



**CHIPPER**

**INSTALLATION, OPERATING AND MAINTENANCE MANUAL**  
**PLEASE LEAVE WITH OPERATOR**



**CHIPPER – PC2 SERIES 1**

**A34/001 R6**

**ECN 7128 April 2007**

**CHIPPER**

**INDEX**

**GUARANTEE.....1**

**DELIVERY.....1**

**SAMPLE RATING LABEL.....1**

**INTRODUCTION.....2**

**CHIPPER DIMENSIONS.....2**

**INSTALLATION.....3**

**ELECTRICITY SUPPLY CONNECTION.....3**

**COMMISSIONING.....4**

**OPERATION.....4**

**CHANGE CHIP SIZES.....5**

**CLEANING.....5**

**MAINTENANCE.....6**

**ORDERING SPARE PARTS.....6**

**WIRING DIAGRAM FOR CHIPPER.....7**

**EXPLODED VIEW.....8**

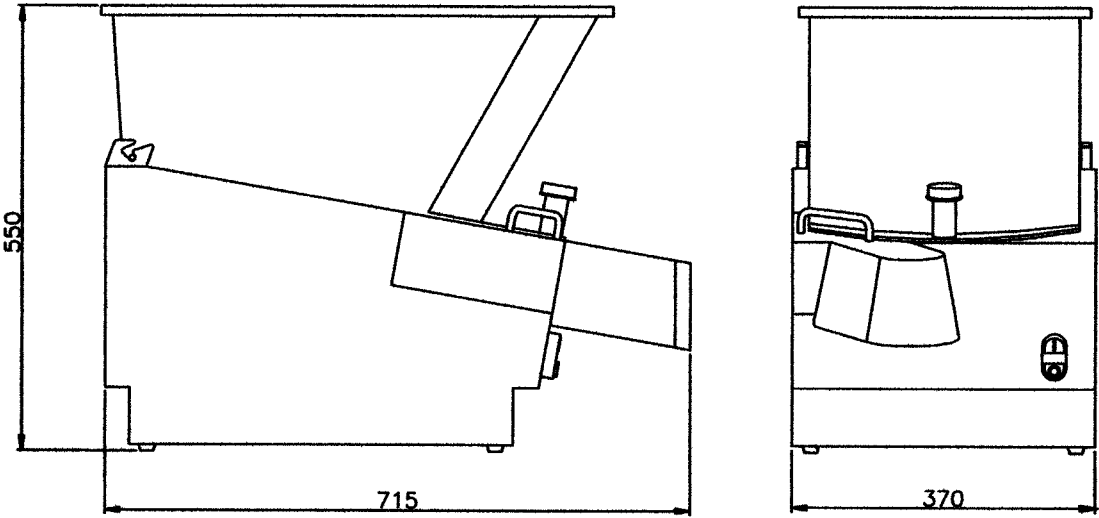
**PARTS LIST.....10**

**INTRODUCTION**

The Chipper is intended for cutting peeled potatoes into chips or scallops, in a batch process.

**CHIPPER DIMENSIONS**

All dimensions are in mm.



## INSTALLATION

### For the Installer:

These Instructions contain important information designed to help the user obtain the maximum benefit from the investment in an IMC Chipper. Please read them carefully before starting work, and consult with the supplier in the event of any queries.

Be sure to leave this Instruction Manual with the user after installation of the machine is complete.

### Procedure

The unit is designed to stand on a bench, table, or on a draining board. Ensure that whatever is used for this purpose is sturdy and rigid and not more than 750 mm high. A higher table makes it difficult to load the machine.

The Chipper should be placed where supplies of peeled potatoes from the peeling machine are readily accessible, after which the output of chips need to be in easy reach of the fryer.

The IMC Chipper has a top loading hopper into which potatoes can be tipped from either side or from the front. It is not handed, and no consideration need be given to its loading direction. The discharge of chips is from the chute at the front of the machine, and the machine should be placed so that this chute is directly over the receiving container.

## ELECTRICITY SUPPLY CONNECTION

A Wiring Diagram is shown on Page 7.

Position the Chipper in the chosen site. The electricity supply connection should be made to a power outlet socket or isolator mounted on the wall close to the machine. This socket or isolator must be accessible once the machine is installed. Before connecting, check that the voltage shown on the rating is correct for the electricity supply you have available. The outlet should be fused at 13 amps.

**NOTE: The plug is fitted with a 10amp fuse.**

**WARNING: This machine must be earthed**

Should the supply cord become damaged then an approved electrician must fit a replacement. The IEE Codes of Practice must be observed.

An equipotential bonding terminal is provided at the back of the unit near the cable outlet for external earth bonding. Provision of an earth bond does not remove the requirement for an earth in the electrical supply.

This Chipper is designed for batch process work; switch the machine off once all the potatoes have been cut. The motor is fitted with a thermal trip that will stop the machine if the motor overheats. This protection feature will automatically reset itself when it cools down but it is necessary to wait a few minutes for this to happen.

The machine will switch itself off in the event of failure of the electricity supply whilst operating. When the supply is restored the machine must again be switched on. It is fitted with no-volt release.

### CHANGE CHIP SIZES

To change to a different size of chip, change the knife block assembly. Spare knife block assemblies are available from IMC. Open the hopper, lift out the knife block and replace with the alternative selected. Knife blocks are available in the following sizes from the standard range: 8mm, 11mm, 14mm and 14x17mm. Scallops can be cut with similar knife block assemblies. The standard scallop size is 8mm.

### CLEANING

It is essential to clean the machine at least once a day, preferably at the end of each period of operation.

1. Switch off at the socket or isolator
2. Fully unscrew the interlock knob, open the hopper and lift it out of its hinge seating at the back
3. Clean the hopper in a sink, dishwasher, pot wash or by hosing with a spray
4. Remove the knife block by lifting upwards, off its locating dowels  
**NOTE: Take care when handling the knife block. The blades are sharp.**
5. Clean the knife block under a spray or running tap and remove any residual pieces of potato. Visually inspect all blades for wear or damage, and replace the knife pack as necessary. Do not attempt to straighten a bent blade - bent blades should be replaced immediately.
6. Lift the rotor carefully off its spindle.
7. Clean the rotor in a sink, pot wash, etc.
8. Clean out the interior of the base unit and wipe over the exterior with a damp soft cloth. Do not hose down the exterior of the machine.  
**DO NOT USE CLEANING MATERIALS CONTAINING ABRASIVES OR BLEACHES.**
9. Reassemble the machine, reversing the above disassembly procedure. When replacing the rotor, ensure that it is put back square on its spindle. Make sure that it is properly seated on its cross pin by turning it slowly until it drops onto this seating. When replacing the knife block it should slip down easily on to its dowel pins, make certain that it is fully down.

## COMMISSIONING

Open the hopper by fully unscrewing the interlock knob at the front and lifting up until the hopper is fully resting back on its hinges. Turn the rotor by hand to ensure that it is completely free to rotate and that the knife block assembly is properly in position. Replace the hopper and screw down the interlock knob until it is tight.

It is now safe to switch on at the wall socket and to start the machine by pressing the start button on the front of the machine (green button). To stop the machine press the red button.

One of the safety features provided on the IMC Chipper are the interlock devices that ensures that the machine cannot run unless both the knife block and the hopper are properly and fully in position. This makes it impossible for the operator to touch the spinning rotor whilst it is running.

To confirm that the interlock is operating correctly press the start button to switch the machine on. Then whilst it is still running, unscrew the hopper interlock knob. After two or three turns the machine should switch off, but there are still two or three further turns of the knob necessary before the hopper can be opened. The rotor should be stationary within 2 seconds of the hopper being opened. If the knife block is not in place, another interlock will prevent the machine from running.

## OPERATION

With the machine running, feed peeled potatoes into the hopper. It will hold approximately 12kg of potatoes, which self feed into the mechanism of the machine and discharge as cut chips from the chute.

Some care is necessary when loading, as the rotor will not accept abnormally large potatoes, so these must be cut into two. The hopper is specially designed not to pass potatoes which are over size and which could otherwise clog the mechanism. It is also essential that only potatoes be fed in to this machine.

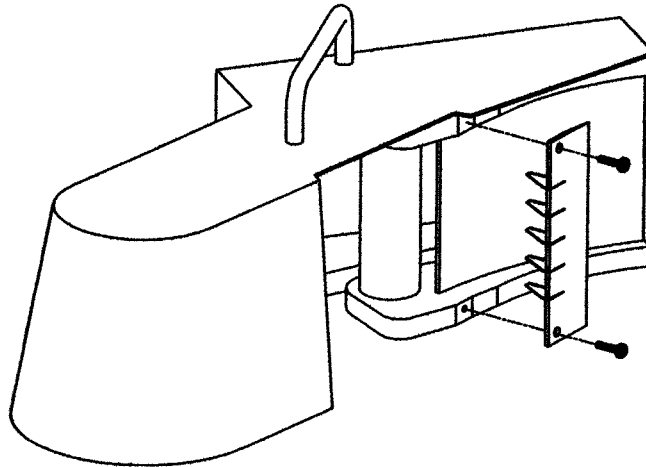
**NOTE: take great care to ensure that there are no stones mixed in with the potatoes.**

A stone or any other foreign object will damage the cutting knives and could cause the machine to jam. In this event the machine has an inbuilt protection device, which will switch it off before the electric motor burns out. This overload protection feature will automatically reset itself when it cools down but it is necessary to wait a few minutes for this to happen. After clearing the jam resume operation by pressing the start button. Should a stone damage the knife blades they must be replaced as further use could break the blades.

## CHANGING KNIFE BLADES

The knife blades are supplied as a pack and individual blades cannot be changed. Change the knife blade pack as soon as it is damaged or blunt. To change the knife blade pack remove the knife block and undo the two screws securing the knife blade pack. Dispose of the old blades carefully and screw the new knife blade pack in place. See diagram below.

For optimum performance IMC recommend changing the blade pack every 6 months, or sooner depending on usage.



**NOTE:** Take care when handling the knife block. The blades are sharp.

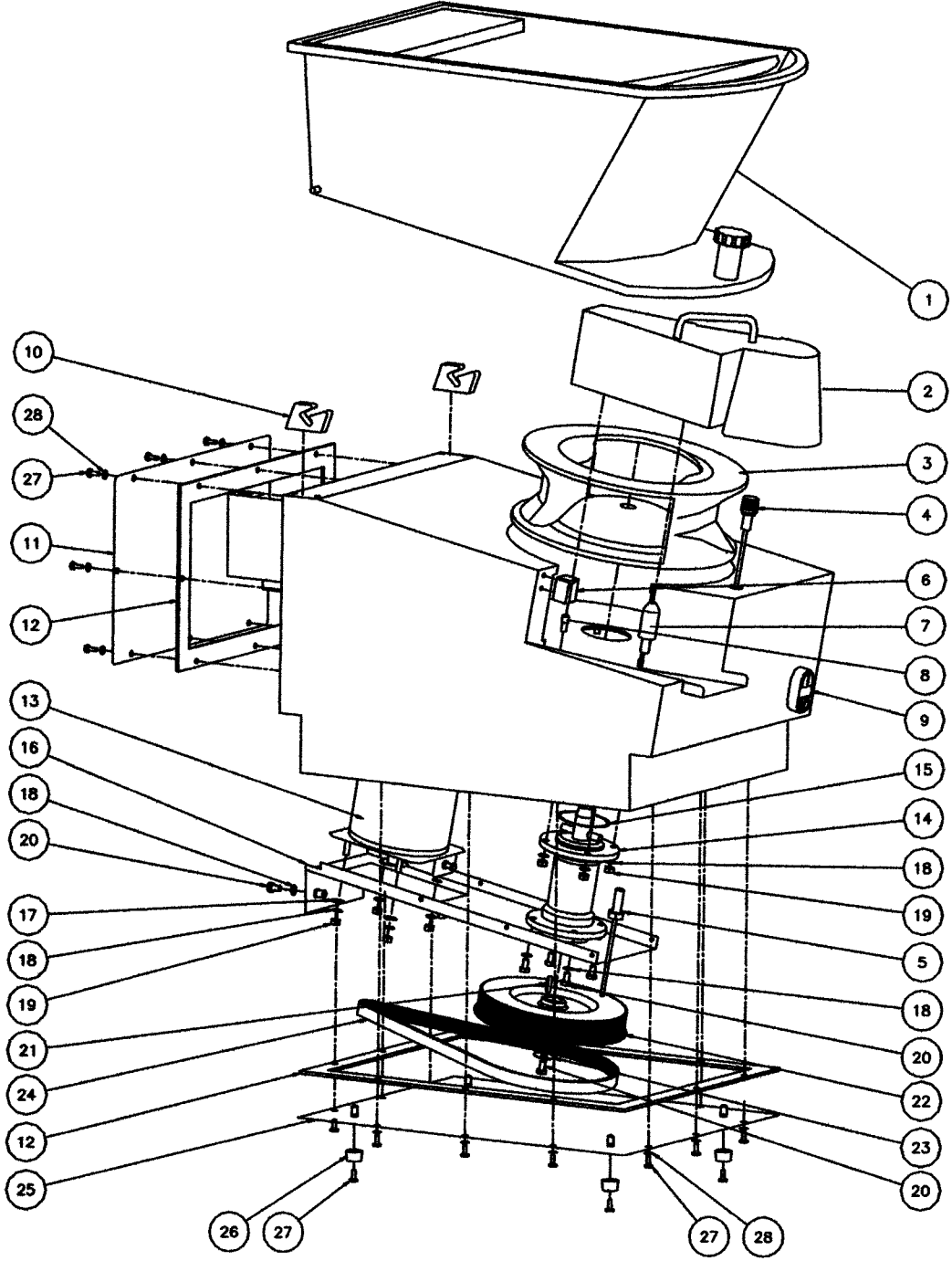
## MAINTENANCE

Details of IMC Service Contracts are available on application.

## ORDERING SPARE PARTS

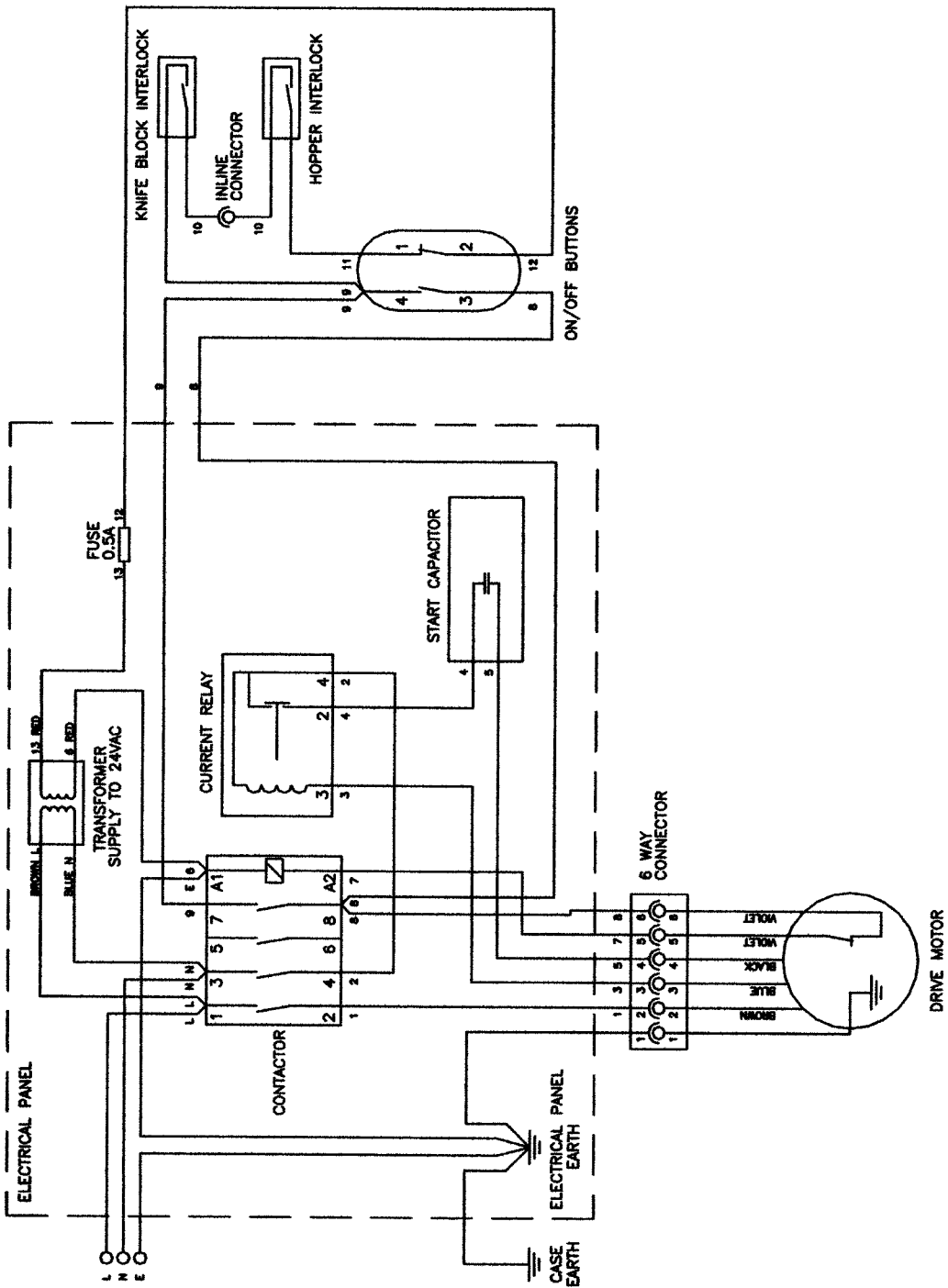
In the event that spare parts or accessories need to be ordered, please always quote the **SERIES AND SERIAL NUMBER** of the machine. This is to be found on the rating plate located near the supply cable.

EXPLODED VIEW

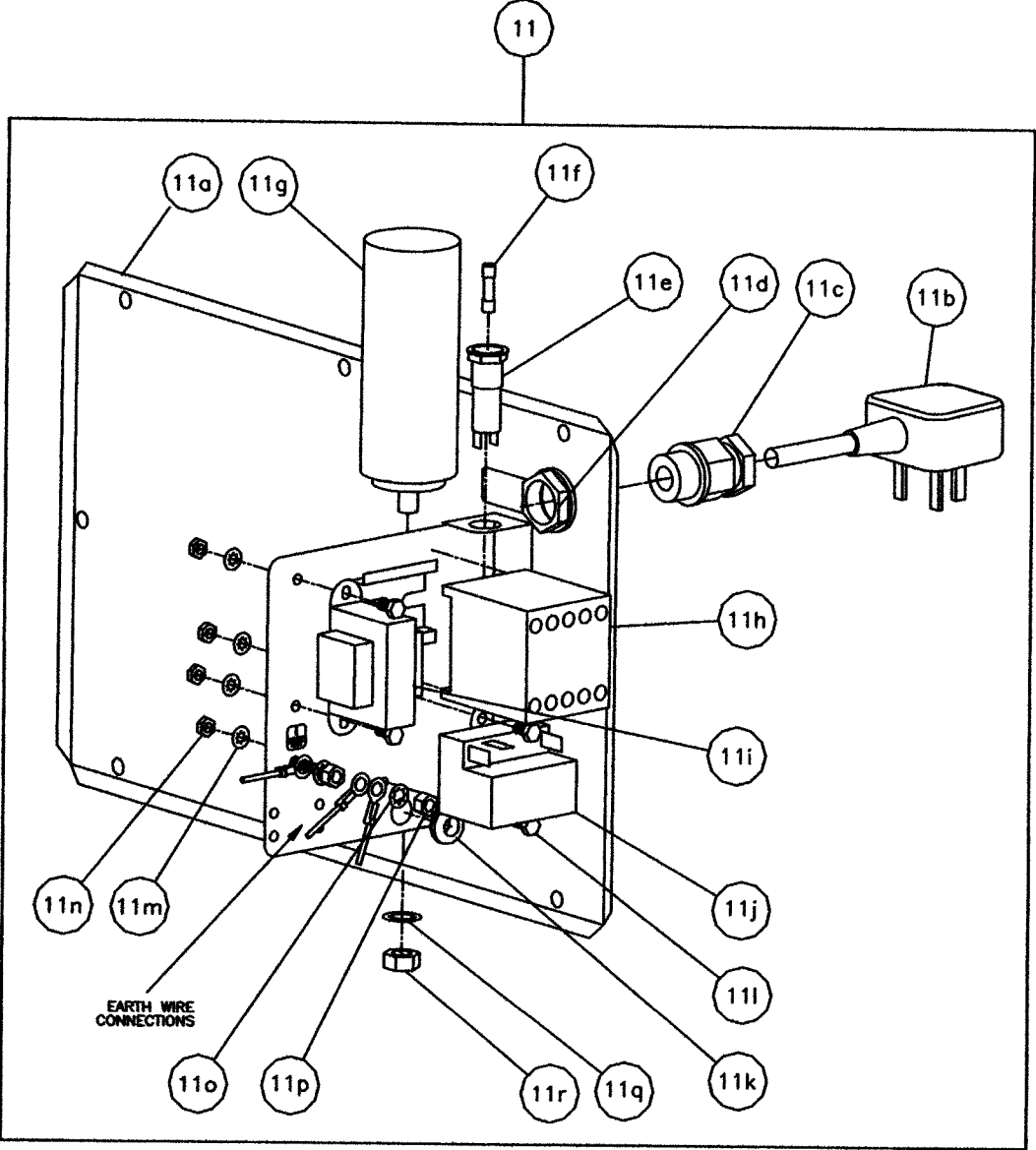




WIRING DIAGRAM FOR CHIPPER



Electrical control parts



## PARTS LIST

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION	
1	S61/121	Hopper assembly	11h	G30/343	Contactora 24V ac	
	M81A	Interlock body	11i	G60/332	Transformer terminated	
	A12/011	Interlock spring	11j	G41/016	Current relay	
	M69	Interlock knob	11k	A10/012	Grommet	
	D26/017	Interlock pin	11l	D19/110	M4x10 Hex screw SS	
	M48	Interlock knob cap	11m	D25/033	M4 Shakeproof washer SS	
	2	S61/111	8mm Scallop knife block	11n	D20/011	M4 Full nut SS
S61/112		8mm Knife block	11o	D25/004	M5 Shakeproof washer SS	
S61/113		11mm Knife block	11p	D20/038	M5 Full nut SS	
S61/114		14mm Knife block	11q	D25/062	M8 Lock washer SS	
S61/115		14x17mm Knife block	11r	D20/014	M8 Full nut SS	
S61/131		Knife blade pack 8mm	12	K08/043	Gasket strip	
S61/130		Knife blade pack 11mm	13	S61/116	Motor assembly	
S61/129		Knife blade pack 14mm		E61/014	Motor mounting plate	
S61/128		Knife blade pack 17mm		D19/032	M5x12 Hex screw SS	
L61/004		Scallop slicing blade		D19/115	M6x30 Hex screw SS	
D22/060		No 6 Self tapping screw SS		D20/013	M6 Full nut SS	
3		C61/002 M1 Z	Rotor	14	S61/118	Bearing housing assembly
		S61/123	Hopper switch assembly	15	A02/068	O – Ring
4	S61/127	Knife block switch assy	16	E61/015	Drive plate	
	L61/013	Anti deflection block	17	D25/052	M6 Plain washer SS	
6	D25/004	M5 shakeproof washer SS	18	D25/005	M6 Shakeproof washer SS	
	D19/032	M5x12 Hex Screw SS	19	D20/013	M6 Full nut SS	
	7	L61/009	Knife block locating pin	20	D19/038	M6x12 Hex screw SS
D25/003		M10 spring washer SS	21	D27/031	Drive key	
D20/015		M10 full nut SS	22	A06/090	Driven pulley 114-5M-25	
8		L34/005	Knife block short pin	23	D25/019	M6 25OD plain washer
	D25/052	M6 Plain washer SS	24	A05/044	Timing belt 850-5M-15	
	D20/013	M6 Full nut SS	25	E61/007	Base plate	
	9	G45/109	On / off button	26	A13/108	Plastic foot
G45/110		Button protective boot	27	D21/044	M5x12 Pan screw SS	
G45/111		Button contacts NO & NC	28	D25/004	M5 shakeproof washer SS	
10	A13/024	Hopper hinge				
	D25/033	M4 Shakeproof washer SS				
	D19/120	M4x8 Hex screw SS				
11	S61/119	Rear panel assembly				
11a	E61/033	Rear panel				
11b	G60/101 M4	Mains cable with plug				
11c	A10/266	Strain relief gland				
11d	A10/224	Back nut				
11e	G35/012	Fuse holder				
11f	G35/004	Fuse 5x20 0.5A				
11g	G41/015	Motor start capacitor				

## Note

The parts list is for 230V 1ph 50Hz machines. For electrical parts for other voltages please contact our spares department.