



Abaco Site Saw Mod S1

Instruction Manual and Safety Instructions



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Instruction Manual and Safety Instructions

READ THIS MANUAL BEFORE USING THE SAW.

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1. Safety

READ AND UNDERSTAND ALL OF THE OPERATING INSTRUCTIONS, SAFETY PRECAUTIONS AND WARNINGS IN THE INSTRUCTION MANUAL BEFORE OPERATING OR MAINTAINING THIS SAW.

Most accidents that result from the operation and maintenance of Wet Saws are caused by the failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing a potentially hazardous situation before it occurs and by observing appropriate safety procedures.

Safety messages inform the user about potential hazards that could lead to injury, death and/or equipment damage. Each safety message will be preceded by one of the following (3) three words that identify the severity of the message.

Definitions of Signal Words

-  **DANGER** Not following instructions **WILL** lead to **DEATH** or **SERIOUS INJURY**.
-  **WARNING** Not following instructions **COULD** lead to **DEATH** or **SERIOUS INJURY**.
-  **CAUTION** Not following instructions **CAN** lead to injury.

Damage Prevention and Important Messages:

A Damage Prevention Message is used to inform the user of important information and/or instructions that could lead to equipment or other property damage if not followed. Information Messages convey information that pertains to the equipment being used. Each message will be preceded by the word NOTE, as in the example below.

Note:

Equipment and/or property damage may result if these instructions are not followed.

Important Safety Precautions:

*Read **all** Instructions **before** use.*

Always wear eye protection.



- When operating the Saw, always wear eye protection, and make sure others in the work area wear eye protection, too.

Wear a dust mask.



- A face dust mask or respirator should be worn if the cutting operation is dusty.

Always wear ear protection.

Always wear ear protection to protect your ears from loud noise.

Keep guards in place.



- In order to prevent injury, keep guards in place and in working order at all times.

Keep work area clean.

- Cluttered areas invite injuries. Clear all work areas of unnecessary tools, debris, etc.

Do not use in dangerous environments.

- Do not use the Saw in wet locations or expose it to rain. Always ensure that the work area has plenty of light.

Keep children and visitors away.

- All visitors and children should be kept a safe distance from the work area.

Do not force the Saw.

- The Saw will do a better job and operate safer at the rate for which it was designed.

Dress properly.

- Do not wear loose clothing or jewelry as they can be caught in moving parts. Non-slip footwear is recommended.
- Wear protective hair covering to contain long hair.

Secure your work.

- Clamps or a vise should be used to hold work whenever practical. It is safer to keep your hands free to operate the Saw.

Do not overreach.

- Keep proper footing and balance at all times by not overreaching.

Stay alert.

- **Focus** on what you are doing. Use common sense. Do **not** operate the Saw when you are tired.
- The Saw should never be used if you are under the influence of alcohol, drugs or medication that makes you drowsy.

Never stand on the Saw.

- Serious injury could occur if the Saw is tipped, or if the Saw is unintentionally contacted.

Disconnect tools.

- Power should always be disconnected before servicing or when changing accessories, such as blades, pumps, etc.

Check for damaged parts.

- Before using the Saw, check for damaged parts. A guard or any other part that is damaged should be carefully checked to determine if it will operate properly and perform its intended function.
- Always check moving parts for proper alignment or binding. Check for broken parts and mountings and all other conditions that may affect the operation of the Saw. A guard, or any damaged part, should be properly repaired or replaced.

Check the direction of feed.

- Always feed work into a blade **against** the direction of rotation. A blade should always be installed such that rotation is in the direction of the arrow imprinted on the side of the blade.

Never leave the saw running unattended. Turn the power off.

- Do not leave the Saw until it comes to a **complete stop**. Always turn the Saw **OFF** when leaving the work area or when a cut is finished.

Use the proper extension cord.

- If using an extension cord, first make sure it is in good condition. Always be sure to use an extension cord heavy enough to carry the current your product will draw.
- An undersized cord will cause a drop in line voltage that will result in a loss of power and overheating.

Maintain the Saw with care.

- Keep the Saw clean for the best and safest performance. Always follow maintenance instructions for lubricating and when changing accessories.

Keep clear of rotating or moving parts.

- Keep hands, feet, hair, and clothing away from all moving parts to prevent injury. Never operate the Saw with covers, shrouds, or guards removed.

Prevent electrical shock.

- Never touch electrical wires or components while the motor is running. Exposed, frayed or worn electrical motor wiring can be sources of electrical shock that could cause severe injury or burns.

Electrical Requirements and Grounding Instructions

*In order to prevent potential electrical shock and injury, the following electrical safety precautions should be followed **at all times!***

- In case of a malfunction or breakdown, grounding provides a path of least resistance for an electric current to reduce the risk of electric shock. This Saw is equipped with an electric cord having a grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.
- Improper connection of the grounding conductor can result in a risk of electric shock.
- The grounding conductor is the insulated conductor that has an outer surface that is green, with or without yellow stripes.
- If a repair or replacement of the electric cord or plug is necessary, do not connect the grounding conductor to a live terminal.

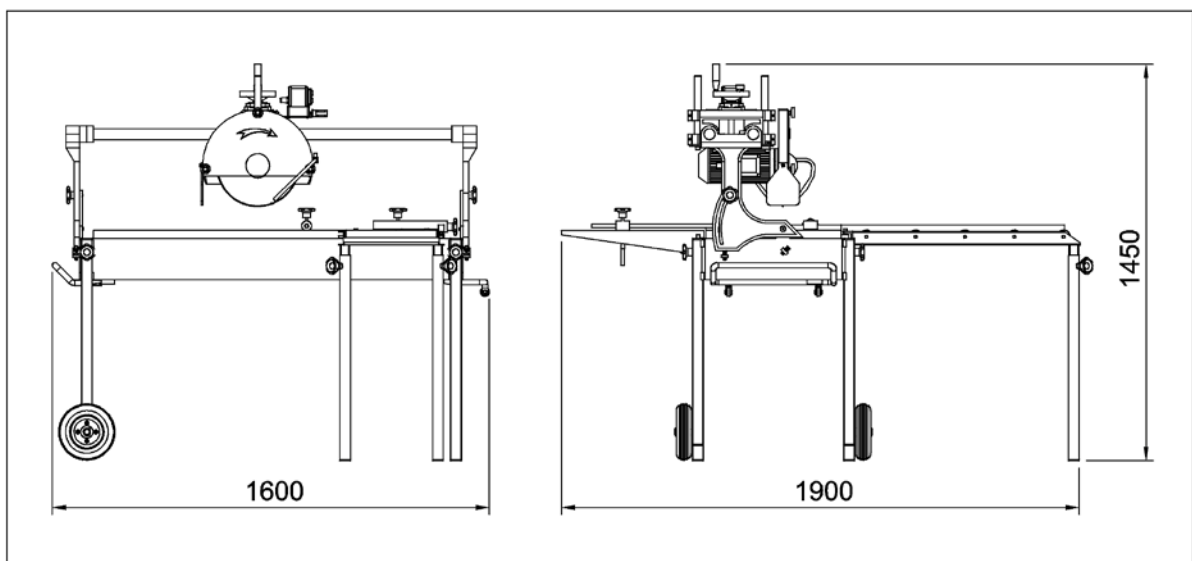
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood or if in doubt as to whether the Saw is properly grounded.
- Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the Saw's plug.
- Repair or replace a damaged or worn cord immediately.
- To reduce the risk of electrocution, keep all connections dry and off the ground.

2. Product Specifications

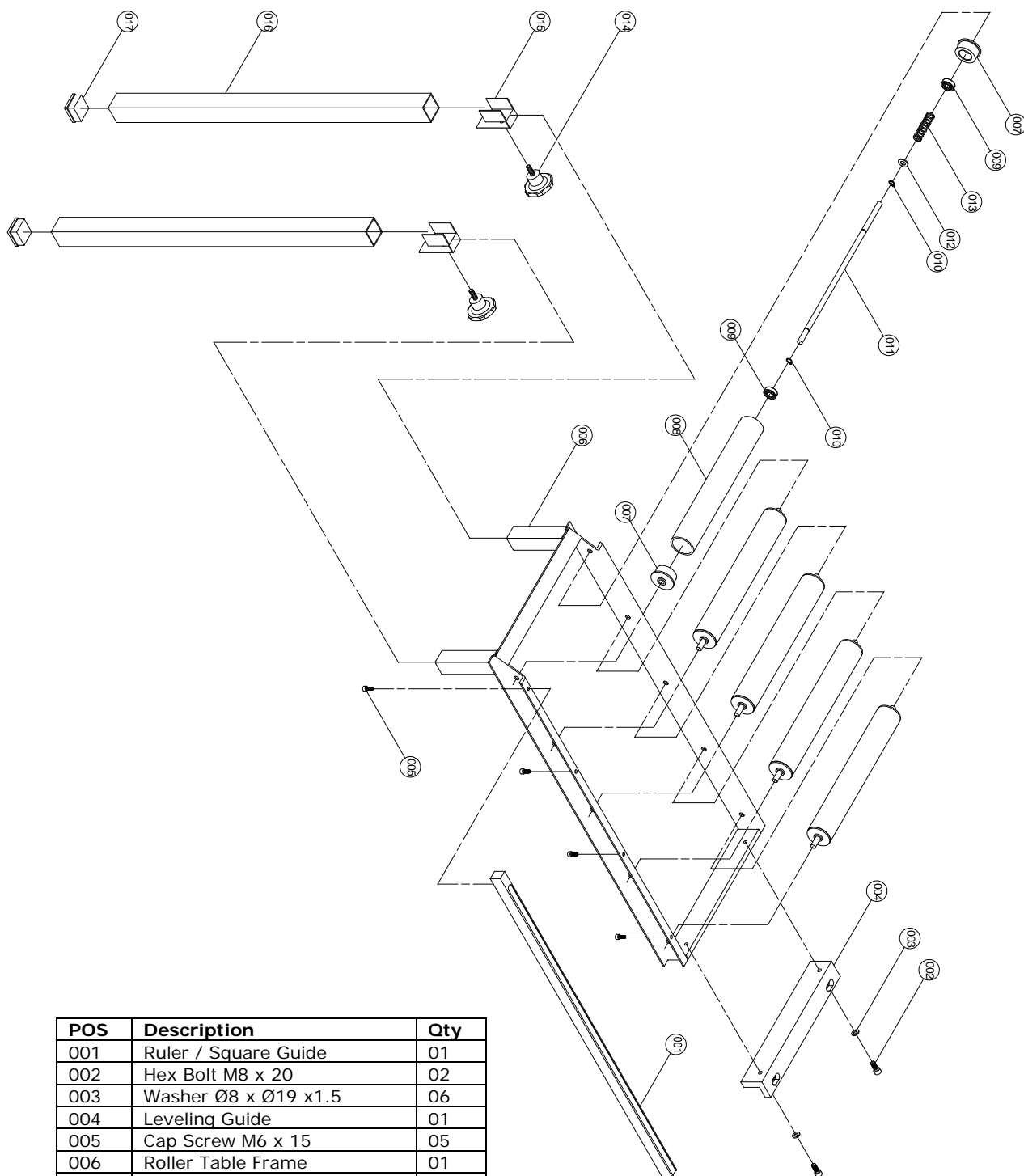
The Abaco SITE SAW MOD S1 is a Precision Saw designed to cut all types of materials including, but not limited to, granite, pavers, porcelain, terracotta, marble, quarry, sandstone and slate, and almost any other non-ferrous material.

General Description

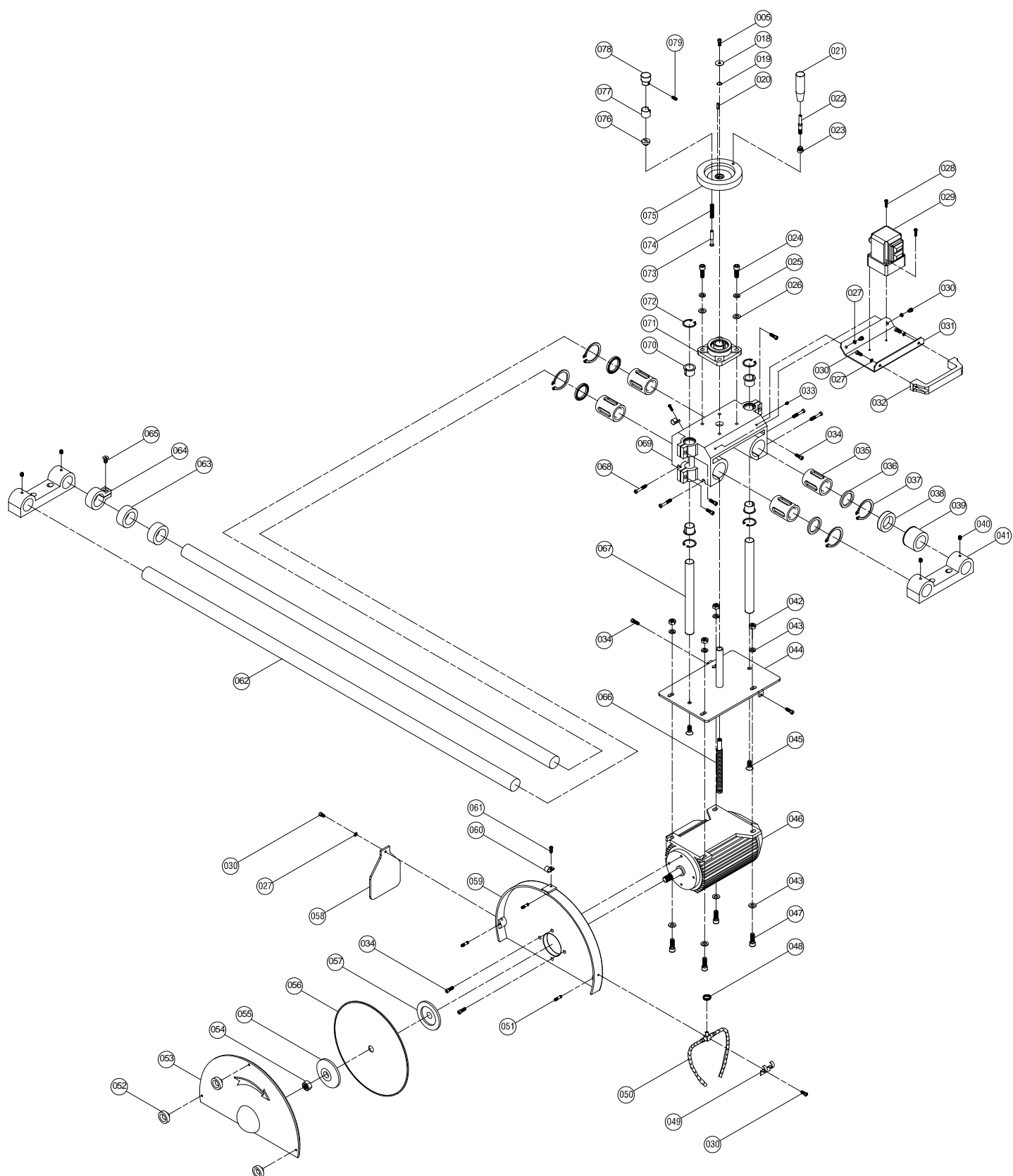
The Abaco SITE SAW MOD S1 has a "Cast Aluminum Machined Working Table" guided by dual linear bearings on an induction hardened chrome bar (Rust Free). The Saw includes a powerful 3HP motor and a thermal protective overload.



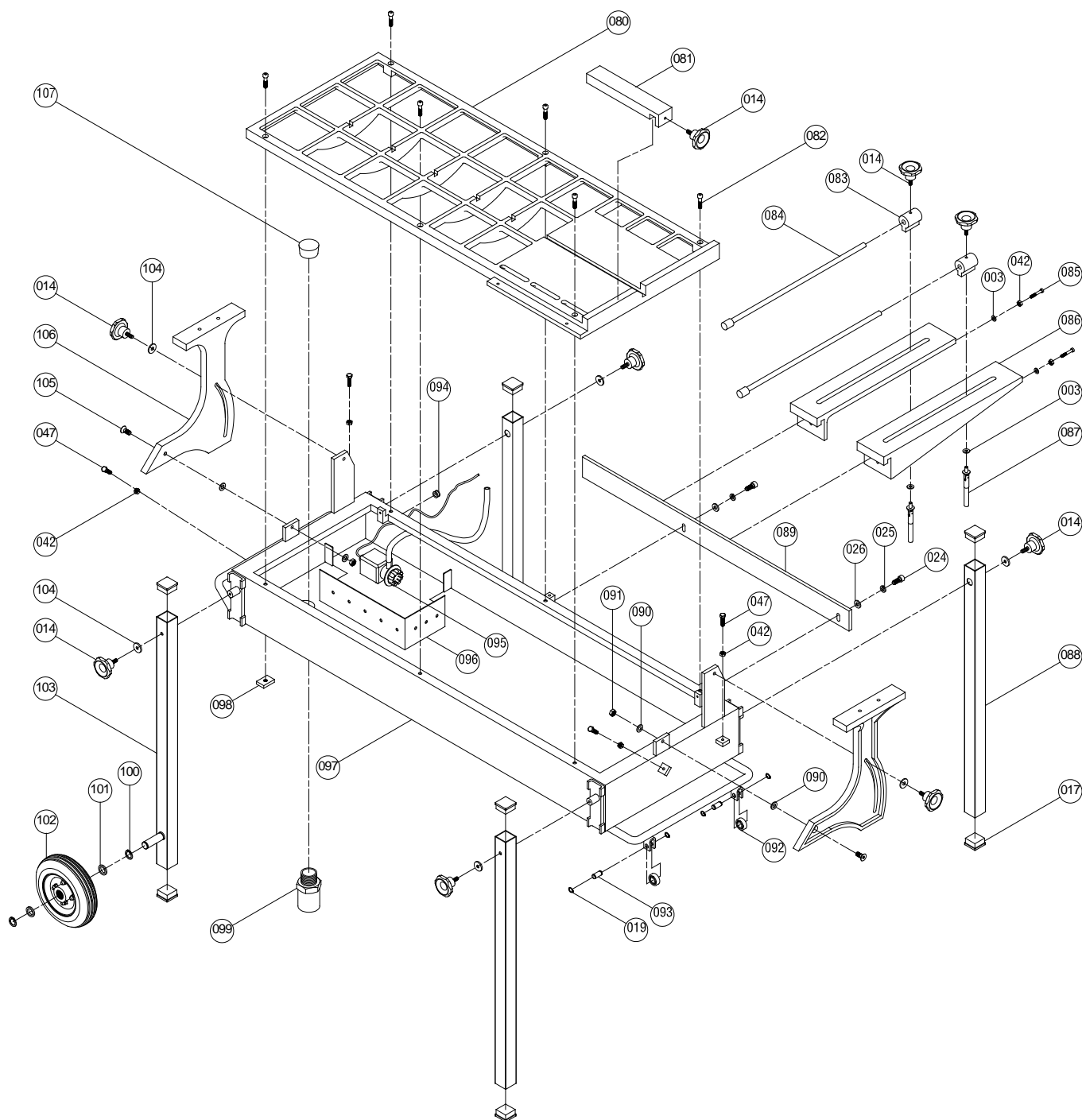
Model	MOD-S1 (USA Mod)	MOD-S1 (Aus Mod)
Power	3HP	2.2KW
Voltage	220V	240V
Hertz (Cycle)	60	50
Full Load Amps	14.4	13
Motor RPM	3400	2800
Switch	Contains Thermal Circuit Breaker	
	Inches	Millimeters
Blade Capacity	10 x 12 x 14	250 x 300 x 350
Arbor Size	1	25.4
Depth of Cut at 90°	2 x 3 x 4	50 x 75 x 100
Length of Cut	47	1193
Cutting Table	48 x 19	1219 x 482
Saw Weight Uncrated	275lbs	125kg
Saw Weight Crated	350lbs	160kg
Crated Dimensions LxWxH	63 x 29 x 39	1600 x 736 x 990
Saw Dimensions LxWxH	59 x 19 x 51	1498 x 482 x 1295
Water Tray LxWxH	55 x 19 x 6	1397 x 482 x 152
Water Tray Capacity	24G	90L



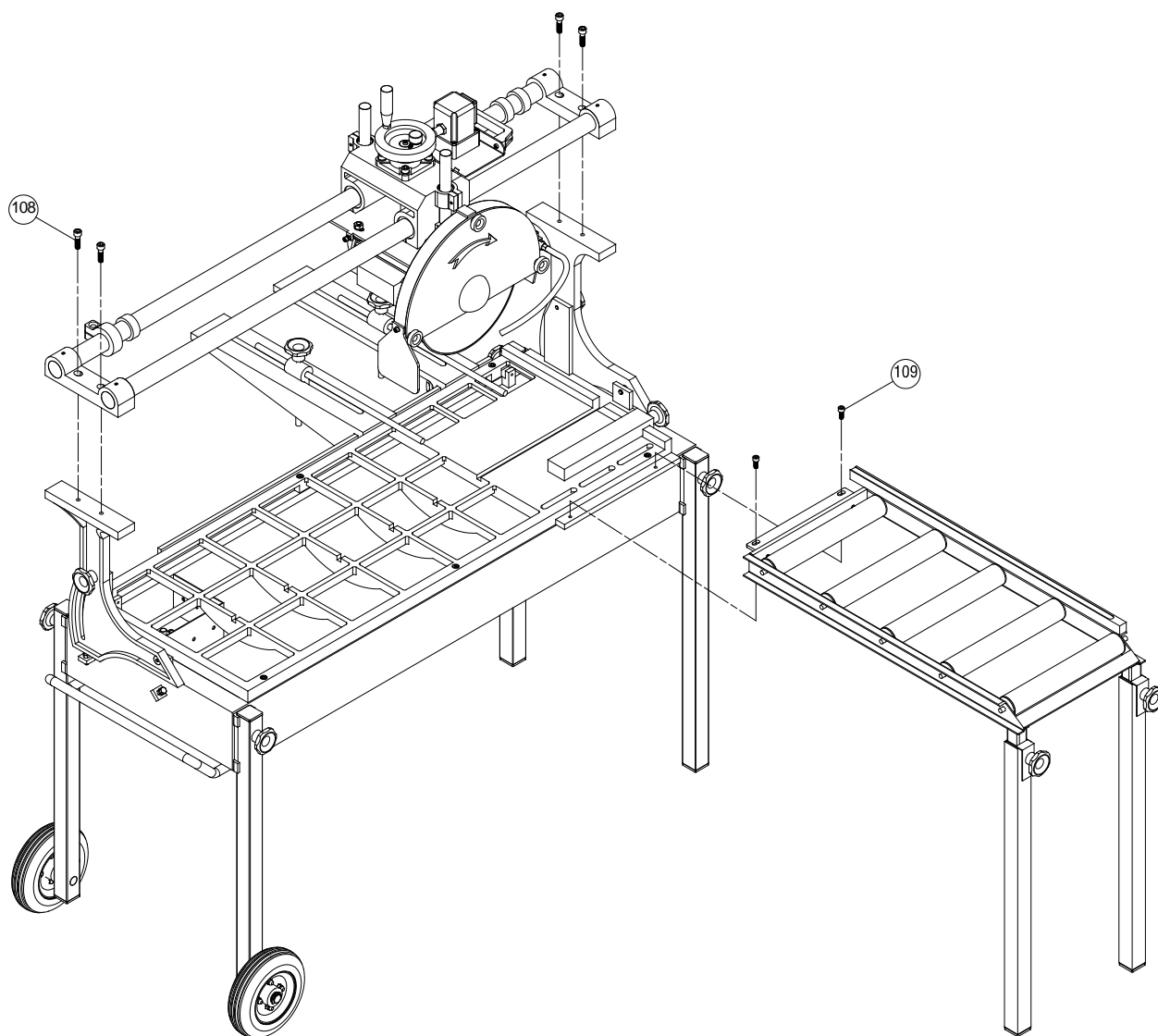
POS	Description	Qty
001	Ruler / Square Guide	01
002	Hex Bolt M8 x 20	02
003	Washer Ø8 x Ø19 x1.5	06
004	Leveling Guide	01
005	Cap Screw M6 x 15	05
006	Roller Table Frame	01
007	Roller Bearing	10
008	Plastic Roller	05
009	Bearing 6000z	10
010	Circlip Ø10	10
011	Roller Shaft	05
012	Al. Washer Ø10 x Ø16 x 0.8	05
013	Roller Spring	05
014	M8 Knob	11
015	Locking Bracket	02
016	Extension Leg	02
017	Plastic Cap 40mm	10



POS	Description	Qty
018	Washer Ø6 x Ø25 x 1	01
019	Circlip Ø12	05
020	Stop Pin	01
021	Wheel Handle	01
022	Handle Spindle	01
023	Handle Spacer	01
024	Hex Bolt M10 x 30	06
025	Spring Washer Ø10	06
026	Washer Ø10 x Ø20 x 1.5	06
027	Washer Ø6x Ø12 x 1	05
028	Screw M5 x 50	02
029	Switch	01
030	Screw M6 x 15	06
031	Switch Base	01
032	Handle	01
033	Grease Screw M6 x 5	05
034	Hex Bolt M6 x 20	10
035	Linear Bearing LBB40	04
036	Linear Bearing Seal	04
037	Circlip Ø52	04
038	Rubber Absorber Ø40 x 10	01
039	Stopper	01
040	Cap Screw M8 x 10	04
041	Chrome Bar Holder	02
042	Nut M8	10
043	Washer Ø8 x Ø20 x 2.5	08
044	Motor Plate	01
045	Counter-Sunk Cap Screw M10 x 20	02
046	Motor 2.2 KW	01
047	Hex Bolt M8 x 30	08
048	Hose Clamp	02
049	Nozzle Holder	01
050	Water Nozzle	01
051	Blade Cover Rear	03
052	Knob M6	03
053	Blade Cover Front	01
054	Nut M20	01
055	Motor Flange (outside)	01
056	Blade	01
057	Motor Flange (inside)	01
058	Rubber Pieces	01
059	Blade Guard	01
060	Nylon P Clip	04
061	Screw M4 x 15	04
062	Induction Hard Chrome Bar Ø40	02
063	Rubber Absorber Ø40 x 20	02
064	Head Stopper	01
065	Cap Screw M8 x 20	01
066	Acme Thread	01
067	Head Guide Tube	02
068	Cap Screw M6 x 50	04
069	Housing	01
070	Flange Bush F16-14	04
071	Flange Bearing F205	01
072	Circlip Ø36	04
073	Locking Pin	01
074	Locking Spring	01
075	Wheel	01
076	Positioning Bush	01
077	Locking Knob Sleeve	01
078	Locking Knob	01
079	Cup Point Socket Head Screw M6 x 15	01



Number	Description	Qty.	Number	Description	Qty.
80	Saw Table	1	94	Rubber Grommet	1
81	Stop Guide	1	95	Water Pump	1
82	Cap Screw M8 x 40	6	96	Water Pump Wall Plate	1
83	Stop Rod Block	2	97	Water Tray	1
84	Stop Rod	2	98	Al. Table Lock M8	6
85	Cap Screw M8 x 30	2	99	Water Pump Coupling	1
86	Support Arm	2	100	Circlip $\varnothing 20$	4
87	Stop Rod Guide	2	101	Washer $\varnothing 20 \times \varnothing 24 \times 1$	4
88	Tray Leg	2	102	Solid Rubber Wheel 0205	2
89	Support Table Bar	1	103	Tray Leg with Wheel Shaft	2
90	Washer $\varnothing 10 \times \varnothing 22 \times 1$	4	104	Washer $\varnothing 8 \times \varnothing 30 \times 2.5$	6
91	Nylon Nut M10	2	105	Counter Sunk Cap Screw M10 x 40	2
92	Bearing 6021z	2	106	Swing Arm	2
93	Bearing Shaft	2	107	Water Plug	1



POS	Description	Qty
108	Cap Screw M10 x 40	04
109	Cap Screw M8 x 20	02

3. Unpacking and Assembly

UNPACKING

Your Saw has been shipped from our factory thoroughly inspected. The Saw has been aligned and adjusted and is ready for work.

Package Contents

Packed into your container, you will find:

- 1 x Abaco SITE SAW MOD S-1
- 1 x Water Recycling Pump (installed)
- 1 x Pump Guard/ Water Filter (installed)
- 1 x Cutting Guide
- 1 x Spanner
- 1 x Allen Key 6mm
- 2 x Legs with Wheels
- 2 x Legs
- 4 x Knob Screws for Legs
- 1 x Water Tray Drain Plug
- 1 x Overflow Drain Valve
- 2 x Support/ Stop Arms
- 1 x Side Table with 2 legs

Assembly

THE SITE SAW MOD S1 COMES STANDARD WITH THE EUROPEAN POWER PLUG.

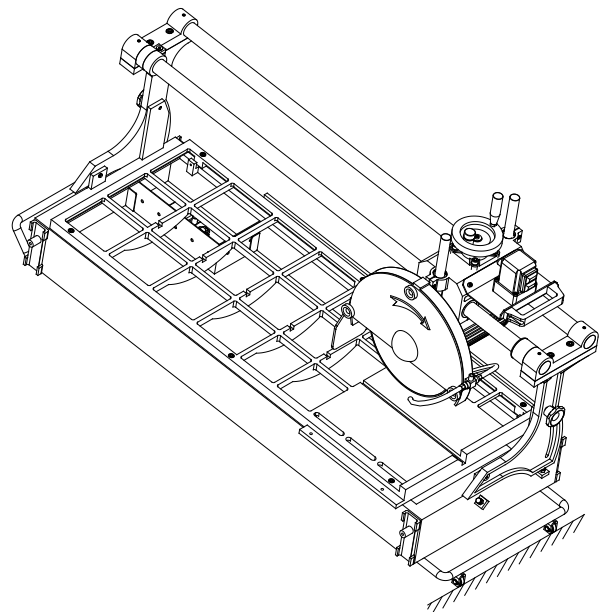
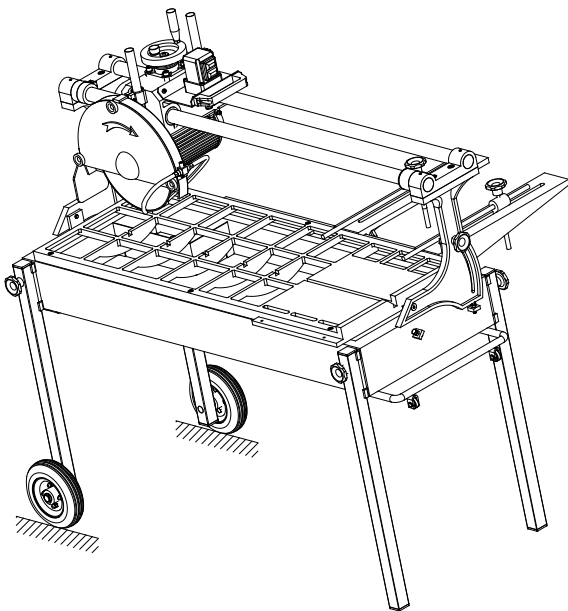
1. Alternately this power plug has been removed. Ensure that the correct plug is fitted to the power cable. Check with your local authorized service center for more information.
2. Ensure that the Saw is placed on level ground.
3. Screw the 4 legs onto the water tray of the Saw using the 4 knob screws provided, ensuring that the legs with wheels are at the motor's beginning position end (closest to the water pump).
4. Fit the support/stop arms into the desired position on the off cut side of the Saw by slotting over the tension bar and tightening.
5. Screw the side table legs on to the side table. Adjust the height of the table using a spirit level to ensure that the side table and working table are level.
6. Loosen the "Travel Lock" on the chrome bars before use.

Your Abaco SITE SAW MOD S1 comes standard with a "Travel Lock" located on the induction hardened chrome bar.

1. Before transporting the Saw, ensure that the "Travel Lock" is in position and tightened using the 6mm Allen key supplied.
2. Return the Saw's head to the first position.
3. Slide the "Travel Lock" against the Saw's head.
4. Tighten using the 6mm Allen key supplied.

Your Abaco SITE SAW MOD S1 has a unique "Single Person Moving System".

1. The bearings on the under side of the carry handle are used to roll the Saw onto the vehicle.
2. Lay the handle with the bearings onto the tray of the vehicle.
3. Unscrew the front legs.
4. Slide the Saw onto the tray.
5. Lock the Saw's head using the 6mm Allen key.
6. Secure the Saw firmly to the vehicle.



Diamond Blade Installation

Important - Do **not** "cross thread" and do **not** over tighten the retaining-nut.
The Abaco SITE SAW MOD S-1 can be fitted with a 10", 12" or 14" diamond blade.

1. Use the spanner and the 6mm Allen key provided.
2. Ensure that the power is **OFF** and the power cable is disconnected.
3. Remove the blade cover by unscrewing the 3 black knobs.
4. Insert the 6mm Allen key into the middle of the motor shaft. This will lock the shaft.
5. While holding the Allen key, remove the retaining-nut (left hand thread) and the outer flange using the spanner provided.
6. Install the diamond blade onto the blade shaft.
7. Make sure that the direction of rotation is correct.
8. Verify that the arrow on the blade cover and the arrow on the blade are rotating in the **same** direction.
9. Reinstall the outer flange and retaining-nut (left hand thread) holding the shaft locked with the Allen key. Tighten the retaining-nut.
10. Reinstall the blade cover by screwing back on the 3 black knobs.

Head Adjustment

Depending on the size of the blade and type of cut required (i.e. Step Treads); the Abaco SITE SAW MOD S-1's head is adjustable.

1. Ensure that the locking lever located next to the hand wheel lever is **UP**.
2. Turn the hand wheel on the top of the Saw to the desired height.
3. Be sure not to lower the head too deep to cut the working table.
4. Once the desired height has been reached, lock the wheel with the locking lever located next to the hand wheel lever.

Water Pump Operation

The water pump is designed for water recirculation.

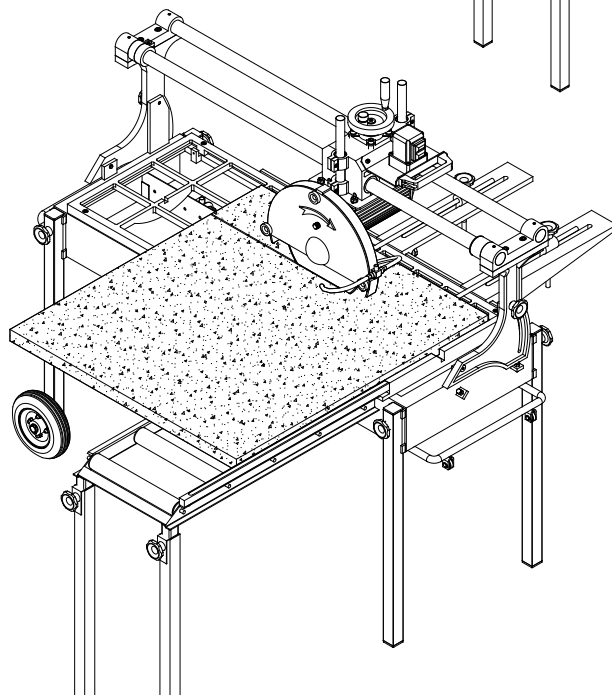
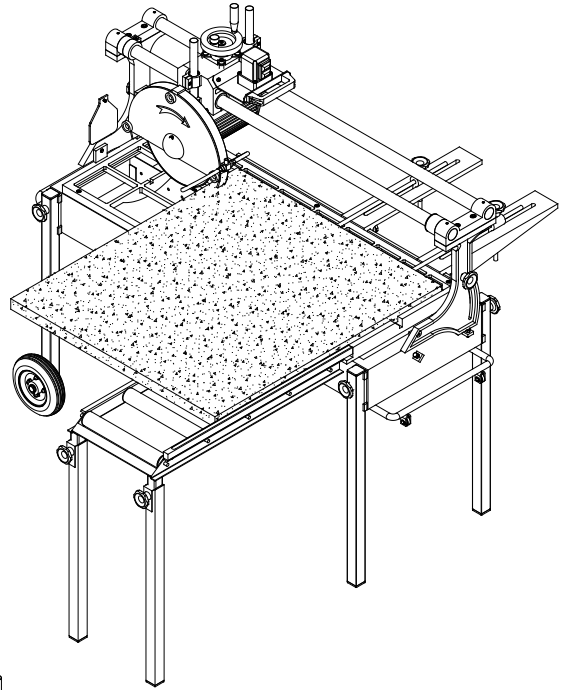
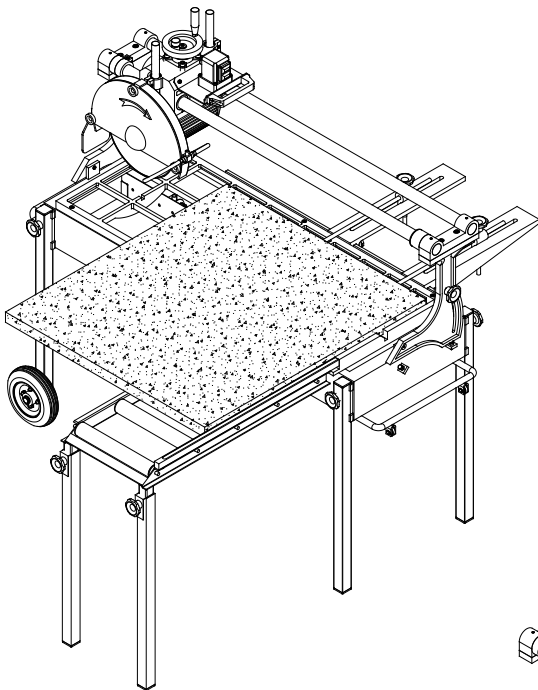
1. Ensure that the drain plug is installed into the water tray.
2. Ensure that the water pump's guard is installed.
3. Fill the water tray until the water completely covers the water pump.

4. The overflow drain valve is supplied for use with the Saw when used indoors or a place that the water in the water tray cannot simply be let out.
5. Screw the overflow drain valve to the under side of the drain hole.
6. Connect a hose to the overflow drain valve to run the water to the desired location.
7. Remove the drain plug in the water tray to start water removal.

4. Operating the Abaco Site Saw Mod S1

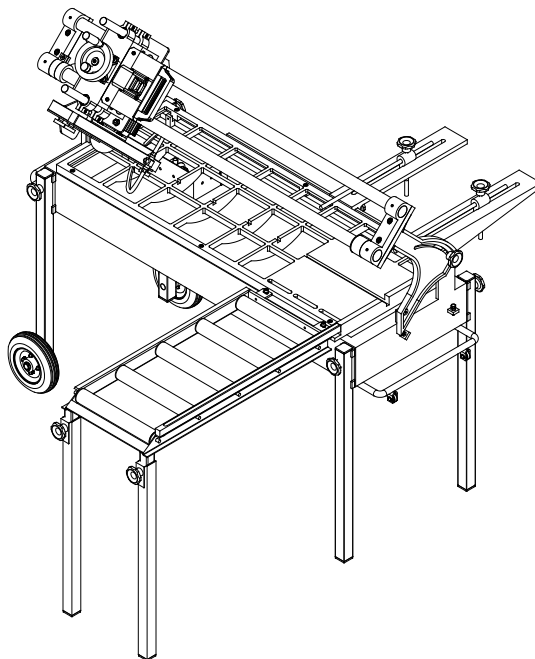
Cutting Straight Edges

1. Ensure the Saw is turned **OFF**.
2. Tighten the cutting guide to the desired location using the ruler on the working table.
3. Place the tile against the ruler and the cutting guide.
4. Turn the motor **ON**.
5. Make sure water is flowing through the nozzles **before** cutting.
6. Perform the cut.
7. Turn the motor **OFF** when the cut is complete.



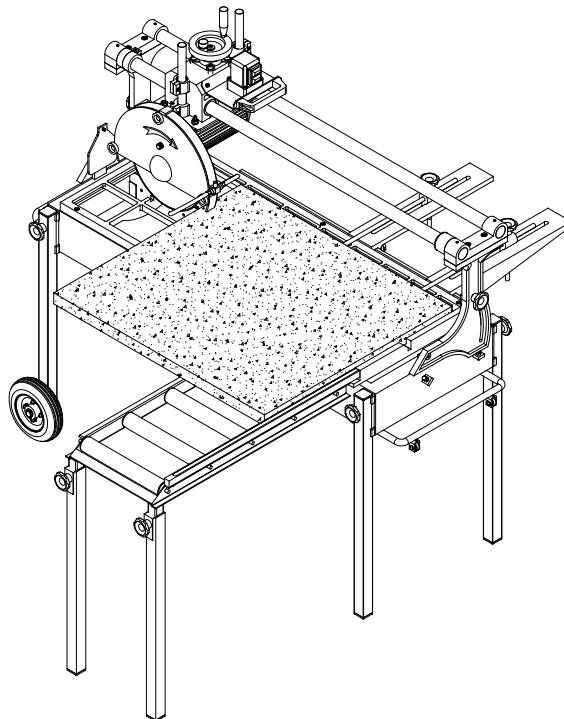
Cutting 45° Miter

1. Ensure the Saw is turned **OFF**.
2. Loosen both knobs on the support arms of the Saw.
3. Swing the Tile Saw's head over to 45°.
4. Tighten both knobs on the support arms of the Saw.
5. Tighten the cutting guide to the desired location using the ruler on the working table.
6. Place the tile against the ruler and the cutting guide.
7. Turn the motor **ON**.
8. Make sure water is flowing through the nozzles **before** cutting.
9. Perform the cut.
10. Turn the motor **OFF** when the cut is complete.



Cutting Step Treads

1. Ensure the Saw is turned **OFF**.
2. Turn the hand wheel on the top of the Saw to the desired height.
3. Once the desired height has been reached, lock the wheel with the locking lever located next to the hand wheel lever.
4. Tighten the cutting guide to the desired location using the ruler on the working table.
5. Place the tile against the ruler and the cutting guide.
6. Turn the motor **ON**.
7. Make sure water is flowing through the nozzles **before** cutting.
8. Perform the cut.
9. Turn the motor **OFF** when the cut is complete.
10. Repeat steps 4, 5, 6, 7, 8, 9.
11. Turn the motor **OFF** when completed.



Warning: Please ensure that while adjusting the blade height, that the blade is **off** and well **above** your working material.

5. Clean Up

To ensure long life of the water pump, it is should be cleaned **after every job**.

1. Ensure the Saw is turned **OFF**.
2. Drain the water from the water tray.
3. The water pump comes apart for easy cleaning.
4. Clean the water pump.
5. Clean the water tray.
6. Clean the Tile Saw with clean water.

6. Maintenance

To ensure long life of the Saw, maintenance should be performed **after each use**.

1. Ensure the Saw is turned **OFF**.
2. Unplug the Saw from the wall socket.
3. Wipe the induction hardened chrome bars after every use with a clean cloth.
4. Remove the diamond blade and lubricate the retaining-nut, the outer flange and the inner flange with light oil such as WD-40.
5. Periodically lubricate the leg screw threads and the blade cover knobs with light oil such as WD-40.

7. Troubleshooting

Blade Dressing

Diamond blades perform best when they are dressed. Over time and use, diamonds on the outer edge of the blade will become smooth or glazed over.

This will reduce cutting efficiency and may cause the blade to wander or bend giving the illusion of an alignment problem. When this occurs, the blade will need to be dressed. You can dress your blade using a **dressing block**.

1. Ensure the Saw is turned **OFF**.
2. Tighten the cutting guide to the desired location using the ruler on the working table.
3. Place the dressing block against the ruler and the cutting guide.
4. Turn the motor **ON**.
5. Make sure water is flowing through the nozzles **before** cutting.
6. Cut the dressing block 5 – 10 times to “dress the blade”.
7. Turn the motor **OFF** when complete.

Blade Will Not Cut Properly

1. Check for smoothness or “glazing”. Dress the blade (see above) if required.
2. Check that the rotation direction is correct. Verify that the arrow on the blade cover and the arrow on the blade are rotating in the **same** direction.
3. Ensure that there is tension on the blade. If bent, change the blade.
4. Ensure that you use the correct blade for the material being cut.
5. Contact your distributor for repair details.

Water Pump Problems

1. Disassemble the pump's casing and check for debris/restrictions.
2. Check the pump's impeller for damage.
3. Check the hose line and nozzles for debris/restrictions.
4. Contact your distributor for repair details.

