SMS7XP-69	Motor Housing	1
024.7	SMS7XP-24.7	Laser Button	1	**070**	SMS7XP-70	M5 Panhead Screw + Washer	4
024.8	SMS7XP-24.8	Button Switch Assembly	1	**071**	SMS7XP-71	Set Screw	2
024.9	SMS7XP-24.9	Spring	1	**072**	SMS7XP-72	Brush Holder	2
024.10	SMS7XP-24.10	Laser	1	**073**	SMS7XP-73	Carbon Brush	2
024.11	SMS7XP-24.11	O-Ring	1	**074**	SMS7XP-74	Carbon Brush Cap	2
024.12	SMS7XP-24.12	Laser Fixed Ring	1	**075**	SMS7XP-75	Jumper Wire A	1
025	SMS7XP-25	Grasp Handle	1	**079**	SMS7XP-79	Terminal Block	1
026	SMS7XP-26	Panhead Screw + Washer	2	**080**	SMS7XP-80	Extruded Tubing	1
027	SMS7XP-27	Cover	1	**082**	SMS7XP-82	Wrench Holder	1
028	SMS7XP-28	Cross Recessed Truss Head Screw	1	**083**	SMS7XP-83	6mm Hex Wrench	1
029	SMS7XP-29	Jack Shaft Assembly	1	**084**	SMS7XP-84	Panhead Screw	1
030	SMS7XP-30	Steel Plate	1	**085**	SMS7XP-85	Self Tapping Screw	1
031	SMS7XP-31	Flathead Screw	2	**104**	SMS7XP-104	Lock Lever	1
032	SMS7XP-32	Safety Cover	1	**107**	SMS7XP-107	Carriage Screw	1
033	SMS7XP-33	Return Spring	1	**108**	SMS7XP-108	Flat Washer	1
034	SMS7XP-34	Front Plate	1	**100**	SMS7XP-100	Nylon Nut	1
035	SMS7XP-35	Flathead Screw	3	**109**	SMS7XP-109	Spacer Ring	1
036	SMS7XP-36	Inside Blade Flange	1	**111**	SMS7XP-111	Flat Washer	1
038	SMS7XP-38	Outer Flange	1	**112**	SMS7XP-112	Right Plate	1
039	SMS7XP-39	Arbor Bolt (Blade Bolt)	1	**113**	SMS7XP-113	Panhead Screw	1
040	SMS7XP-40	Cord Guard	1	**901**	SMS7XP-901	Plastic Carry Case	1
041A	SMS7XP-041A	Complete Handle Set (Rear right + left)	1	**902**	SMS7XP-902	Carton	1
041	SMS7XP-041	Rear Right Handle		**903**	SMS7XP-903	Operator's Manual	1
050	SMS7XP-050	Rear Left Handle		**904**	SMS7XP-904	Motor Specification/Serial # Label	1
042	SMS7XP-42	Power Cord	1	**905**	SMS7XP-905	Plastic Carry Case Label	1
043	SMS7XP-43	Switch	1	**908**	SMS7XP-908	Laser Class II Warning Label	1
044	SMS7XP-44	Lock Button	1	**909**	SMS7XP-909	Laser Radiation Warning Label	1
045	SMS7XP-45	Spring	1	**910**	SMS7XP-910	Name Plate	1
046	SMS7XP-46	Self Tapping Screw	2	**911**	SMS7XP-911	Safety Goggles	1
047	SMS7XP-47	Jumper Wire	1	**912**	SMS7XP-912	Ear Plug	1

ASSEMBLY AND ADJUSTMENT INSTRUCTIONS

Your Steelmax® S-7 XP saw is shipped complete and protected inside a reusable carrying case. Remove all contents from the case and inspect to ensure no damage occurred during shipping.

DESCRIPTION	PART NUMBER	QUANTITY
SM-7 XP METAL CUTTING SAW	SM-S-7 XP	1
7-1/4" TCT SAW BLADE FOR MILD STEEL	SM-BL-07	1
OPERATOR'S MANUAL	N/A	1
EARPLUGS (2)	SMS7XP-912	1
SAFETY GOGGLES	SMS7XP-911	1
6MM ALLEN WRENCH	SMS7XP-83	1
EDGE GUIDE RULER	SMS7XP-53	1
CARRYING CASE	SMS7XP-901	1
REPLACEMENT CARBON BRUSHES	SMS7XP-73	2

WARNING:

For your own safety, never connect the plug to a power source outlet until all assembly steps are complete and you have read and understood the safety and operating instructions. The safety cover is attached to the saw for your protection. Should the safety cover become damaged, do not use the saw until the damaged cover has been replaced. If the safety cover becomes dirty, or chips adhere to it, clean the safety cover carefully with a damp cloth.

Installing a New Saw Blade

WARNING: To prevent an accident or personal injury, always turn off the trigger switch and disconnect the power plug from the receptacle before removing or installing a blade. Only use Steelmax® blades designed for metal cutting saws. DO NOT USE ABRASIVE WHEELS OR WOOD SAW BLADES ON YOUR METAL CUTTING SAW. USE ONLY 7" OR 7 ¼" METAL CUTTING SAW BLADES. USE OF ABRASIVE WHEELS, WOOD SAW BLADES OR SMALLER OR LARGER SAW BLADES WILL VOID YOUR PRODUCT WARRANTY AND MAY RESULT IN PERSONAL INJURY.

Check that the blade to be used is flat, sharp and free of damage or defects.

1. **Change blade**: Loosen the lock bolt (A) and remove chip shield assembly. Fig.1

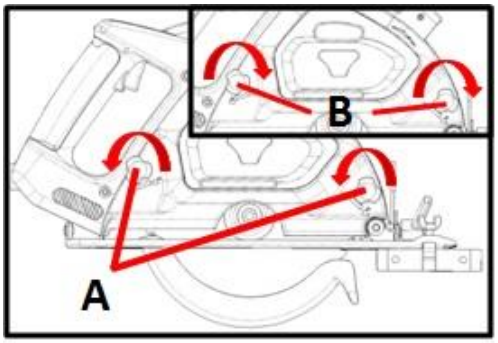


Fig.1

2. Remove included 6 mm Allen wrench (A). Fig.2

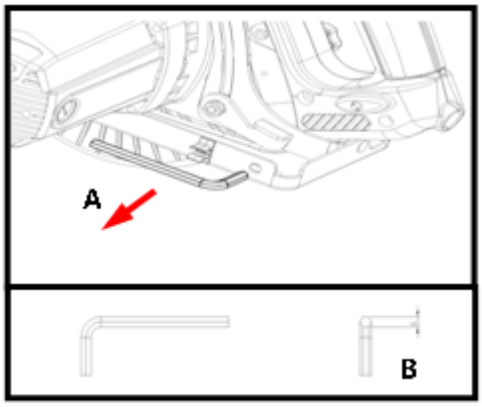


Fig.2

3. Hold down the shaft lock lever (A) to secure the motor shaft. Use the Allen wrench to loosen the shaft screw (B) (counter-clockwise) and remove the shaft screw and flange. Fig.3

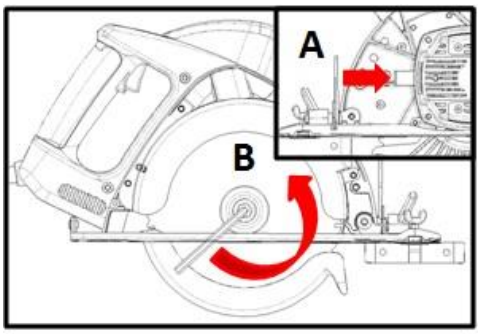


Fig.3

4. Open the blade guard (A) and remove old blade. Align new blade with inner flange and install the new blade and check for proper blade orientation (B). Fig.4

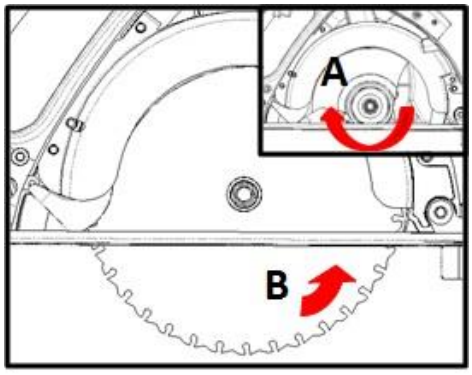


Fig.4

5. Install the outer flange on the blade spindle. Use the the shaft lock lever (A) to secure the motor shaft while tightening the shaft screw (B). Fig.5

   Assemble chip shield assembly with blade housing and re-tighten lock bolts ((B), Fig.1

   Be sure to repalce Allen wrench for future use.

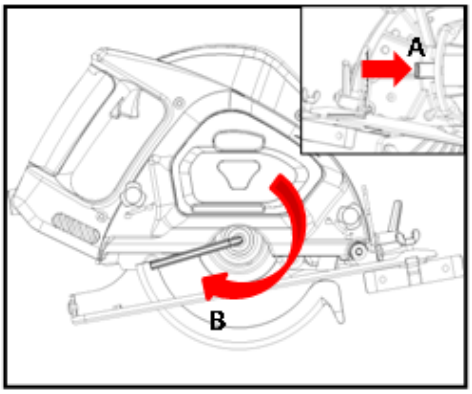


Fig.5

Bevel Angle Adjustment

1. Loosen the handle (A), adjust the angle plate to the desired bevel angle (0˚-45˚) (B) and re-tighten the handle (A). Fig.6

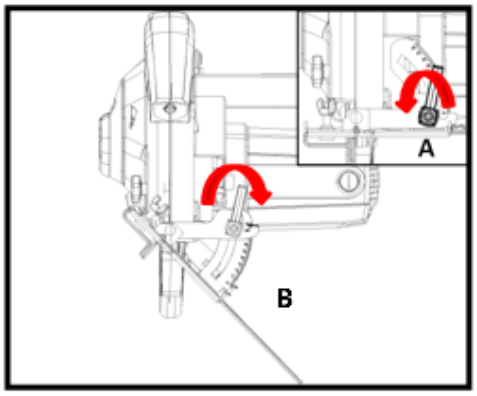


Fig.6

Laser Guide Use and Adjustment

1. Plug power cord into appropriate power supply and turn on the laser on/off switch. Laser (B) will illuminate. Fig.7
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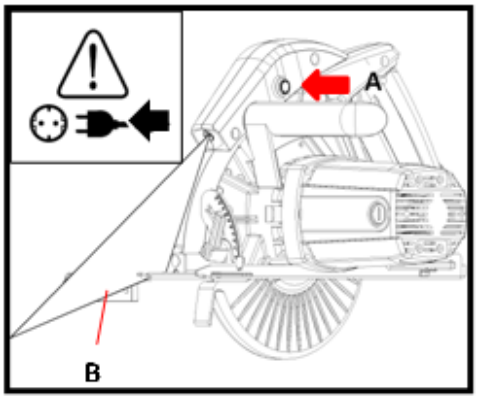

Fig.7

2. Laser guide automatically follows bevel angle. Fig.8.

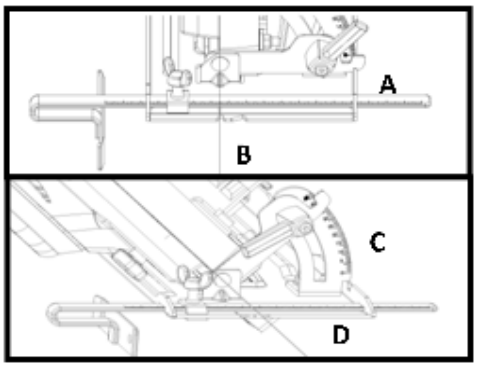

Fig.8

Aligning the Laser Guide Line

DANGER: Laser radiation. Avoid direct eye contact with light source.

WARNING: Use of controls or adjustments or performance of procedures other than those specified herein may resuit in hazardous radiation exposure. When adjusting the laser guide, make sure the saw trigger is not inadvertently engaged. Serious injury could result. Fig.9

1. Adjusting the laser: Use an M2 Allen wrench to tighten or loosen the laser adjustment screw (A) to adjust the laser beam width. Fig.10

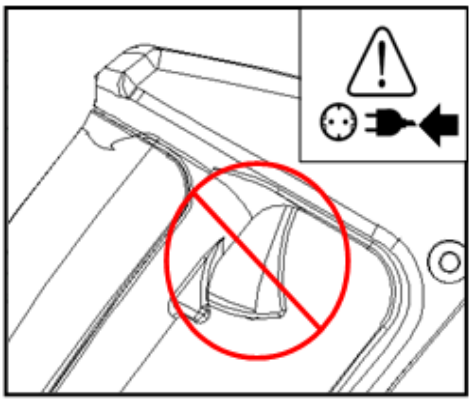

Fig.9

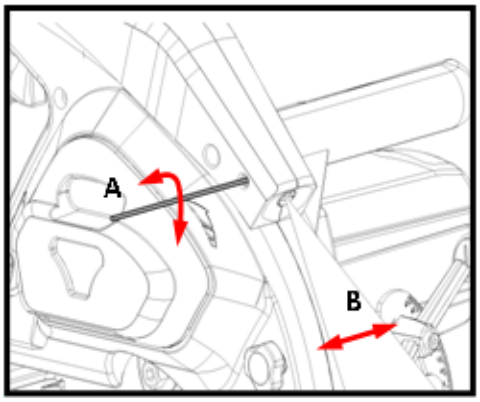

Fig. 10

2. Use a small flat blade screw driver to align the laser beam with the actual cut line. Fig.11.

3. Adjust the laser and return zero position by adjusting the guide ruler (A) and back base to zero position (B). The laser indication needs to close U shape gap (C). Fig.12.

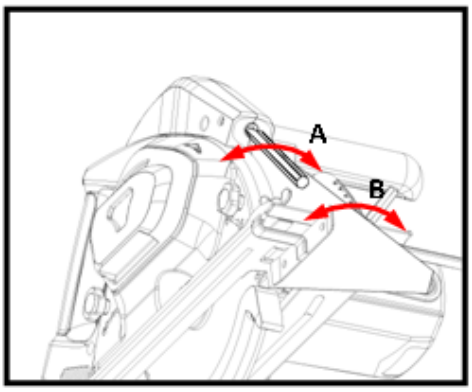

Fig.11

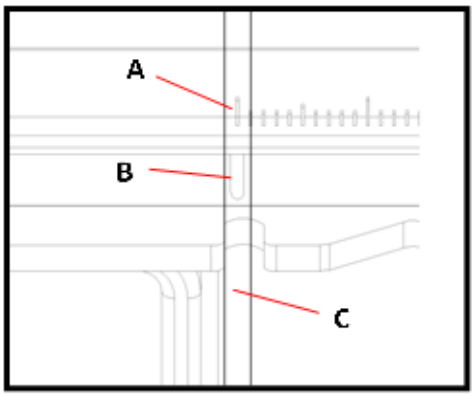

Fig.12

Cutting Depth Adjsutment

1. Pull up on the Lock Lever (A) to loosen the base plate. Fig.13

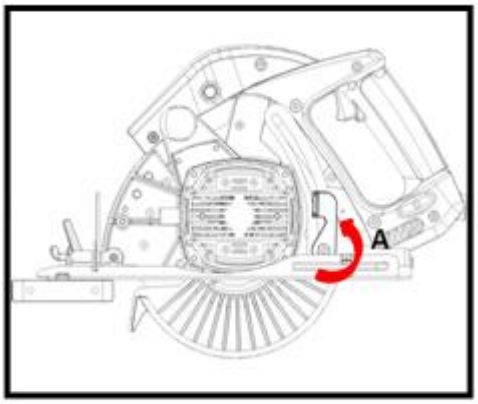

Fig.13

2. Lift the back of the saw away from the baseplate until the desired depth of cut is achieved.

3. Re-tighten the Lock Lever (A) securely after the depth adjustment is made. Fig. 14

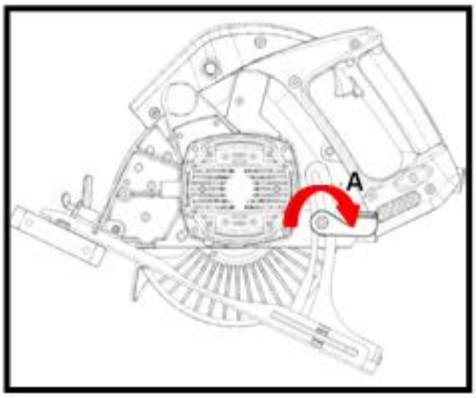

Fig.14

Saw Trigger Switch Operation

Press the stop button (A) and pull the Trigger Switch (B) at the same time to start saw motor.

Saw stops automatically when Trigger Switch is released. Fig.15

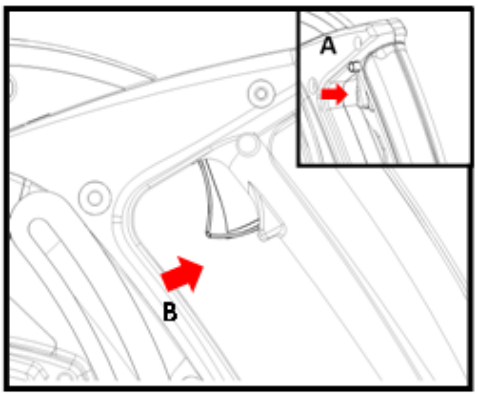

Fig.15

Proper Saw Operation

Use right hand to to hold the rear handle (A) and left hand (B) to hold the forward handle. Once the blade reaches full speed, steadily push the saw into the material to be cut. Keep moving smoothly until the cut is finished. Fig.16

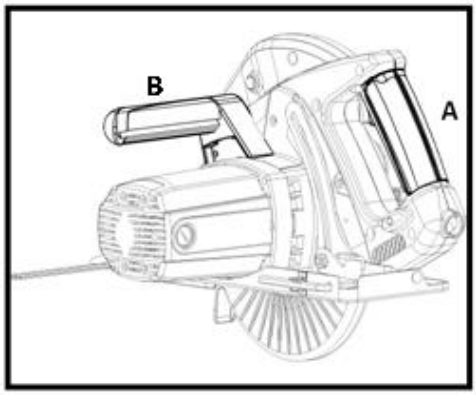

Fig. 16

Saw Guide Ruler

The guide ruler is used to make straight cuts along the edge of a plate.

The guide ruler (A) is used on the right of the blade. Fig.17

Attach the guide ruler in the mounting slots at the front of the baseplate and tighten the wing nut to secure it in place
at the desired cut width.

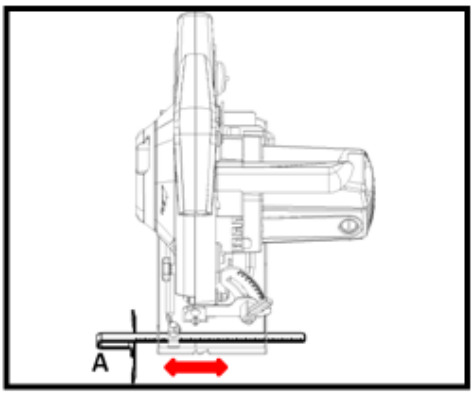

Fig. 17

Sighting Notch

The sighting notch (A) near the front of the baseplate provides guidance during free-hand cuts. When performing cuts, the cutting line for the saw blade can be observed via a triangle shaped sighting notch at the front of the base plate. Align the cutting line on the workpiece with the triangle shaped sighting notch at the front of the Base Plate. Fig. 18

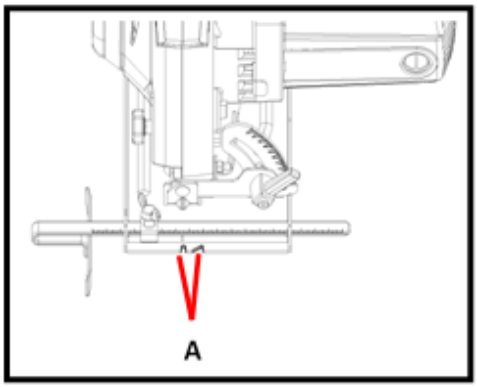

Fig. 18

Chip Removal

Chip accumulation can be obsrved throgh the clear viewing window on the side of the saw. When the chip collection area reaches half-full, remove the guard by loosening the two bolts. Empty the guard of its contents and re-install. Fig. 19, 20

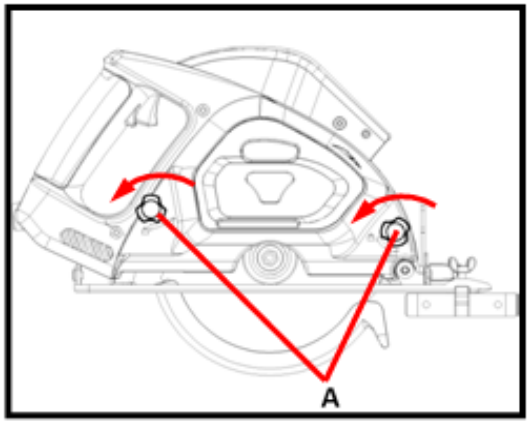

Fig. 19

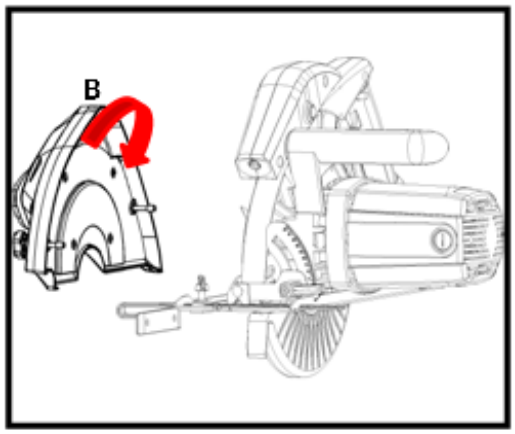

Fig. 20

Beware: Always keep the saw away from your body when removing the chip shield to avoid spilling chips on your person or clothing. The chips can be very hot.

SAW MAINTENANCE

General Maintenance

Remove the power cord from the power supply before carrying out any adjustment, servicing or maintenance on your Steelmax saw. Keep the machine clean and never use a saw blade that is damaged or distorted. Replace the saw blade when it becomes dull. For service and replacement pieces see the exploded parts diagram and parts list. Inspect the blade safety cover to assure that it is in good condition and that it moves freely and smoothly. Never use the tool unless the safety cover operates properly and it is in good operating condition.

After operation of the tool has been completed, make sure power plug has been removed from the receptacle and store it in a secure place out of the reach of children. Periodically remove chips in the dust cover and dust from the surface of the power tool with a damp cloth. Keep the tool away from water or oil.

Replacing Carbon Motor Brushes

► **Caution: Disconnect plug from power supply before servicing your saw.**

Your saw's carbon motor brushes must be replaced when they are worn down to 6 mm or less in length from the brush spring. Be sure brushes are clean and slide freely in the brush holder. Always replace both carbon brushes at the same time. Never repalce just one of the brushes. Use only approved repalcement brushes. Use a flat-blade screwdriver to remove the brush holder cap (A) and remove the worn carbon brushes (B). Insert new carbon brushes and re-secure the brush holder cap. Fig.21

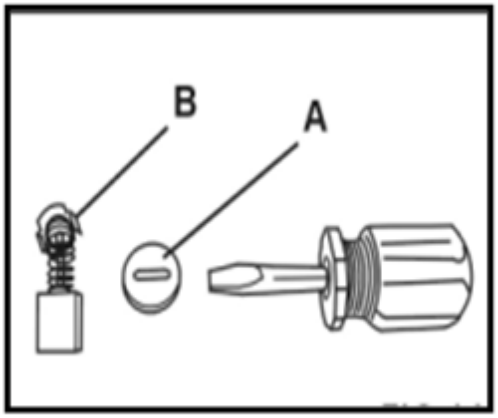

Fig.21

Troubleshooting

ALWAYS DISCONNECT THE SAW FROM POWER SOURCE BEFORE TROUBLEHSOOTING

1. Machine will not turn on

   - Inspect power cord for damage. Check continuity AND Replace if needed.
   - Inspect brushes for excessive wear. Replace if needed.
   - Saw may be overheated. Do not exceed 30 minutes continuous run time without letting saw cool down.
   - Check trigger switch for continuity. Replace if needed.

2. Losing Power

   - Inspect brushes and replace if needed.
   - Extension cord too long. Limit cord length to 50' or less.
   - Extension cord too thin. Use 14 AWG or heavier.

3. Blade Guard Sticks

   - Remove guard, clean and remove any foreign material. Wipe any excess material from guard & face plate. 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.
   - Check guard for distortion. Replace if distorted or damaged.

4. Blade Spins on Spindle

   - Check for proper tightness and installation. Inspect inner blade flange and outer blade flange 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. Use only the following Steelmax® saw blades.

Steelmax® TCT Saw Blades		Steelmax® Cermet-Tipped Saw Blades	
SM-BL-07-5	Mild Steel	SM-BL-CT-0725-MS	Mild Steel
SM-BL-07-5-AL	Aluminum		
SM-BL-07-5-SS	Stainless Steel	SM-BL-CT-0725-SS	Stainless Steel
SM-BL-07-5-TS	Thin Steel		

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

6. Saw Vibrates

- Check blade for tightness.
- Inspect inner blade flange and outer blade drive flange for wear or damage. Replace if needed.
- Check to ensure work is properly clamped. Both primary and cut-off piece can cause vibration.
- Check bevel lock and depth lock for tightness.
- Check for missing teeth, bends or cracks in the blade

7. Laser Won't Track
   - Adjust Laser alignment with laser turned on.

STEELMAX S-7 XP SPECIFICATONS

Rated Voltage	120V, 60Hz
Motor Power	1,560W
No Load Motor Speed	3,800 RPM
Arbor	20.0 mm
Saw Blade Diameter	7-1/4" (185mm)
Weight, Gross/Net	16 lbs. (7.3 kg) / 12.75 lbs. (5.8 kg)
Max. Cutting Depth at 90 °	2-1/2" (63 mm)
Max. Cutting Depth at 45 °	1-3/8" (36 mm)
Max. Plate Thickness	6 mm
Sound power level	98dB(A)
Sound pressure level	88dB(A)

WARNING SYMBOLS AND PRECAUTIONS

Please read the instructions carefully before starting the machine.

Wear hearing protection!

Always wear eye protection when using the machine.

Always keep hands away from the path of the saw blade.

Always disconnect the plug from the power source before carrying out any work on the machine.

Never expose tool to rain.

Laser radiation. Avoid direct eye contact with light source.

Caution: When cutting do not touch the metal parts that may become hot.

Caution: Laser radiation - do not stare into beam

PRODUCT INFORMAITON

Thank you for purchasing a Steelmax® product!

Please record the following information and keep this page for your records.

MODEL:	**S-7 XP METAL CUTTING SAW**
SERIAL NUMBER:	_____
PURCHASE DATE:	_____
PURCHASED FROM:	_____