

E	nter	Serial	No. here	e	 	

In the event of an enquiry please quote this serial number.



MXT ROTARY RACK OVEN

SET UP AND OPERATION INSTRUCTIONS
(With programming instructions)

ECOTOUCH CONTROL

FGI64T – MXT RevAI8 I5/01/2018



DECLARATION OF CONFORMITY

We hereby declare that this machine complies with the essential health and safety requirements of :-

- The Machinery Directive 2006 / 42 / EC
- The Low voltage Directive 2014 / 35/ EC
- The requirements of the Electromagnetic Compatibility Directive 2004 / 108EC, 91 / 263 / EEC, 92 / 31 / EEC Incorporating standards EN55014-1:2006+A1:2009+A2:2011 EN55014-2:1997+A1:2001+A2:2008
- The General Safety of Machinery and food processing Standards applicable
- Materials and Articles intended to come into contact with food Regulation (EC) No. 1935 / 2004

Signed	CACT Vious		
G.A.Williams – Quality Manager			
Date			
Machine FG Code.	Machine Serial No.		

A technical construction file for this machine is retained at the following address:

MONO EQUIPMENT

Queensway, Swansea West Industrial Park, Swansea SA5 4EB UK

MONO EQUIPMENT is a business name of **AFE GROUP Ltd**Registered in England No.3872673 VAT registration No.923428136

Registered office: Unit 9, Bryggen Road,
North Lynn Industrial Estate,
Kings Lynn,
Norfolk,
PE30 2HZ

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Failure to adhere to the cleaning and maintenance instructions detailed in this booklet could affect the warranty of this machine.



NOTE

All reference to LEFT HAND ovens means that main door is hinged on the left and the control panel is on the right.



All reference to RIGHT HAND ovens means that main door is hinged on the right and the control panel is on the left.



1.0 INTRODUCTION



The **MONO MXT** rotary rack oven is a compact, electrically fired oven with a computerized touch control panel. The oven is designed to accommodate a single rotating rack of up to eighteen trays capacity.

Ecotouch ovens are supplied with **TOUCH** displays for the user-friendly control panels. This can show pictures of product types or program numbers that have been set by the user. When not being used, the screen can show your company logo. A voice prompt facility is also available for the basic instructions like "Bake over".



The oven is of stainless steel construction, with easily cleaned interior and exterior surfaces and smart appearance.

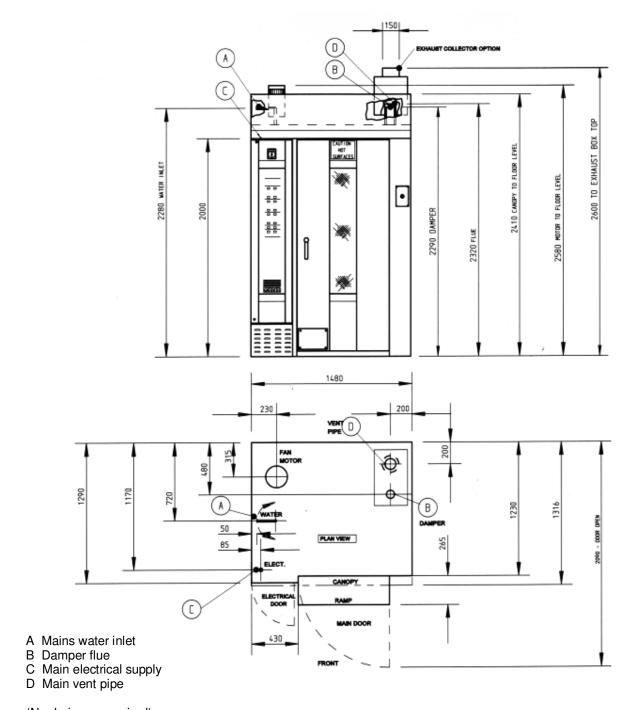
The fan and rack rotator have generously rated, totally enclosed, motors and a sealed for life gearbox.

The high-speed fan and 45 kW element array (36kW on low power version) give good, efficient air circulation via a diagonal cross-flow system.

Steam is generated within the oven chamber by means of a multi-point, water injection cascade.

Programmed damper control is provided as part of the programming controls.

2.0 OVERALL DIMENSIONS



(No drainage required)

Minimum door entry required:- 2000mm (78") high x 760mm (30") wide Minimum operational ceiling height:- 3000mm (118")

Total floor area:- 1.85 sq. Mtrs

3.0 SPECIFICATIONS

 OVERALL WIDTH:
 1480mm (58 1/4")

 OVERALL DEPTH:
 1290mm (50 3/4")

 OVERALL HEIGHT:
 2580mm (101 1/2")

INSIDE CLEAR DIAMETER: 1000mm nominal (39 3/8")

HEIGHT: INSIDE 1920mm (75 1/2")

VOLUME: 1.5 cu. M

FOOTPRINT WIDTH: 1480mm (58 1/4") FOOTPRINT DEPTH: 1290mm (50 3/4")

FOOTPRINT AREA: 1.85 sq. m

TOTAL POWER: 50kW (41kW on low power version available) ELECTRICAL SUPPLY: 415V. 3pH. 50Hz. ,70amps per phase

HEATING ELEMENTS: Finned hairpin type

HEATING ELEMENTS LOADING: 3kW. each

HEATING ELEMENTS NUMBER: 15 (12 on low power version available)

FAN MOTOR: 3kW. Totally enclosed fan cooled Squirrel cage.

Class F 2860 rpm

FAN: 200mm dia x 82mm (8" dia x 3 1/4")

FAN SPEED: 2860 rpm

FAN DRIVE: Direct Coupled

RACK DRIVE

MOTOR: .37 kW. Geared Motor Unit with Squirrel

cage, enclosed fan cooled, class F motor: and sealed-for-life spur/worm reduction unit.

Output speed, 6rpm:

TURNTABLE: Single row ball bearing

410mm (16")

RACK SIZE: 30" x 18" (760mm x 460mm) tray size

RACK CARRIER: 'MONO' system 4 roller. Top hung.

STEAMER SYSTEM: High mass 2-point water injection and

solenoid operated supply:

WATER PRESSURE

MAXIMUM: 4.0bar (60 psi) MINIMUM: 2.0bar (30 psi)

WATER FLOW 6 litres/minute (at minimum pressure)

WEIGHT Approx. 1100kg (2420lbs)

DAMPER Solenoid operated trapdoor type. Semi-automatic.

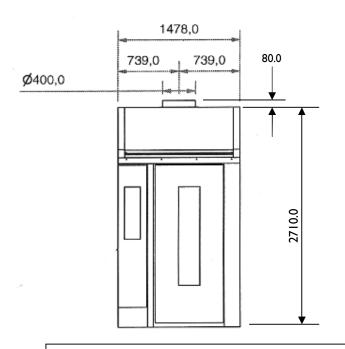
ELECTRICAL SYSTEM: Membrane operated dedicated.

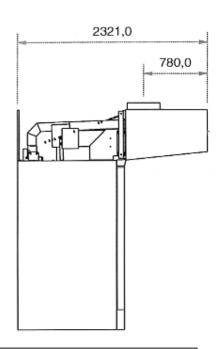
CONTROL PANEL: Microprocessor integrated system, with umbilical to

main electrical panel

ELECTRICAL PANEL: 415V 3pH 50Hz mains, 24V DC auxiliaries.

NOISE LEVEL: Less than 85 dB.





OPTIONAL EXTRACTION CANOPY DIMENSIONS (CANOPY PT.No.M164-00-01400)

Extraction rate of 1000 cu ft./min is easily sufficient to extract the air from the canopy whilst the oven is in use. Customers are responsible for make-up air.

4.0 SAFETY

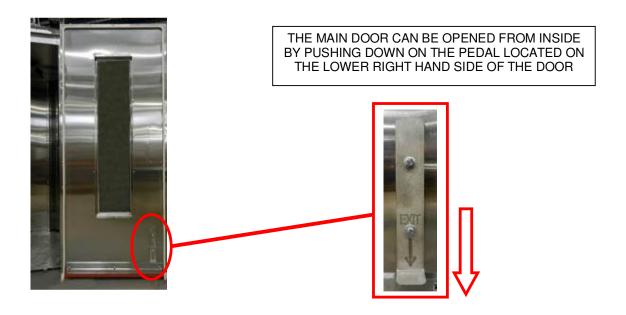
In the interests of safety and efficient operation of this oven, it is essential that this manual **should be made available to all personnel** who may be required to operate the oven, **before** work is commenced.

The following points should be closely observed and rigorously pursued at all times.

- This oven is designed for baking bread, confectionery and savoury bakery products. Do not use the oven for baking other items without consulting the manufacturers.
- 2 All repairs and maintenance of electrical units should only be carried out by authorised electricians.
- 3 Electrical panels and electrical distributor boxes should not be opened until the main supply to the oven has been turned off.
- 4 When choosing and installing a flue, the precautions and instructions in this manual must be observed.
- All connections to this oven must be made in accordance with the statutory and technical regulations of the country in which the oven is installed.
- When work is being carried out inside the oven, the electrical mains isolator must be turned off and locked.
- Whenever there is someone working inside the oven, the baking compartment door should be wedged open and a suitable warning notice hung on the door to prevent it being accidentally closed.
- While the oven is in operation, and for some time after having been in operation, it is dangerous to touch the window glass or the metal surfaces in its vicinity.
- 9 The oven should be operated and maintained as described in this manual.
- 10 Use only **MONO** spare parts for this oven.
- 11 The construction of the oven must not be changed.
- The owner of the oven is **legally obliged to instruct staff** using the oven in its operation and in these safety regulations. The instruction manual for the oven must not be removed from the oven work area.

WARNING: KEEP CLEAR OF LARGE FLUE PIPE ON ROOF OF OVEN WHEN DOING ANY MAINTENANCE ON TOP. <u>VERY HOT</u> AIR IS EJECTED.

EMERGENCY INTERNAL-DOOR RELEASE PEDAL



5.0 INSTALLATION

- The **MONO MXT** oven is designed to operate as a freestanding unit, and must not be bolted down or fixed to the floor in any way. It can be installed flush against walls on two sides as access is only required at the top and one side.
- The concrete floor beneath the oven must be smooth, flat and clear of any obstructions, and must be at least 150mm (6") thick.
- The foundation must be flush with the overall bakery floor because racks are wheeled up a ramp (supplied with the oven) into the baking chamber.
- A minimum headroom clearance of 3 metres (180") between the floor and the bakery ceiling must be maintained at all times.
- Connect to a suitable water supply, making sure that the pipes are flushed out to remove all foreign bodies i.e. flux or solder.

NOTE: Customers in hard water areas must ensure that an efficient water treatment device protects the supply to the oven. It is the customers' responsibility to install and maintain an adequate water supply to the oven, which should comply with local water regulations.

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	DESCRIPTION	SPECIFICATION	REMARKS
Α	Mains water inlet (steam solenoid)	Flexible hose to clients 15mm s/cock 3/4"B.S.P.Female	Connection by client. Water pressure:-Min 2 BAR (30PSI) Max 4 BAR (60PSI)
В	Damper flue	3" Pipe. Duty:-165 CFM at 210 C(410 F)	Discharge to atmosphere via an independently supported 3" flue pipe terminating with an air break collector cone or discharge directly into clients extract canopy.
С	Main electrical supply	45KW - 80 AMP (see note 2 below)	Three phase and neutral isolator 80 AMP FUSE and supply to oven by client
D	Main vent pipe	4" O.D Pipe (10swg wall thickness)	Leave open to atmosphere or discharge into suitable extract canopy,if provided by client. DO NOT CLOSE COUPLE TO OUTLET.
	Drainage outlet		None required

2.Electrical Supply (BY CLIENT)

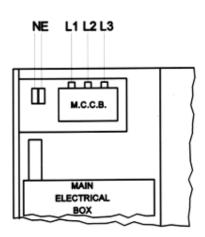
Typical cables for UK are:-

4off 25mm²- Coloured

1off 25mm 2- Earth

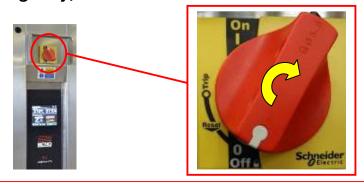
- In flexible conduit

MAINS CONNECTIONS (RIGHT HAND OVEN SHOWN)



6.0 ISOLATION

In case of an emergency, switch oven off at mains isolator switch.



NOTE: IF WORKING ON ELECTRICAL BOX AND PANEL, ensure oven is DISCONNECTED from CONSUMER POWER SUPPLY.

NOT ONLY OVEN ISOLATOR ABOVE, AS SOME PARTS STAY LIVE AFTER ISOLATOR SWITCH IS OPERATED

7.0 DAILY CLEANING INSTRUCTIONS

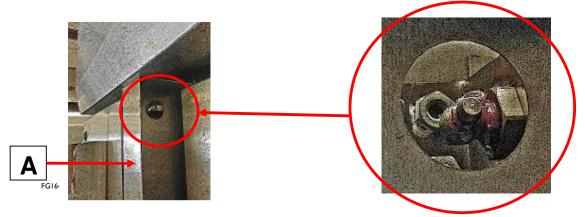
The oven has been designed with sealed components, which are used wherever possible. The minimum of routine cleaning is required, but it is essential that it be properly and regularly carried out.

Clean up spillages of product on the oven floor. Wipe off splashes on door window.

Note: build up of spillages may result, because of incorrect rack rotation. Check for damage to door seals, particularly if operators are careless with rack handling.

8.0 WEEKLY MAINTENANCE INSTRUCTIONS

 Grease rack drive bearings. The remote point for greasing is located in the door post (A). Two shots per week are required. Note, over greasing may cause over heating in the bearing and leakage of grease.



9.0 GENERAL MAINTENANCE

Check for frayed or bare cables. The oven should not be used if any are found.

Follow cleaning and greasing instructions in sections 7.0 and 8.0

Check condition of main door seals and replace if required.

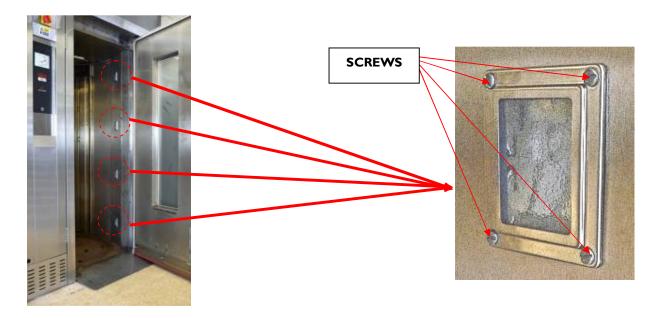
Check all lights are in working order. If not, replace as shown in the next section.

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TO REPLACE LIGHTING BULBS

In the event of a bulb failure, Instructions on how to change a bulb are as follows: -

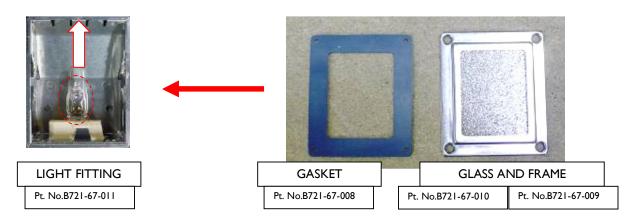
- Ensure oven is isolated from mains supply and allow to cool.
- Remove screws (4 per light) and take glass, frame and gasket off lamp unit.



DO NOT TOUCH BULBS WITH BARE HANDS.

USE A CLOTH OR GLOVES TO STOP ANY MARKS THAT WILL CAUSE HOT SPOTS AND PREMATURE BULB FAILURE.

Remove bulb by pulling in direction of arrow and replace with new bulb.



- Refit glass front, take care that gasket is in position around stainless steel frame.
- Re-connect oven and test.





Section 10

TOUCH SCREEN OPERATING INSTRUCTIONS

BASIC OPERATION

ALL OPERATIONS ARE ACTIVATED BY TOUCHING AREAS ON THE SCREEN, WHICH WILL PASS YOU ON TO THE NEXT INFORMATION PANEL.

DO NOT USE EXCESSIVE FORCE.

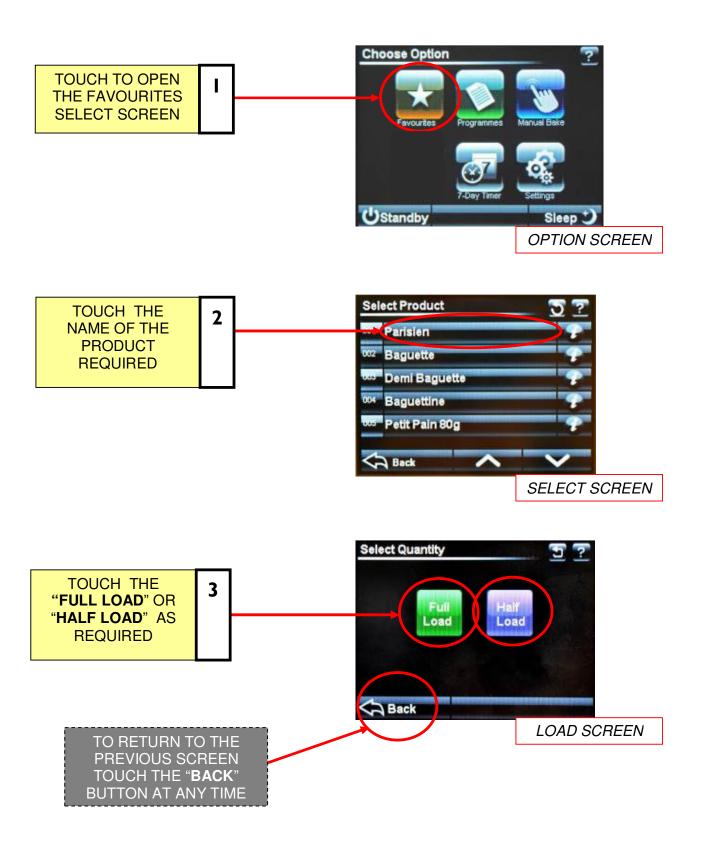
(THE PRESSURE REQUIRED TO OPERATE THE PANEL CAN BE ALTERED IN THE SETTINGS SECTION)



STANDBY
THE OVEN TURNS OFF.
TOUCH THE SCREEN TO GO TO
THE OPTION SCREEN.

SLEEP
THE OVEN STAYS AT 100c AND
HEATS TO LAST PROGRAM
TEMPERATURE WHEN THE
SCREEN IS TOUCHED.
OPTION SCREEN THEN SHOWS.

10-1 BAKING USING FAVOURITES MENU

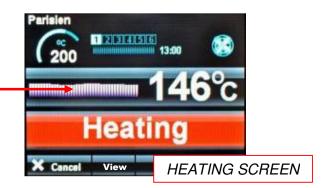


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IF THE OVEN IS NOT UP TO TEMPERATURE IT WILL SHOW THE HEATING SCREEN.

WAIT FOR THE OVEN TO REACH TEMPERATURE

IF THE OVEN IS TOO HOT FOR THE TEMPERATURE CHOSEN, THE SCREEN WILL TELL YOU TO OPEN THE DOOR TO AID COOLING.



WHEN OVEN IS AT THE CORRECT TEMPERATURE THE "**READY**" SCREEN WILL SHOW.

- 1. OPEN DOOR AND LOAD PRODUCT.
- 2. CLOSE THE DOOR FULLY.
- 3. TOUCH "START"

TIP

TO HELP TO KEEP THE OVEN HOT, TRY NOT TO KEEP THE DOOR OPEN MORE THAN NEEDED



4

BAKE IN PROGRESS SCREEN

THIS SCREEN WILL SHOW WHILE THE PRODUCT IS BAKING

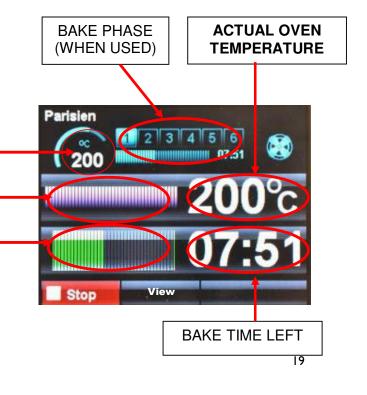
SET TEMPERATURE

TEMPERATURE PROFILE BAR

BAKE TIME PROGRESS BAR

NOTE

The actual temperature shown will rise and fall above and below the set temperature as the oven cools and reheats. This is not a fault



BAKE OVER SCREEN

5

AT THE END OF THE BAKE TIME A SOUNDER WILL BE HEARD AND "BAKE OVER" WILL FLASH. TOUCH "STOP" AND OPEN THE DOOR TO REMOVE THE PRODUCT.

TO KEEP THE OVEN BAKING FOR EXTRA MINUTES

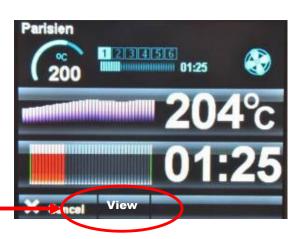
THE "+ 10 MIN" BUTTON CAN BE TOUCHED.

(THIS TIME CAN BE ALTERED IN SET UP)



TOUCHING "VIEW" BUTTON DURING A BAKE

TOUCHING "VIEW" BUTTON
DURING A BAKE WILL SHOW THE
SETTINGS FOR THE BAKE IN PROGRESS.
TOUCH "CANCEL" TO GO BACK TO THE
PREVIOUS SCREEN.





VIEW SCREEN

10 - 2 BAKING USING MANUAL MENU



SET BAKE TIME AND TEMPERATURE



2

SET BAKE TEMPERATURE

TOUCH TEMPERATURE ON THE SCREEN TO ACTIVATE THE KEYBOARD SCREEN. KEY IN REQUIRED TEMPERATURE

7 8 9
4 5 6
1 2 3
0 ☑

SET BAKE TIME

TOUCH TIME ON THE SCREEN TO ACTIVATE THE KEYBOARD SCREEN. KEY IN REQUIRED TIME AND TOUCH "DONE"

7 8 9
4 5 6
1 2 3
0 €3

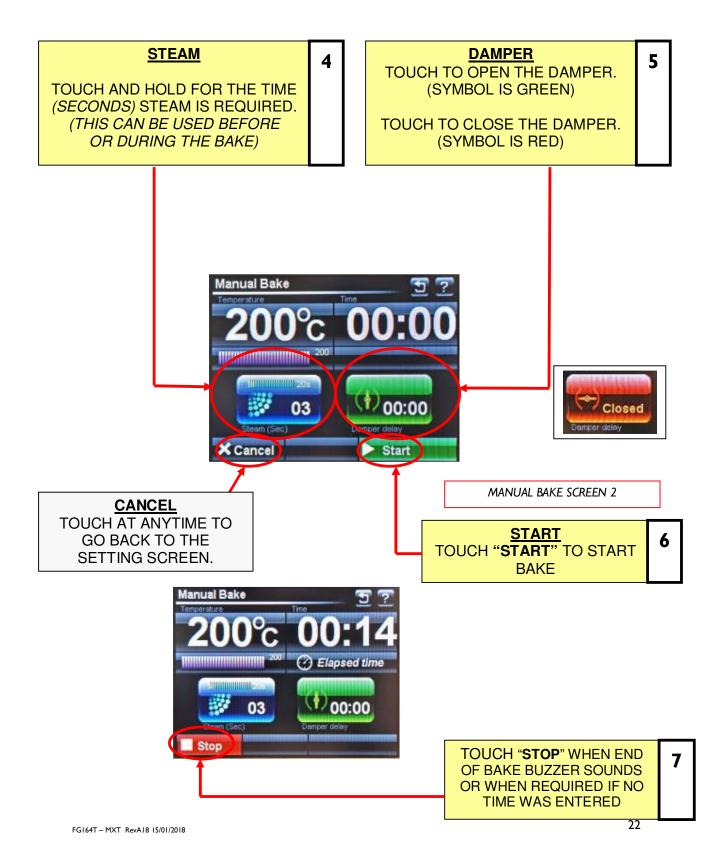
NOTE:

TIME DOES NOT HAVE TO BE SET IN MANUAL MODE. (ONLY TEMPERATURE) WHEN START IS PRESSED, THE TIME WILL COUNT UP INSTEAD OF DOWN.
TOUCH STOP TO FINISH BAKE.

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3

USE STEAM TIME AND DAMPER IF REQUIRED



SAVE MANUAL PROGRAM, IF REQUIRED



MANUAL BAKE SCREEN 3

SAVE SETTINGS

IF NO TIME WAS ENTERED AT THE START OF THE BAKE, WHEN STOP IS TOUCHED "SAVE" WILL APPEAR AT THE BOTTOM OF THE SCREEN. "SAVE"CAN BE TOUCHED AND AN OPTION SCREEN WILL APPEAR.

7

TOUCH "ADD TO FAVOURITES" OR "SAVE AS"



USE KEYBOARD TO TYPE THE REQUIRED NAME AND TOUCH "SAVE"



NOTE: In manual mode, only one operation of the steam or damper is saved.

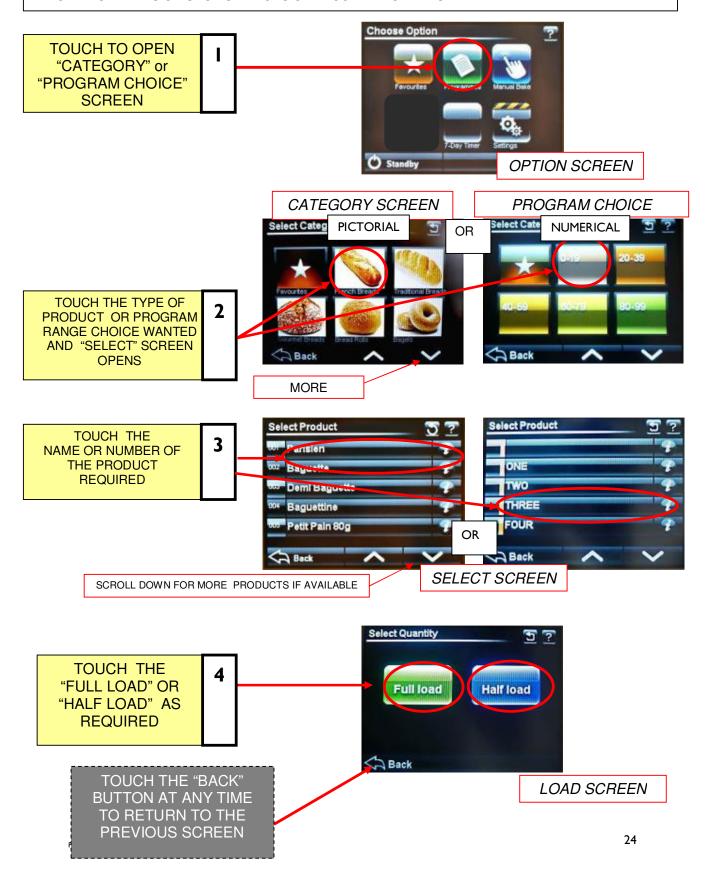
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10 - 3 BAKING USING PROGRAMMES

NOTE: THIS COVERS TWO VERSIONS OF FIRMWARE. (THE OVEN CAN BE PRE-SET TO SHOW ONLY ONE OF THEM).

1. PICTORIAL VERSION SHOWS CHOICES OF PRODUCT CATERGORIES

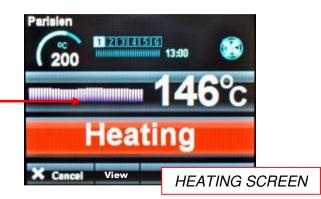
2. NUMERICAL VERSION SHOWS RANGES OF PROGRAM NUMBERS.



IF THE OVEN IS NOT UP TO TEMPERATURE IT WILL SHOW THE HEATING SCREEN.

WAIT FOR THE OVEN TO REACH **TEMPERATURE**

IF THE OVEN IS TOO HOT FOR THE TEMPERATURE CHOSEN, THE SCREEN WILL TELL YOU TO OPEN THE DOOR TO AID COOLING.



13:00 200

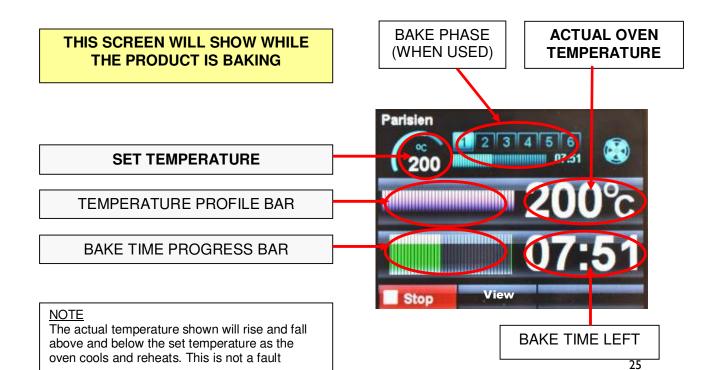
WHEN THE OVEN IS AT THE CORRECT TEMPERATURE, THE "READY" SCREEN WILL SHOW.

- 1. OPEN DOOR AND LOAD PRODUCT.
- 2. CLOSE THE DOOR FULLY.
- 3. TOUCH "START"

TIP

TO HELP TO KEEP THE OVEN HOT, TRY NOT TO KEEP THE DOOR OPEN MORE THAN NEEDED





5





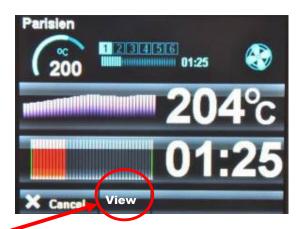
AT THE END OF THE BAKE TIME A SOUNDER WILL BE HEARD AND "BAKE OVER" WILL FLASH.
TOUCH "STOP" AND OPEN THE DOOR TO REMOVE THE PRODUCT.

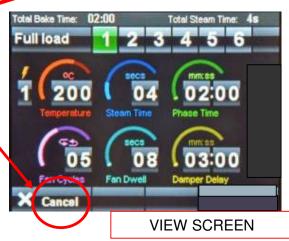
6

TO KEEP THE OVEN BAKING FOR EXTRA
MINUTES
THE "+ 10 MIN" BUTTON CAN BE
TOUCHED.
(THIS TIME CAN BE ALTERED IN SET UP)

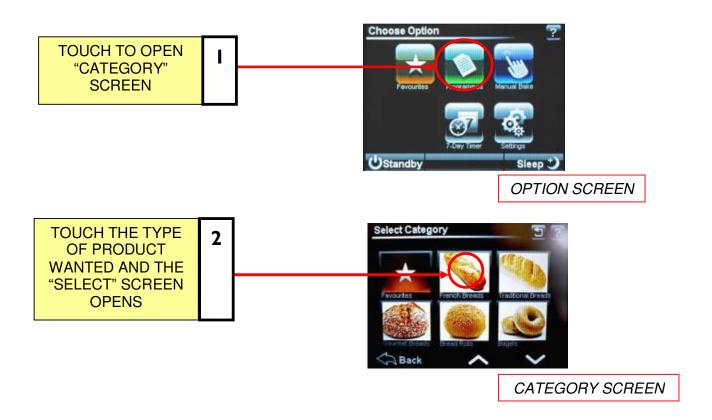
TOUCHING "VIEW" BUTTON DURING BAKE

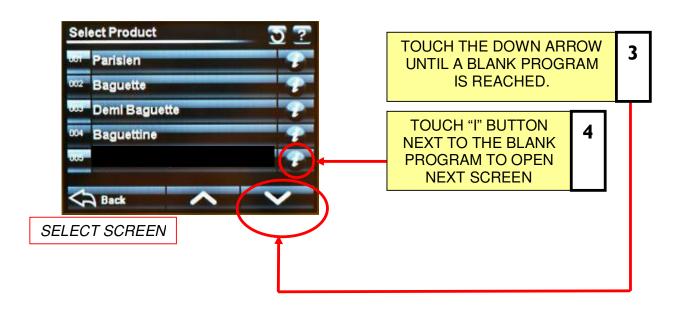
TOUCHING "VIEW" BUTTON
DURING BAKE WILL SHOW THE SETTINGS
FOR THE BAKE IN PROGRESS.
TOUCH "CANCEL" TO GO BACK TO THE
PREVIOUS SCREEN.



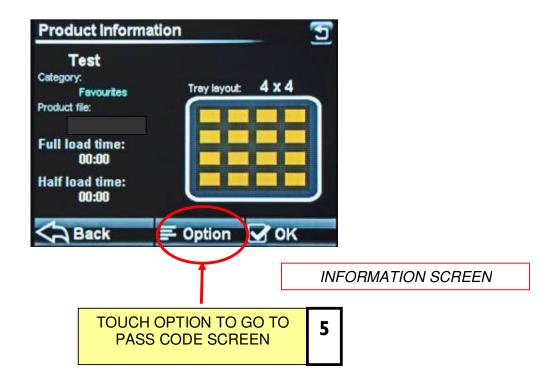


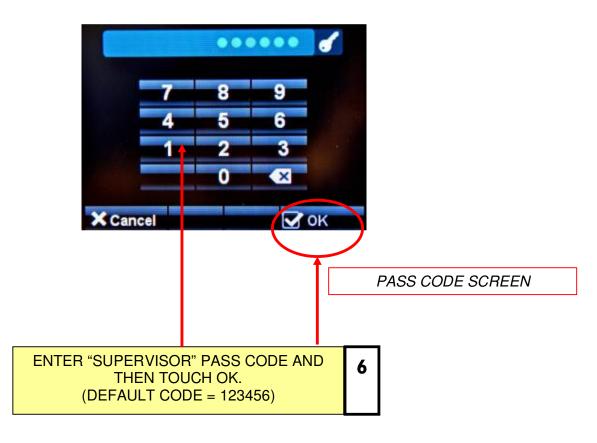
10 - 4 CREATING A PROGRAM



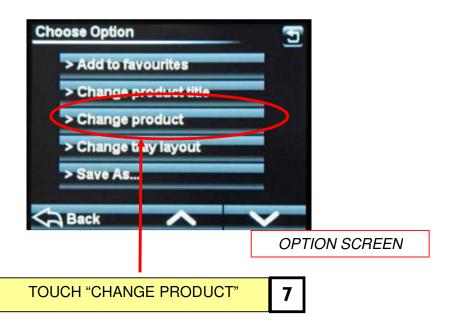


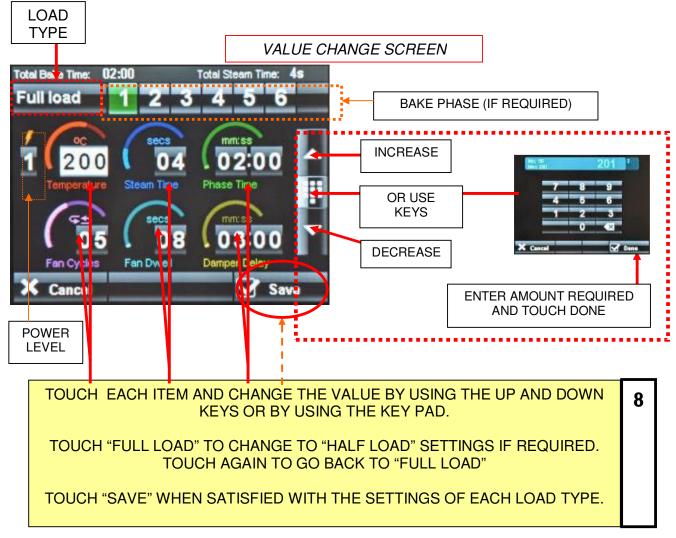
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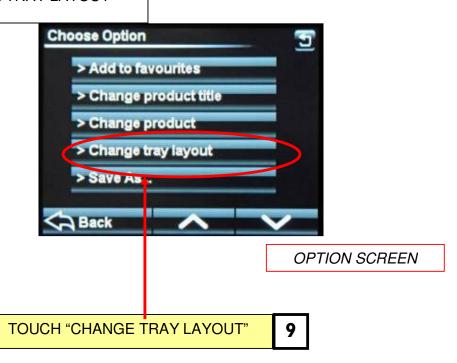
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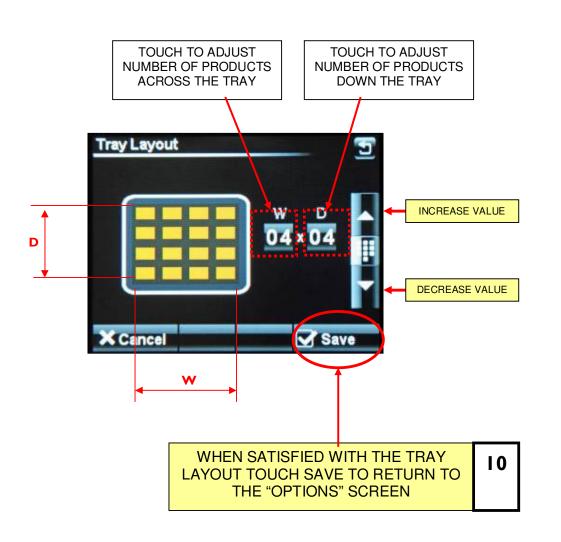




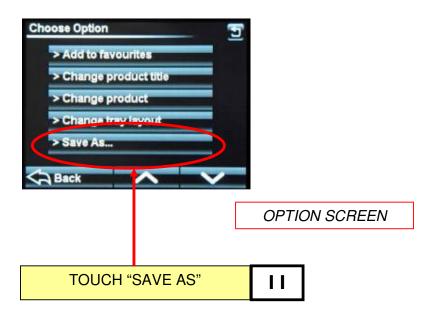
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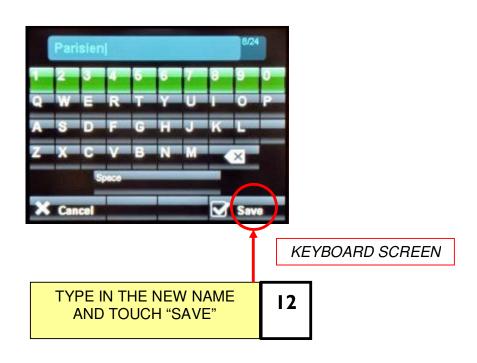






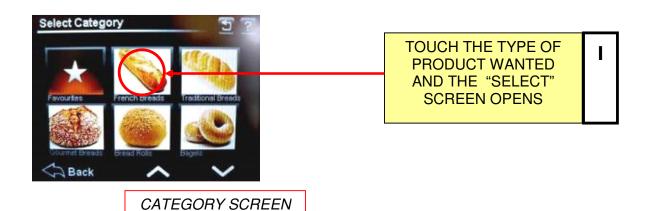
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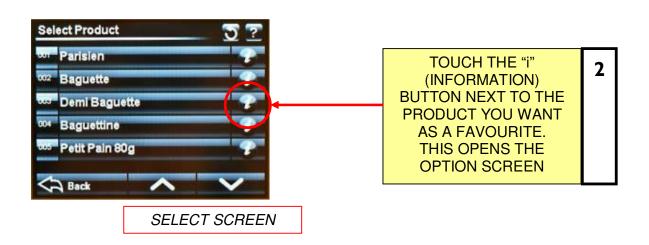


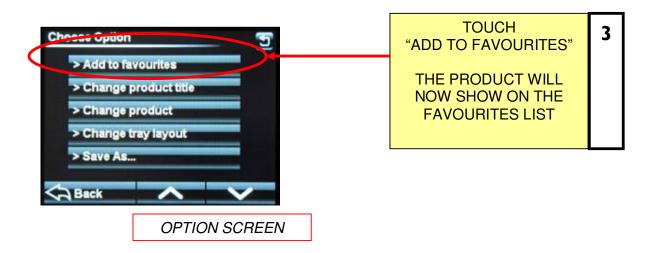


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ADD A PRODUCT TO THE FAVOURITES LIST



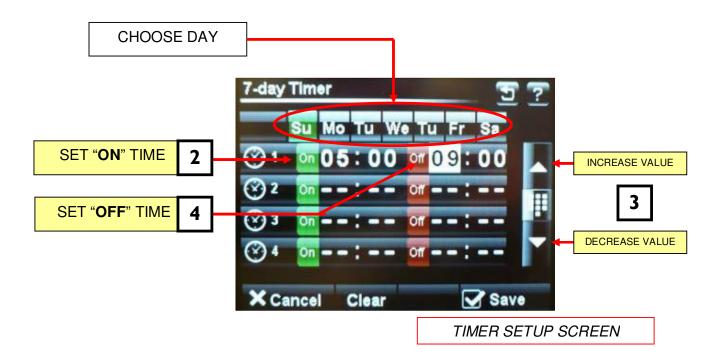




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10 - 5 SETTING 7-DAY TIMER





NOTE

Up to four on/off times can be set for each day.

Touch "clear" to clear the settings on the day shown.

Touch "save" to activate the times set.

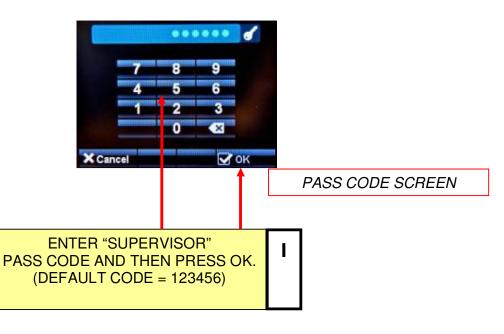
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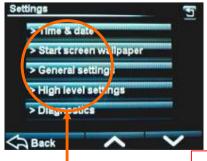
10 - 6 SETTINGS



OPTION SCREEN

TOUCH TO OPEN THE "SETTINGS" SCREEN





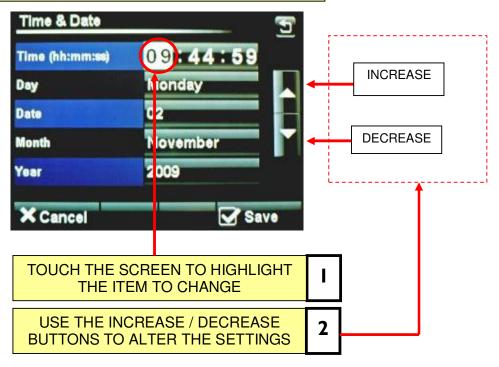
SETTINGS SCREEN

CHOOSE THE SETTING TO ALTER

2

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TIME AND DATE





TIME AND DATE SCREEN

3

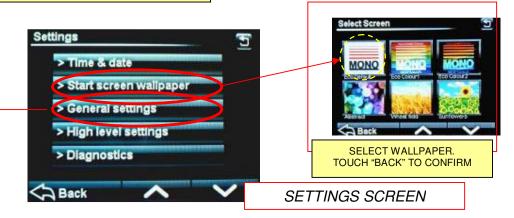
WHEN ALL INFORMATION IS CORRECT,
TOUCH "SAVE".
THIS WILL RETURN TO THE SETTINGS SCREEN



SETTINGS SCREEN

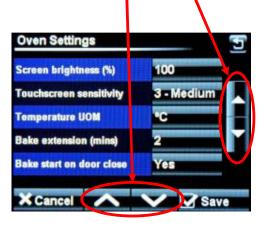
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OVEN SETTINGS (GENERAL)



TOUCH "GENERAL SETTINGS" AND THE FOLLOWING SCREEN WILL APPEAR.

SCROLL DOWN TO MOVE THROUGH ALL CHOICES AND ADJUST EACH ONE AS REQUIRED, USING THE ARROW KEYS.









FGI64T – MXT RevA18 15/01/2018

OVEN SETTINGS EXPLAINED - GENERAL LEVEL

SCREEN BRIGHTNESS -

Adjusts the brightness of the viewing screen for user comfort.

TOUCHSCREEN SENSITIVITY -

Adjusts the pressure required to operate the touch screen. (5 settings)

TEMPERATURE UNIT OF MEASURE -

Centigrade (Celsius) or Fahrenheit

BAKE EXTENSION (mins) -

Adjusts the extra time at the end of a bake for each "extra time" button touch. (10mins max)

BAKE START ON DOOR CLOSE -

This will start the set bake program as soon as the door closes.

SLEEP MODE DELAY -

Oven will go into sleep mode after the set minutes, providing it is up to temperature and has been through at least one bake cycle.

8 HOUR COUNTDOWN TIMER -

After 8 hours the oven gives a warning and then turns off.

Touch any button for an extra hour if required.

POWER LEVEL (1-4) -

Set these as required for each level to be used.

CHART INTERVAL -

Time interval in seconds that the bars show on the heat and bake time progress charts.

SOUNDER SELECT -

Set as external or onboard.

SOUNDER TONE -

Select a tone - Voice or Off

SOUNDER VOLUME -

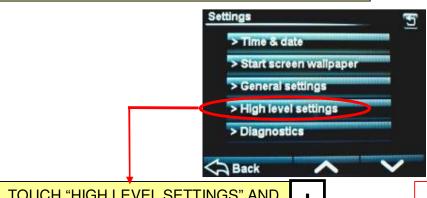
Adjust to suit the volume required. (onboard sounder only)

SHORTCUT BUTTONS -

1 fn	Gives the choice of what buttons are active and in which order they appear on the
2 fn	options screen.
3 fn	Options available = Favourites, Programs, Manual bake, Multi bake,
4 fn	7-day timer . (Settings at 6fn cannot be changed)
5 fn	

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TOUCH "HIGH LEVEL SETTINGS" AND THE FOLLOWING SCREEN WILL APPEAR.

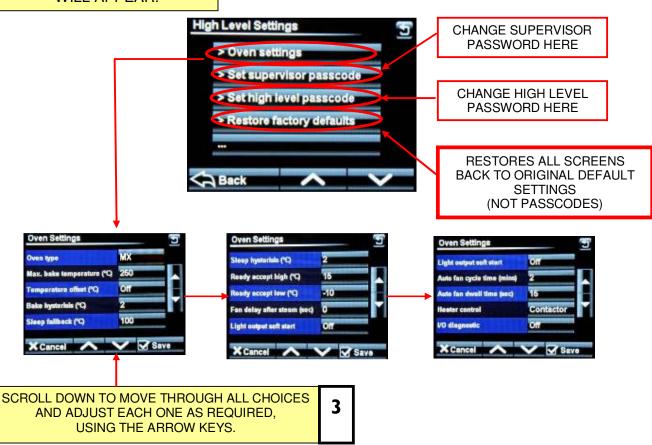
SETTINGS SCREEN



ENTER "HIGH LEVEL" PASS CODE AND THEN TOUCH OK.

2

THE FOLLOWING SCREEN WILL APPEAR.



FGI64T – MXT RevA18 15/01/2018

OVEN SETTINGS EXPLAINED - HIGH LEVEL

OVEN TYPE -

Set this to MX.

MAX. BAKE TEMPERATURE -

Can be set up to 300C, (depending on the oven type)

TEMPERATURE OFFSET -

Can be used to adjust the display to the actual temperature in the oven.

BAKE HYSTERISIS -

Sets bake temperature cycling around a set point. (Above and below).

SLEEP FALLBACK -

Temperature of the oven in "sleep mode" (100C is suggested).

SLEEP HYSTERISIS -

Sets "sleep mode" temperature cycling around a set point. (Above and below).

READY ACCEPT HIGH -

Highest temperature for the oven to display "READY"

READY ACCEPT LOW-

Lowest temperature for the oven to display "READY"

FAN DELAY AFTER STEAM -

Delay before fan starts after the oven has steamed. (60 seconds max)

LIGHT OUTPUT SOFT START -

On/Off Some lights need this for cold start up to stop them blowing.

AUTO FAN CYCLE TIME (MINS) -

Set time required. Only used in manual and multibake modes.

AUTO FAN DWELL TIME -

Set time required. Only used in manual and multibake modes.

HEATER CONTROL -

Contactor or solid state. Defaults to contactor. (solid state not used at the moment)

I/O DIAGNOSTIC -

Displays outputs and inputs at the top of the screen to aid fault finding if needed.

DEFAULT PASSCODES

SUPERVISOR (LOW LEVEL) -- 123456

HIGH LEVEL -- 654321

MASTER -- 314159 (This is fixed)

SUGGESTION

To stop unauthorised changes to the oven setup, it is suggested that this page is removed from this manual and kept in a safe place for future reference.

If tampering could be a problem, It is a good idea to change the passcodes at regular intervals,.

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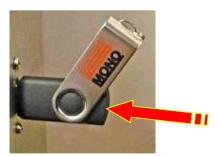
10 - 7 USING THE USB PORT



Ensure the Start screen is showing

1

START SCREEN



Insert the USB memory stick into the socket on the oven panel. (Rubber plug may have to be removed first).

2

NOTE

The USB stick will only fit in one way. Do not force into the socket.



Wait for the USB symbol to finish moving

3



If old firmware is found, the firmware version screen will appear.

4

Touch "OK" to update firmware -Wait-

Remove USB stick OR

Touch "CANCEL" to choose other items to update or change. (see next page)



Choose action you would like to do.

5



Select the file required.

6



When confirmation of "file loaded ok" Shows, remove the usb stick.

7

NOTES ON USING USB STICKS

For a USB stick to function correctly it must have the following folder in the root folder .

Mono

Then into that folder add the following:

Firmware

Products

Skins

Sounds

Startup

Place your recipe/product files in the "products" folder.

The oven will find the "**Mono**" folder automatically when the stick is plugged into the oven. Any stick can be used (does not have to be blank) but the Mono folder must be in the root folder.

The most used folders are explained below:

SKINS

These control the way the screen looks in different modes.

<u>Pictorial</u> is when the screen displays catergories using pictures.



Numerical is when the screen displays program numbers.



STARTUP SCREENS

This is the picture/logo you see when the oven is started.



PRODUCT FILES (PROGRAM FILES)

These are the files that contain the information for baking each product e.g. bread, buns, cakes etc.

10 - 8 DIAGNOSTICS



SETTINGS SCREEN

TOUCH "DIAGNOSTICS" AND THE FOLLOWING SCREEN WILL APPEAR.



DIAGNOSTICS SCREEN



TOUCH THE REQUIRED OUTPUT AND A SIGNAL IS SENT TO THAT ITEM. THE OUTPUT BEING CHECKED IS HIGHLIGHTED WHEN ACTIVE. TO STOP THE OUTPUT, PRESS AGAIN.

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11.0 ELEMENT BANK REMOVAL

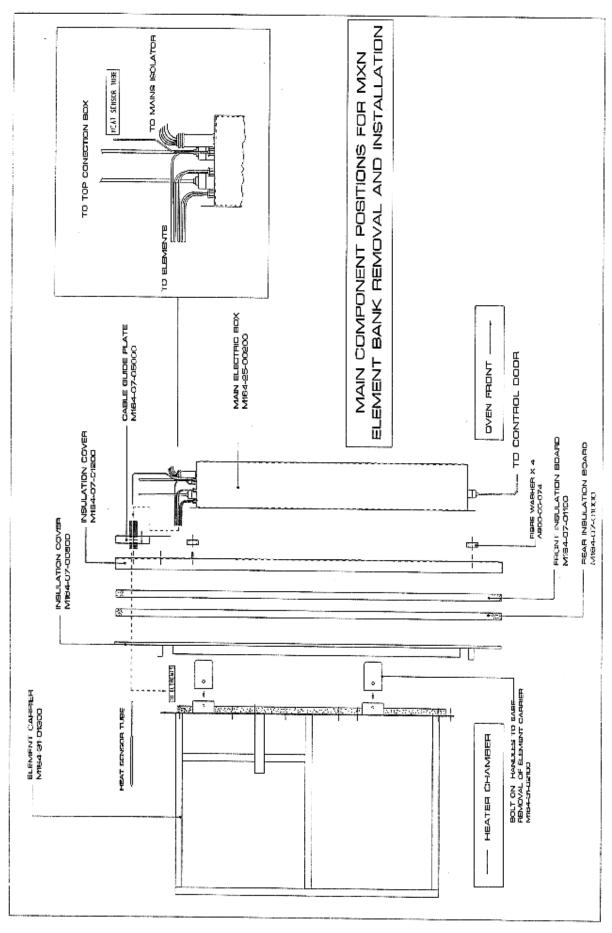
(SEE DRAWINGS ON NEXT PAGES)

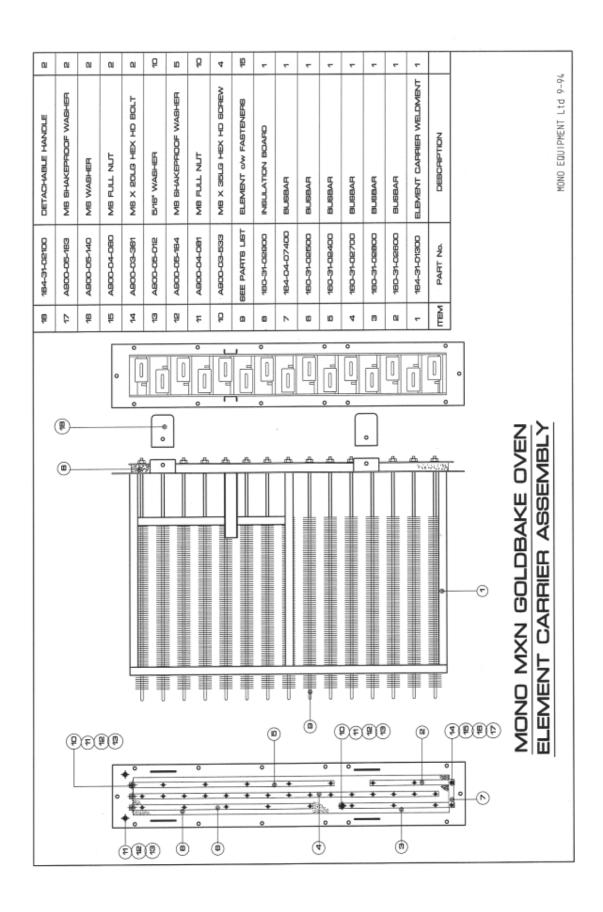
- 1 Ensure oven is DISCONNECTED from consumer power supply.
 ----(DO NOT ONLY USE OVEN ISOLATOR)----
- 2 Disconnect two plug connectors from sockets at the top of main electrical box and one plug connector from the bottom of the box.
- 3 Disconnect element supply cables from inside the box.
- 4 Disconnect cables from mains isolator.
- 5 Unscrew cable guide plate and slide away down heat sensor tubing.
- 6 Remove insulation material from cable guide plate area.
- 7 Unscrew retainer screw on heat sensor holder and slide out sensor tube leaving holder in place.
- 8 Loosen nuts clamping conduit tube to main isolator bracket.
- 9 Loosen bottom electrical box holding nuts.
- 10 Remove top electrical box holding nuts.
- Pull top of box forward, disengaging conduit from bracket and lift slots off studs at bottom. (Be careful not to damage heat sensor tube.).
- Slide insulation covers and insulation boards out of chamber to reveal element carrier front face.
- Bolt on two handles (part no. M164-31-02100) to fixing lugs on front face of carrier assembly.
- 14 Remove 14 hex. head bolts from around front face of carrier and slide complete assembly out of heater.

12.0 ELEMENT BANK REPLACEMENT

 This is the reversal of 12.1 - 12.14, but ensure all insulation is replaced and that the insulation ladder tape on heater chamber front face is in good condition

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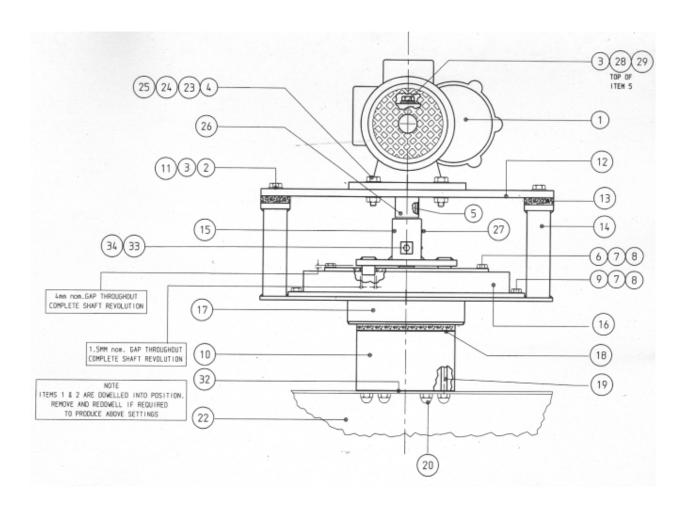




13.0 Rack Drive/Turntable parts

WARNING: KEEP CLEAR OF LARGE FLUE PIPE ON ROOF WHEN DOING ANY MAINTENANCE ON TOP OF OVEN. VERY HOT AIR IS EJECTED.

MONO MXT OVEN TURNTABLE DRIVE COMPONENTS



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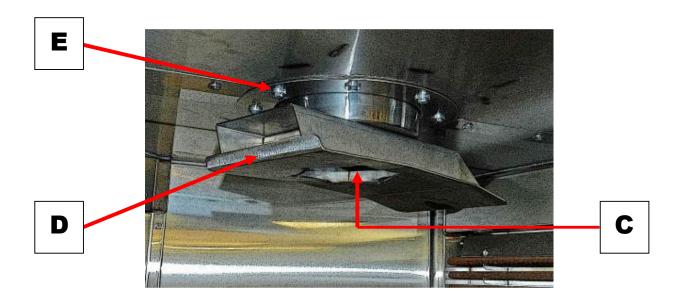
MONO MXT OVEN TURNTABLE DRIVE COMPONENTS DESCRIPTION

(see drawing on previous page)

Item	Part no	Description	Qty
1	B912-74-009	Gearmotor unit (Varvel MRA70)	1
2	A900-05-143	M10 Plain washer	4
3	A900-05-142	M10 Spring washer	5
4	A900-03-387	M12 x 45LG Hex.Hd. setscrew	4
5	162-02-04100	Drive shaft assy (shaft key pin)	1
6	A900-03-383	M8 x 25LG Hex.Hd.setscrew	8
7	A900-05-144	M8 Plain washer	16
8	A900-05-141	M8 Spring washer	16
9	A900-03-439	M8 x 50LG Hex.Hd.setscrew	8
10	160-36-01000	Turntable drive (lower)	1
11	A900-03-438	M10 x 45LG. Hex.Hd.setscrew	4
12	160-15-00600	Top plate	1
13	160-15-00700	Insulation packing piece	4
14	160-36-00100	Bearing support plate assy.	1
15	162-02-04400	Drive spider	1
16	160-36-00300	Turntable bearing	1
17	160-15-00800	Turntable drive (upper)	1
18	160-15-01400	Insulation disc	1
19	160-36-01100	M10 Stud	6
20	A900-04-096	M10 Dome nut	6
21			
22	160-36-00600	Rack hanger. (ref. only)	1
23	A900-05-022	½" Plain washer	8
24	A900-05-059	½" Spring washer	8
25	A900-04-084	M12 Nut	4
26	162-02-04300	Spacer	7
27	A900-03-436	M6 x 10LG Grub screw	2
28	162-02-045	Washer (drive shaft)	1
29	A900-03-395	M10 x 16LG hex.Hd. setscrew	1
30	160-35-02000	Direction of rotation label	1
31	A900-03-628	M4 x 6LG slotted pan ho. screw	2
32	160-40-06102	Packing shim for rack hanger (14swg)	as required
	160-40-06103	(20swg)-	"
33	A900-03-360	M6 x 12LG Hex.Hd. setscrew	1
34	A900-05-163	M6 Shakeproof washer	1

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To renew the rack drive seal



This seal is situated inside the oven above the ring plate surrounding the Rack hanger shaft.

- 1 Release the six dome nuts (C) securing the rack hanger to its shaft and remove the hanger (D). Release the screws securing the ring plate and remove the plate (E).
- 2 Pick out the rubber ring seal and coiled rope seal from within the cavity and carefully coil in the new seal, ensuring that it is not distorted. Replace the rubber ring seal.
- 3 Refit the ring plate and the rack hanger.

ROPE SEAL PT No. A900-32-016 RUBBER SEAL PT No A900-12-060

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14.0 SPARES AND SERVICE

If a fault arises, please do not hesitate to contact the Customer Service Department, quoting the **machine serial number** on the silver information plate of the machine and on the front cover of this manual

MONO

Queensway Swansea West Industrial Estate Swansea, SA5 4EB UK

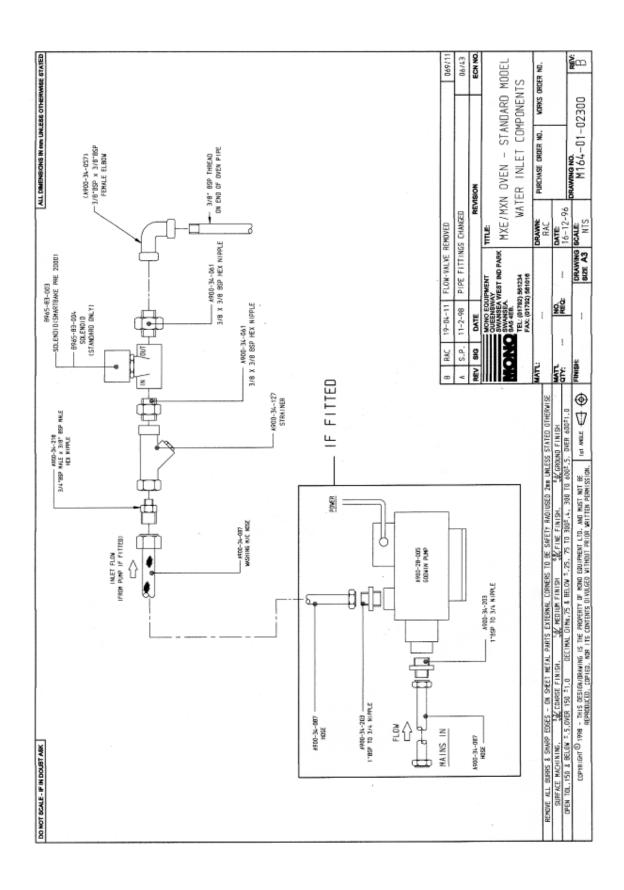
email:spares@monoequip.com Web site:www.monoequip.com

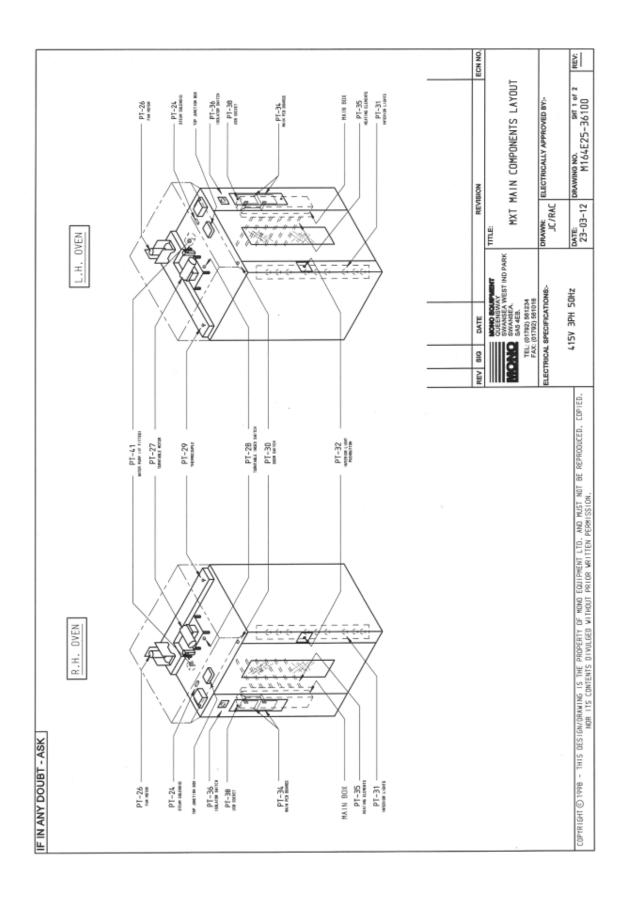
Tel. 01792 561234 Spares +44(0)1792 564039 Fax. 01792 561016

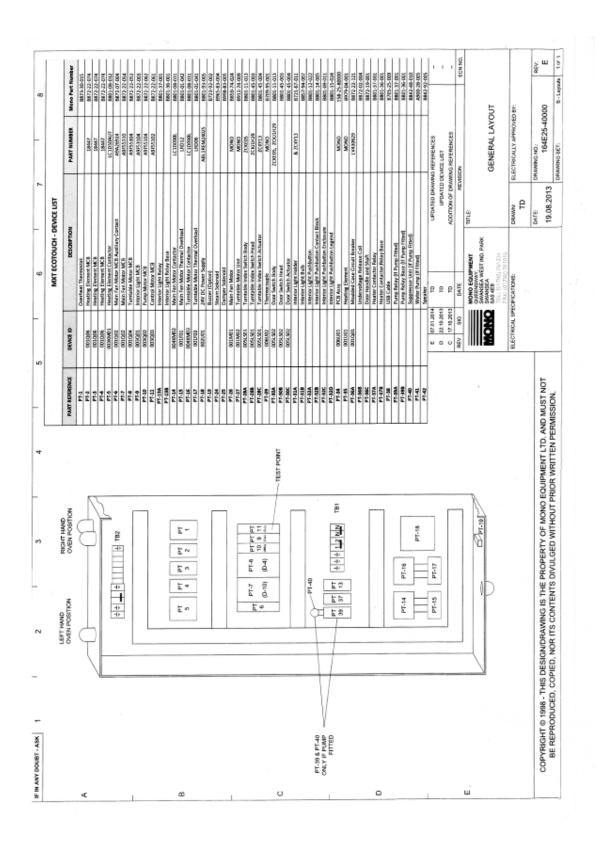
FGI64T – MXT RevAI8 I5/01/2018

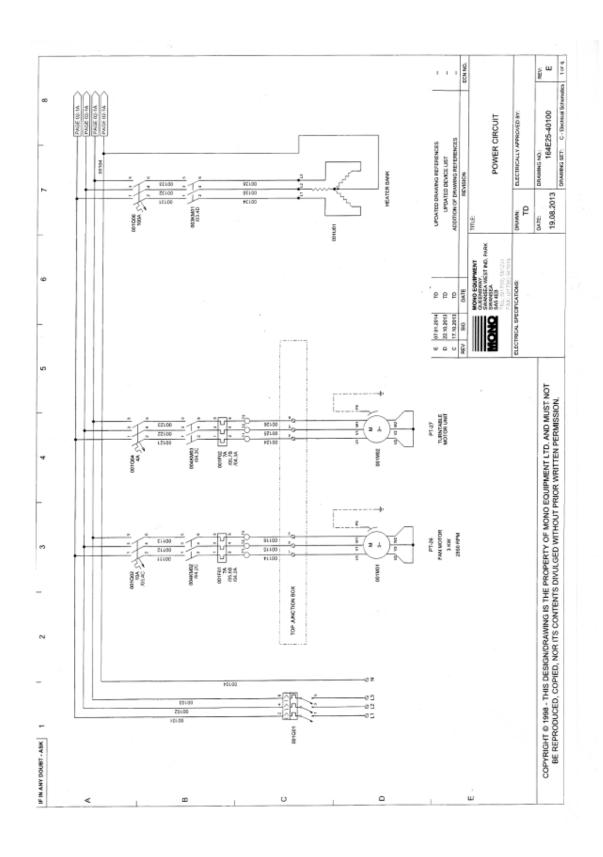


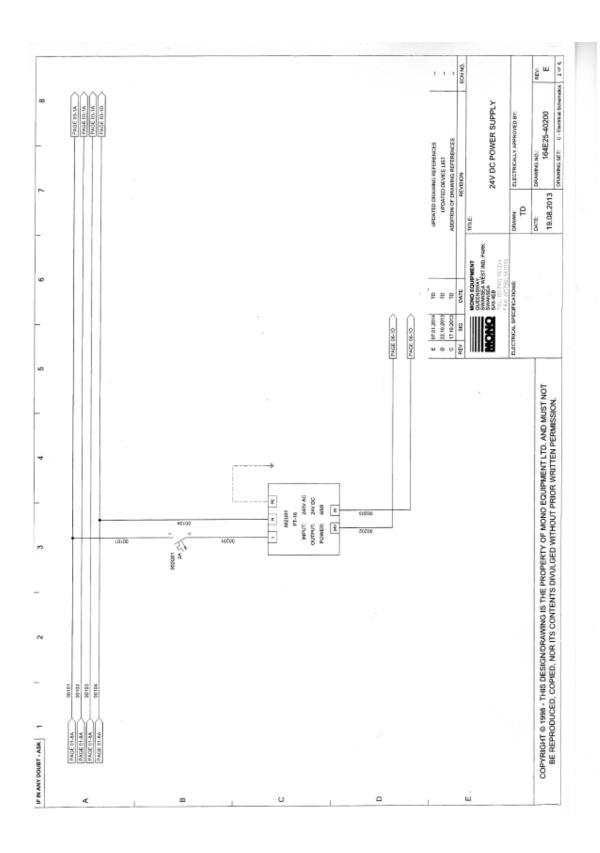
15.0 ELECTRICS (WITHOUT PUMP)

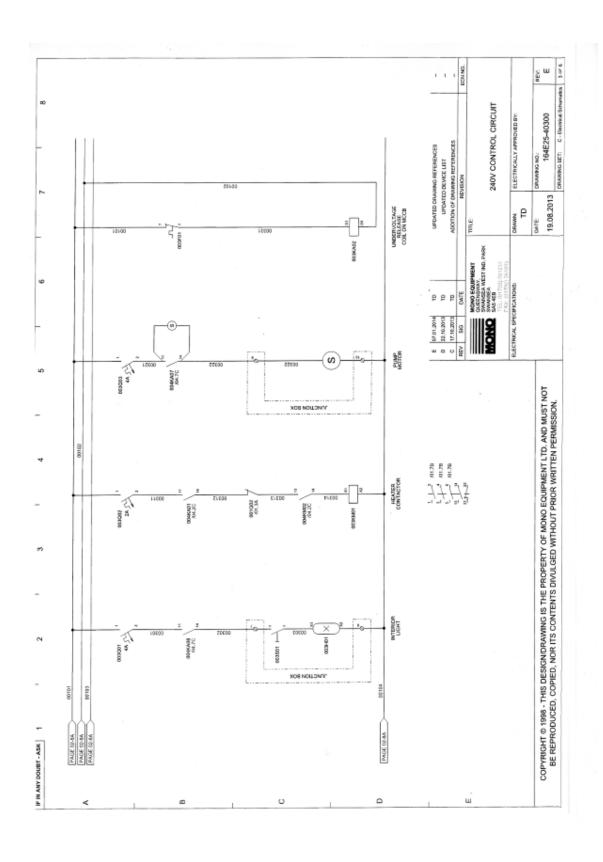


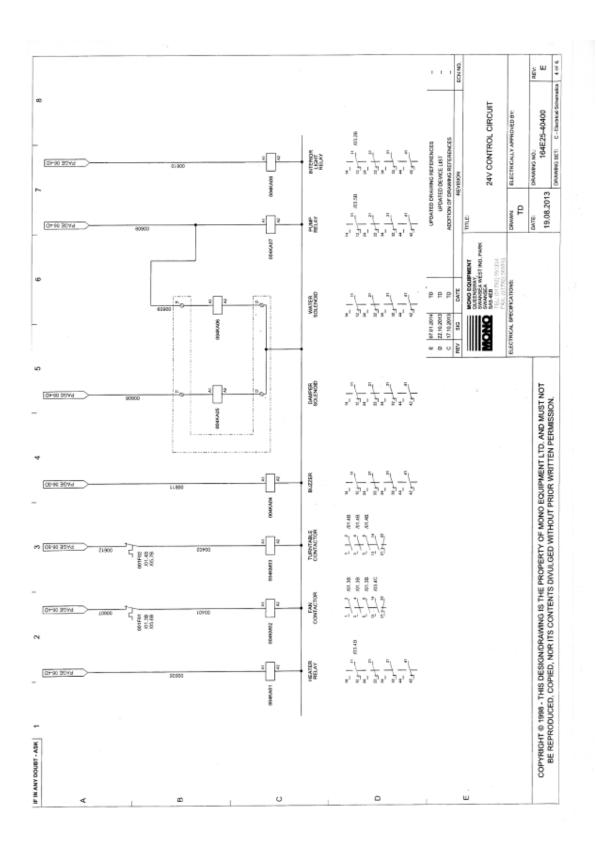


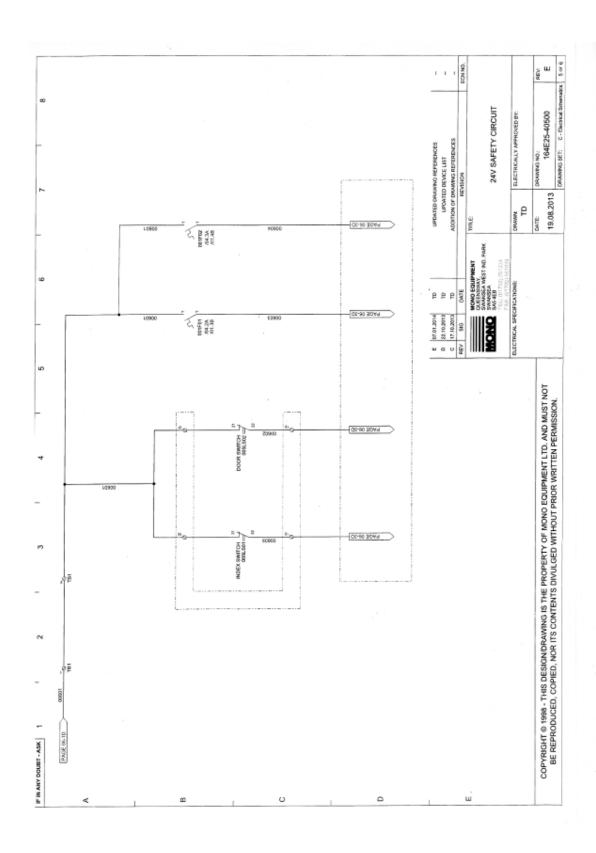


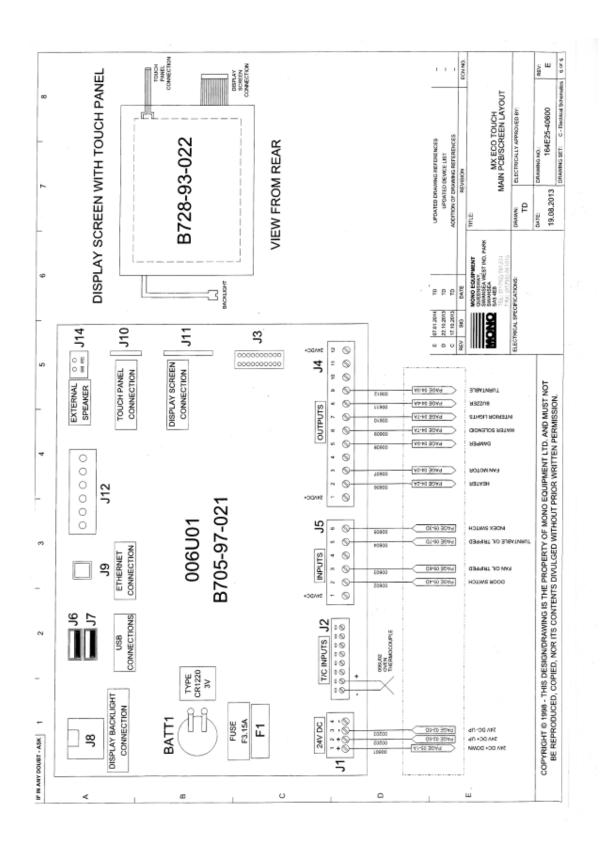






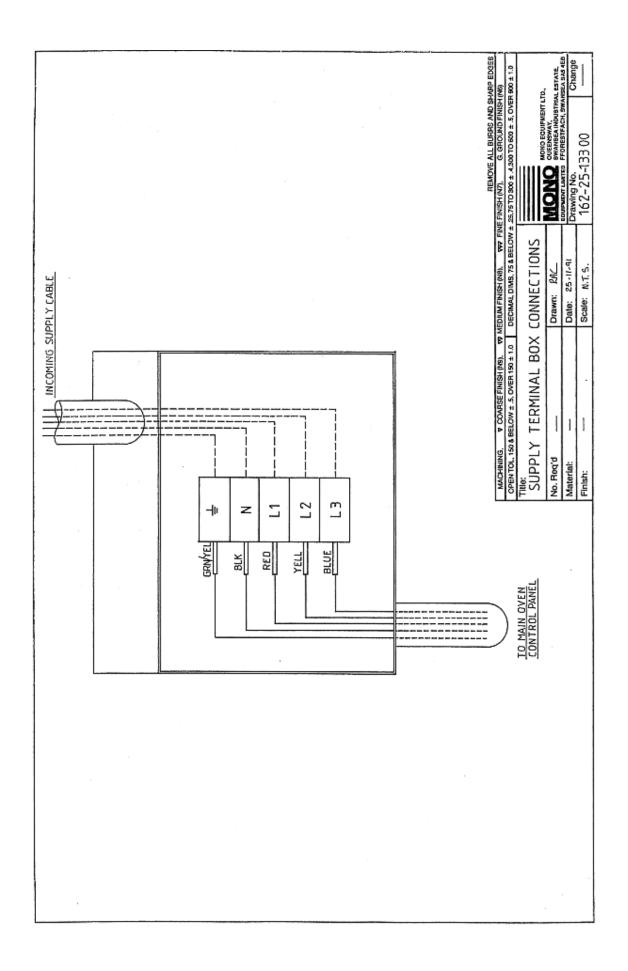


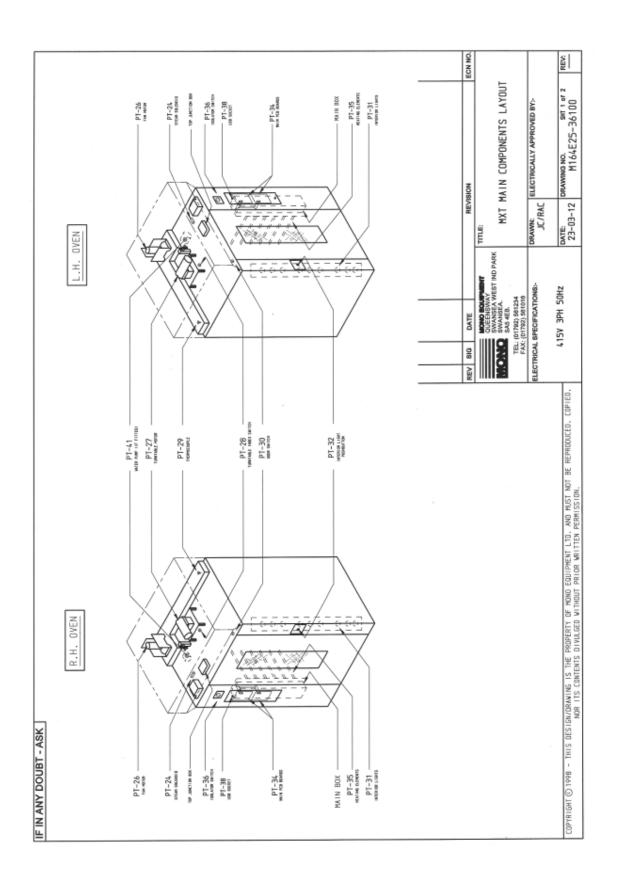




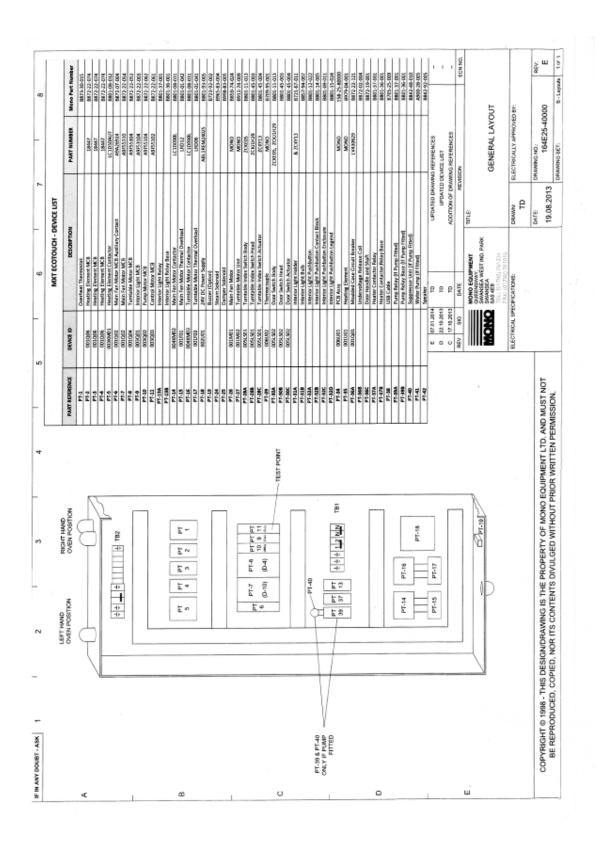


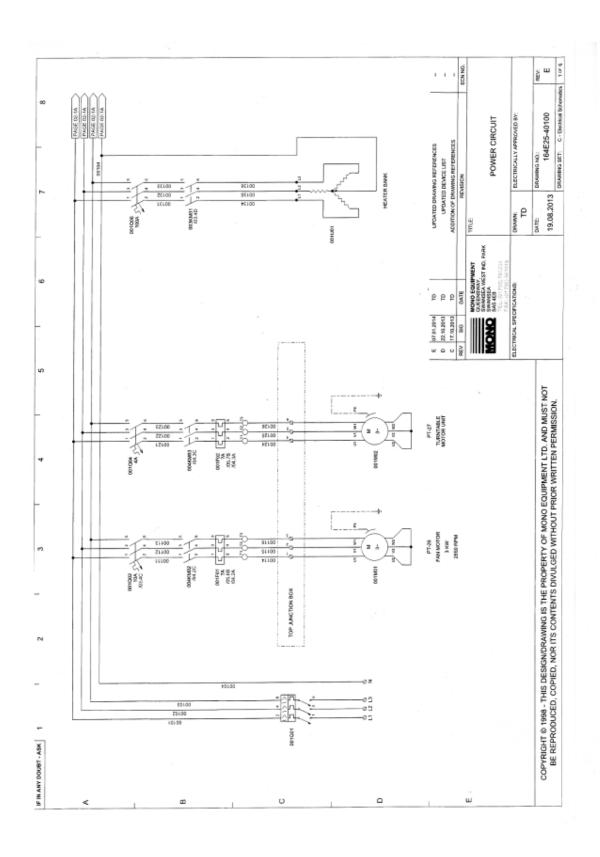
16.0 ELECTRICS (WITH PUMP)

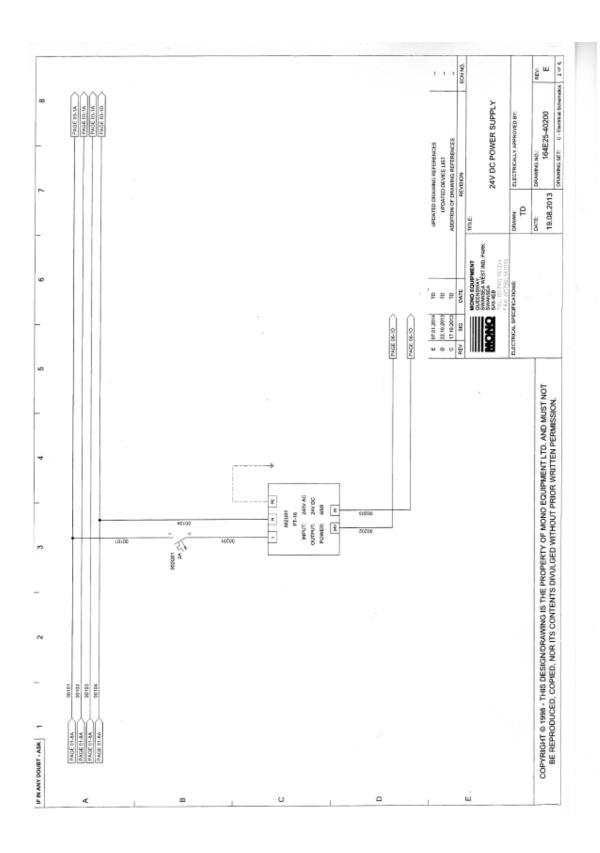


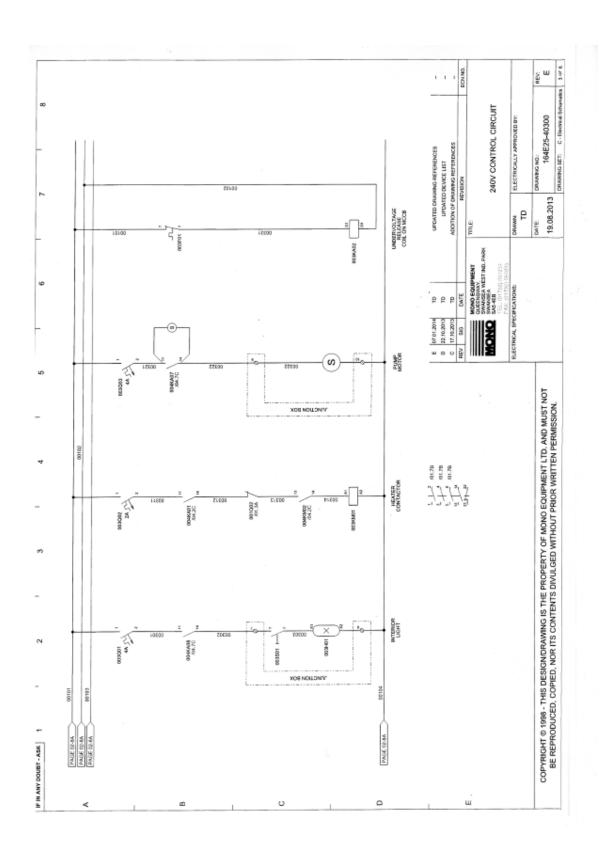


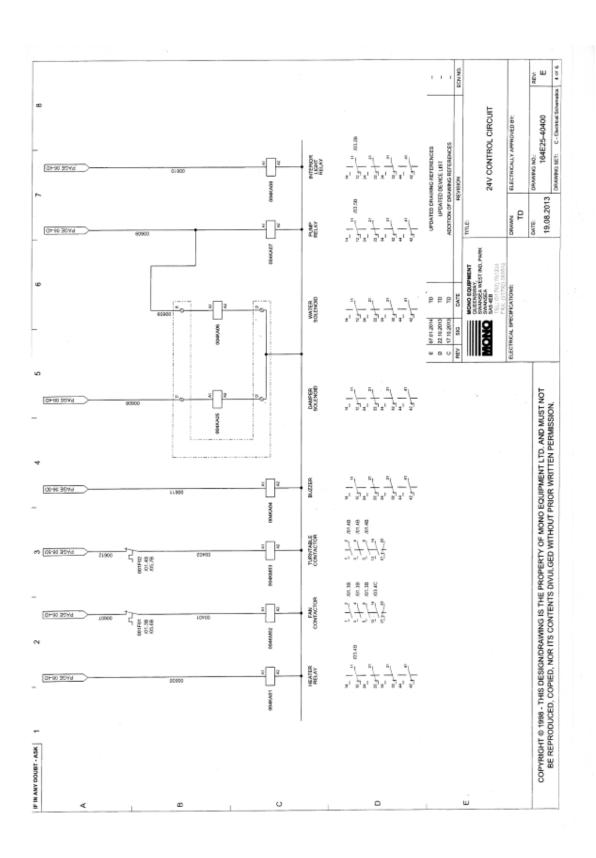
	JC/RAC	ELECTROLAL OPECIFICATIONS	5	8801-45-004	DOOR SWITCH ACTUATOR.	PT-30C
FIECTRICALLY APPROVED BYS.	DRAWN	FAX: (01792) 561018		8801-45-003	DOOR SWITCH HEAD.	PT-30B
COLOURSMART OVEN			-	B801-11-013	DOOR SWITCH BODY.	PT-30A
COMPONENT PART LIST FOR MXT	GUNEANWAY SWANNSEA WEST IND PARK SWANSEA.	SWANSEA SWANSEA SWANSEA		8709-95-001	THERMOCOUPLE.	PT-29
	TITLE		:[]	8801-45-004	TURNTABLE INDEX SWITCH ACTUATOR.	PT-28C
ECN NO	REVISION	REV 81G DATE	i di	8801-45-003	TURNTABLE INDEX SWITCH HEAD.	PT-28B
		-		8801-11-013	TURNTABLE INDEX SWITCH BODY.	PT-28A
				8912-74-009	TURNIABLE MOTOR UNIT.	PT-27
				8859-74-024	MAIN FAN MOTOR.	PT-26
8842-92-005		SPEAKER	PT-42	8998-83-005	DAMPER SOLENDID.	PT-25
A900-28-005	FITTED).	WATER PUMP (IF FITTED).	PT-41	9965-83-004	STEAM SOLENDID.	PT-24
8842-48-010	SUPPRESSOR UNIT (IF PUMP FITTED).	SUPPRESSOR UNI	D1-40	8723-92-002	BUZZER (OPTION)	PT-19
8801-36-001	PUMP RELAY BASE (IF PUMP FITTED).	PUMP RELAY BASI	PT-39b	8801-93-005	24V DC POWER SUPPLY.	PT-18
B801-37-001	PUMP FITTED)	PUNP RELAY (IF PUMP FITTED)	PT-39a	B801-01-041	TURNTABLE MOTOR THERMAL OVERLOAD.	PT-17
8705-25-009		USB CABLE	PT-38	B801-08-031	TURNTABLE MOTOR CONTACTOR.	PT-16
8801-36-001	JR RELAY BASE.	HEATER CONTACTOR RELAY BASE	PT-37B	B801-01-042	MAIN FAN MOTOR THERMAL OVERLOAD.	PT-15
B801-37-001	JR RELAY.	HEATER CONTACTOR RELAY.	PT-37A	B801-08-031	MAIN FAN MOTOR CONTACTOR.	PT-14
8872-19-001	SHAFT.	DOOR HANDLE' AND SHAFT	PT-36C	B801-36-001	INTERIOR LIGHT RELAY BASE.	PT-13B
8872-02-002	LEASE COIL.	UNDERVOLTAGE RELEASE COIL.	PT-36B	B801-37-001	INTERIOR LIGHT RELAY.	PT-13A
B872-22-078	RCUIT BREAKER.	MOULDED CASE CIRCUIT BREAKER.	PT-36A	B872-22-061	CONTROL NOTOR MCB.	PT-11
8979-04-001		HEATING ELEMENT.	PT-35	B872-22-062	PUNP MOTOR MCB.	PT-10
				8872-22-003	INTERIOR LIGHT MCB	PT-9
158-25-80000		PCB ASSY	PT-34	8872-22-052	TURNTABLE MOTOR MCB.	PT-8
				B872-22-054	MAIN FAN MDTOR MCB.	PT-7
8801-15-024	INTERIOR LIGHT PUSHBUTTON LEGEND.	INTERIOR LIGHT	PT-320	8872-07-004	MAIN FAN MOTOR MCB AUXILIARY CONTACT	PT-6
8801-09-011	NTERIOR LIGHT PUSHBUTTON ENCLOSURE.	INTERIOR LIGHT	PT-32C	B801-08-032	HEATING ELEMENT CONTACTOR	PT-5
8801-14-005	NTERIOR LIGHT PUSHBUTTON CONTACT BLOCK	INTERIOR LIGHT	PT-32B	B872-22-074	HEATING ELEMENT NCB.	PT-4
B801-12-022	PUSHBUTTON.	INTERIOR LIGHT PUSHBUTTON	PT-32A	B872-22-074	HEATING ELEMENT MCB.	PT-3
B857-94-007	BULB.	INTERIOR LIGHT BULB.	PT-31B	B872-22-074	HEATING ELEMENT MCB.	PT-2
8721-67-011	HOLDER.	INTERIOR LIGHT HOLDER.	PT-31A	8873-30-015	OVERHEAT THERMOSTAT	PT-1
PART NUMBER	DESCRIPTION		PT-Ref	PART NUMBER	DESCRIPTION	PT-Ref
4				***************************************		

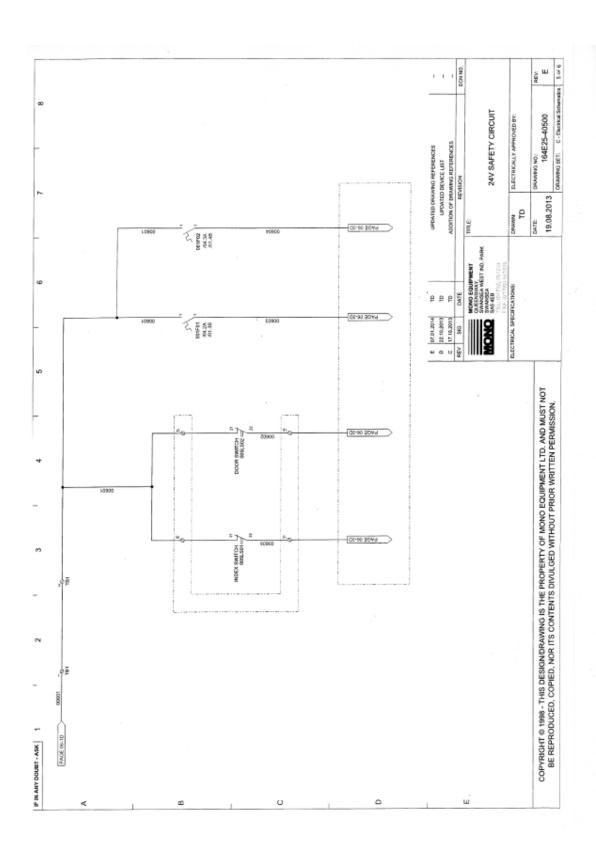


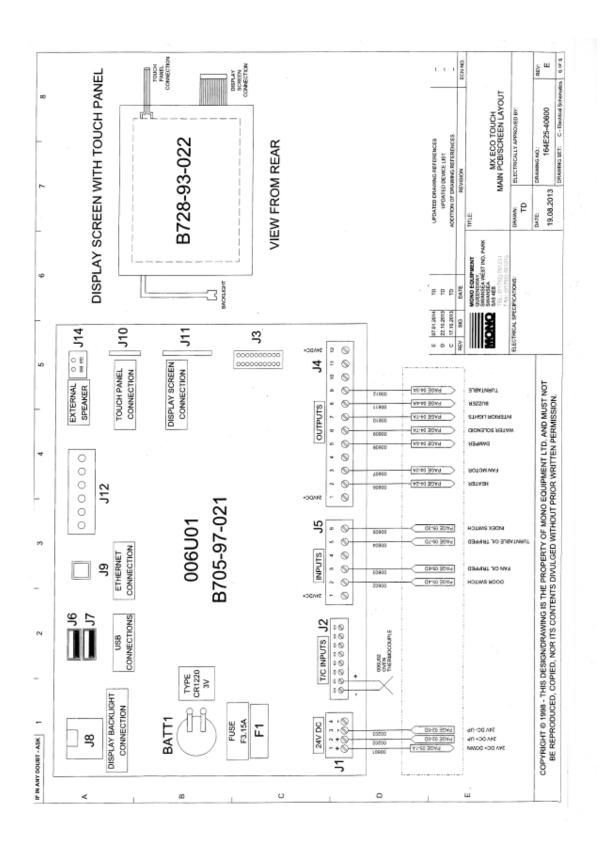


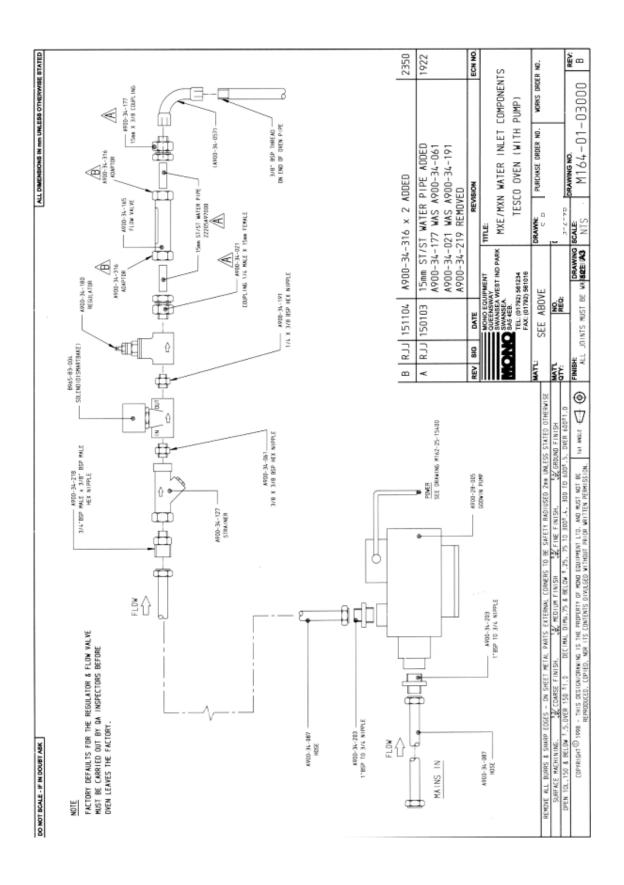


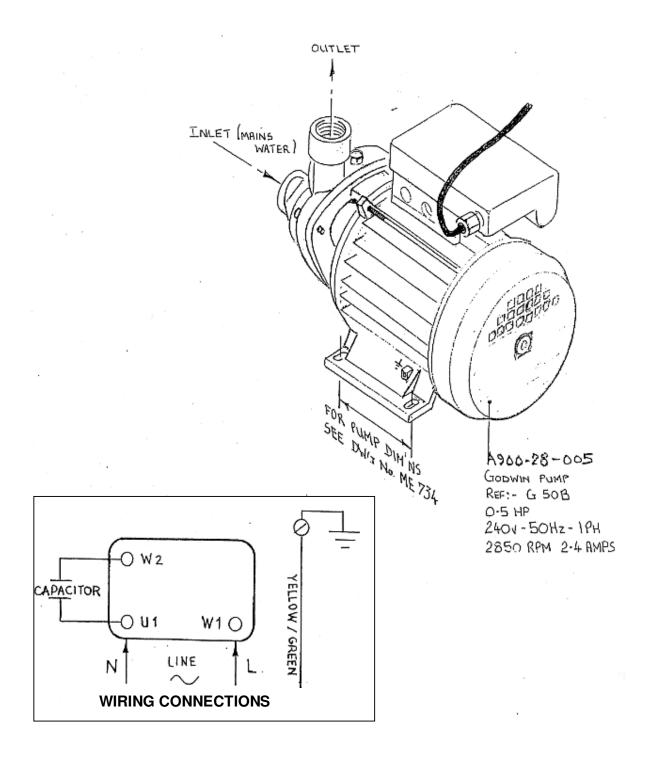








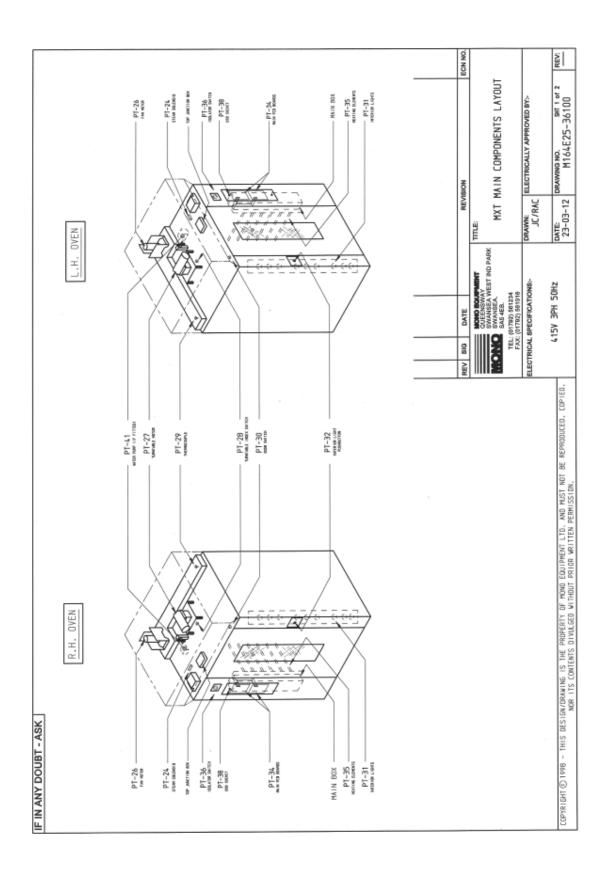




WATER PUMP (GODWIN) DIAGRAM (IF FITTED)

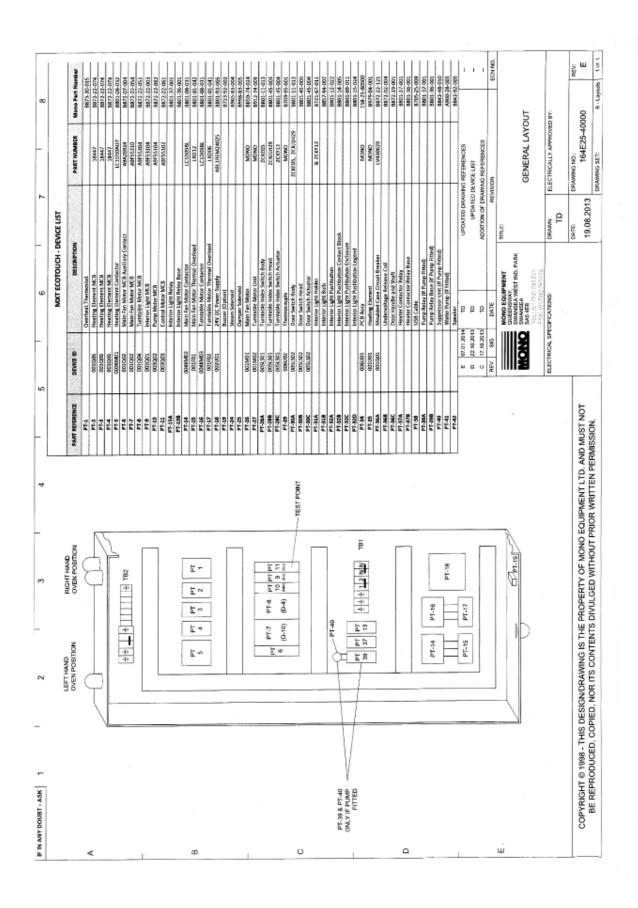


17.0 SPARES

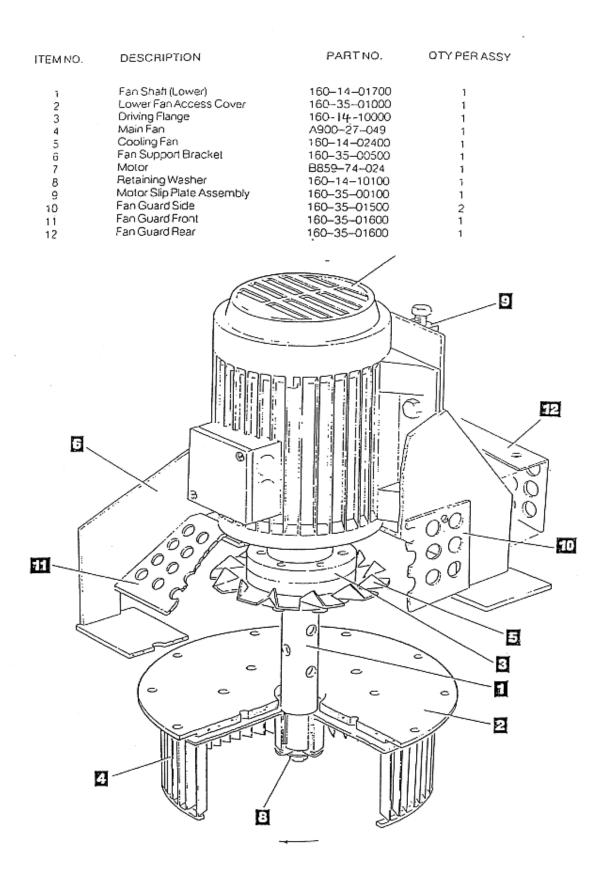


INTERIOR LIGHT BULB. INTERIOR LIGHT PUSHBUTTON. INTERIOR LIGHT PUSHBUTTON CONTACT BLOCK INTERIOR LIGHT PUSHBUTTON ENCLOSURE. INTERIOR LIGHT PUSHBUTTON LEGEND. PCB ASSY HEATING ELEMENT. MOULDED CASE CIRCUIT BREAKER. UNDERVOLTAGE RELEASE COIL. DOOR HANDLE AND SHAFT. HEATER CONTACTOR RELAY. HEATER CONTACTOR RELAY BASE. USB CABLE PUMP RELAY (IF PUMP FITTED). SUPPRESSOR UNIT (IF PUMP FITTED). SUPPRESSOR UNIT (IF PUMP FITTED). SATER PUMP (IF FITTED).	PT-31A PT-31B PT-32B PT-32D PT-32D PT-36B PT-36B PT-36B PT-36B PT-36B PT-36B PT-37A PT-39a PT-40 PT-41	8872-22-074 8872-22-074 8872-22-074 8872-22-074 8872-22-074 8872-22-074 8872-22-074 8872-22-061 8872-22-062 8872-22-061 8801-35-001 8801-01-042 8801-01-042 8801-01-042 8801-01-042 8801-01-041 8801-01-041 8801-01-041 8801-01-041 8801-01-042 8801-01-043 8801-11-013 8801-11-013		PT-2 PT-3 PT-4 PT-5 PT-6 PT-10 PT-11 PT-13 PT-14 PT-15 PT-15 PT-16 PT-17 PT-18 PT-17 PT-18 PT-17
SIG	RE	700 07 10000		007 10
		B801-11-013	TURNIABLE INDEX SWITCH BODY.	PT-28A
	L	8801-11-013	TURNTABLE INDEX SWITCH BODY.	PT-28A
	L	8801-11-013	TURNTABLE INDEX SWITCH BODY.	PT-28A
			-	100 TC
		8912-74-009	TURNTABLE MOTOR UNIT.	T-27
		8912-74-009	TURNTABLE MOTOR UNIT.	T-27
		170 1 1000	TO T	2
		B859-74-024	MAIN FAN MOTOR.	1-26
		8859-74-024	MAIN FAN MDTOB.	T-26
SPEAKER	PT-42	8998-83-005	DAMPER SOLENOID.	T-25
WATER PUMP (IF	PT-41	8965-83-004	STEAM SOLENOID.	T-24
100		700 71 000	DOLLER TOP TOP	-
SUPPRESSOR UNIT	D1-40	8723-92-002	BUZZER (OPTION)	T-19
PUMP RELAY BASE	PT-39b	8801-93-005	24V DC POWER SUPPLY.	T-18
TOTAL OF THE	AUC TO	100 00 1000	Transfer of the same	40
PUMP RELAY (IF	PT-39a	8801-01-041		T-17
USB CABLE	PT-38	8801-08-031	TURNTABLE MOTOR CONTACTOR.	T-16
				!
HEATER CONTACTO	PT-37B	8801-01-042	MAIN FAN MOTOR THERMAL DVERLOAD.	T-15
HEATER CONTACTO	PT-37A	8801-08-031	MAIN FAN MOTOR CONTACTOR.	1-14
	- 1			;
DOOR HANDLE AND	DT-36C	B801-36-001	INTERIOR LIGHT RELAY BASE.	T-13B
UNDERVIOLI MOE NE	000	100-15-1000	INIERIOR CIONI NEENI.	5
UNDERVOLTAGE REI	PT-36B	B801-37-001	INTERIOR LIGHT RELAY.	T-13A
MOULDED CASE CI	PT-36A	B872-22-061	CONTROL MOTOR MCB.	1-11
				2
HEATING ELEMENT	PT-35	B872-22-062	PUMP MOTOR MCB.	T-10
		8872-22-003	INTERIOR LIGHT MCB	6-1
PLB ASST	P1-34			
V2004 070	√C 10	B872-22-052	TURNTABLE MOTOR MCB.	1-8
		450-ZZ-Z/88	MAIN FAN MOIUR MLB.	/-
		2000	600	
INTERIOR LIGHT	PT-320	8872-07-004	MAIN FAN MOTOR MCB AUXILIARY CONTACT	9-L
		4		1
INTERIOR LIGHT	PT-32C	B801-08-032	HEATING ELEMENT CONTACTOR	-5
INTERIOR LIGHT	P1-32B	8872-22-074	HEATING ELEMENT MCB.	7-
	1			
INTERIOR LIGHT	PT-32A	B872-22-074	HEATING ELEMENT MCB.	m-
INTERIOR LIGHT E	PT-31B	B872-22-074	HEATING ELEMENT MCB.	-2
	PT-31A	B873-30-015	UVERHEAT INERMUSIA!	
INTERIOR LIGHT !		TAN MORPH	CHARLES THE DROPEST	-
INTERIOR LIGHT HOLDER			TATOMOSTA TIPOMOSTAT	PT-1
INTERIOR LIGHT	PT-Ref	DART NIMBER	A THE PROPERTY AT THE PROPERTY	PT-Ref PT-1
DESCRIPTION INTERIOR LIGHT HOLDER.	PT-Ref	DART NIMBER	UESCRIPTION	
	INTERIOR LIGHT PUSHBUTTON. INTERIOR LIGHT PUSHBUTTON DOOR HANDLE AND SHAFT. HEATER CONTACTOR RELAY BAS WANNESSOR UNIT IIF PUNP F SUPPRESSOR UNIT IIF F SUPPRESSOR UNIT IIF PUNP F SUPPRESSOR U			### BOOL 12-014 #### BOOL 12-02-024 ###################################

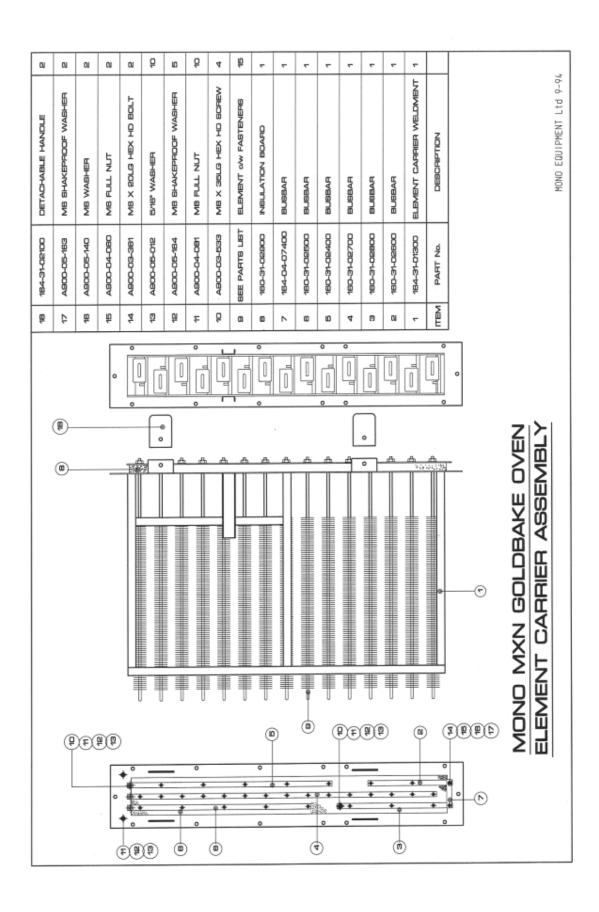
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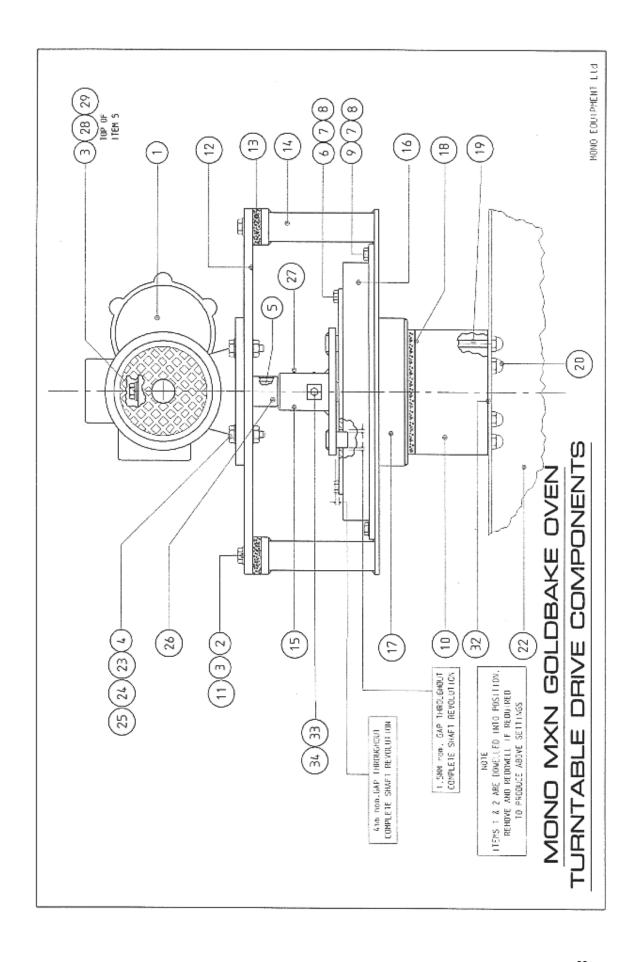
MAIN FAN ASSEMBLY FOR MXN SMARTBAKE OVEN



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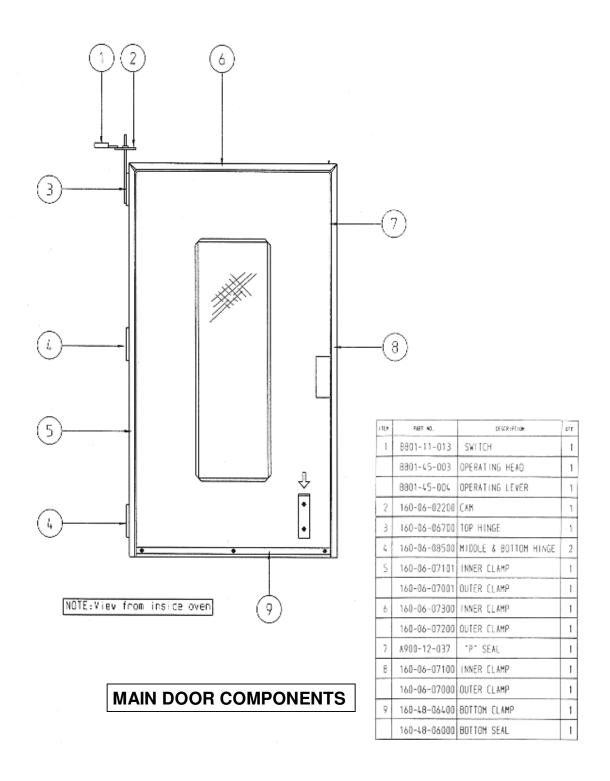
MONO MXC GOLDBAKE OVEN TURNTABLE DRIVE COMPONENTS DESCRIPTION

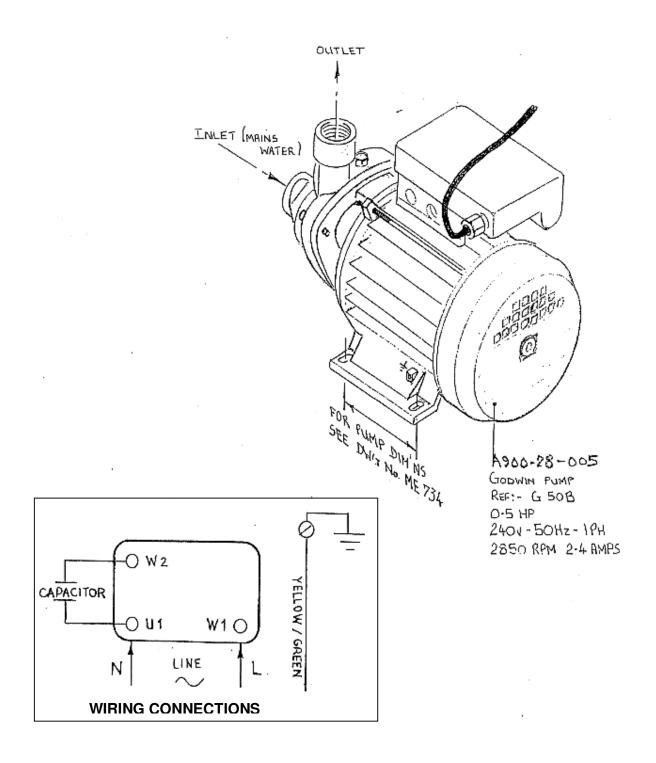
(see drawing on previous page)

-Item	Part no	Description	- Qty
1	B912-74-009	Gearmotor unit (Varvel MRA70)	1
2	A900-05-143	M10 Plain washer	4
3	A900-05-142	M10 Spring washer	5
4	A900-03-387	M12 x 45LG Hex.Hd. setscrew	.4
5	162-02-04100	Drive shaft assy (shaft key pin)	1
6	A900-03-383	M8 x 25LG Hex.Hd.setscrew	. 8
7	A900-05-144	M8 Plain washer	16
8	A900-05-141	M8 Spring washer	16
9	A900-03-439	M8 x 50LG Hex.Hd.setscrew	8
10	160-36-01000	Turntable drive (lower)	1
11	A900-03-438	M10 x 45LG. Hex.Hd.setscrew	4
12	160-15-00600	Top plate	1
13	160-15-00700	Insulation packing piece	4
14	160-36-00100	Bearing support plate assy.	1
15	162-02-04400	Drive spider	1
16	160-36-00300	Turntable bearing	1
17	160-15-00800	Turntable drive (upper)	1
18	160-15-01400	Insulation disc	1
19	160-36-01100	M10 Stud	6
20	A900-04-096	M10 Dome nut	6
21			
22	160-36-00600	Rack hanger. (ref. only)	1
23	A900-05-022	½" Plain washer	8
24	A900-05-059	½" Spring washer	8
25	A900-04-084	M12 Nut	4
26	162-02-04300	Spacer	7
27	A900-03-436	M6 x 10LG Grub screw	2
28	162-02-045	Washer (drive shaft)	1
29	A900-03-395	M10 x 16LG hex.Ho. setscrew	1
30	160-35-02000	Direction of rotation label	1
31	A900-03-628	M4 x 6LG slotted pan ho. screw	2
32	160-40-06102	Packing shim for rack hanger (14swg	
	160-40-06103	(20swg)
33	A900-03-360	M6 x 12LG Hex.Hd. setscrew	1
34	A900-05-163	M6 Shakeproof washer	1

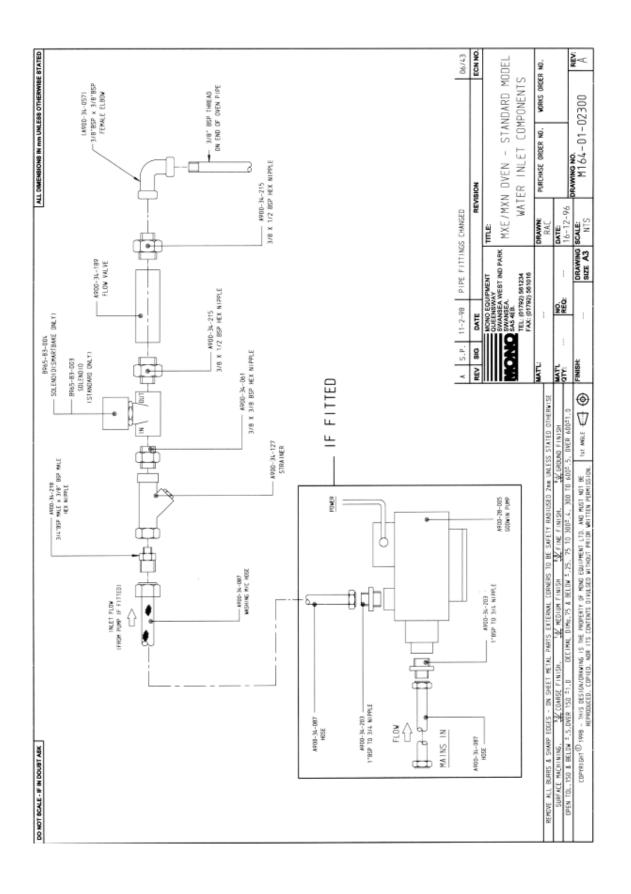
ROPE SEAL PT No. A900-32-016 (NOT SHOWN) RUBBER SEAL PT No. A900-12-060 (NOT SHOWN)

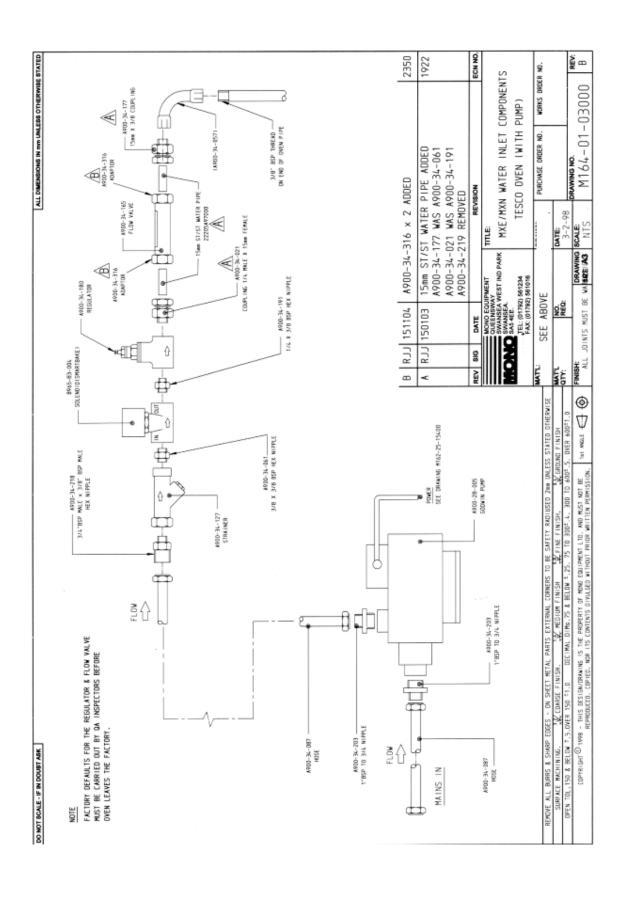
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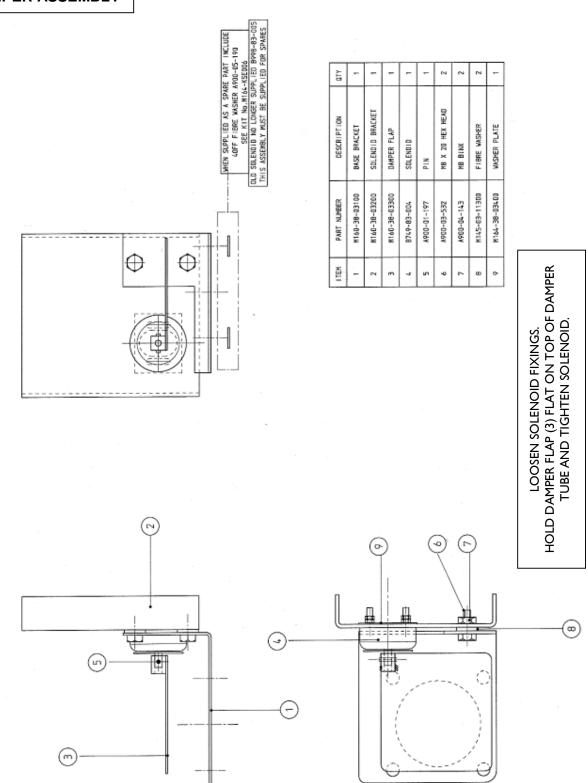
WATER PUMP (GODWIN) DIAGRAM (IF FITTED)





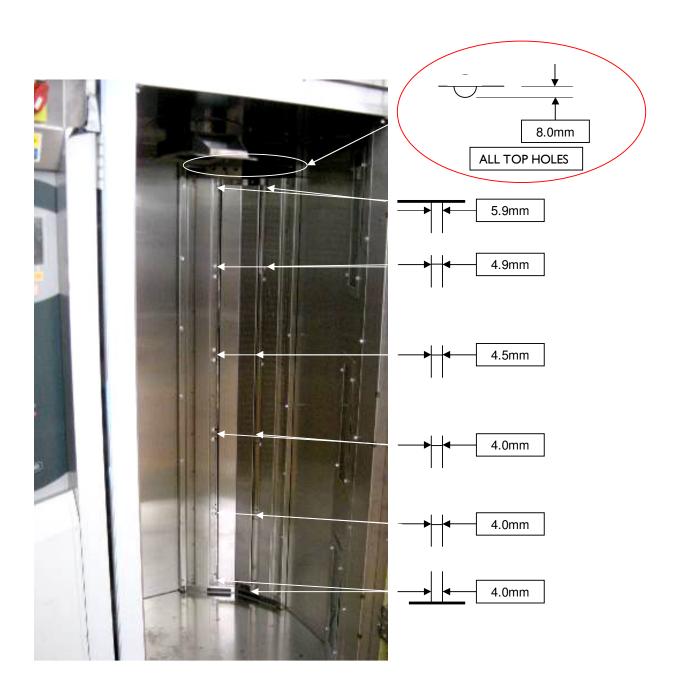
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DAMPER ASSEMBLY



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MX OVEN AIR DOOR DEFAULT SETTINGS



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MONO Equipment

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As it is our policy to improve our machines continuously, we reserve the right to change specifications without prior notice.

DISPOSAL

CARE SHOULD BE TAKEN WHEN THE MACHINE COMES TO THE END OF ITS WORKING LIFE. ALL PARTS SHOULD BE DISPOSED OF IN THE APPROPRIATE PLACE, EITHER BY RECYCLING OR OTHER MEANS OF DISPOSAL THAT COMPLIES WITH LOCAL REGULATIONS.

(IN UK, ENVIRONMENTAL PROTECTION ACT 1990 APPLIES)