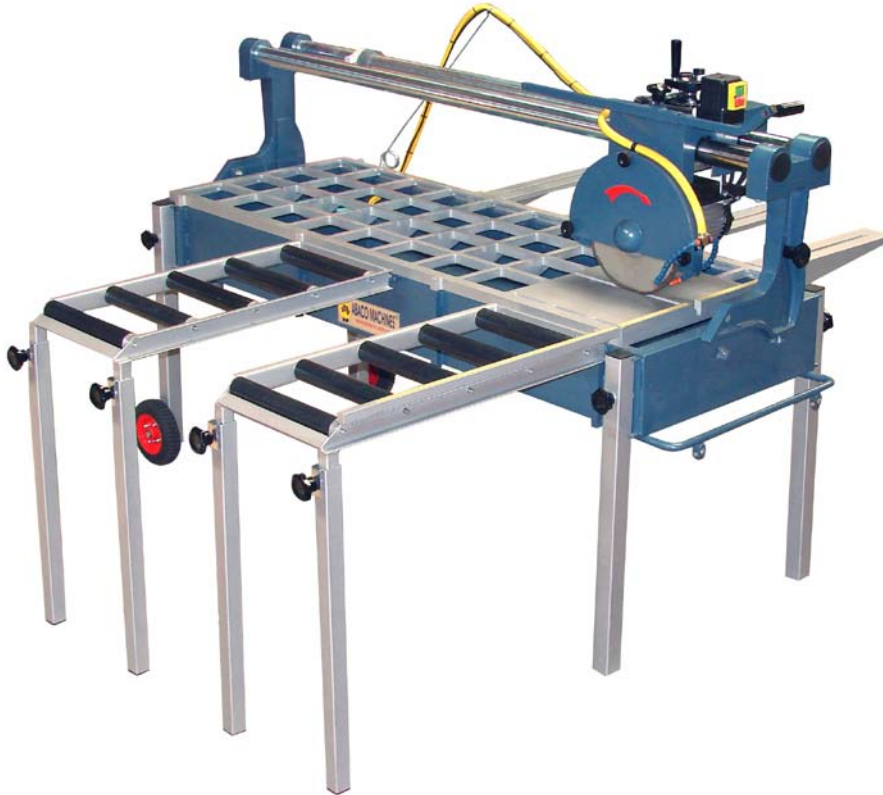




ABACO MACHINES OPERATION MANUAL Abaco Site Saw Mod S2



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Abaco Site Saw Mod S2

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 all guards in place.



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

Keep the 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 your work whenever practical. Keeping your hands free to operate the saw is safer.

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, make sure it is in good condition. 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 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 the 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.

Avoid 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 can 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 equipment or 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.

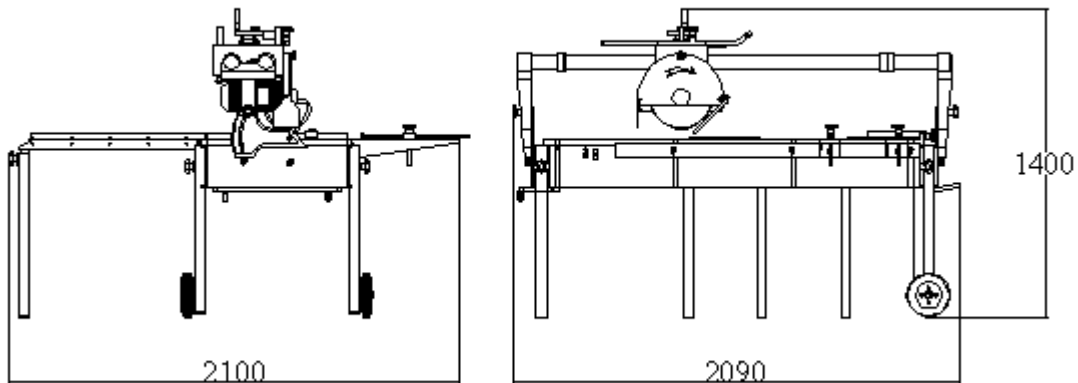
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the Saw is properly grounded.
- Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the Saw's plug.
- Repair 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 S2 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.

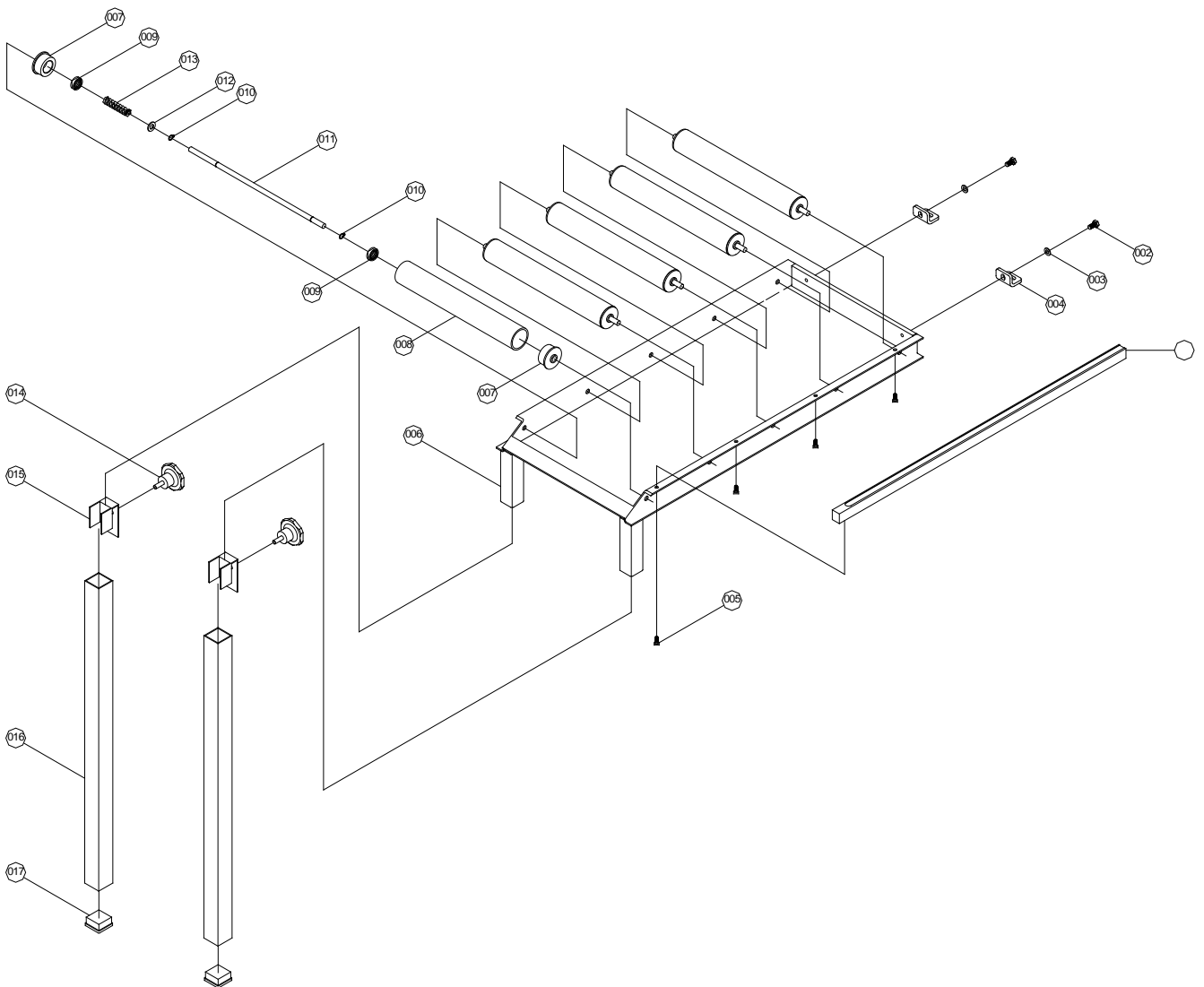
General Description

The Abaco SITE SAW MOD S2 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.

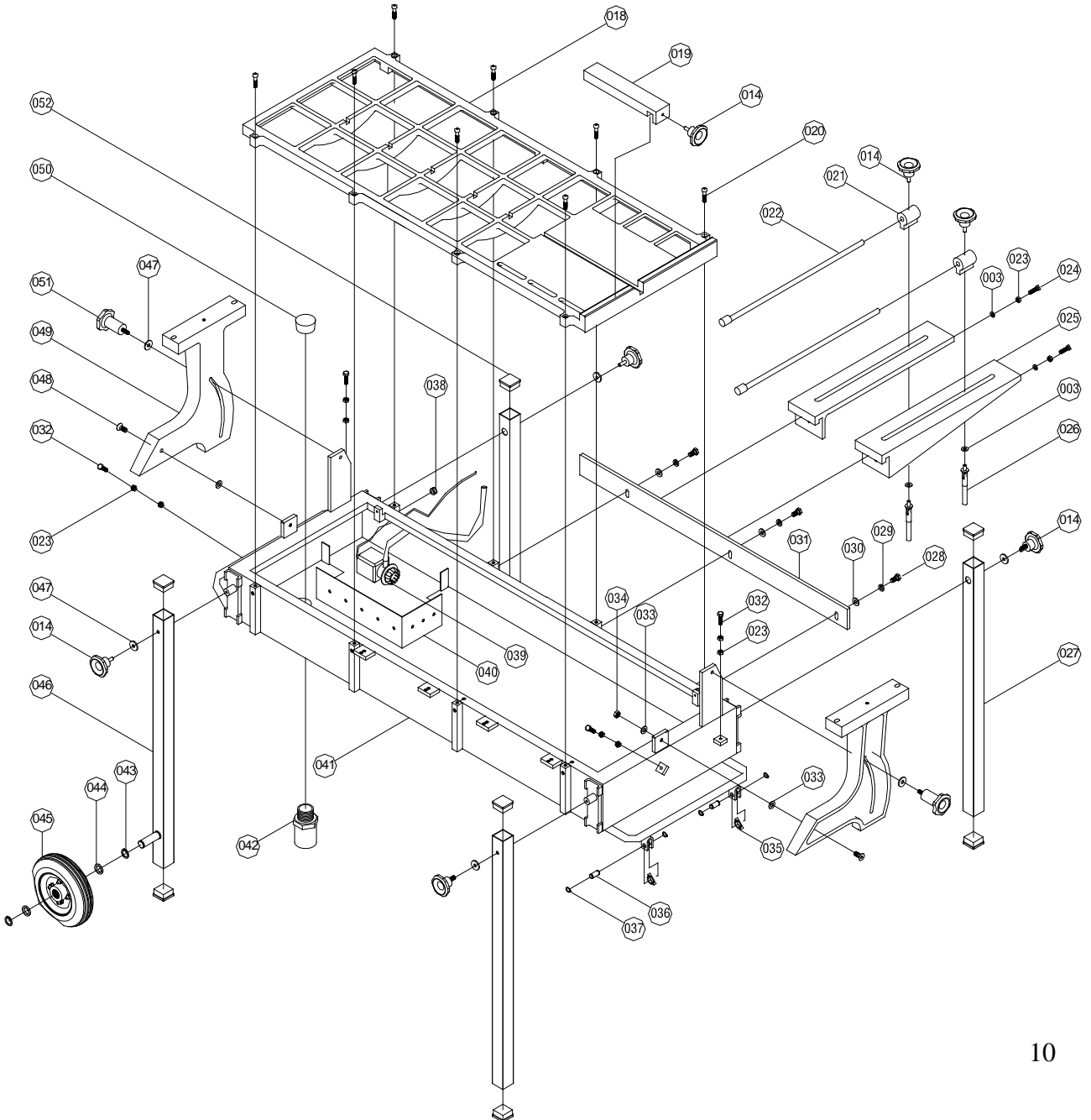


Model	Mod-S2 (USA Mod)	Mod-S2 (Aus Mod)
Power	3HP	2.2KW
Voltage	220V	240V
Hertz (Cycle)	60	50
Full Load Amps	14.4	13
Motor RPM	3400	2800
Switch	Contains Thermal Circuit Breaker	
	Inches	Millimeters
Blade Capacity	10 x 12 x 14	254 x 304 x 355
Arbor Size	1	25.4
Depth of Cut at 90°	2 x 3 x 4	50 x 75 x 100
Depth of Cut at 45°	1.2 x 2 x 3	30 x 50 x 75
Length of Cut	65	1650
Working Table	67 x 26	1700 x 650
2X Support Arms	20 x 4	520 x 100
Saw Weight uncrated	396lbs	180kg
Water Tray Capacity	48G	180L

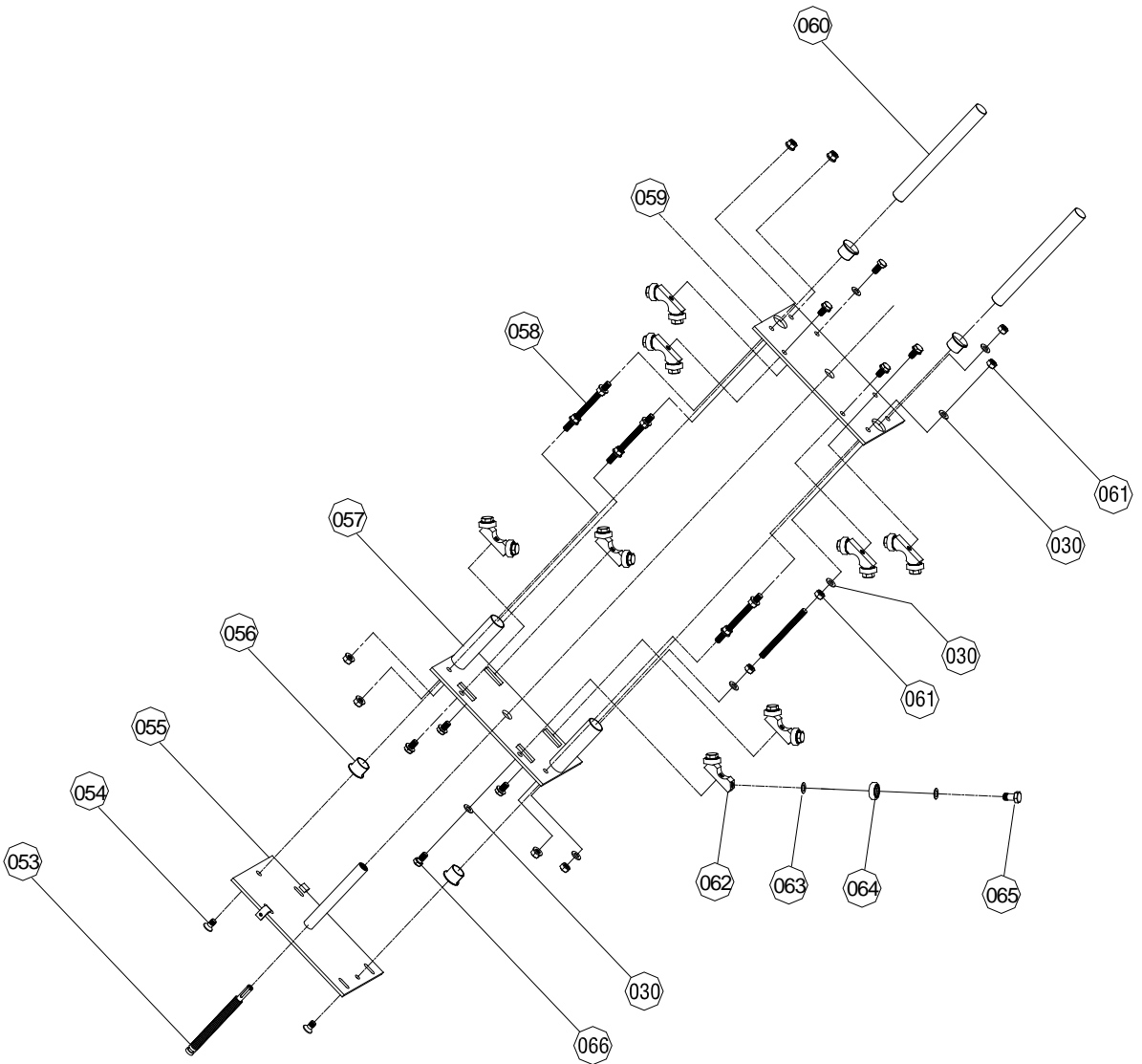
POS	Description	Qty
001	Ruler / Square Guide	01
002	Hex Bolt M8 x 20	02
003	Washer Ø8 x Ø19 x1.5	06
004	Leveling Guide	01
005	Cap screw M6 x 15	05
006	Roller Table Frame	01
007	Roller Bearing	10
008	Plastic Roller	05
009	Bearing 6000Z	10
010	Circlip Ø10	10
011	Roller Shaft	05
012	Al. Washer Ø10 x Ø16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



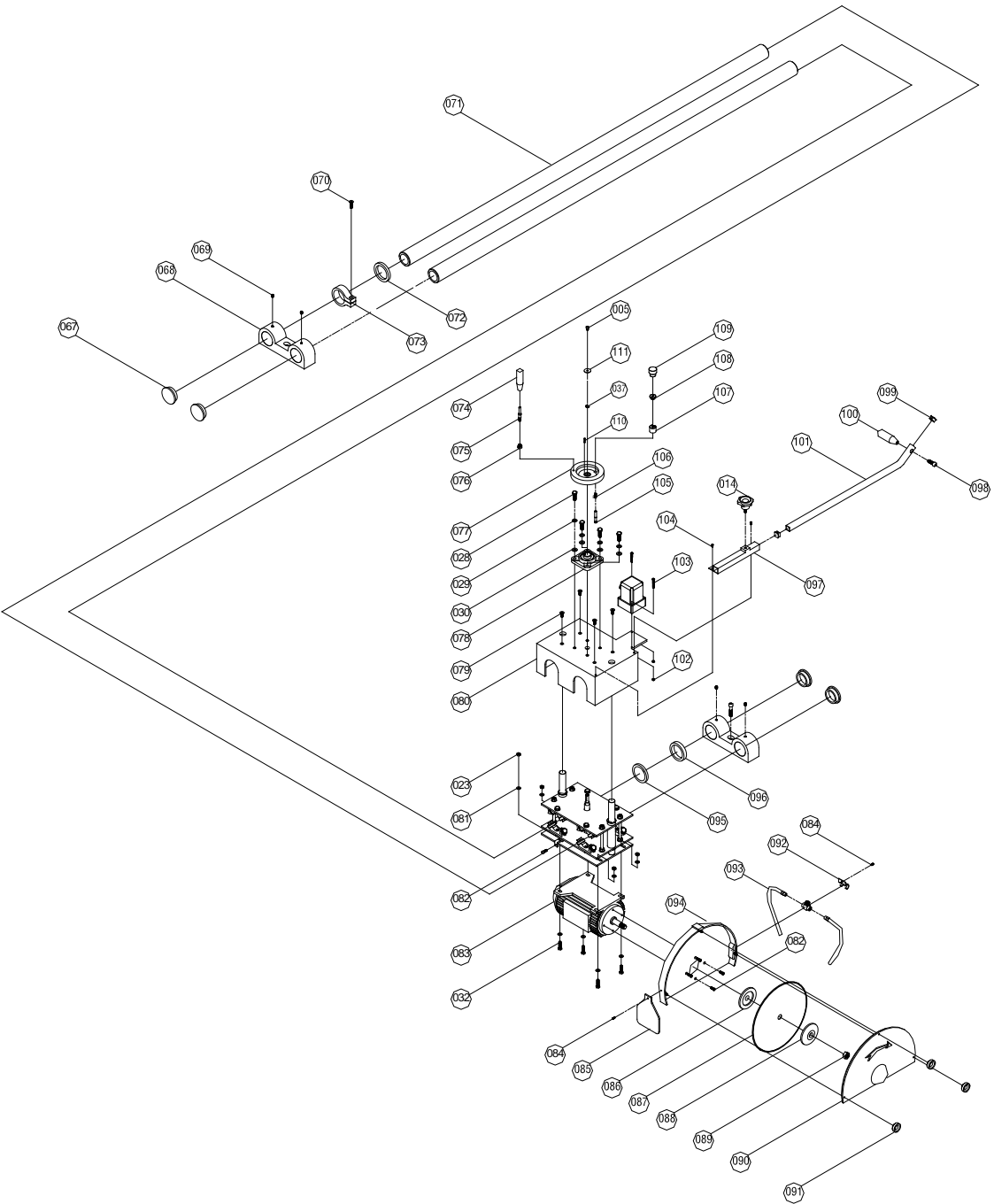
POS	Description	Qty
018	Saw Table	01
019	Stop Guide	01
020	Cap Screw M8 x 40	06
021	Support table stopper	02
022	Stop Rod	02
023	Nut M8	10
024	Cap Screw M8 x 30	02
025	Support Table	02
026	Stopper Locking screw	02
027	Tray Leg	02
028	Hex Bolt M10 x 30	06
029	Spring Washer Ø10	06
030	Washer Ø10 x Ø20 x 1.5	06
031	Support Table Bar	01
032	Hex Bolt M8 x 30	08
033	Washer Ø10 x Ø22 x 1	04
034	Nylon Nut M10	02
035	Bearing 6021z	02
036	Bearing Shaft	02
037	Circlip Ø12	05
038	Rubber Grommet	01
039	Water Pump	01
040	Pump protector	01
041	Water Tray	01
042	PVC connector male	01
043	Circlip Ø20	04
044	Washer Ø20 x Ø24 x 1	04
045	Solid Rubber Wheel Ø205	02
046	Tray Leg with Wheel Shaft	02
047	Washer Ø8 x Ø30 x2.5	06
048	Counter-Sunk Cap Screw M10 x 40	02
049	Swing Arm	02
050	Rubber plug	01
051	M8 Knob	02
052	Rubber Cap 50	08



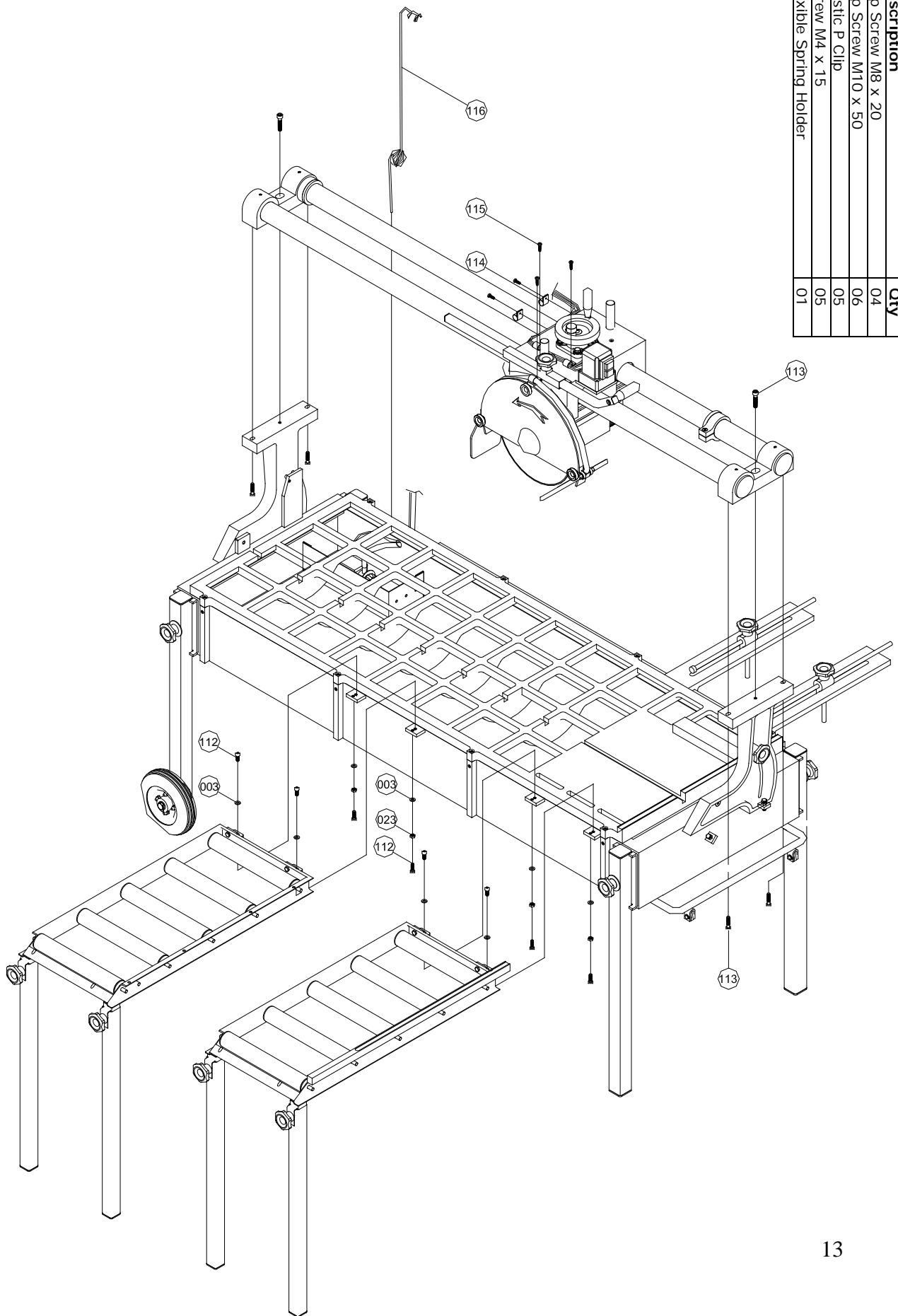
POS	Description	Qty
053	Acme Thread	01
054	Countersunk Cap Screw M10 x 20	02
055	Motor Mounting Plate	01
056	Flange Bush	04
057	Bottom Plate	01
058	Thread Rod M10	04
059	Top Plate	01
060	Chrome Bar Ø25	02
061	Nut M10	16
062	Bearing Roller	08
063	Al. Washer Ø12 x Ø20 x 1	32
064	Bearing 6201z	16
065	Bolt M12 x 20	16
066	Bolt M10 x 20	08
053	Acme Thread	01
054	Countersunk Cap Screw M10 x 20	02
055	Motor Mounting Plate	01
056	Flange Bush	04
057	Bottom Plate	01
058	Thread Rod M10	04
059	Top Plate	01
060	Chrome Bar Ø25	02
061	Nut M10	16
062	Bearing Roller	08
063	Al. Washer Ø12 x Ø20 x 1	32
064	Bearing 6201z	16
065	Bolt M12 x 20	16
066	Bolt M10 x 20	08



POS	Description	Qty
067	Rubber Cap	04
068	Chrome Bar Holder	02
069	Cuppoint Socket Head Screw M8 x 10	04
070	Counter Sunk Capscrew M8 x 30	02
071	Chrome Bar Ø60	02
072	Absorbing Rubber	01
073	Stopper	01
074	Wheel Handle	01
075	Handle Spindle	01
076	Handle Spacer	01
077	Hand Wheel	01
078	Flange Bearing F205	01
079	Counter Sunk Caps Screw M8 x 30	04
067	Rubber Cap	04
068	Chrome Bar Holder	02
069	Cuppoint Socket Head Screw M8 x 10	04
070	Counter Sunk Capscrew M8 x 30	02
071	Chrome Bar Ø60	02
072	Absorbing Rubber	01
073	Stopper	01
074	Wheel Handle	01
075	Handle Spindle	01
076	Handle Spacer	01
077	Hand Wheel	01
078	Flange Bearing F205	01
079	Counter Sunk Caps Screw M8 x 30	04
080	Housing Cover	01
081	Washer Ø8 x Ø20 x 2.5	01
082	Caps Screw M6 x 20	06
083	Motor 2.2Kw	01
084	Screw M6 x 15	02
085	Rubber Piece	01
086	Motor Flange (inside)	01
087	Blade	01
088	Motor Flange (outside)	01
089	Nut M20	01
090	Blade Cover	01
091	Knob M6	03
092	Nozzle Holder	01
093	Water Nozzle	02
094	Blade Guard	01
095	Rubber Absorber Ø60 x 10	01
096	Stopper	01
097	Extension Housing	01
098	Cap Screw M10 x 20	01
099	Rubber Cap 20	02
100	Extension Bar Handle	01
101	Extension Bar	01
102	Nut M5	02
103	Screw M5 x 50	02
104	Screw M6 x 10	02
105	Locking Pin	01
106	Locking Spring	01
107	Positioning Bush	01
108	Spacer	01



POS	Description	Qty
112	Cap Screw M8 x 20	04
113	Cap Screw M10 x 50	06
115	Plastic P-Clip	05
116	Screw M4 x 15	05
117	Flexible Spring Holder	01



3. Unpacking and Assembly of the Abaco Site Saw Mod S2

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 S2
- 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
- 2 x Side Table with 2 Legs

Assembly

THE SITE SAW MOD S2 COMES STANDARD WITH THE EUROPEAN POWER PLUG.

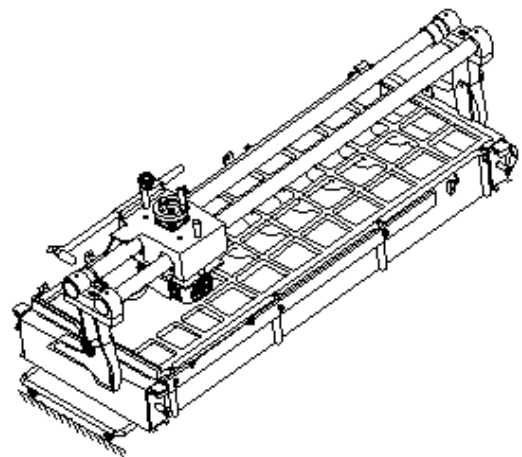
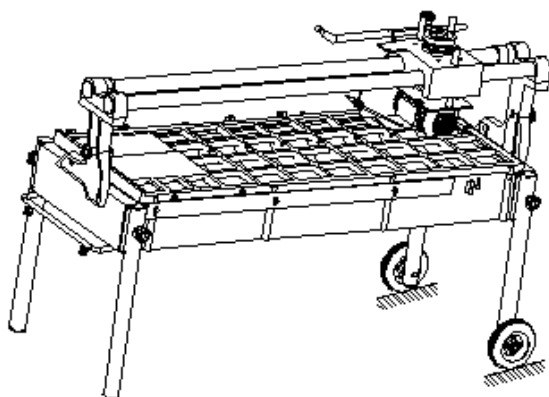
1. Alternately this power plug has been removed. Ensure that the correct plug is fitted to the power cable. Check with your local authorized service center for more information.
2. Ensure that the Saw is placed on level ground.
3. Screw the 4 legs onto the water tray of the Saw using the 4 Knob screws 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 onto the side table. Adjust the height of the table using a spirit level to ensure that the side table and working are level.
6. Loosen the "Travel Lock" on the chrome bars before use.

Your Abaco SITE SAW MOD S2 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 5mm 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 5mm Allen key supplied.

Your Abaco SITE SAW MOD S2 has a unique "Single Person Moving System"

1. The bearings on the underside 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 5mm 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 S2 can be fitted with a 10", 12" or 14" diamond blade.

1. Use the spanner and 6mm Allen key provided.
2. Ensure 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 the retaining-nut (left hand thread) holding the shaft locked with the Allen key. Tighten the retaining-nut.
10. Reinstall the blade cover screw back on using the 3 black knobs.

Head Adjustment

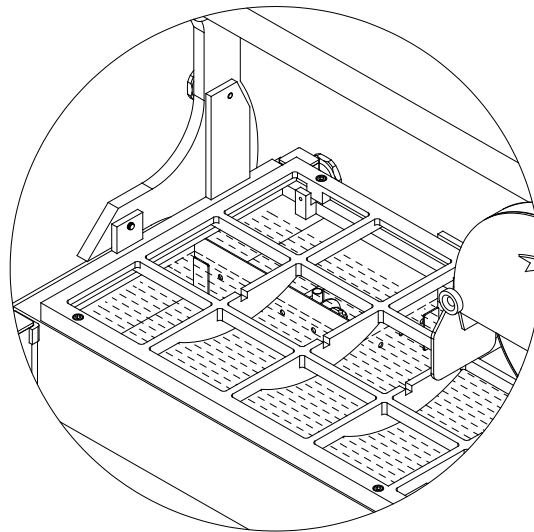
Depending on the size of the blade and type of cut required (i.e Step Treads). The Abaco SITE SAW MOD S2's head is adjustable.

1. Ensure 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. Ensure 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.

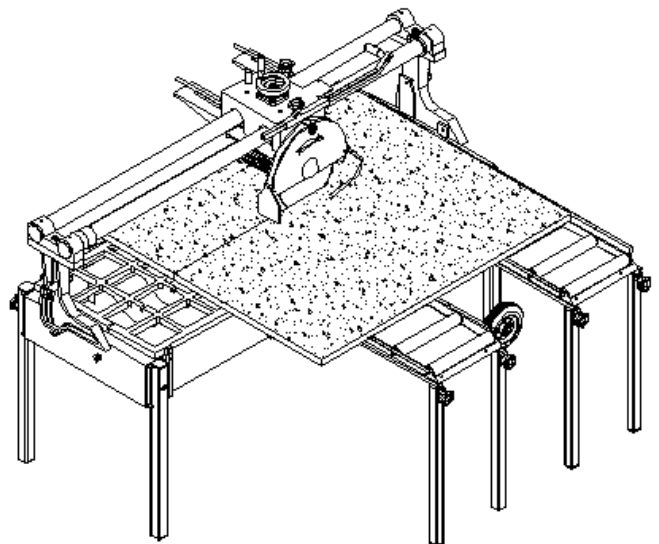
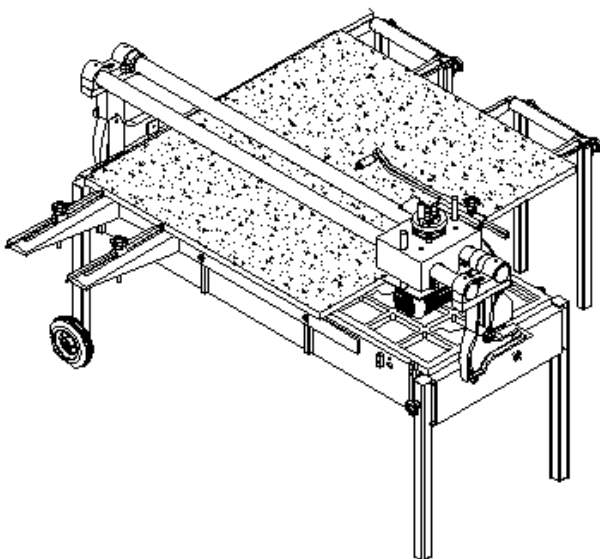
1. Ensure that the drain plug is installed into the water tray.
2. Ensure that the water pump's guard is installed.
3. Fill the water tray until the water completely covers the water pump.
4. The overflow drain valve is supplied for use of the Saw when indoors or a place that the water in the water tray 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 S2

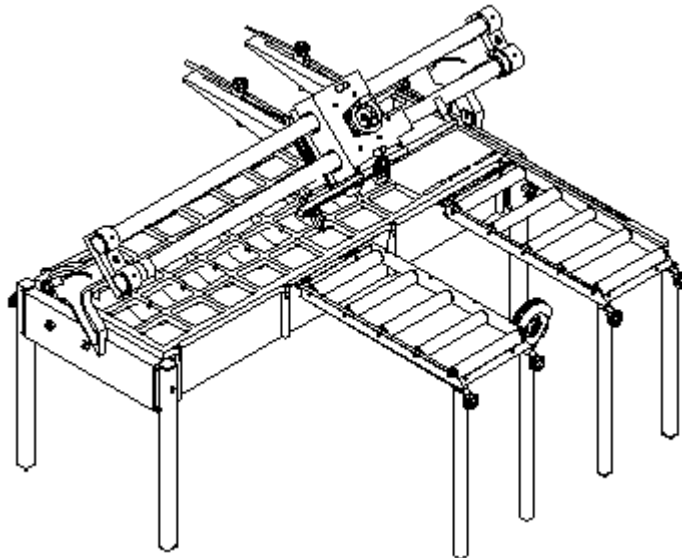
Cutting Straight Edges

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.



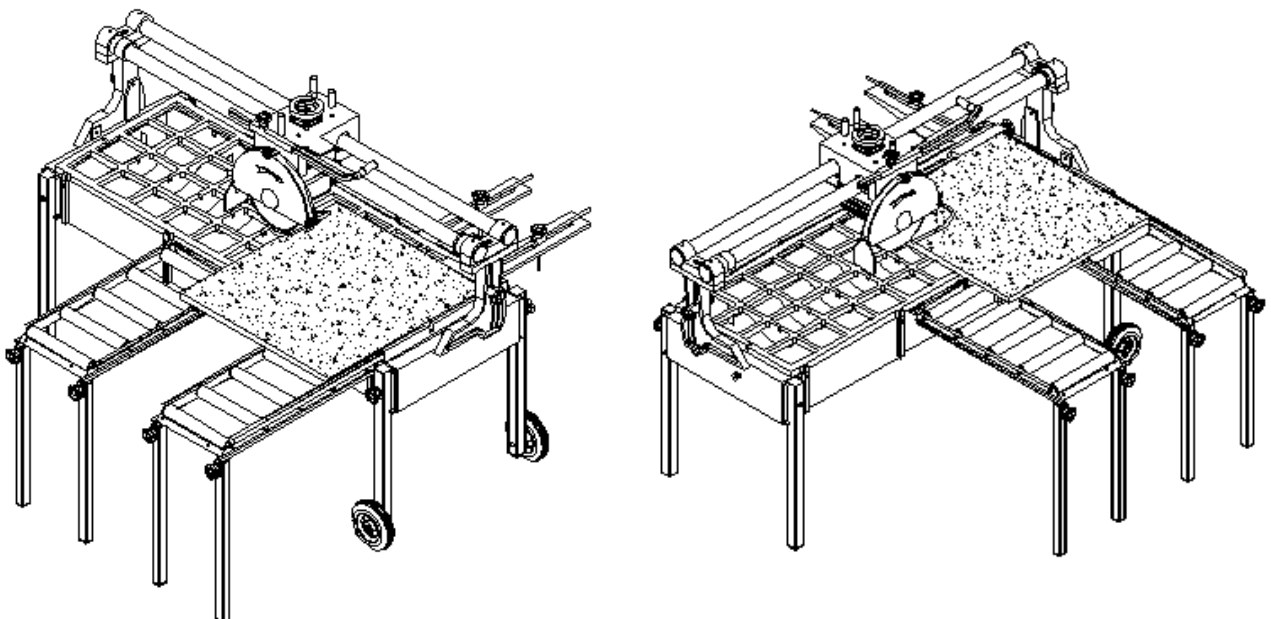
Cutting 45° Miter

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 desired location using the ruler on the working table.
5. Place 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 complete.



Clean Up

To ensure long life of the water pump, it 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.

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 at 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 inner flange with a light oil such as WD-40.
5. Periodically lubricate the leg screw threads and blade cover knobs with a light oil such as WD-40.

5. 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 smoothed 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 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.