INSTRUCTIONS FOR

COMPOUND SLIDING MITRE SAW

MODEL NO: **SMS12**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.


Refer to instructions


Wear ear protection


Wear eye protection


Wear protective gloves


Wear a mask


Warning: Laser beam

1. SAFETY

1.1. **ELECTRICAL SAFETY**

❑ **WARNING!** It is the user's responsibility to check the following:
Check all electrical equipment and appliances to ensure that they are safe before using. Inspect power supply leads, plugs and all electrical connections for wear and damage. Sealey recommend that an RCD (Residual Current Device) is used with all electrical products. You may obtain an RCD by contacting your local Sealey dealer.
If the saw is used in the course of business duties, it must be maintained in a safe condition and routinely PAT (Portable Appliance Test) tested.
Electrical safety information, it is important that the following information is read and understood.

1.1.1. Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply.

1.1.2. Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that they are secure.

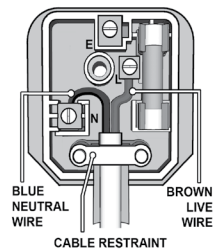
1.1.3. **Important**: Ensure that the voltage rating on the appliance suits the power supply to be used and that the plug is fitted with the correct fuse - see fuse rating in these instructions.

× **DO NOT** pull or carry the appliance by the power cable.

× **DO NOT** pull the plug from the socket by the cable. Remove the plug from the socket by maintaining a firm grip on the plug.

× **DO NOT** use worn or damaged cables, plugs or connectors. Ensure that any faulty item is repaired or replaced immediately by a qualified electrician.

1.1.4. This product is fitted with a BS1363/A 13 Amp 3 pin plug.
If the cable or plug is damaged during use, switch the electricity supply and remove from use.
Replace a damaged plug with a BS1363/A 13 Amp 3 pin plug. If in doubt contact a qualified electrician.
Class II products are wired with live (brown) and neutral (blue) only are marked with the Class II symbol;
A) Connect the BROWN live wire to the live terminal 'L'.
B) Connect the BLUE neutral wire to the neutral terminal 'N'.
C) After wiring, check that there are no bare wires and ensure that all wires have been correctly connected.
Ensure that the cable outer sheath extends inside the cable restraint and that the restraint is tight.



Recommended fuse rating
13 Amp

× **DO NOT** connect either wire to the earth terminal.
Sealey recommend that repairs are carried out by a qualified electrician.

1.2. **GENERAL SAFETY**

✓ Familiarise yourself with the applications, limitations and potential hazards of the saw.

❑ **WARNING!** Disconnect the saw from the mains power before changing accessories, servicing or performing any maintenance.

✓ The machine must only be serviced by a qualified person or service agent. Contact your Sealey dealer for information.

✓ Select a work area suitable for the saw and keep the area clean, tidy and free from unrelated materials. Ensure that there is adequate lighting.

✓ Permanently mount the saw on a supporting surface strong enough to take the weight of the machine and workpiece.

✓ Wood dust can be harmful to health by inhalation and skin contact. Concentrations of small dust particles in the air can form an

✓ explosive mixture. Ensure that there is adequate ventilation and that the saw is attached to a dust-extraction unit.

✓ Maintain the saw in good condition, check moving parts alignment regularly. Keep saw blades clean and sharp.

✓ Replace or repair damaged parts. *Use recommended parts only. Unauthorised parts may be dangerous and will invalidate the warranty.*

❑ **WARNING!** Keep all guards and holding screws in place, tight and in good working order. Check regularly for damaged parts.

✓ A guard, or any other part, that is damaged should be repaired or replaced before the saw is next used. The safety guard is a mandatory fitting where the saw is used in premises covered by the Health & Safety at Work Act.

✓ Before commencing work, ensure the saw blade is set to cut in the correct direction, securely fastened, sharp and is compatible with the

✓ machine, spindle speed and the material to be cut. Never use a saw blade if damaged, bent or warped. Use only recommended saw blades.

✓ Remove adjusting keys and wrenches from the machine and the vicinity before switching on.

✓ Machine operators must have received sufficient training and instructions relating to the dangers associated with the machine, the precautions to be observed and the requirements of the Wood Working Machines Regulations. Operators must be under the adequate supervision of a person who has a thorough knowledge and experience of the machine and the appropriate regulations.

× **DO NOT** operate the saw if any parts are damaged or missing as this may cause failure and/or personal injury.

× **DO NOT** operate the saw when you are tired or under the influence of alcohol, drugs or intoxicating medication.
✓ When not in use switch off the saw and unplug from the power supply.
❑ **WARNING!** Wear approved safety eye protection, ear defenders and, if dust is generated, respiratory protection.
✓ Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery and contain long hair.
✓ Keep hands and body clear of the blade when operating the saw.
✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
✓ Keep children and unauthorised persons away from the work area.
✓ Avoid unintentional starting and never leave the saw operating unattended.
× **DO NOT** use the saw for a task it is not designed to perform and ensure operators are trained to use the saw.
× **DO NOT** get the saw wet or use in damp or wet locations or areas where there is condensation.
× **DO NOT** use the saw where there are flammable liquids, solids or gases such as paint solvents and including waste cleaning rags etc.

1.3. **SPECIFIC SAW SAFETY RULES**

✓ Connect to a suitable extraction system. Failure to do so will result in the build-up of sawdust which could become a fire hazard.
✓ Keep blade guard in place and operational.
❑ **WARNING!** Before each use, check that the saw blade is secure and not worn or damaged.
✓ Check workpiece to ensure that there are no nails or other items which may foul the saw blade.
✓ Clamp the workpiece firmly against the fence.
✓ Avoid subjecting the saw blade to excessive strain - never force the blade down. Maintain a controlled, steady progression.
✓ Should the saw blade jam, switch the power off immediately to prevent damage to the motor.
✓ Provide adequate support to the sides of the saw table for long or wide workpieces.
✓ Always use the workpiece clamp provided if at all possible. If the workpiece can only be hand-held take extreme care.
× **DO NOT** place yourself in an awkward operating position where a slip could cause your hand to move into the cutting blade.
× **DO NOT** stand, or have any part of your body, in line with the path of the saw blade.
× **DO NOT** hold what will become the off-cut (the waste part of the workpiece).
❑ **WARNING! DO NOT** put hands anywhere near the blade whilst it is rotating.
❑ **WARNING! DO NOT** attempt to free a jammed saw blade without first switching off or removing the plug from the mains power supply.
× **DO NOT** cut metals or substances that may produce toxic dust. **Saw must only be used to cut wood or wood derived substances and plastics.**
× **DO NOT** attempt to cut round section wood.
× **DO NOT** use solvent to clean plastic parts, it may damage them. Use a soft damp cloth only.
✓ Store blades in a safe, dry childproof location.

LASER SAFETY. SM12 utilises a Class II laser that emits a low level of visible radiation (i.e. a wavelength of 650 nanometres) which is safe for the skin but not inherently safe for the eyes. The Class II emission limit is set at the maximum level for which eye protection is normally afforded by natural aversion responses to bright light. Accidental eye exposure is therefore normally safe, although the natural aversion response can be overridden by deliberately staring into the beam, and can also be influenced by the use of alcohol or drugs.

2. INTRODUCTION

Lightweight portable saws with aluminium base, chassis and machined aluminium table. Features sliding action, table extension wings and work clamp. Laser guide enables user to accurately align cut line avoiding miss cuts and wastage. Trigger control with safety catch provides added user safety. Blade guard includes Ø35mm dust extraction port with removable dust-bag. Saw arm features ±45° mitre with positive stop and 45° bevel for cutting compound mitres. Supplied with TCT saw blade. Saw arm latches closed for easy storage and transport.

3. SPECIFICATION

Model no:	SMS12
Motor power:	1800W
Supply:	230V
Blade size:	Ø305 x 2.8 x Ø25.4mm
Blade speed:	4200rpm
Positive mitre lock:	0°, 15°, 22.5°, 30°, 45°
Blade 90°/mitre 0°:	100 x 310mm
Blade 90°/mitre 45°:	100 x 215mm
Blade 45°/mitre 0°:	55 x 310mm
Blade 45°/mitre 45°:	55 x 215mm
Dust extraction port:	Ø35mm
Weight:	19kg
Replacement blades:	
Model no:	tpu:
SMS12B40:	40*
SMS12B60:	60

*Standard blade

4. ASSEMBLY

Refer to fig.1

❑ ***WARNING! ENSURE THAT THE SAW IS NOT CONNECTED TO THE MAINS POWER BEFORE COMMENCING ASSEMBLY.***

4.1. Screw the mitre lock (6) into the work table.

4.2. Push workpiece supports (8) into the mounting holes at either end of the table extensions and secure with clamp screws.

4.3. Plug the clamping vice (16) into one of the two holes on the left or right of the base plate.

4.4. **MOUNTING**

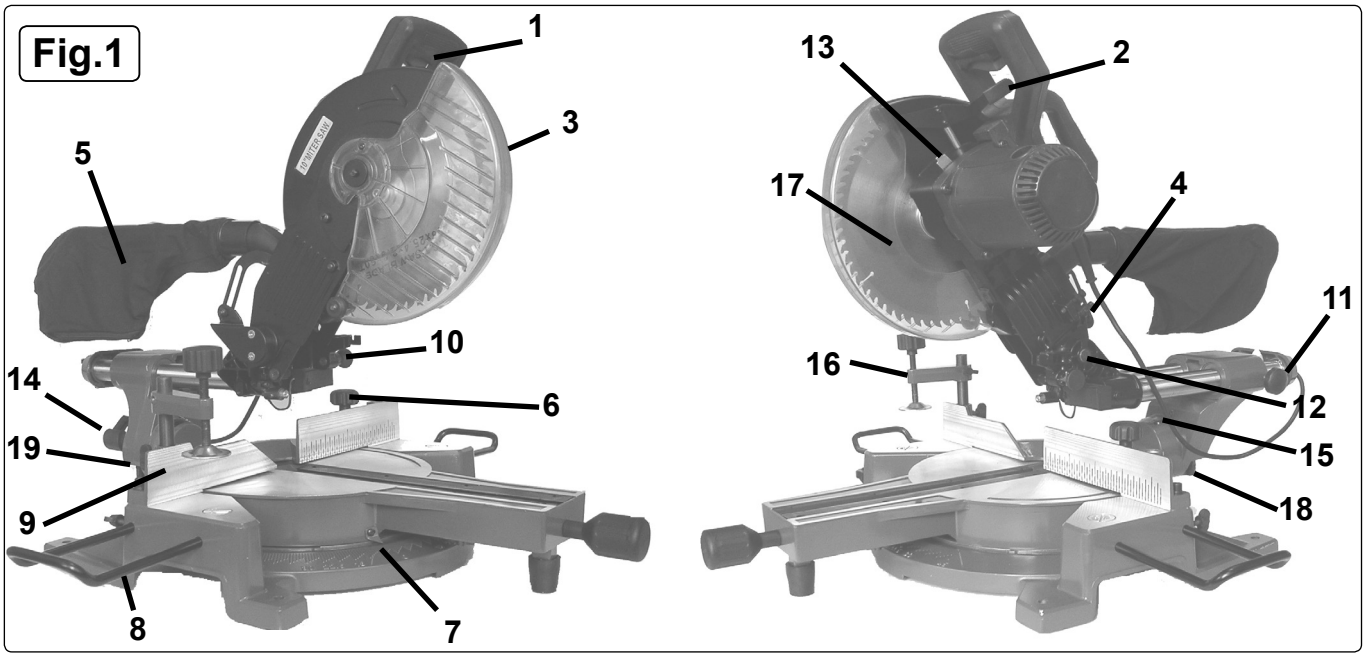
4.4.1. The saw should be bolted to a sturdy workbench. Ensure that the supporting surface is strong enough to take the weight of the saw and any workpiece. Position the saw in a suitable work area with enough clearance to allow room when working with large workpieces.

4.4.2. Ensure that there is adequate lighting and that the saw blade can be clearly seen.

4.5. **EXTRACTION**

Connect the outlet to a suitable extraction system, or attach the dust bag (5).

❑ **WARNING!** *Wood dust can be harmful to health by inhalation and skin contact and concentrations of small dust particles in the air can form an explosive mixture. Therefore, ensure that there is adequate ventilation and that the saw has the dust bag fitted or is attached to a dust-extraction unit.*



1	ON/OFF Trigger	7	Mitre Degree Pointer	13	Blade Lock
2	Guard Release Lever	8	Work Support	14	Bevel Lock
3	Blade Guard	9	Fence	15	Bevel Degree Pointer
4	Adjustable Depth Stop	10	Laser Guide	16	Clamping Vice
5	Dust Bag	11	Slide Lock	17	Blade
6	Mitre Lock	12	Saw Head Lock Pin	18	Stop Screw

5. ADJUSTMENTS

Refer to fig.1

❑ **WARNING! ALWAYS DISCONNECT SAW FROM THE MAINS POWER BEFORE MAKING ANY ADJUSTMENTS.**

5.1. **TABLE**

5.1.1. Loosen the mitre lock (6) and the table will rotate.

5.1.2. The table will latch at 0°, 15°, 22.5°, 30° and 45°. Once the latch is engaged at the required angle, tighten the locking handle (6).

5.1.3. For any other angle the table is retained by the lock (6) only.

5.2. **BLADE**

5.2.1. Lightly press down on the handle and at the same time pull the saw head lock pin (12). Control the spring-loaded saw arm until it reaches the fully raised position.

5.2.2. The blade can be tilted by up to 45° to the left by loosening the bevel lock (14). Firmly tighten screw to clamp at the required angle.

5.3. **Initial set-up** - before first use set blade angle to 0° on scale and confirm, using a set square, that the blade is at 90° to the table. If it is not, loosen lock nut and adjust stop screw (19) to give 90°, retighten lock nut. Similarly, set the blade at 45° and check that the blade to table angle is 45°. Any required adjustment is provided by the opposite lock nut and stop screw.

5.4. **CHANGING THE BLADE**

5.4.1. Swing up the blade to full height.

5.4.2. Press the guard release lever (2) and lift the guard up to expose the blade retaining hex bolt.

5.4.3. Engage the blade lock (13) and undo the blade retaining bolt. **Note the bolt has a left hand thread, to undo turn clockwise.**

5.4.4. Remove the outer blade flange and then the saw blade with care. Wear hide palm rigger's gloves to protect hands from the blade.

5.4.5. When fitting the new blade it is very important to ensure that the direction arrow on the blade matches the arrow on the blade housing. Clean shaft and flanges and then fit blade, outer blade flange, washer and bolt. Tighten bolt.

5.4.6. Check the operation of the pivoted guard by lowering and raising the blade.

5.5. **SETTING THE CUTTING DEPTH refer to fig.2 unless otherwise instructed**

5.5.1. The maximum cutting depth of the blade must be set to make sure that it does not come into contact with the bed of the saw.

5.5.2. Lower the cutting arm as far as it will go and hold it down on the stop.

5.5.3. Lock the bevel angle locking lever, fig.1.14, in the 0° position.

5.5.4. Securely tighten the mitre angle lock, fig.1.6, and the slide rod locking screw, fig.1.11.

5.5.5. Rotate the blade by hand to make sure that It moves freely. (Ensure saw is disconnected from the mains).

5.5.6. The correct blade depth should allow for the blade to be 5mm below the upper level of the kerf plate at the fence position.

5.5.7. If the blade is not in this position, it should be adjusted as follows.

5.5.8. Undo the lock nut and turn the blade depth adjusting screw until the blade is 5 mm below the the upper level of the kerf plate.

5.5.9. Screw the adjusting screw in, if the blade needs to be raised.

5.5.10. Screw the screw out, if the blade needs to be lowered. When the blade has been set to the lowest cutting depth, securely tighten the lock nut.

5.5.11. There is also a secondary depth stop, which can be used for partial through cutting (trenching). To set the blade for partial through cutting proceed as follows.

5.5.12. Pull out the depth stop lever.

5.5.13. Loosen the knurled adjusting locking nut.

5.5.14. Adjust the cutting depth adjusting bolt until the required depth setting is achieved, (i.e lower cutting arm until adjusting bolt touches the top of the depth stop lever).

5.5.15. Screw the adjusting bolt in, if the blade needs to be raised, screw the bolt out, if the blade needs to be lowered tighten the knurled adjusting lock nut. Return the depth stop lever to its original position when not in use.

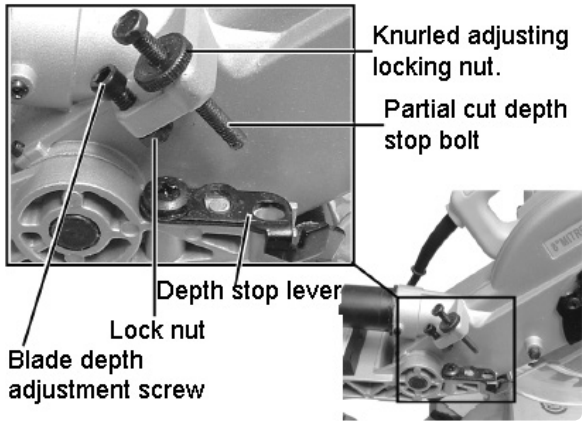


Fig.2

6. OPERATION

Refer to fig.1

❑ **WARNING! As with all power tools, there are potential hazards involved in the use of this saw. It is, therefore, vital to ensure that you have read and understood all the safety instructions in Section 1.**
Familiarise yourself again with the specific saw safety rules for each step of the following operation. Failure to do so could cause serious damage and/or personal injury and may invalidate your warranty. Disconnect the saw from the mains power before making any adjustments, maintenance or removing/fitting the blade. Ensure that all screws and nuts are secure and that the blade is in good condition and correctly fitted. ALWAYS wear approved safety eye protection.

6.1. Set the required table angle and blade angle. Leave blade in raised position.

6.2. Secure the workpiece against the fence (9) with the clamping vice (16).

▲ **DANGER!** If holding the workpiece by hand take extreme care and ensure hand is kept away from the blade.

6.3. When you have completed the cut, the waste off-cut will either remain on the saw table and workpiece supports or fall off, depending upon size. Before starting, therefore, consider how you will handle the off-cut.

6.4. Plug the saw into the mains power supply.

6.5. Switch on the laser guide using the switch located on the battery cover next to (12) Saw Head Lock.

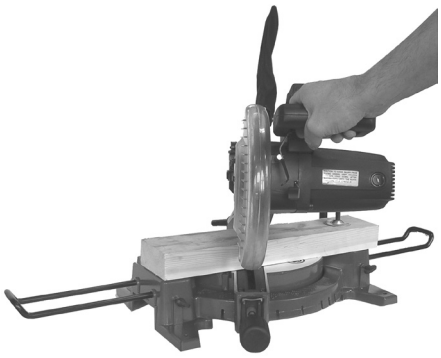
6.6. Align the cut mark on the workpiece with the laser line.

❑ **WARNING! DO NOT look or stare into the laser beam as permanent eye damage could result. See section 1 LASER SAFETY.**

6.7. Hold the saw handle and squeeze the switch trigger. When the blade has reached maximum speed press the guard release lever (2) and bring the blade down onto the workpiece.
Slowly move the blade down through the workpiece. Do not try to force the blade through the wood, use light pressure.
When the cut is complete allow the blade to rise to the upper position and release the switch to turn off the saw.

6.8. When the blade has come to a complete stop turn off the laser guide.

❑ **WARNING!** ***DO NOT*** *attempt to pick up an off-cut or to remove the clamped workpiece before the saw blade has completely stopped.*

MITRE	BEVEL	COMPOUND
		
Mitre Cut To perform a mitre cut loosen the mitre lock (6) position the saw table to the desired angle and tighten the mitre lock(6). For wide workpieces loosen slide lock (11), bring the blade down and slowly move the blade backwards until the cut is complete. **DO NOT** stand in front of the blade, keep to one side.	**Bevel Cut** To perform a bevel cut position the blade to the desired angle using the bevel lock (14). For wide workpieces loosen slide lock (11), bring the blade down and slowly move the blade backwards until the cut is complete. **DO NOT** stand in front of the blade, keep to one side.	**Compound Cut** To perform a compound cut select the desired mitre and bevel cut position as described in “Mitre Cut & Bevel Cut”. For wide workpieces loosen slide lock (11), bring the blade down and slowly move the blade backwards until the cut is complete. **DO NOT** stand in front of the blade, keep to one side.

7. MAINTENANCE

❑ **WARNING! Ensure machine is switched off and plug is removed from socket before any maintenance is undertaken.**

7.1. Regularly clean the saw to remove dirt, dust and chips, using a brush and cloths, and re-oil moving parts. If compressed air is used for cleaning remember to wear protective goggles and keep other personnel at a safe distance.

7.2. **CARBON BRUSHES**

7.3. The carbon brushes should last for approx. 50 hours of running time. Replace when there is less than 5mm of carbon remaining.

7.4. The brushes are located on either side of the motor.

7.5. Undo the plastic cap and withdraw the brush, use caution as the brushes are spring loaded. Repeat on the other side.

7.6. Reassemble by reversing the procedure.

7.7. Ensure that motor vents are clear at all times.

7.8. Clean plastic components with water and detergent, never use caustic or abrasive cleaners.

7.9. Check the condition of the blade before every use, any sign of damage should result in the blade being disposed of and a new replacement fitted. ***Ensure the replacement blade conforms to the saws specifications i.e RPM, outer blade diameter and type i.e woodcutting.***

7.10. Listen to the saw when in use. If any unusual sounds are heard stop the machine and inspect . If in any doubt refer the machine to an authorised service agent.

7.11. If the laser does not function remove the battery cover and replace the batteries (2 x AAA).

Environmental Protection

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain off any fluids (if applicable) into approved containers and dispose of the product and the fluids according to local regulations.

NOTE: *It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.*

IMPORTANT: No liability is accepted for incorrect use of this product.

WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.

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