



Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.



Never dispose of electrical equipment or batteries in with your domestic waste. If your supplier offers a disposal facility please use it or alternatively use a recognised re-cycling agent. This will allow the recycling of raw materials and help protect the environment.

**sip**  
SIP INDUSTRIAL

**machinery specialists since 1968**

## 12" Industrial Circular Saw



**01565**

**FOR HELP OR ADVISE ON THIS PRODUCT PLEASE CONTACT YOUR DISTRIBUTOR,  
OR SIP DIRECTLY ON:  
TEL: 01509500400  
EMAIL: [sales@sip-group.com](mailto:sales@sip-group.com) or [technical@sip-group.com](mailto:technical@sip-group.com)  
[www.sip-group.com](http://www.sip-group.com)**

**Please read and fully understand the instructions in this manual before operation. Keep this manual safe for future reference.**

# DECLARATION OF CONFORMITY

## Declaration of Conformity

We

SIP (Industrial Products) Ltd  
Gelders Hall Road  
Shepshed  
Loughborough  
Leicestershire  
LE12 9NH  
England

As the manufacturer's authorised representative within the EC  
declare that the


12" Industrial Circular Saw 3PH - SIP Part. No. 01565

**Conforms to the requirements of the following directive(s), as indicated.**

2006/95/EC	Low Voltage Directive
2006/42/EC	Machinery Directive
2004/108/EC	EMC Directive
2002/95/EC	RoHS Directive

**And the relevant harmonised standard(s), including:**

EN 55014-1:2006+A1+A2  
EN 55014-2:1997+A1+A2  
EN 61000-3-2:2006+A1+A2  
EN 61000-3-3:2008

Signed:  .....

Mr P. Ippaso - Managing Director - SIP (Industrial Products) Ltd  
Date: 30/08/2013.



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## SAFETY SYMBOLS USED THROUGHOUT THIS MANUAL



**Danger / Caution:** Indicates risk of personal injury and/or the possibility of damage.



**Warning:** Risk of electrical injury or damage!



**Note:** Supplementary information.

## SAFETY INSTRUCTIONS



**IMPORTANT:** Please read the following instructions carefully, **failure to do so could lead to serious personal injury and / or damage to the circular saw.**

When using the circular saw, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury.

Read all these instructions before operating the circular saw and save this user manual for future reference.

The circular saw should **not** be modified or used for any application other than that for which it was designed.

It was designed for metal cutting work in engineering workshops, garages, metal fabricators, etc.

If you are unsure of its relative applications do not hesitate to contact us and we will be more than happy to advise you.

**KNOW YOUR CIRCULAR SAW:** Read and understand the owner's manual and labels affixed to the circular saw. Learn its applications and limitations, as well as the potential hazards specific to it.

**KEEP WORK AREA CLEAN AND WELL LIT:** Cluttered work benches and dark areas invite accidents. Floors must not be slippery due to oil, water or sawdust etc.

**DO NOT USE THE CIRCULAR SAW IN DANGEROUS ENVIRONMENTS:** Do not use the circular saw in damp or wet locations, or expose it to rain. Provide adequate space sur-

## PARTS LIST...cont

Ref. No.	Description	SIP Part No.	Ref. No.	Description	SIP Part No.
645.	Washer	WK03-00210	674.	Bolt M5x12	WK04-00093
646.	Nut	WK03-00211	675.	Spring washer	WK03-00218
647.	Pinion	WK03-00212	676.	Emergency stop button	WK03-00089
648.	Lock nut	WK03-00213	677.	Switch	WK03-00219
655.	Motor	WK03-00214	678.	Earth connector	WK03-00220
657.	Motor bolt	WK03-00215	682.	Label	WK03-00221
658.	Stop ring	WK03-00216	N/A	Inline filter	WK03-00095
670.	Electrical box	WK03-00090	N/A	QF1, 2, 3 Breaker	WK04-00149
671.	Electrical box cover	WK03-00091	N/A	Contactora CN6	WK04-00150
672.	Electrical box cover gasket	WK03-00092	N/A	Relay	WK04-00152
673.	Screw M4x10	WK03-00217	N/A	Transformer	WK04-00153

## PARTS LIST....cont

Ref. No.	Description	SIP Part No.	Ref. No.	Description	SIP Part No.
402.	Bolt	WK03-00149	441.	Blade shaft	WK03-00180
403.	Bolt	WK03-00150	442.	Blade flange	WK03-00181
404.	Nut	WK03-00151	443.	Blade bolt	WK03-00182
405.	Oil sight glass	WK03-00152	450.	Stopper	WK03-00183
406.	Needle bearing	WK03-00153	451.	Ring	WK03-00184
407.	Circlip	WK03-00154	471.	Gasket	WK03-00185
409.	Stopper	WK03-00155	473.	Screw	WK03-00186
410.	Bearing	WK03-00156	501.	Fixed blade guard	WK03-00187
416.	Key for worm shaft	WK03-00157	502.	Large movable blade guard	WK03-00188
418.	Ring	WK03-00158	503.	Small moveable blade guard	WK03-00189
419.	Dowel pin	WK03-00159	504.	Ring	WK03-00190
421.	Drain bolt	WK03-00160	505.	Guard rod	WK03-00191
422.	Oil seal	WK03-00161	506.	Washer	WK03-00192
423.	Nut	WK03-00162	507.	Coolant tap	WK03-00193
424.	Gear	WK03-00163	508.	Pivot pin	WK03-00194
425.	Spacer ring	WK03-00164	510.	Bush	WK03-00195
426.	Cap head bolt	WK03-00165	511.	Circlip	WK03-00196
427.	Stop ring	WK03-00166	512.	Guard rod	WK03-00197
428.	Lock ring	WK03-00167	513.	Bracket	WK03-00198
429.	Bearing	WK03-00168	514.	Washer	WK03-00199
430.	Ring	WK03-00169	515.	Cap head bolt	WK03-00200
431.	Bearing	WK03-00170	518.	Lever rod	WK03-00201
432.	Worm shaft	WK03-00171	519.	Bolt	WK03-00202
433.	Head	WK03-00172	521.	Ring	WK03-00203
434.	Worm wheel	WK03-00173	522.	Coupling rod	WK03-00204
435.	Bush	WK03-00174	525.	Coolant hose	WK03-00205
436.	Circlip	WK03-00175	612.	Head handle	WK03-00206
437.	O-ring	WK03-00176	614.	Micro switch c/w handle	WK03-00037
438.	Cap head bolt	WK03-00177	615.	Head handle nut	WK03-00207
439.	Bearing block	WK03-00178	631.	Motor shaft key	WK03-00208
440.	Key for blade shaft	WK03-00179	644.	Head handle screw	WK03-00209

## SAFETY INSTRUCTIONS....cont

rounding the work area. Do not use in environments with a potentially explosive atmosphere.

**KEEP CHILDREN AND UNTRAINED PERSONNEL AWAY FROM THE WORK AREA:** All visitors should be kept at a safe distance from the work area.

**STORE THE CIRCULAR SAW SAFELY WHEN NOT IN USE:** the circular saw should be stored in a dry location and disconnected from the mains supply, and out of the reach of children.

**WEAR THE CORRECT CLOTHING:** Do not wear loose clothing, neckties, rings, bracelets, or other jewellery, which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves up above the elbow.

**USE SAFETY CLOTHING / EQUIPMENT:** Wear CE approved safety goggles at all times, normal spectacles only have impact resistant lenses, they are **NOT** safety glasses. A face or dust mask should be worn if the operation is dusty and ear protectors (plugs or muffs) should be worn, particularly during extended periods of operation.

**PROTECT YOURSELF FROM ELECTRIC SHOCK:** When working with the circular saw, avoid contact with any earthed items (e.g. pipes, radiators, hobs and refrigerators, etc.). It is advisable wherever possible to use an RCD (residual current device) at the mains socket.

**STAY ALERT:** Always watch what you are doing and use common sense. Do not operate the circular saw when you are tired or under the influence of alcohol or drugs.

**DISCONNECT THE CIRCULAR SAW FROM THE MAINS SUPPLY:** When not in use, before servicing and when changing accessories such as circular saw blade, etc.

**AVOID UNINTENTIONAL STARTING:** Make sure the switch is in the **OFF** position before connecting the circular saw to the mains supply.

**NEVER LEAVE THE CIRCULAR SAW RUNNING / CONNECTED WHILST UNATTENDED:** Turn the circular saw off and disconnect it from the mains supply between jobs. Do not leave the circular saw until it comes to a complete stop.

**DO NOT ABUSE THE MAINS LEAD:** Never attempt to move the circular saw by the mains lead or pull it to remove the plug from the mains socket. Keep the mains lead away from heat, oil and sharp edges. If the mains lead is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid unwanted hazards.

**CHECK FOR DAMAGED PARTS:** Before every use of the circular saw, a guard or other part that is damaged should be carefully checked to determine that it will operate correctly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, and any other conditions that may affect its operation. A guard or other part that is damaged should be correctly repaired or replaced by an authorised service centre unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorized service agent. Do not use the circular saw if the switch does not turn the saw on and off.

**KEEP ALL GUARDS IN PLACE:** And in full working order.

**MAINTAIN THE CIRCULAR SAW WITH CARE:** Keep blades sharp and clean for the best

## SAFETY INSTRUCTIONS....cont

and safest performance. Follow instructions for lubricating and changing accessories. All extension cables must be checked at regular intervals and replaced if damaged. Always keep the vice hand-wheel grip/s on the circular saw clean, dry and free of oil and grease.

**USE ONLY RECOMMENDED ACCESSORIES:** Consult this user manual, your distributor or SIP directly for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards and will invalidate any warranty you may have.

**REMOVE ADJUSTING KEYS AND WRENCHES:** Form a habit of checking to see that keys and adjusting wrenches are removed from the circular saw before every use.

**SECURE THE WORK-PIECE:** Always use the vice to hold the work-piece. This frees up both hands to operate the circular saw.

**DO NOT OVERREACH:** Keep proper footing and balance at all times.

**USE THE RIGHT TOOL:** Do not use the circular saw to do a job for which it was not designed.

**DO NOT FORCE THE CIRCULAR SAW:** It will do the job better and more safely at the rate which it was designed.

**DO NOT OPERATE THE CIRCULAR SAW IN EXPLOSIVE ATMOSPHERES:** Do not use the circular saw in the presence of flammable liquids, gases, dust or other combustible sources. Circular sawing operations may create sparks which can ignite the dust or fumes.

**DO NOT EXPOSE THE CIRCULAR SAW TO RAIN OR USE IT IN WET CONDITIONS:** Water entering circular saw will greatly increase the risk of electric shock.

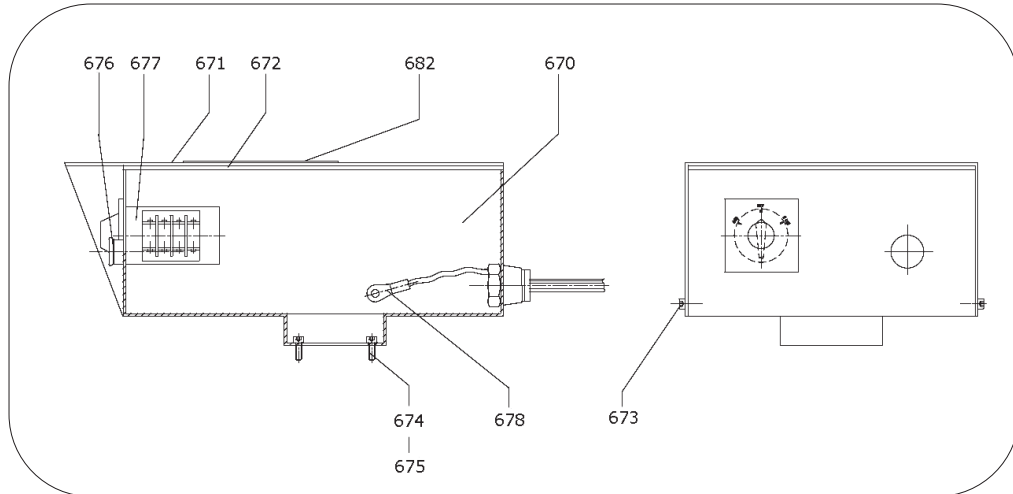
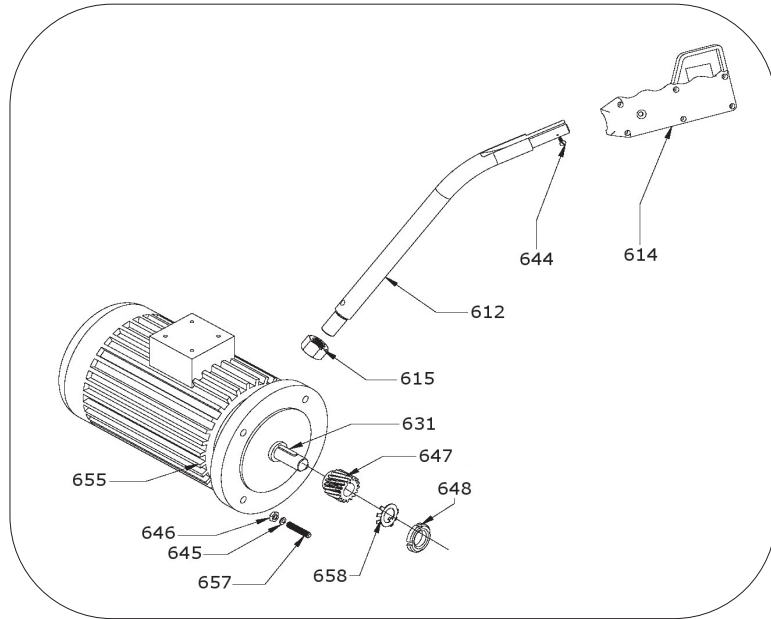
**HAVE YOUR CIRCULAR SAW REPAIRED BY A QUALIFIED PERSON:** The tool is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

**DO NOT** dismantle, tamper with or use the circular saw without all guards fitted as this may be dangerous and will invalidate the warranty.

- Keep hands out of the path of the circular saw blade, never reach around circular saw blade.
- Make sure the circular saw blade is clear of the work-piece before the handle trigger is pressed in.
- Stop operation immediately if you notice anything abnormal.
- Wait for the circular saw blade to stop completely and remove the plug from mains supply before servicing or adjusting the circular saw or changing the blade.
- Be alert at all times, especially during repetitive, monotonous operations. Don't be lulled into a false sense of security. Circular saw blades can be extremely unforgiving.

## PARTS LIST

Ref. No.	Description	SIP Part No.	Ref. No.	Description	SIP Part No.
102.	Cover	WK03-00100	305.	Bolt	WK03-00120
103.	Pump support	WK03-00101	306.	Rubber cover	WK03-00121
104.	Bolt M6x12	WK04-00038	307.	Pipe clamp	WK03-00122
105.	Spring washer M6	WK03-00102	308.	Nut	WK03-00123
106.	Bolt M10x100	WK03-00103	320.	Pin	WK03-00124
107.	Bolt M6x12	WK04-00038	321.	Mitre handle knob	WK03-00125
108.	Spring washer M6	WK03-00102	322.	Mitre handle	WK03-00126
109.	Electrical label	WK03-00104	323.	Shaft	WK03-00127
110.	General label	WK03-00105	324.	Nut	WK03-00128
111.	Coolant pump	WK04-00313	325.	Tensioning nut	WK03-00129
112.	Coolant tank filter	WK03-00106	326.	Nut	WK03-00130
113.	Bolt M6x12	WK04-00038	327.	Bolt	WK03-00131
114.	Coolant tank	WK04-00020	328.	Pressure plate	WK03-00132
201.	Angle scale	WK03-00107	337.	Front vice jaw left	WK03-00133
202.	Rivet	WK03-00108	N/A	Rear vice jaw right	WK03-00133
203.	Spring	WK03-00109	338.	Front vice jaw right	WK03-00134
204.	Washer M10	WK04-00046	N/A	Rear vice jaw left	WK03-00134
205.	Bolt M10x100	WK03-00103	339.	Front vice jaw holder	WK03-00135
206.	Nut M10	WK04-00052	340.	Cap head bolt	WK03-00136
207.	Base mesh filter	WK03-00110	341.	Vice handle	WK03-00137
208.	Spring fixed plate	WK03-00111	342.	Vice handle knob	WK03-00138
209.	Spring fixed plate	WK03-00112	343.	Plastic cover	WK03-00139
210.	Washer	WK03-00113	344.	Handle boss	WK03-00140
220.	Base	WK03-00114	345.	Guide shaft	WK03-00141
221.	Swivel base	WK03-00115	346.	Vice base	WK03-00142
222.	Grease nipple	WK03-00116	347.	Cap head bolt	WK03-00143
223.	Swivel base shaft	WK03-00117	349.	Rear vice jaw holder	WK03-00144
302.	Nut M10	WK04-00052	350.	Support block	WK03-00145
303.	Ring	WK03-00118	351.	Cap head bolt	WK03-00146
304.	Plate	WK03-00119	353.	Vice shaft	WK03-00147
305.	Bolt	WK03-00120	401.	Ring	WK03-00148



- Use of improper accessories may cause damage to the circular saw and surrounding area as well as increasing the risk of injury.
- Do not modify the circular saw to do tasks other than those intended.
- When sawing always use the vice to hold the material; To avoid injury, the work-piece should never be held with the bare hands.
- Secure the stand to the circular saw before using the circular saw. If the work is heavy or large and likely to cause the circular saw to tip over, use additional supports as appropriate under and around the material.
- Remove all tools from the machine base after adjustment is made.
- Appropriate personal protective equipment **MUST** be worn and **MUST** be designed to protect against all hazards created. Severe permanent injury can result from using inappropriate or insufficient protective equipment - Eyes in particular are at risk.
- Do not overload the blade. Allow the blade to operate at its optimum speed for maximum efficiency.
- Always ensure that the accessories such as blades are rated / designed for use with this circular saw as well as the required application, and are correctly and securely fastened before connecting the circular saw to the mains supply.
- The work must be clamped firmly whilst sawing, if its loose it could result in personal injury or damage to the blade/machine.
- Using the correct tpi blade for cutting the material will make your job easier, and the blade last longer, using the wrong tpi blade will make a rough cut and will decrease the life of the blade.
- Keep hands away from the blade.
- Never use this circular saw with the blade guard or electrical box cover removed.
- Round bar and tubing can have a tendency to roll whilst being cut and can cause the blade to slip, **DO NOT** cut such items without clamping the material with the vice.
- Never have the blade touching the material before you press the handle trigger, this is dangerous and will make the blade bounce or even shatter, any damage will not be covered by warranty.
- Do not start the circular saw until the material is secure and the blade has been lowered to just above the material.
- Never use damaged or deformed circular saw blades, this is extremely dangerous and if the blade shatters pieces will fly out, and could injure you or any one in the vicinity.

**If the circular saw is used in a place of work all rules and laws etc. relating to the use of portable electrical appliances should be followed.**



## SAFETY INSTRUCTIONS....cont



When using the circular saw for certain operations, particularly during extended periods; ensure the operator as well as those in the area wear ear protection.



When using the circular saw always ensure the operator as well as those in the area wear eye protection.

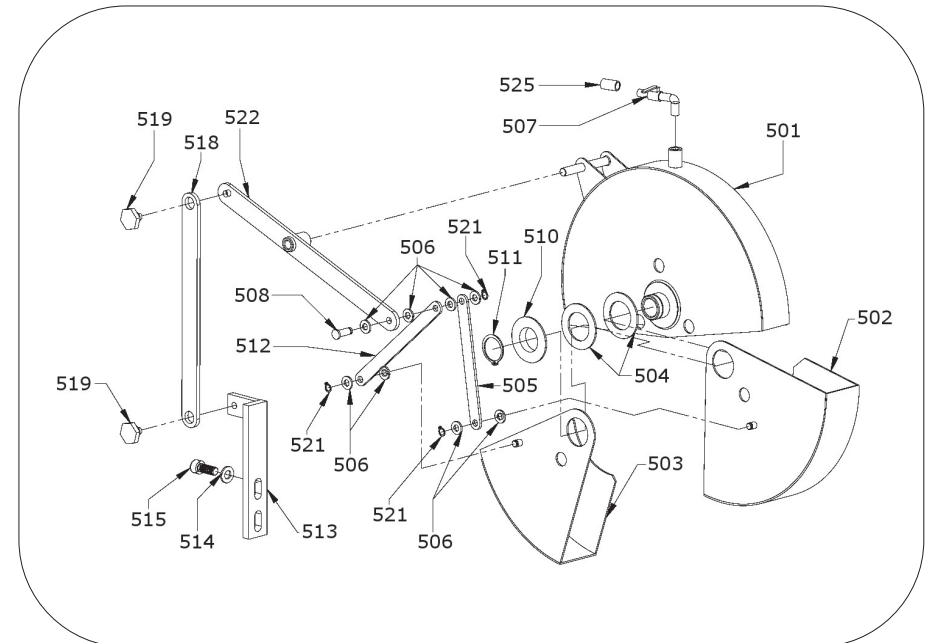
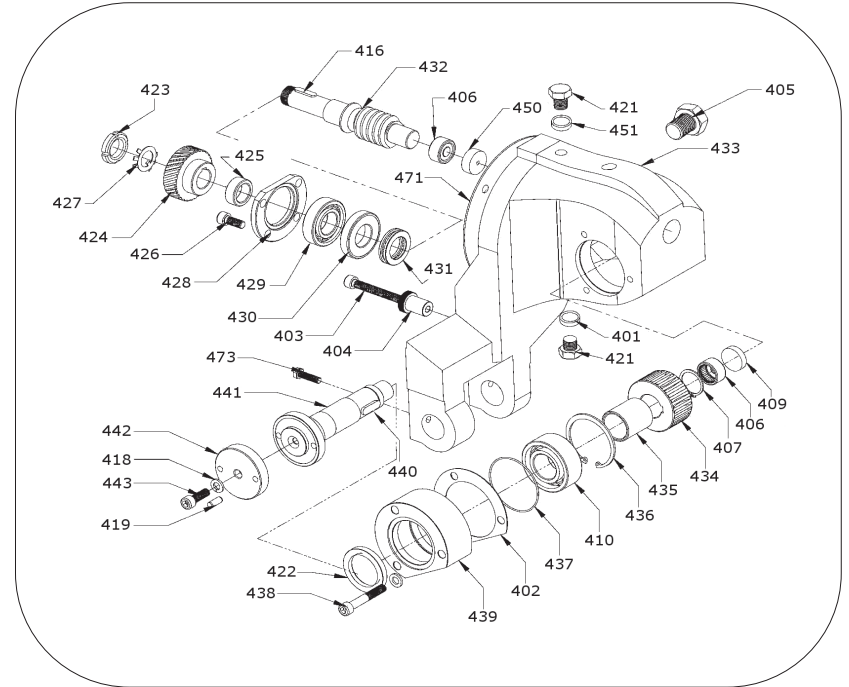


Some materials have the potential to be highly toxic; always wear a face mask when operating circular saw.



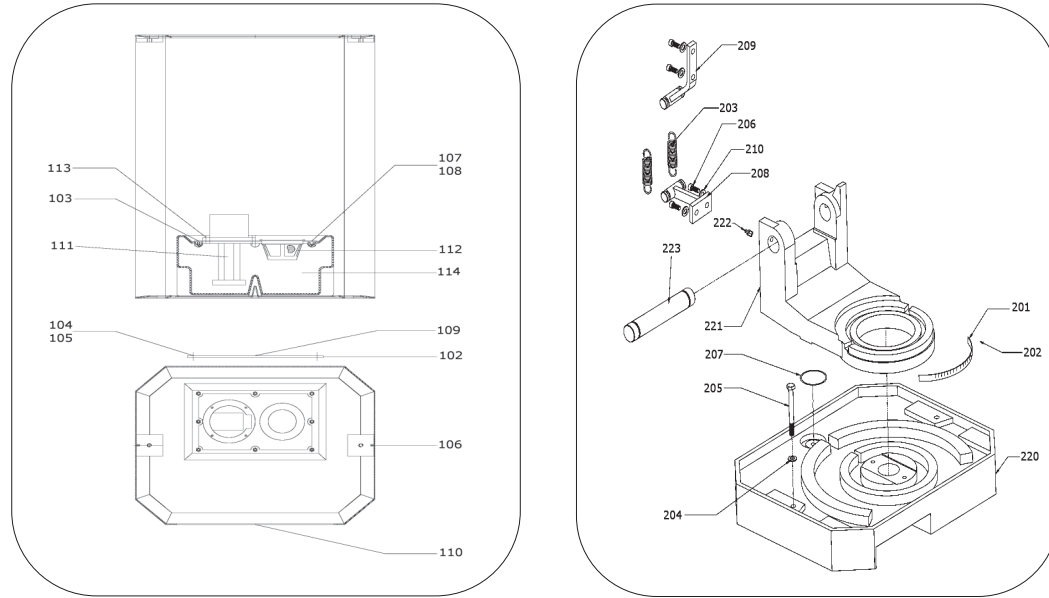
**CAUTION:** The warnings and cautions mentioned in this user manual can not cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be applied.

## EXPLODED DRAWING....cont





## EXPLODED DRAWING



## ELECTRICAL CONNECTION

**WARNING!** It is the responsibility of the owner and the operator to read, understand and comply with the following:

You must check all electrical products, before use, to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage.

You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices; A residual current circuit Breaker (RCCB) should be incorporated in the main distribution board. We also recommend that a residual current device (RCD) is used. It is particularly important to use an RCD with portable products that are plugged into a supply which is not protected by an RCCB. If in any doubt consult a qualified electrician.

### Connecting to the power supply:

This SIP circular saw requires 400v 50hz supply. Before using the circular saw, inspect the mains lead and plug (where applicable) to ensure that neither are damaged. If any damage is visible have the circular saw inspected / repaired by a suitably qualified person. If it is necessary to replace the plug a heavy duty impact resistant plug would be preferable.

The wires for the plug are coloured in the following way:

Yellow / green	Earth
Black	Phase
Black	Phase
Black	Phase

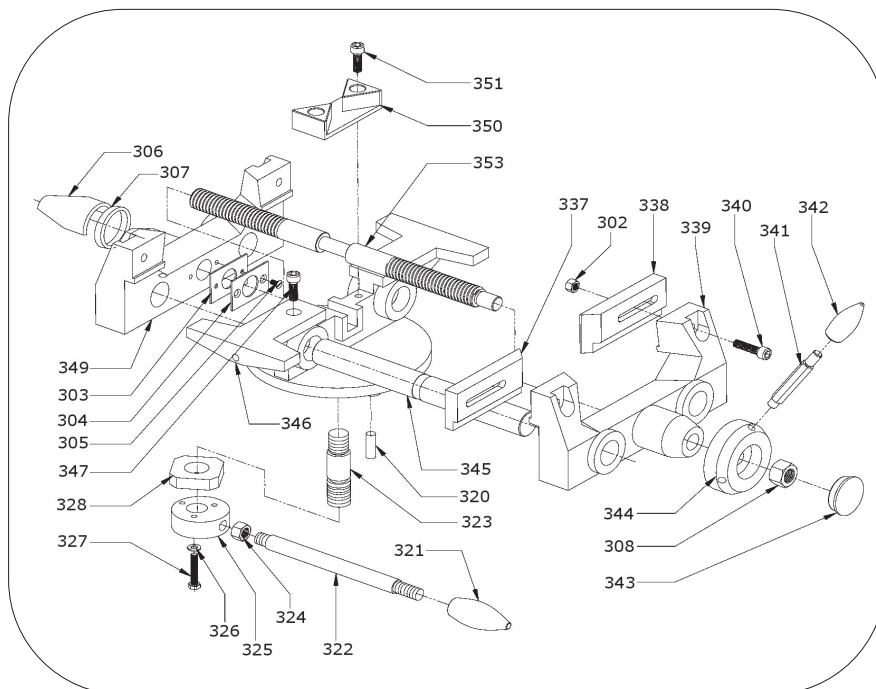
Always secure the wires in the plug terminal carefully and tightly. Secure the cable in the cord grip carefully.



**Warning:** Never connect live or neutral wires to the earth terminal of the plug. Only fit an approved plug with the correct rated fuse. If in doubt consult a qualified electrician.



**Note:** Always make sure the mains supply is of the correct voltage and the correct fuse protection is used. In the event of replacing the fuse always replace the fuse with the same value as the original.



## ELECTRICAL CONNECTION...cont



**Note:** Always make sure the mains supply is of the correct voltage and the correct fuse protection is used. In the event of replacing the fuse always replace the fuse with the same value as the original.



**Note:** If an extension lead is necessary in order to reach the mains supply; The cross section should be checked so that it is of sufficient size so as to reduce the chances of voltage drops. Always fully unwind the lead during use.

## GUARANTEE

This SIP circular saw is covered by a 12 month parts and labour warranty covering failure due to manufacturers defects. This does not cover failure due to misuse or operating the circular saw outside the scope of this manual - any claims deemed to be outside the scope of the warranty may be subject to charges including, but not limited to parts, labour and carriage costs.

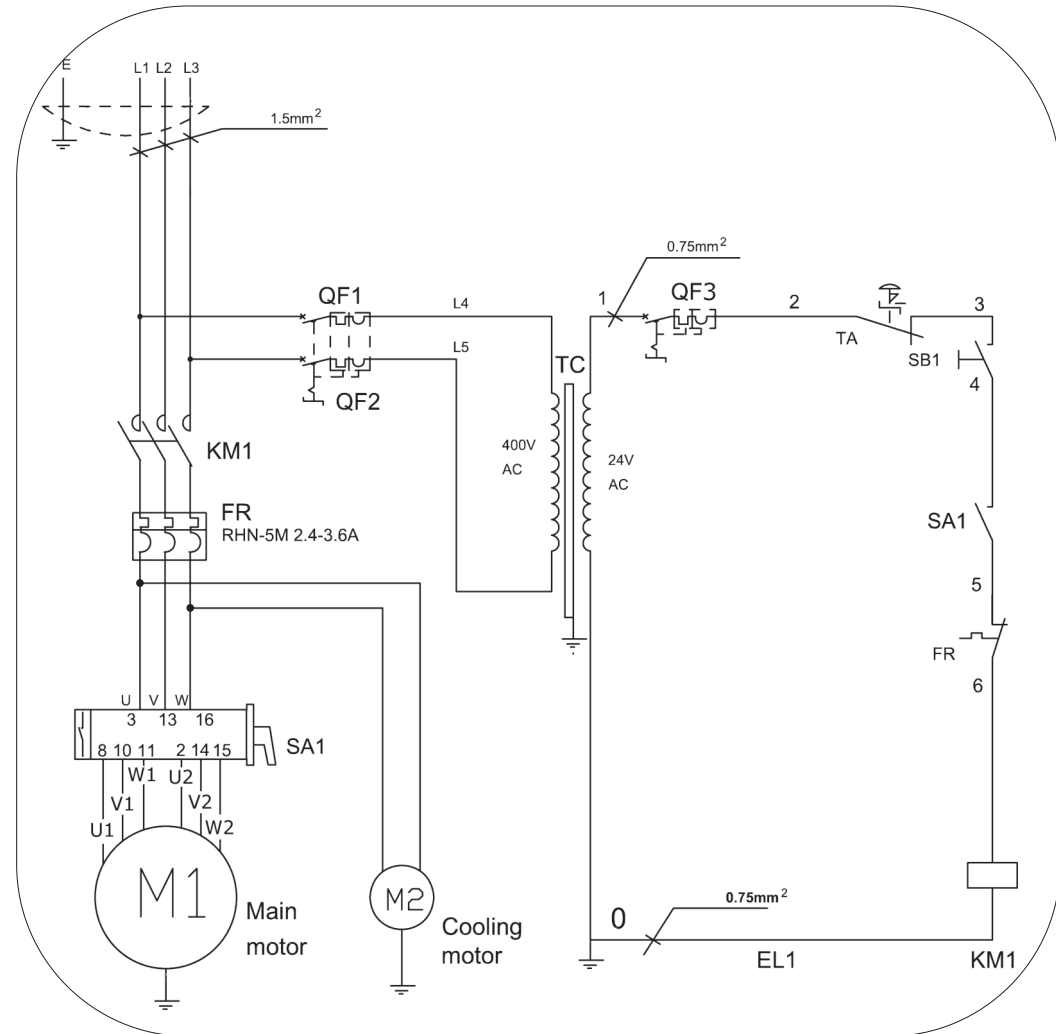
This guarantee does not cover consumables such as oil & blades etc.

In the unlikely event of warranty claims, contact your distributor as soon as possible.



**Note:** Proof of purchase will be required before any warranty can be honoured.

## WIRING DIAGRAM



Ref.	Description	Ref.	Description
TA	Emergency stop	TC	Transformer
SB1	Trigger switch	QF1,2,3	Breaker
FR	Overload relay	SA1	Speed selector switch
KM1	Contactor	EL1	Earth lead

## TROUBLESHOOTING

Symptom	Possible problem	Solution
Excessive bouncing or blade breaking.	<ol style="list-style-type: none"> <li>1. Speed too high.</li> <li>2. Teeth blunt on blade.</li> <li>3. Wrong coolant.</li> <li>4. Blade turns in the wrong direction.</li> <li>5. Worm and worm wheel defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Change speed on speed selector switch.</li> <li>2. Replace blade.</li> <li>3. Use correct coolant.</li> <li>4. Wired incorrectly, change phase 1 &amp; 2 around.</li> <li>5. Replace or contact distributor for repair.</li> </ol>
Motor doesn't turn.	<ol style="list-style-type: none"> <li>1. Motor wired incorrectly.</li> <li>2. Speed selector switch is in the 'OFF' position.</li> <li>3. Breaker popped out.</li> <li>4. Emergency stop button activated.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check wiring at mains board or plug.</li> <li>2. Select the correct speed and turn 'ON'.</li> <li>3. Reset breaker in electrical box or mains board.</li> <li>4. Reset emergency stop button.</li> </ol>
Coolant system not working.	<ol style="list-style-type: none"> <li>1. Coolant tap in the 'CLOSED' position.</li> <li>2. Coolant pump faulty.</li> <li>3. Coolant tank empty.</li> <li>4. Coolant pipe obstructed.</li> <li>5. Coolant filter blocked.</li> </ol>	<ol style="list-style-type: none"> <li>1. Put to the 'OPEN' position.</li> <li>2. Replace coolant pump.</li> <li>3. Fill coolant tank.</li> <li>4. Check and clear/replace pipe if necessary.</li> <li>5. Clean/replace coolant filter.</li> </ol>



**Note:** If none of the above solutions work then contact your local distributor for repair, or contact SIP technical for more advise.








 01 509 500400

 [technical@sip-group.com](mailto:technical@sip-group.com)

## TECHNICAL SPECIFICATION

Name	12" Industrial Circular Saw
Part number	01565
Circular 45°	90mm
Circular 90°	100mm
Rectangle 45°	100 x 90mm
Rectangle 90°	140 x 90mm
Blade size	315mm
Maximum vice width	145mm
Blade speed	18 & 36 rpm
Motor	1HP (0.75kw) - 1.7HP (1.3kw)
Net weight	185kg
Gross weight	207kg

For the sawing capacity of different shaped material and mitre angles, refer to the below diagram.

							
90°	100	100x100	100x100	100x100	140x90	55	50x50
60°	100	90x90	90x90	90x90	100x90	45	40x40
45°	100	90x90	90x90	90x90	100x90	45	40x40

## BLADE SECTION

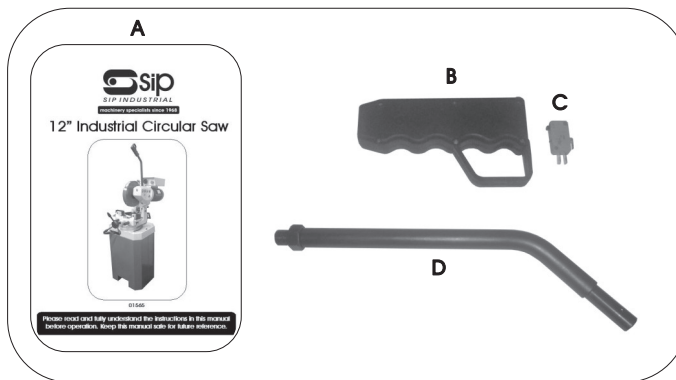
	Tooth Pitch	Solid Bar Size			
		10mm to 15mm	15mm to 20mm	20mm to 25mm	25mm to 35mm
		Hollow Section Wall thickness			
		1mm	2mm	3mm	4mm
Hollow section	3	x			
	4		x		
	5			x	
	6				x
Solid bar	8	x			
	10		x		
	12			x	
	15				x



**Note:** The above table is a reference to what size blade should be used on different thickness materials.

## CONTENTS & ACCESSORIES

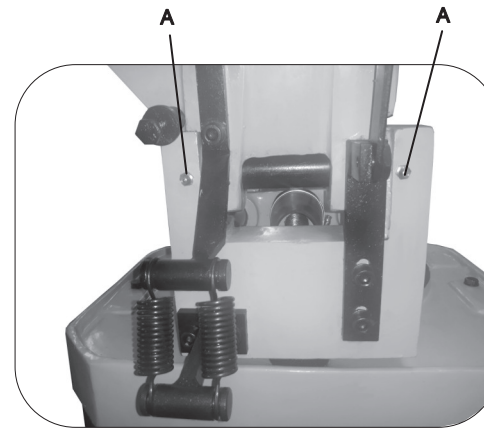
A	Manual
B	Handle
C	Handle micro switch
D	Handle lever



**Note:** If any of the above are missing or damaged, contact your distributor immediately.

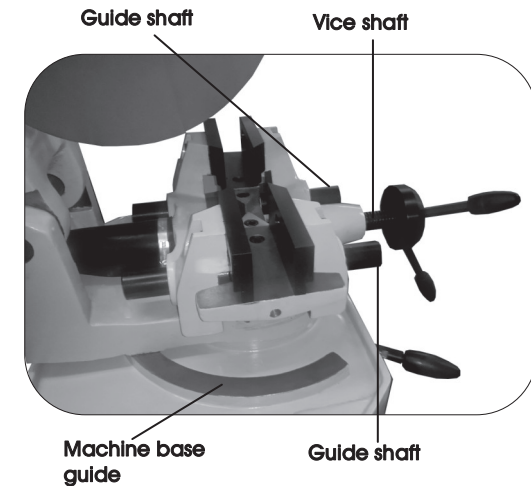
## MAINTENANCE...cont

### LUBRICATING THE CIRCULAR SAW



- The pivots of the saw head must be greased at least every three months, on the rear of the machine. There are two grease nipples (A), apply grease to these points.

- The vice shaft, guide shafts and machine base guide must be oiled regularly, this will make the vice move more smoothly and easier to adjust.



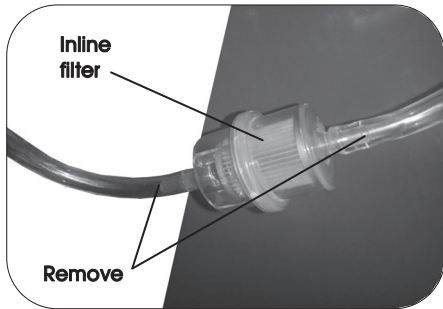
**Note:** Before oiling the shafts and guides, make sure they are cleared of any debris or swarf.

## MAINTENANCE...cont

### CHANGING THE INLINE FILTER



**Note:** Its best to change the filter at least once a year, or sooner if used more often in a working environment. SIP replacement filter code WK03-00095



- The filter is located at the rear of the machine between the coolant pump and coolant tap.
- Pull the two coolant pipes off either side of the filter.
- Push the two coolant pipes back onto the new filter.

### CLEANING THE MACHINE



**Note:** Never use compressed air to blow away the swarf, this is dangerous and could lead to eye damage if safety glasses are not worn, always use a soft brush (paint brush or similar) to remove the swarf at the end of each working day.



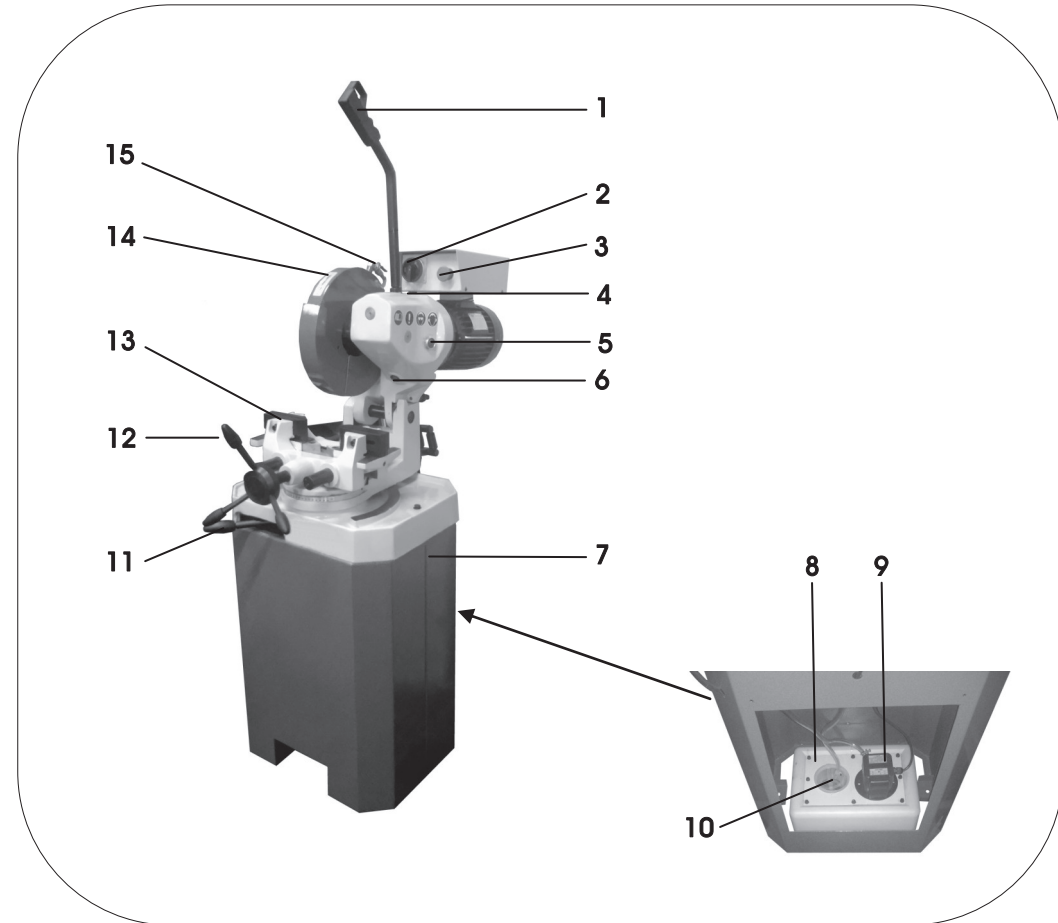
Machine base filter

Over the course of the day the machine will get clogged with swarf and could possibly stop the coolant from running back into the coolant tray. Its best to get into a routine at the end of each working day, or more if its used more frequently to clean any swarf from the machine base casting, filter and vice jaws. Use a soft brush (paint brush or similar) to remove the swarf from the machine at the end of each working day, **NEVER** use compressed air to remove the swarf.



**Note:** Never run the machine without the machine base filter fitted, without it fitted swarf will get into the coolant system and clog the coolant pump, this will stop the coolant circulating and cooling the blade, if a coolant pump is found with swarf inside of it then this will void any warranty you may have.

## GETTING TO KNOW YOUR CIRCULAR SAW



Ref.	Description	Ref.	Description
1.	Handle	9.	Coolant pump
2.	Speed selector switch	10.	Coolant tank filter
3.	Emergency stop button	11.	Bench lever
4.	Oil fill bolt	12.	Vice hand-wheel
5.	Oil sight glass	13.	Vice
6.	Oil drain bolt	14.	Blade guard
7.	Stand	15.	Coolant tap
8.	Coolant tank		



## ASSEMBLY INSTRUCTIONS

### FITTING THE CIRCULAR SAW TO THE STAND

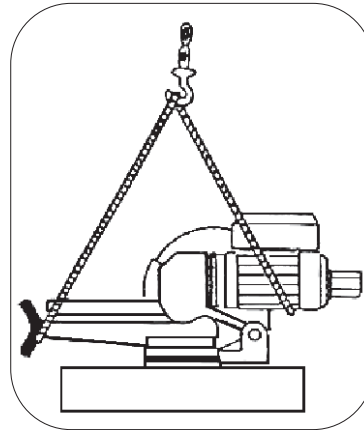


**Danger / Caution:** This is a minimum of a 2 man operation to remove this circular saw from its packaging as its extremely heavy, failing to do this can have serious consequences and could lead to personal injury and/or the possibility of damage.



**Note:** If any items are missing or damaged, **DO NOT** use the machine and contact your distributor immediately.

- Place the stand into the location where the circular saw is to be used.
- Bolt the stand to the floor (bolts not supplied).
- Remove the circular saw from its packaging.



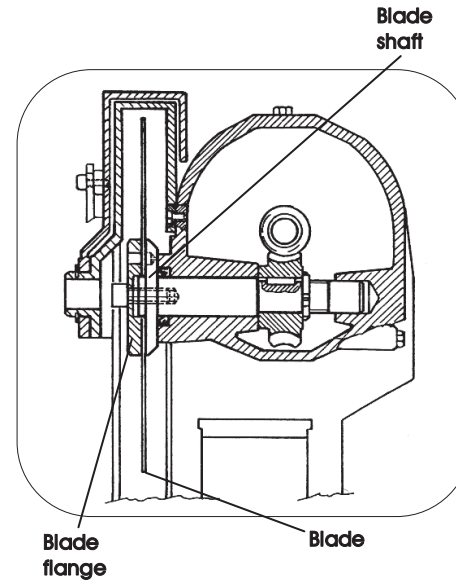
- Using proper lifting equipment and lifting straps, raise the circular saw up so that it is slightly higher than the stand.



**Danger / Caution:** Always using proper lifting equipment to move the circular saw onto the stand, **NEVER** attempt to lift the circular saw without lifting equipment as this is extremely dangerous.

- Slowly move the saw over stand then slowly lower the saw onto the stand, ensuring the four holes match up on the stand and saw.
- Secure the circular saw to the stand using the four hex bolts supplied.
- Remove the straps from the circular saw.

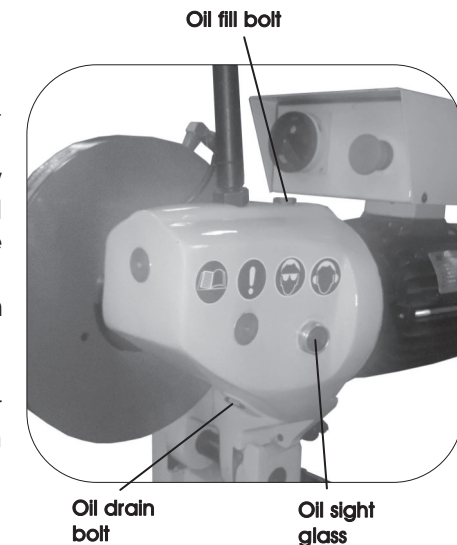
## MAINTENANCE...cont



- Place the new blade over the blade shaft lip.
- Fit the blade flange over the blade, turn the blade until the two pins on the blade flange slot into the two blade holes.
- Now turn the blade again until the two pins on the blade flange slot into the two blade shaft holes.
- Refit the blade bolt by turning it anti-clockwise to tighten it up.
- Slide both guards (C) back down and refit the arm (B) with bolt (A).

### CHANGING THE GEAR BOX OIL

- Turn the machine to the `OFF` position.
- Raise the head upwards.
- Place a container on the base of the circular saw and inline with the oil drain bolt.
- Remove the oil drain bolt to let the oil flow into the container, you may need to pull the head slightly forward to get rid of the remaining oil.
- Once all the oil is out refit the oil drain bolt.
- Remove the oil fill bolt.
- Pour oil into the oil fill hole with EP90 gear oil until it reaches around the red dot on the oil sight glass.
- Refit the oil drain bolt.

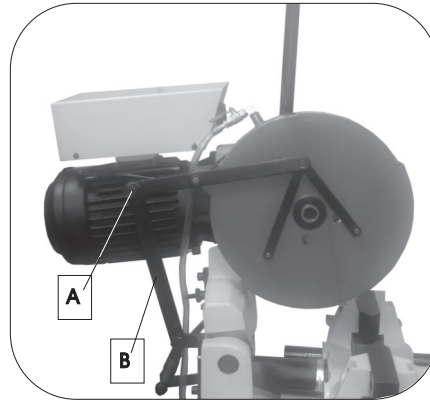


**Note:** Contact your local authority on how / where to dispose of the waste oil.

## MAINTENANCE

### CHANGING THE BLADE

- Turn the circular saw to the `OFF` position.
- Isolate the saw from the mains supply.
- Raise the head upwards.
- Remove hex. bolt (A).
- Slide arm (B) out of the way.



**Caution:** The blade bolt is a left handed thread, meaning to undo it you must turn the bolt clockwise, failing to do this will strip the threads on the blade shaft and will void your warranty.

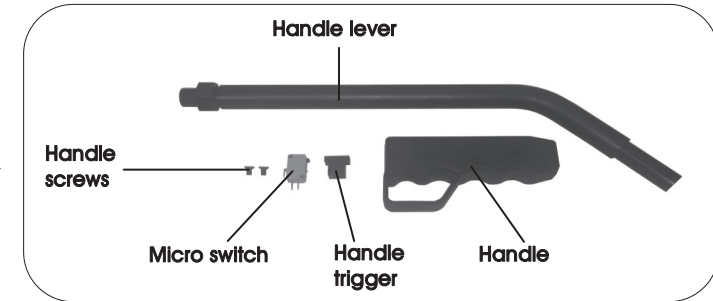


- Slide both movable guards (C) out of the way.
- Remove the blade bolt (D) by turning it clockwise to undo it, a soft mallet may be required just to loosen the bolt as it will be tight, but do not hit it too hard.
- Once the blade bolt is out, remove the blade flange then the blade.

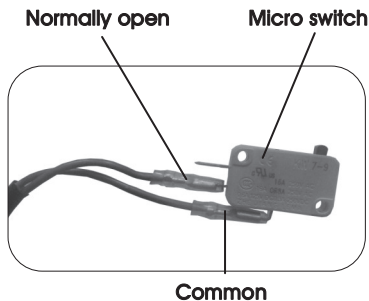
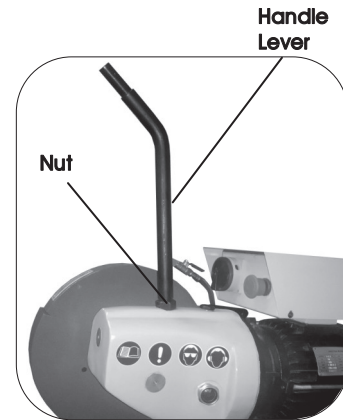
## ASSEMBLY INSTRUCTIONS...cont

### FITTING THE HANDLE LEVER

Items needed →

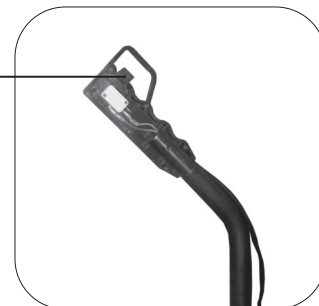


- Remove the transit bung from the head.
- Screw the handle lever into the head and tighten the nut, so the handle lever can't move.



- Locate the micro switch wire on the back of the electrical box and connect the two wires onto the micro switch; one wire to the C (common) connection and the other to the NO (normally open) connection.

Handle trigger



- Screw one half of the plastic handle onto the head lever using the handle screw, push the micro switch into the handle making sure it pushes into both pins, then fit the handle trigger onto the handle.



## ASSEMBLY INSTRUCTIONS...cont



Handle screw

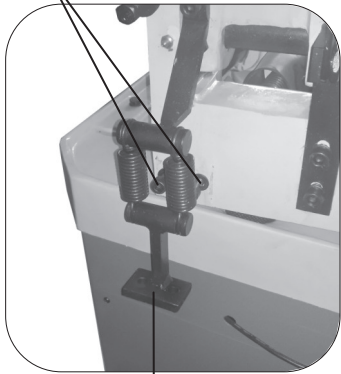
- Push the other half of the handle onto the handle that's already fixed to the head lever, use the remaining handle screw to secure.
- Tighten the remaining six screws on the plastic handle.
- Cable tie the micro switch wire onto the head lever.

### FITTING THE RETURN SPRING

The return spring will need to be fitted prior to operating the circular saw, to fit it do the following.

- Remove the 2 cap head bolts and washers from the circular saw (pic below left).
- Put a cap head bolt through the return spring bracket hole and screw into the base of the machine.
- Screw the other cap head bolt into the opposite side.

Cap head bolts



Return spring bracket



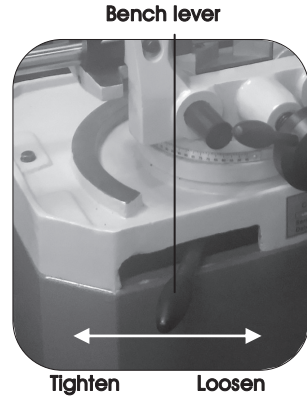
Fitted return spring

## OPERATING INSTRUCTIONS...cont

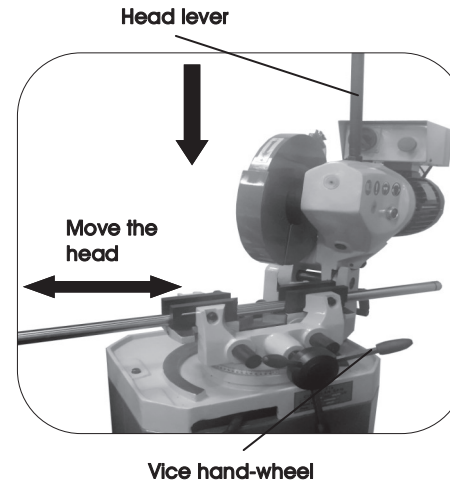
### SETTING UP FOR AN ANGLED CUT

The vice is fixed and the angle can only be set by rotating the head, up to 45° right or 45° left, to adjust to a specific angle the do the following.

- Loosen the bench lever by moving it to the right.



Tighten Loosen



Head lever

Move the head

Vice hand-wheel

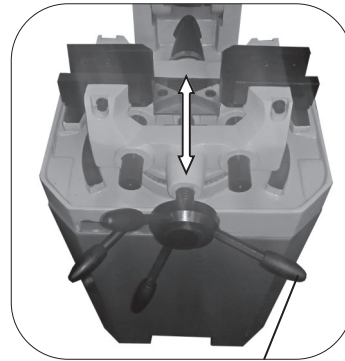
- Pull the head lever down and move the head left or right, depending on what angled cut is to be made.
- Use the scale on the swivel base to set your desired angle.
- Once the angle is set correctly, re-tighten the bench lever.
- Place the material between the vice jaws, then turn the vice hand-wheel clockwise to tighten the vice jaws against material so it can't move.
- The material is now ready to be cut.



**Note:** Never attempt cut an angle beyond 45°, this could possibly lead to damage to the machine, or personal injury to you or others in the area.

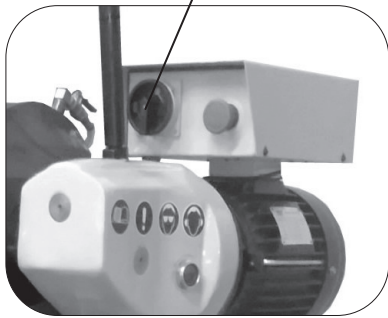
## OPERATING INSTRUCTIONS...cont

- Move the vice hand-wheel so you have enough clearance to fit your material.
- Place your material between the vice jaws.
- Re-tighten the vice hand-wheel so the material can't move.



Vice hand-wheel

Speed selector switch

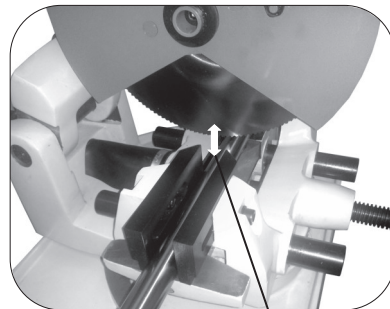


- Select the speed required on the speed selector switch.



**Danger / Caution:** Never have the blade touching the material before you press the trigger, this is dangerous and will make the blade bounce or even shatter the blade, any damage will not be covered by warranty.

- Lower the head about 5mm above the material, but do not make contact with the material.
- Press the trigger on the head lever to start the machine and coolant pump.
- Once the material is cut, release the trigger to stop the machine and coolant pump and raise the head up.
- Remove the material by undoing the vice hand-wheel.
- Repeat these steps if more material is to be cut.



5mm Gap

## ASSEMBLY INSTRUCTIONS...cont

### WIRING THE COOLANT PUMP

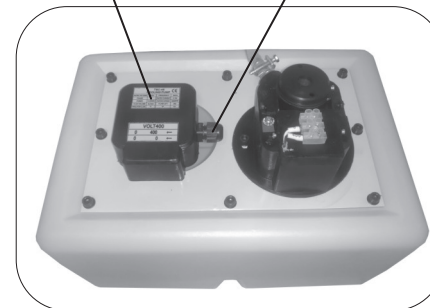


**Warning:** Disconnect from the mains supply before wiring the coolant pump, this is potentially dangerous and could lead to personal injury.

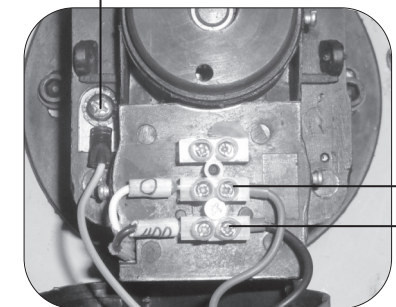
To wire the coolant pump do the following.

- Ensure the mains lead is disconnected from the mains supply.
- Push the coolant pump wire through the pre-drilled hole on the back of the stand.
- Remove the 2 screws holding the coolant pump terminal cover in place, and remove the terminal cover.
- Loosen the cable gland nut.
- Push the coolant pump wire through the cable gland.
- Connect the brown and black wire to the terminal block (see right picture below).
- Connect the earth wire to the earth terminal screw (see right picture below)
- Re-tighten the cable gland nut.
- Refit the terminal cover using the 2 screws.

Terminal Box cover  
Cable Gland nut



Earth Wire



Brown wire  
Black wire

### CONNECTING THE COOLANT PIPES

- The coolant pipe on the coolant tank filter should be connected to the nipple inside the stand (this is located underneath the machine base filter, see pg24), secure using the supplied pipe clip.
- Push the coolant pump pipe through the hole on the left hand side of the stand, pull it through and connect to the coolant tap on the blade guard, secure using the supplied pipe clip.

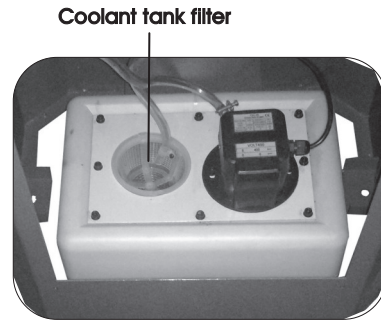
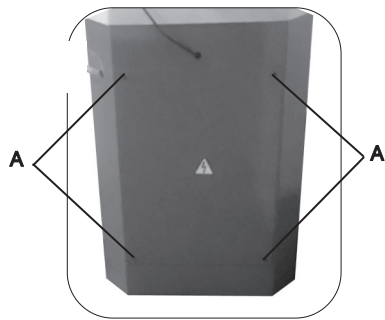
## OPERATING INSTRUCTIONS

### FILLING THE COOLANT TANK



**Note:** Before any cuts are made it is best to get into a routine of turning the coolant tap to the open position, this will prolong the life of the blade.

- Remove the four hex bolts (A) and remove the cover.
- Slide the coolant tank out.
- Fill the coolant tank through the coolant tank filter.
- Slide the tank back in.
- Refit the four hex bolts.

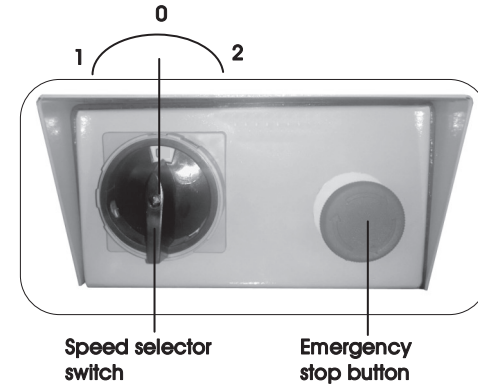


**Note:** Never run the coolant pump without the coolant tank filter fitted, swarf will get into the cooling system and void any warranty you may have.

### STARTING THE CIRCULAR SAW

- To start the circular saw, turn the speed selector switch left for position '1' (18rpm) or to the right for position '2' (36rpm) depending on the speed required, (the blade will not turn until the handle trigger is pressed in).
- To stop the circular saw, turn the speed selector switch back to the centre '0' position, or push the emergency stop button.
- The emergency stop button, when pressed in will cut the power to the motor, to reset the emergency stop button twist it clockwise and it will pop back out.

## OPERATING INSTRUCTIONS...cont



### CUTTING AT 90° DEGREE

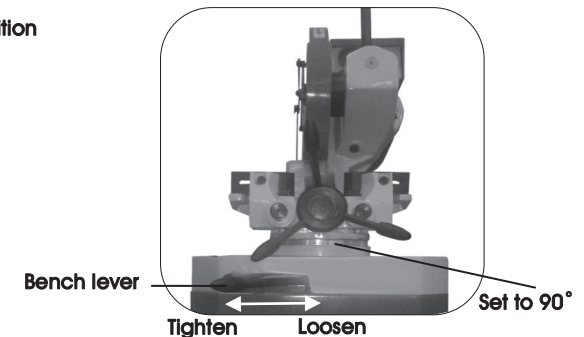


**Danger / Caution:** Never force the blade down whilst cutting, this will damage the teeth on the blade and or shatter the blade, always let the blade do the cutting.

- Turn the coolant tap to the 'Open' position.
- Loosen the bench lever, and turn the head to 90° on the scale.
- Re-tighten the bench lever, so the head can't move as you're cutting.



Open' position



Bench lever

Tighten Loosen

Set to 90°