



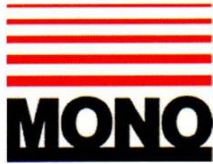
www.monoequip.com

Enter **Serial No.** here. _____

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




SET UP AND OPERATION INSTRUCTIONS
MXC ROTARY RACK OVEN
WITH HALOGEN LIGHTING
(With programming instructions)



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	
G.A.Williams – Quality Manager	

Date	
-------------	--

Machine FG Code.		Machine Serial No.	
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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 **A FE 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

SAFETY SYMBOLS

The following safety symbols are used throughout this product documentation. Before using your new equipment, read the instruction manual carefully and pay special attention to information marked with the following symbols.



WARNING

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

Indicates a hazardous situation which, if not avoided, will result in electric shock.



CAUTION

Indicates a hazardous situation which, if not avoided, will result in minor or moderate injury.

ELECTRICAL SAFETY AND ADVICE REGARDING SUPPLEMENTARY ELECTRICAL PROTECTION:

Commercial bakeries, kitchens and foodservice areas are environments where electrical appliances may be located close to liquids or operate in and around damp conditions or where restricted movement for installation and service is evident.

The installation and periodic inspection of the appliance should only be undertaken by a qualified, skilled and competent electrician, and connected to the correct supply suitable for the load as stipulated by the appliance data label.

The electrical installation and connections should meet the necessary requirements of the local electrical wiring regulations and any electrical safety guidelines.

We Recommend:

- Supplementary electrical protection with the use of a residual current device (RCD)
- Fixed wiring appliances incorporate a locally situated switch disconnecter to connect to, which is easily accessible for switching off and safe isolation purposes. The switch disconnecter must meet the specification requirements of IEC 60947.



The supply to this machine must be protected by a **30mA RCD**

CONTENTS

Section - 1.0	Introduction
Section - 2.0	Overall Dimensions
Section - 3.0	Specifications
Section - 4.0	Safety
Section - 5.0	Installation
Section - 6.0	Isolation
Section - 7.0	Daily Cleaning Instructions
Section - 8.0	Weekly Maintenance Instructions
Section - 9.0	Operating Conditions
Section - 10.0	General Maintenance
Section - 11.0	OPERATION
Section - 12.0	Programming
Section - 13.0	Using Monolink Software
Section - 14.0	24Hr Timer Setting

ENGINEERS SECTION

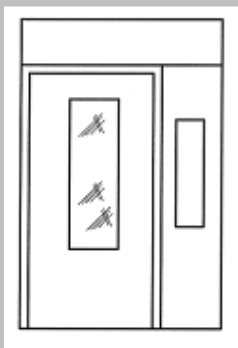
<i>Section - 15.0</i>	<i>Element Bank Removal</i>
<i>Section - 16.0</i>	<i>Element bank Replacement</i>
<i>Section - 17.0</i>	<i>Maintenance (rack drive bushes/seals)</i>
<i>Section - 18.0</i>	<i>Spares and Services</i>
<i>Section - 19.0</i>	<i>Electrics (without pump)</i>
<i>Section - 20.0</i>	<i>Electrics (with pump)</i>
<i>Section - 21.0</i>	<i>Spares</i>

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

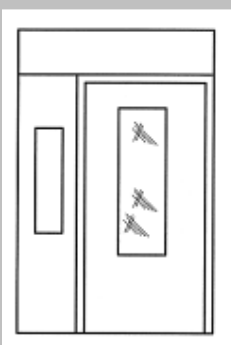


NOTE

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

All bake programs are designated in the oven's LCD display by name and number, for example, "002 French Sticks" or "004 Crusty Rolls". The named programs automatically set the oven's baking time and temperature and steaming time duration.

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

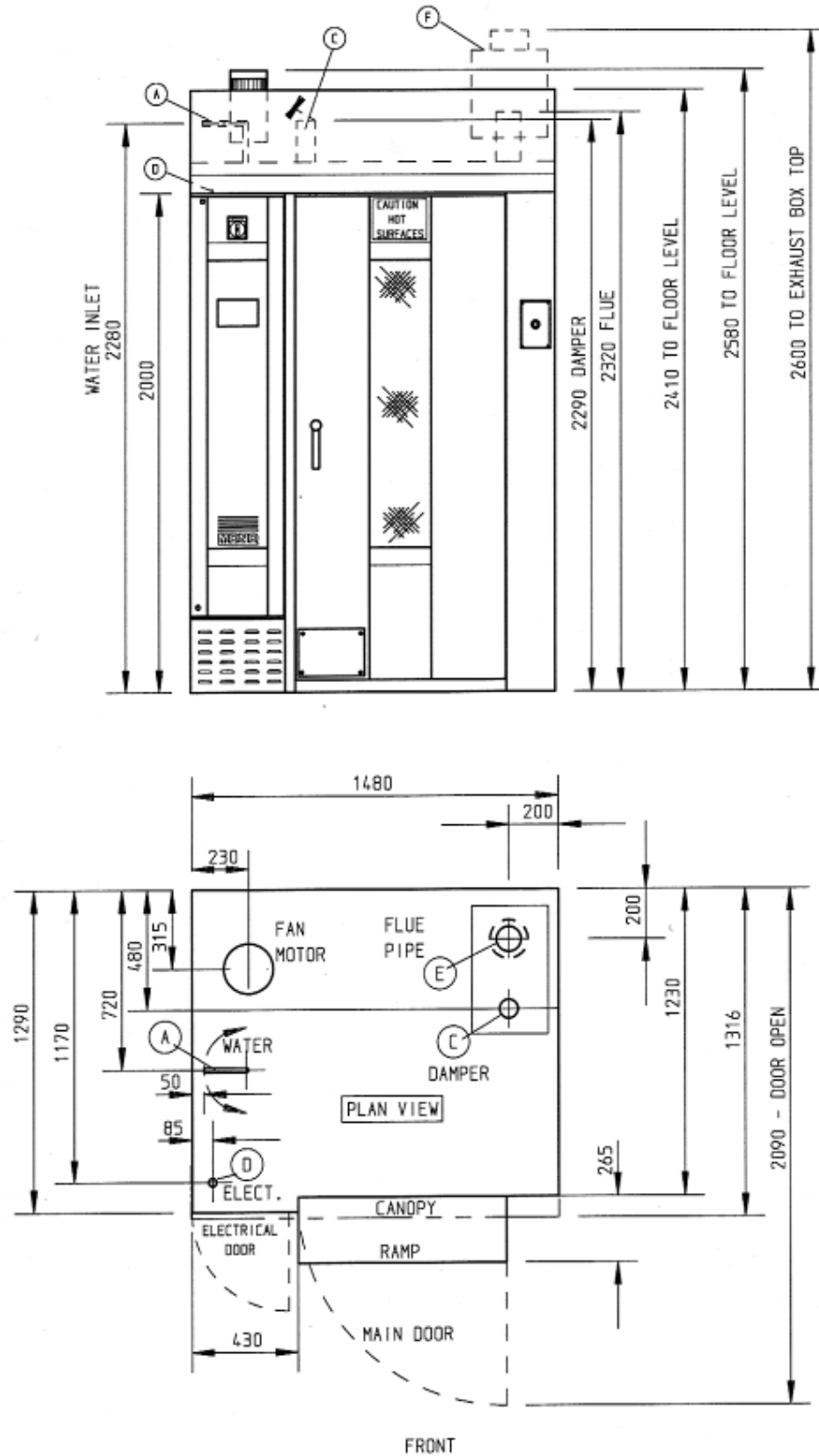
The fan and rack rotator have generously rated, totally enclosed, motors and a sealed for life gearbox.

The high-speed fan and 45 kW element array 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.

Semi automatic damper control is provided.

2.0 OVERALL DIMENSIONS



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: 1.922 sq. m (20.69 sq ft)

TOTAL POWER: 50kW

ELECTRICAL SUPPLY: (SEE SERIAL No. PLATE ON OVEN)

415v. 3ph. 50Hz. , 70amps per phase

380v. 3ph. 60Hz , 76amps per phase



The supply to this machine must be protected by a **30mA RCD**

HEATING ELEMENTS: Finned hairpin type
HEATING ELEMENTS LOADING: 3kW. each
HEATING ELEMENTS NUMBER: 15

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 with gravity drain and solenoid operated supply:

WATER PRESSURE

MAX: 5.5bar (80 psig)
MIN: 3.0bar (minimum pressure)

WATER FLOW 6 litres/min (at min press)

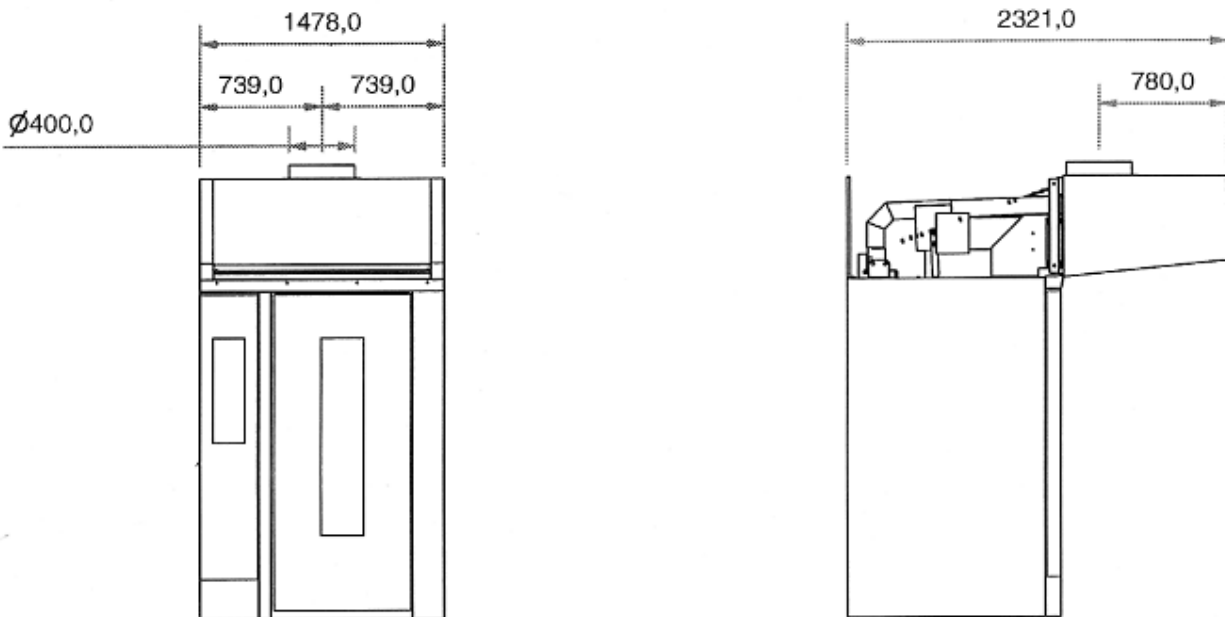
DAMPER Solenoid operated trapdoor type. Semi automatic.

ELECTRICAL SYSTEM: Membrane operated dedicated.

CONTROL PANEL: Microprocessor integrated system, with umbilical to electrical panel

ELECTRICAL PANEL: 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.

1 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 authorized 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.

5 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.

6 When work is being carried out inside the oven, the electrical mains isolator must be turned off and locked.



7 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.



8 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.

12 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.

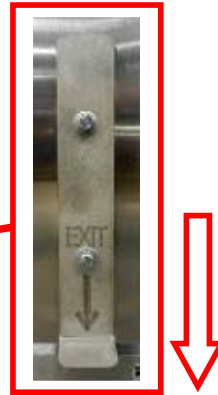


WARNING: KEEP CLEAR OF LARGE FLUE PIPE ON ROOF OF OVEN WHEN DOING ANY MAINTENANCE ON TOP. VERY HOT AIR IS EJECTED.

EMERGENCY INTERNAL-DOOR RELEASE PEDAL



THE MAIN DOOR CAN BE OPENED FROM INSIDE BY PUSHING DOWN ON THE PEDAL LOCATED ON THE LOWER RIGHT HAND SIDE OF THE DOOR



5.0 INSTALLATION

- 1 The **MONO MXC** oven is designed to operate as a freestanding unit, and must not be bolted down or fixed to the floor in any way.
- 2 The concrete floor beneath the oven must be smooth, flat and clear of any obstructions, and must be at least 150mm (6") thick.
- 3 The foundation must be flush with the overall bakery floor as racks are wheeled up by a ramp (supplied with the oven) into the baking chamber.
- 4 A minimum headroom clearance of 3 metres (180") between the floor and the bakery ceiling must be maintained at all times.
- 5 Connect to a suitable water supply, making sure that the pipes are flushed out to remove all foreign bodies i.e. flux or solder. 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.

MECHANICAL and ELECTRICAL SERVICES		
DESCRIPTION	SPECIFICATION	REMARKS
A 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)
B Drainage outlet		None required
C 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.
D Main electrical supply	45KW - 80 AMP (see note 2 below)	Three phase and neutral isolator 80 AMP FUSE and supply to oven by client
E 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.

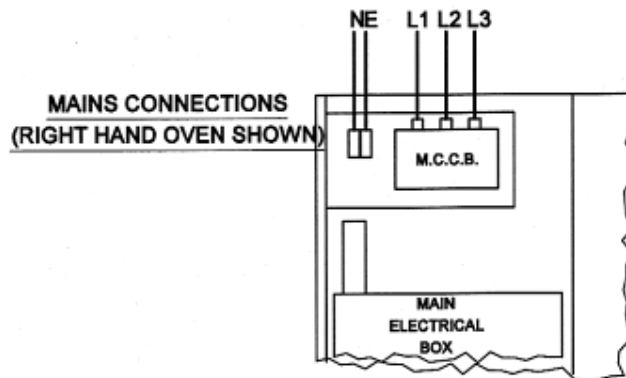
GENERAL NOTES

1.Mono MXN rack ovens can be mounted on any level concrete floor without special preparation. For other types of floor refer to Mono for advice. They can be installed flush against walls on two sides. Access only being required at the top and one side. Total weight of a 1x1 oven is approx. 1100kg (2,420lbs)

2.Electrical Supply (BY CLIENT)

Typical cables for UK are:-

4off 25mm²- Coloured
1off 25mm²- Earth } in flexible conduit



3.Building Dimensions.

Minimum door entry required:- 2000mm (78") High x 760mm (30") Wide.

Minimum ceiling height required:- 3000mm (118")

4.Total floor area:- 1.85m²



The supply to this machine must be protected by a **30mA RCD**

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

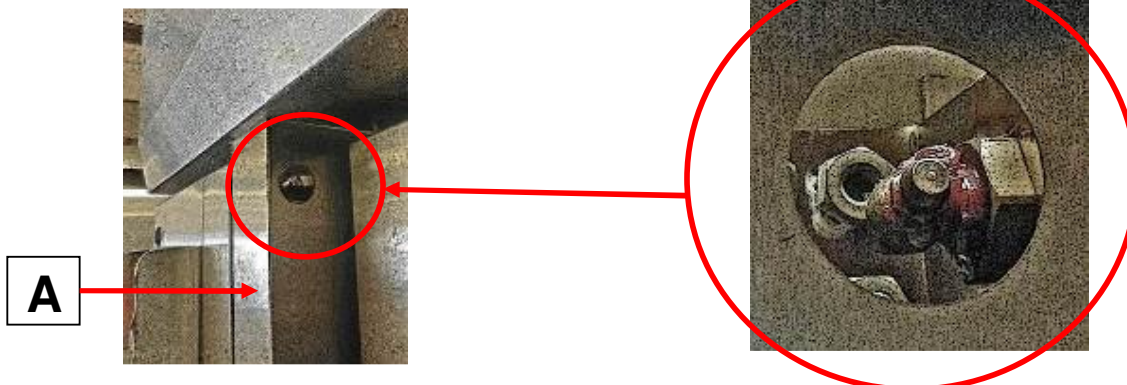
7.0 DAILY CLEANING INSTRUCTIONS

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 from 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.



FG164 – MXc colour RevA19 28-02-19

9.0 OPERATING CONDITIONS

Take note of instructions in sections 4, 5 and 6.

10.0 GENERAL MAINTENANCE

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

Follow cleaning and greasing instructions in sections 7.0 and 8.0

Control Panel - MXC oven

(TO BE USED IN CONJUNCTION WITH THE FOLLOWING PAGES)

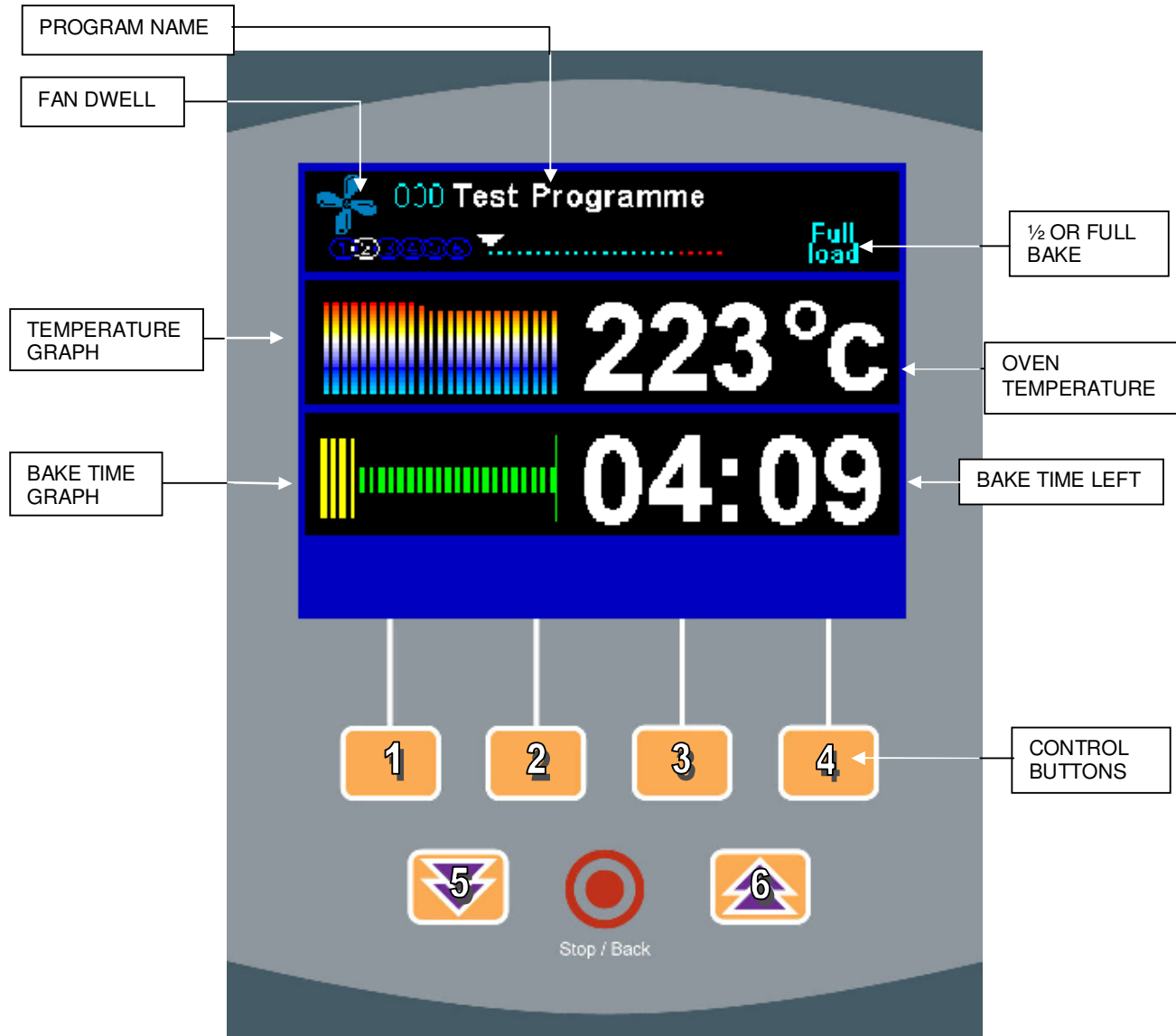


FIG 6

11.0 MXC OPERATING INSTRUCTIONS

To be used in conjunction with panel diagram on previous page

1. Turn oven on and the following screen will appear: -

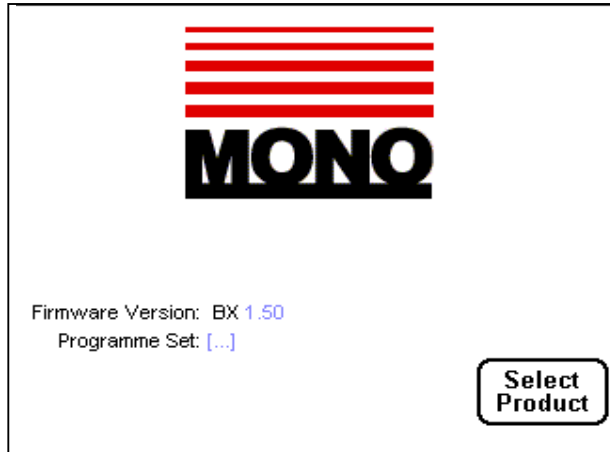


FIG 1

2. Press (4) and program list appears (see fig 2). (If oven has not been programmed go to section 12 - programming).

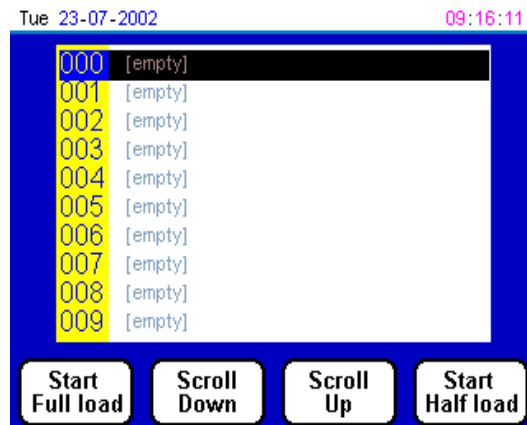


FIG 2

3. Highlight program required by pressing (2) = **down** list. (3) = **up** list
(5)=10 places **down** and (6) = 10 places **up** (see fig 6)

4. Start heating oven by pressing (4) for ½ load bake and (1) for full load, and the following screen will appear. (fig 3)

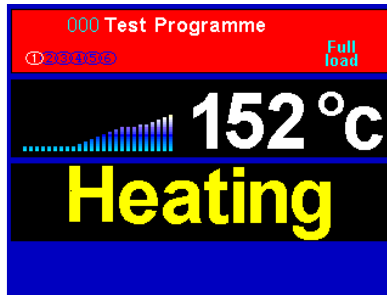


FIG 3

To stop heating press stop (o) at any time.

5. When oven is ready, the following screen will appear (fig 4). Load product and press start (4)

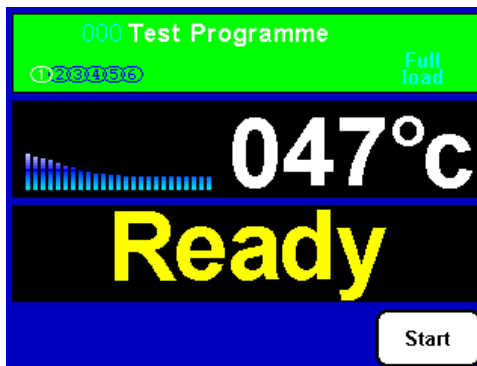


FIG 4

6. At the end of bake time, buzzer will sound, and (fig 5) will be displayed. Press stop (o) and remove product. Shut door to conserve heat.

OR

press key 4 to increase bake by 2 minutes (press stop at any time to stop bake)



FIG 5

7. This will now take you back to program screen (Fig 2).
8. To bake in pre-heated oven, select new program with keys 2 and 3. Follow instructions 3 – 6.

NOTE: During heating (1) can be pressed at any time to check settings.
(Press (1) or wait 10 seconds to return to previous screen).

Until oven is up to temperature the display will show “ HEATING” when correct temperature is reached display will show “READY” the oven will keep to set temperature until bake is started.

Oven will keep up to temperature of last product baked or new item on program list if chosen.

12.0 MXC PROGRAMMING INSTRUCTIONS

1. Press stop (o) to get to first screen

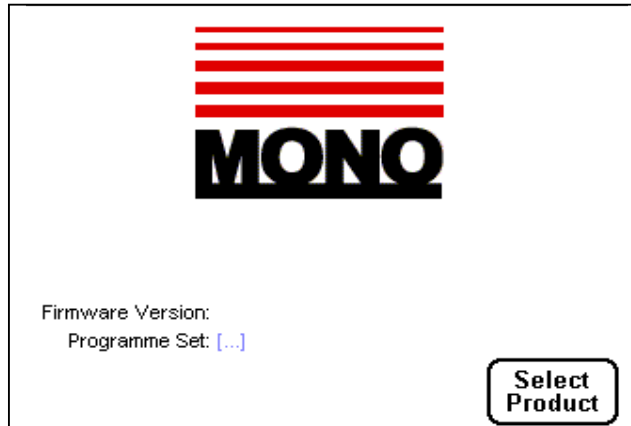


FIG 7

2. Press (2) for pass code screen Fig 8.

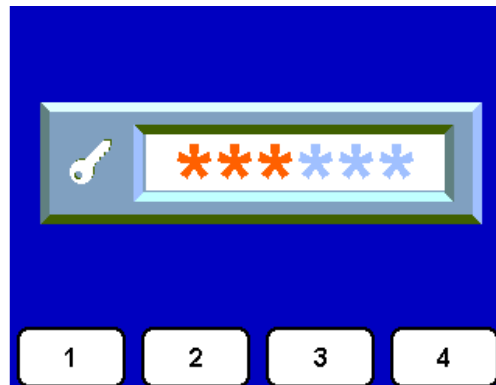


FIG 8

3. Enter pass code (default 111111). Fig 9 will appear.

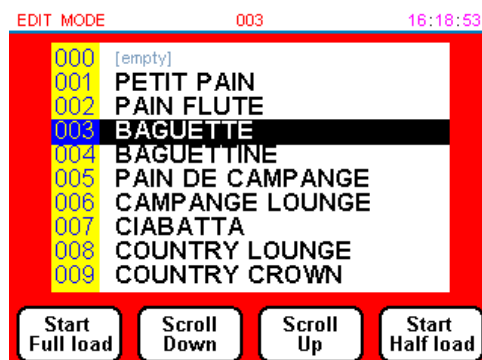
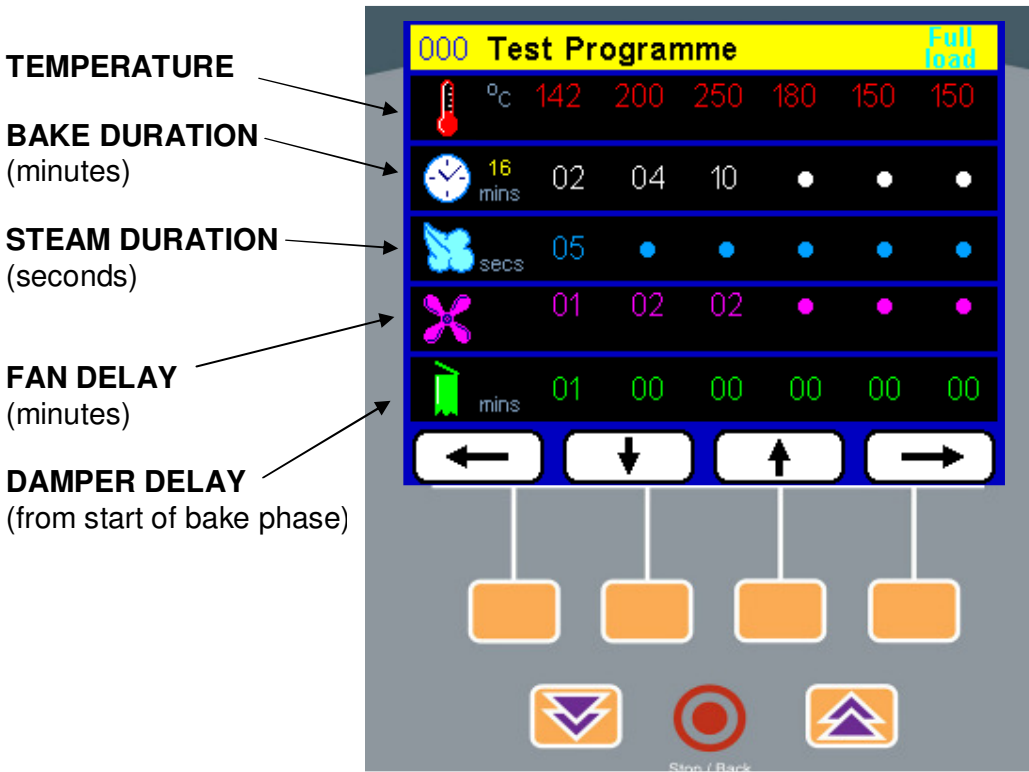


FIG 9

4. Press (4) for ½ bake set-up or (1) for full bake set-up
Now all parameters can now be set.

The oven is capable of six different phases per bake and if a lower number are required, bake time can be left at "0" to leave that phase inoperative.

- To move **across** the screen press (4)
- To move **back** press (1)
- To **increase** value of parameter press (3)
- To **decrease** value of parameter press (2)



PROGRAM TITLE

Press (6) to go up alphabet, press (5) to go down alphabet. After each letter has been chosen press (4) to go to next position. If a mistake is made, pressing (1) will go back to previous position.

WHEN ALL PARAMETERS ARE COMPLETE PRESS STOP (o) THREE TIMES TO SAVE THE SETTINGS. REPEAT FOR EACH PROGRAM REQUIRED.

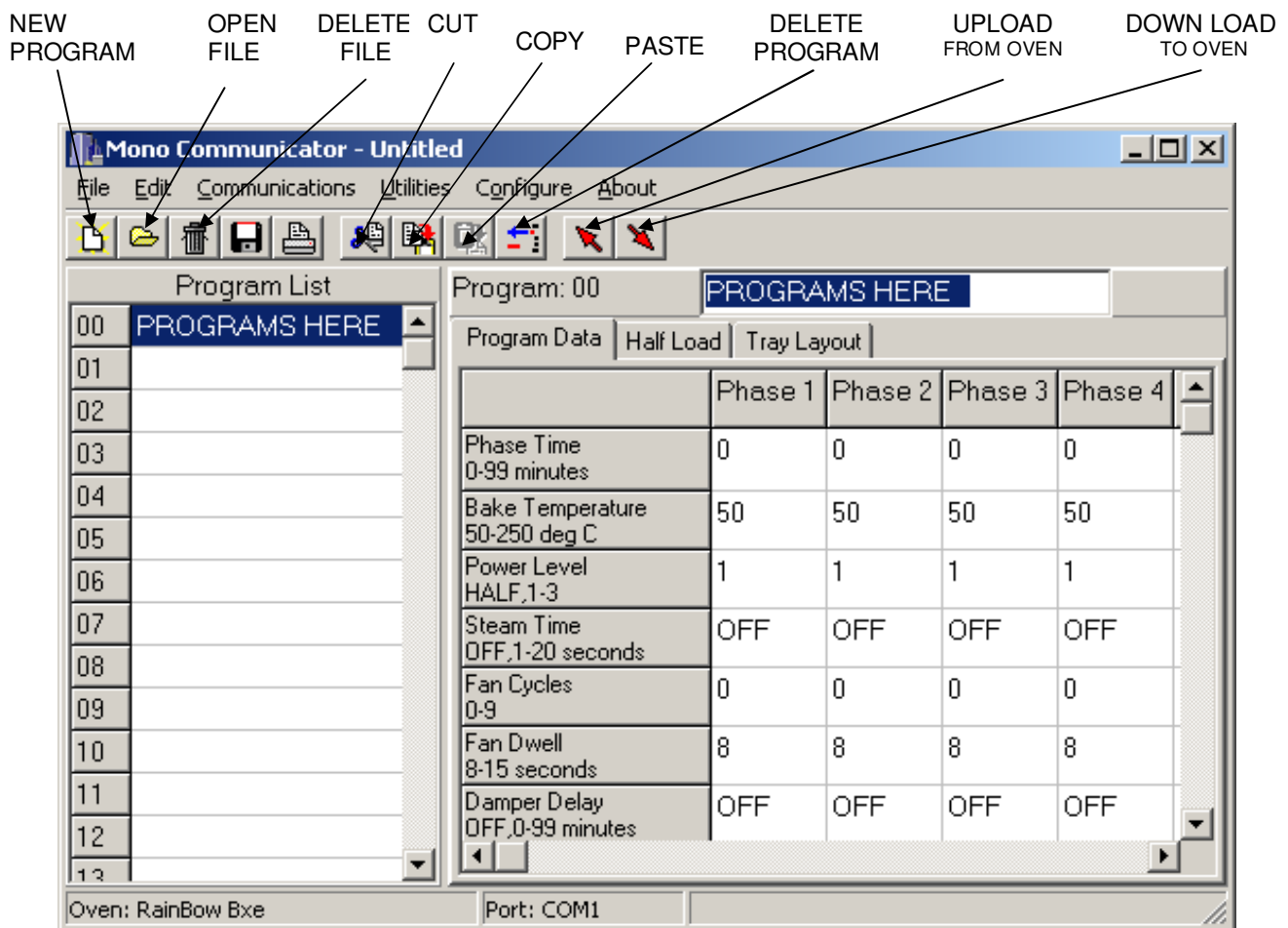
13.0 USING MONOLINK UPLOAD/DOWNLOAD SYSTEM SOFTWARE

Equipment required:

- P.C. floppy disk drive
- 9 ways D-type serial port
- Windows 95-2000
- Monolink up/download system
- Null modem cable (2 x 9 way D-type connector – both female)
- Approximately 2m long

Section 1. Getting Started

Connect the Null modem cable from the P.C (usually com 1) to the port on front of smartbake control panel. Switch on your P.C and enter windows. Insert Mono floppy disc, double click on 'my computer' icon then double click on '(A) drive', double click on 'shortcut to Monolink.exe'. This will then progress you into the main screen as shown below:

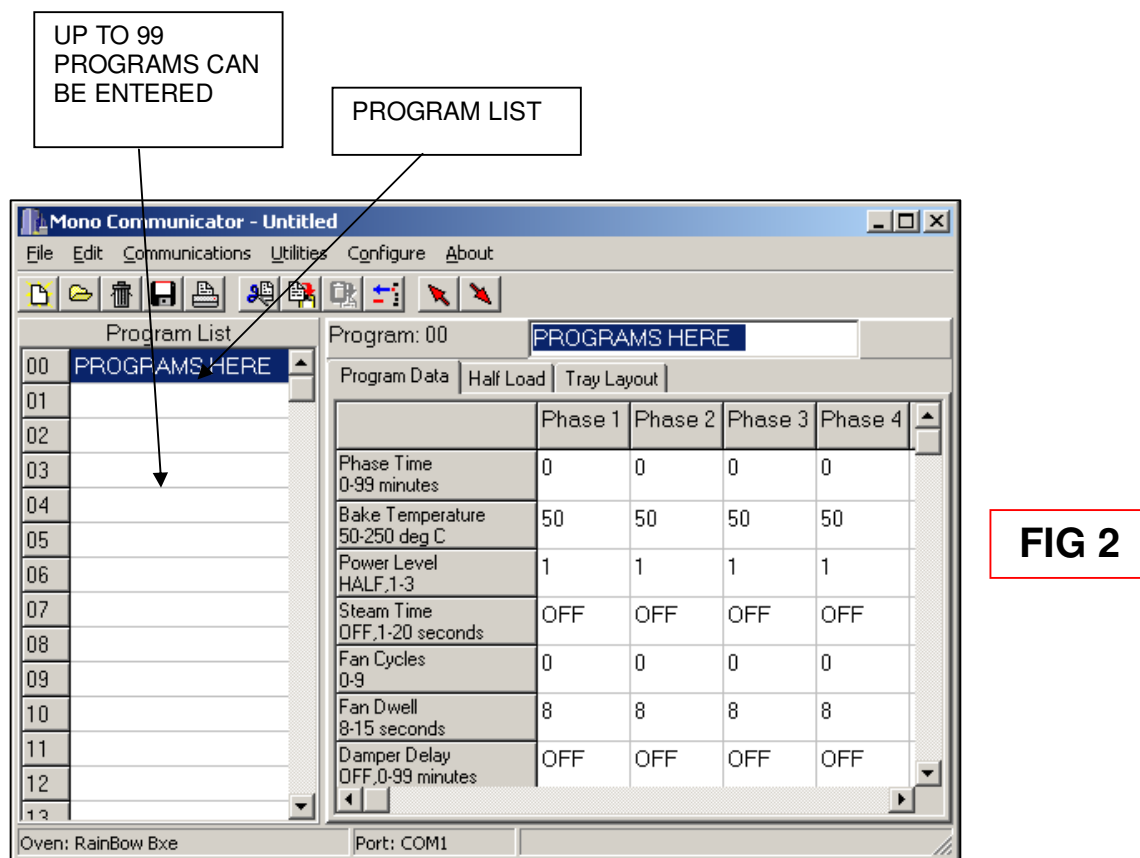


Section 2. Setting up

1. Choose 'Configure' and scroll down to 'Com port'
2. Then click on 'Com 1' oven type
3. Next click on 'Configure' scroll down to oven
4. Next click on 'Rainbow MXC'

Section 3. Writing programs on your personal computer (P.C)

Click on first box under the heading program list, (as can be seen in fig 2) enter your program name and select phase time, bake temperature, power level, steam time, fan cycles, fan dwell and damper delay. This can be repeated up to 99 times just by clicking on next box below. It is now important to save the file to disk. (See section 4 saving)



Section 4. Saving

Click on **'file'** then scroll down to **'save as'** and click on it, and the following box will appear, chose an appropriate drive and enter a suitable name for the file and press save.

It is from this screen that the files are given their names:

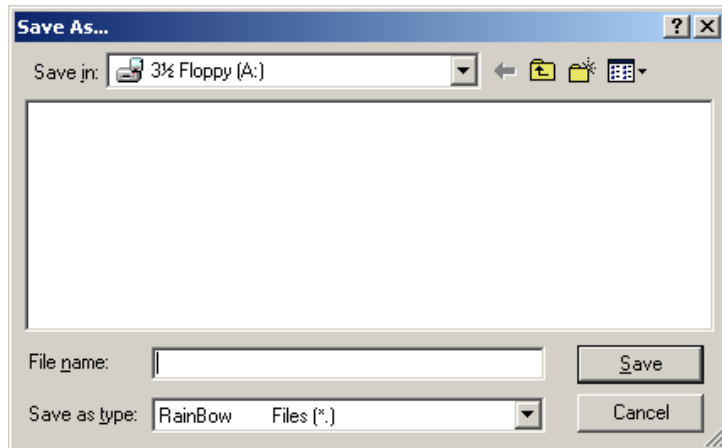


FIG 3

Section 5. To open, recall a folder and file

To recall a file or folder first point and press the **'file'** button, scroll down until **'open'** is highlighted then click once more. (Or click on **'open file'** see figure 1)

The following window will appear:

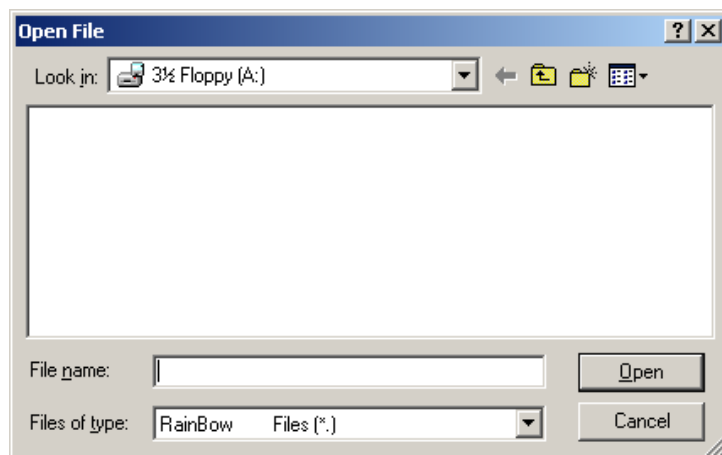


FIG 4

Click on the file needed, and press open, the file will then open in the Mono Communicator. (or enter the file name into the box).

Section 6. Transferring files from your PC to your smartbake controller

Before any file transfer can take place the folder you wish to transfer files from must be opened. To do this follows the instructions in **section 5 to open, recall a file or folder.**

Check that oven is switched on and in the following screen:

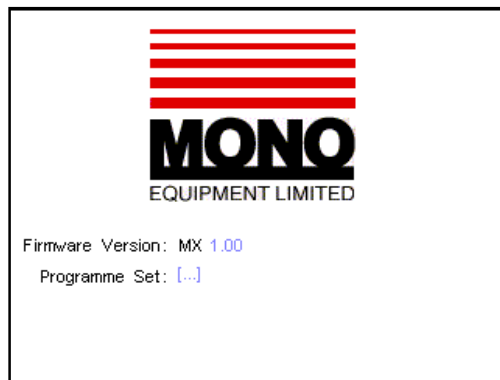


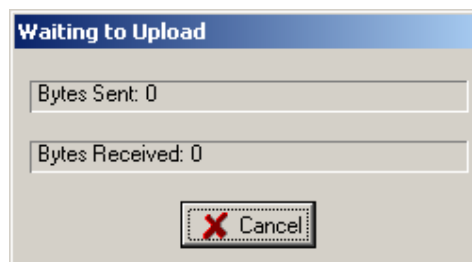
FIG 5

Also check that the data transfer lead is properly connected

Uploading from oven

Check that oven is switched on and that data transfer lead is properly connected, and that **'figure 5'** is displayed.

Click the red up-arrow key or click on communications in the toolbar and select upload (from oven), and the following screen will appear:



If during either uploading or downloading, the communications error window opens,
FG164 – MXc colour RevA19 28-02-19

with the error message 'Error in reply from controller, then check that the data transfer lead is connected correctly. Also check that the oven is switched on and functioning normally.

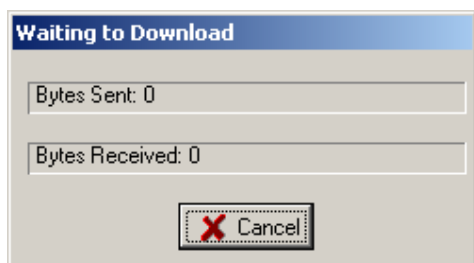


Downloading from Computer (P.C)

Check that oven is switched on and that data transfer lead is properly connected, and that figure 5 is displayed.

Open file to be downloaded

Click the red up-arrow key or click on communications in the toolbar and select upload (from oven), and the following screen will appear:



With the mono communicator window open and a program file open, individual bake programs can be cut pasted via the edit button in the toolbar.

14.0 24 HOUR TIMER SETTING

At the initial start up screen (as can be seen below), press the control button (3)



The following screen will appear.



The green on time '00' will be flashing. This is the hour timer setting. The timer has a 24-hour clock setting.

- **Setting the on/off time**

Use button (5) to decrease settings or the control button (6) to increase settings for your time requirement. To set the required minutes use the control panel (4) to move across to the next setting. This process can be repeated for the red off timer.

- **Setting the days**

To set future days for on/off timers use the control button (4) to move forward through the on/off setting to the previous days. The day will be displayed on the top left of the display. The on/off times for that day can be set as previously indicated.

- **Saving setting**

When desired settings have been set, press the control button (0) to save and exit back to the initial start-up screen.

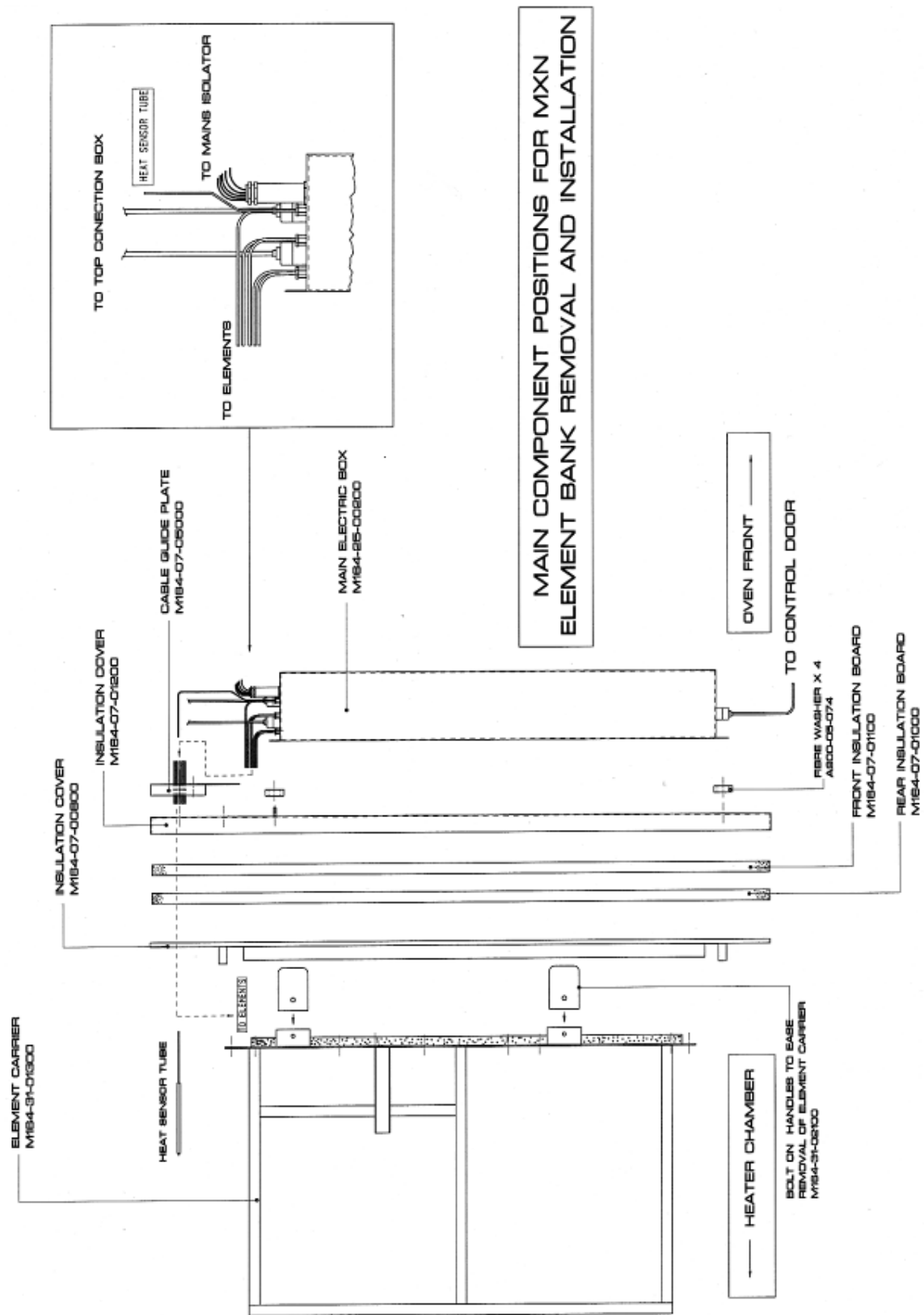
15.0 ELEMENT BANK REMOVAL

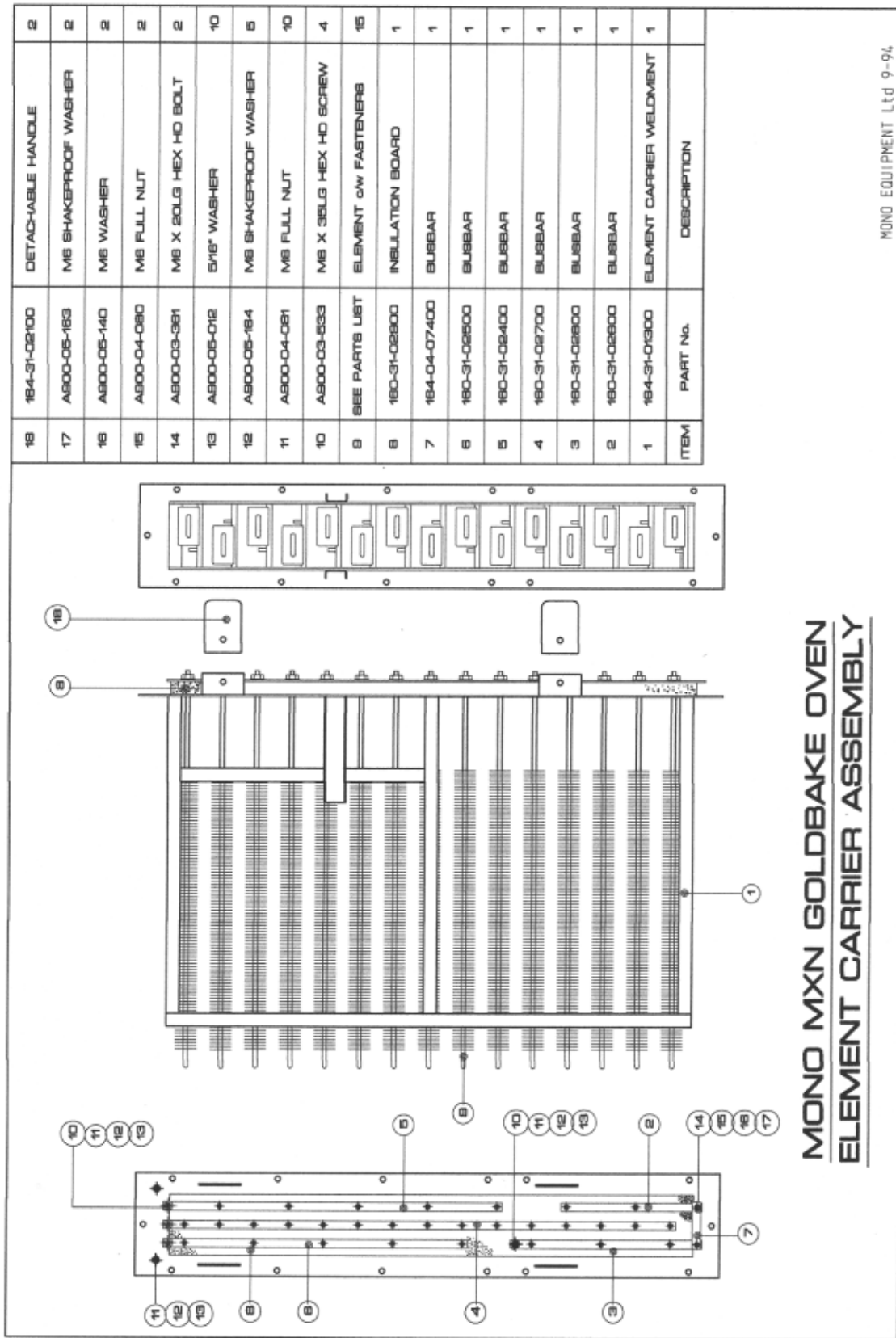
(SEE DRAWINGS ON NEXT PAGES)

- 1 **Ensure oven is DISCONNECTED from power supply.**
(DO NOT ONLY USE OVEN ISOLATOR SWITCH)
- 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.
- 11 Pull top of box forward, disengaging conduit from bracket and lift slots off studs at bottom. **(Be careful not to damage heat sensor tube.)**
- 12 Slide insulation covers and insulation boards out of chamber to reveal element carrier front face.
- 13 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.

16.0 ELEMENT BANK REPLACEMENT

- This is the reversal of 15.1 - 15.14, but ensure all insulation is replaced and that the insulation ladder tape on heater chamber front face is in good condition





**MONO MXN GOLDBAKE OVEN
ELEMENT CARRIER ASSEMBLY**

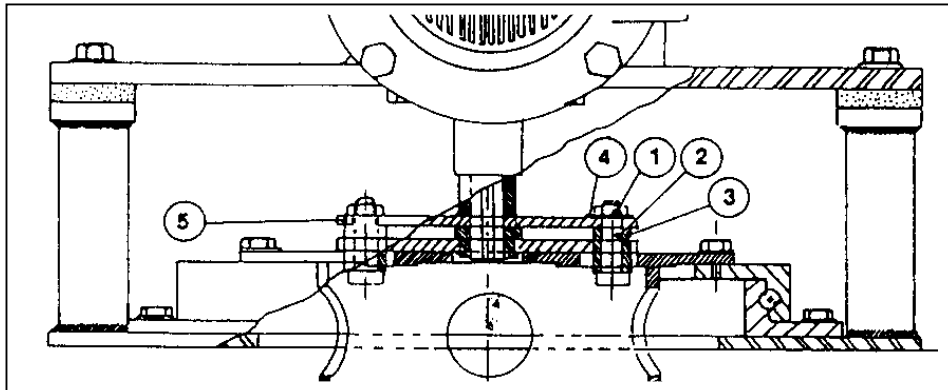
ITEM	PART No.	DESCRIPTION
18	184-31-02100	DETACHABLE HANDLE
17	A800-05-163	M8 SHAKEPROOF WASHER
16	A800-05-140	M8 WASHER
15	A800-04-080	M8 FULL NUT
14	A800-03-091	M8 X 20LG HEX HD BOLT
13	A800-05-012	5/16" WASHER
12	A800-05-164	M8 SHAKEPROOF WASHER
11	A800-04-081	M8 FULL NUT
10	A800-03-033	M8 X 35LG HEX HD SCREW
9	SEE PARTS LIST	ELEMENT o/w FASTENERS
8	180-31-02800	INSULATION BOARD
7	184-04-07400	BUSBAR
6	180-31-02500	BUSBAR
5	180-31-02400	BUSBAR
4	180-31-02700	BUSBAR
3	180-31-02600	BUSBAR
2	180-31-02800	BUSBAR
1	184-31-01300	ELEMENT CARRIER WELDMENT

MONO EQUIPMENT Ltd 9-94.

17.0 MAINTENANCE (Rack Drive Bushes/Seals/Drive)

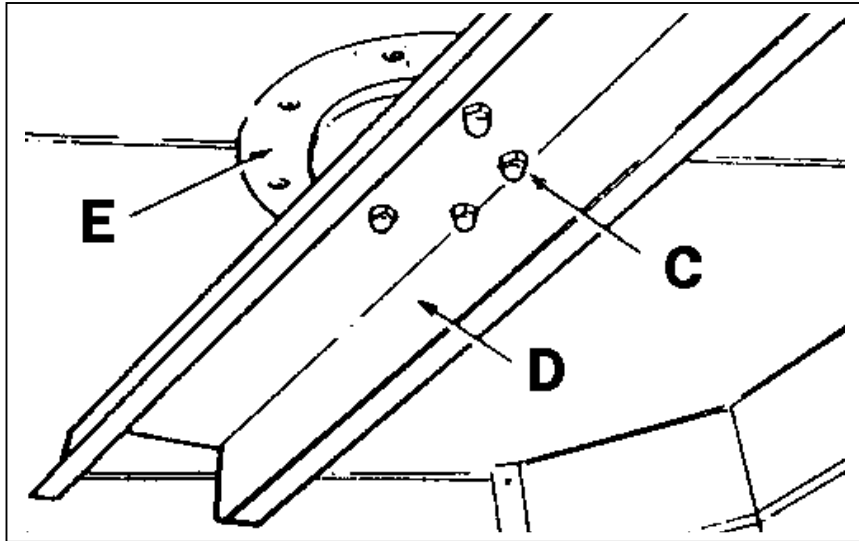
WARNING: KEEP CLEAR OF LARGE FLUE PIPE ON ROOF WHEN DOING ANY MAINTENANCE ON TOP OF A RUNNING OVEN. VERY HOT AIR IS EJECTED.

To renew rack drive bushes. (For ovens fitted with spider drive.)



- 1 Isolate the oven at mains. Open electrical panel and isolate rack drive motor.
- 2 Remove restraining strap on top of gearbox and draw shaft upwards until drive spider bushes clear the driven plate.
- 3 Remove nuts 1, bolts 2, and bushes 3 from spider 5.
- 4 Replace bushes and reinstall in reverse order.

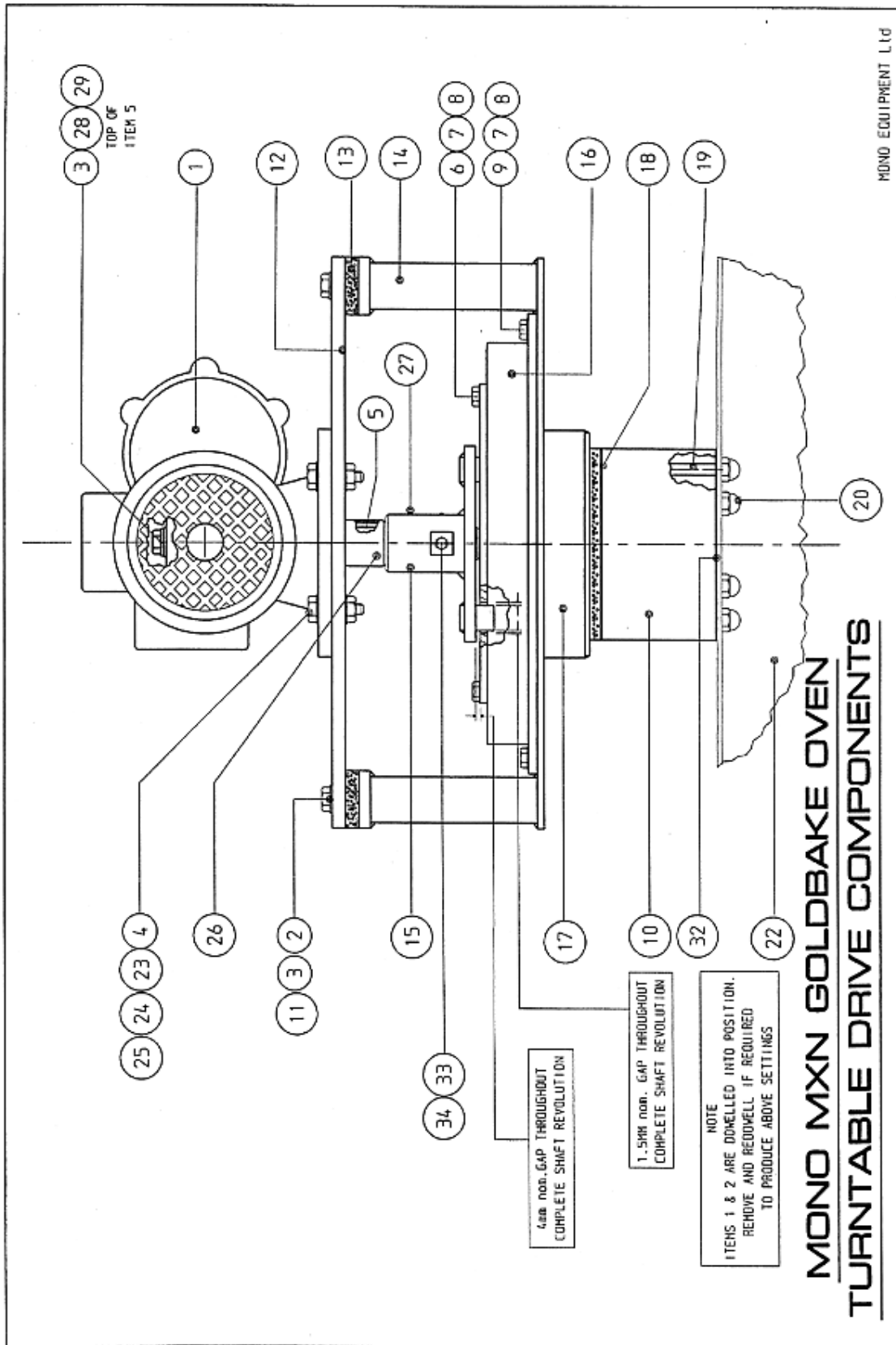
TO RENEW THE RACK DRIVE SEAL



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

- 1 Support hanger (D) and release the six dome nuts (C) securing the rack hanger to its shaft. 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



**xMONO MXC OVEN TURNTABLE DRIVE
COMPONENTS DESCRIPTION**

(see drawing on previous page)

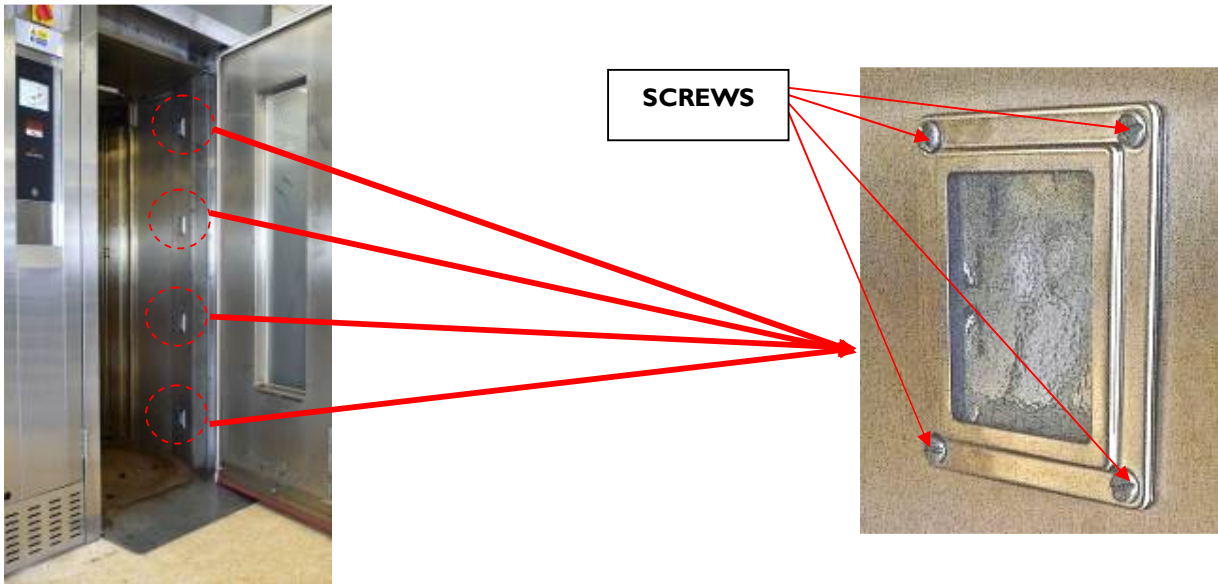
Item	Part no	Description	Qty
1	B912-74-009	Gearmotor unit (Varvel MRA70)	1
2	A900-05-143	M10 Plain washer	4
3	A900-05-142	M10 Spring washer	5
4	A900-03-387	M12 x 45LG Hex.Hd. setscrew	4
5	162-02-04100	Drive shaft assy (shaft key pin)	1
6	A900-03-383	M8 x 25LG Hex.Hd.setscrew	8
7	A900-05-144	M8 Plain 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

TO REPLACE LIGHT BULBS

REPLACEMENT BULB = B857-94-007

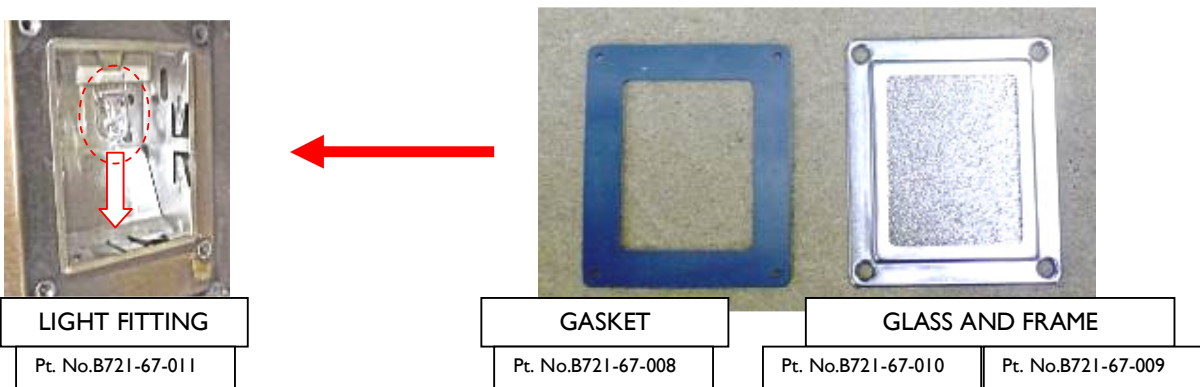
In the event of a bulb failure, Instructions on how to change a bulb are as follows: -

- 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 taking care that gasket is in position around stainless steel frame.
 - Re-connect oven and test.

18.0 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

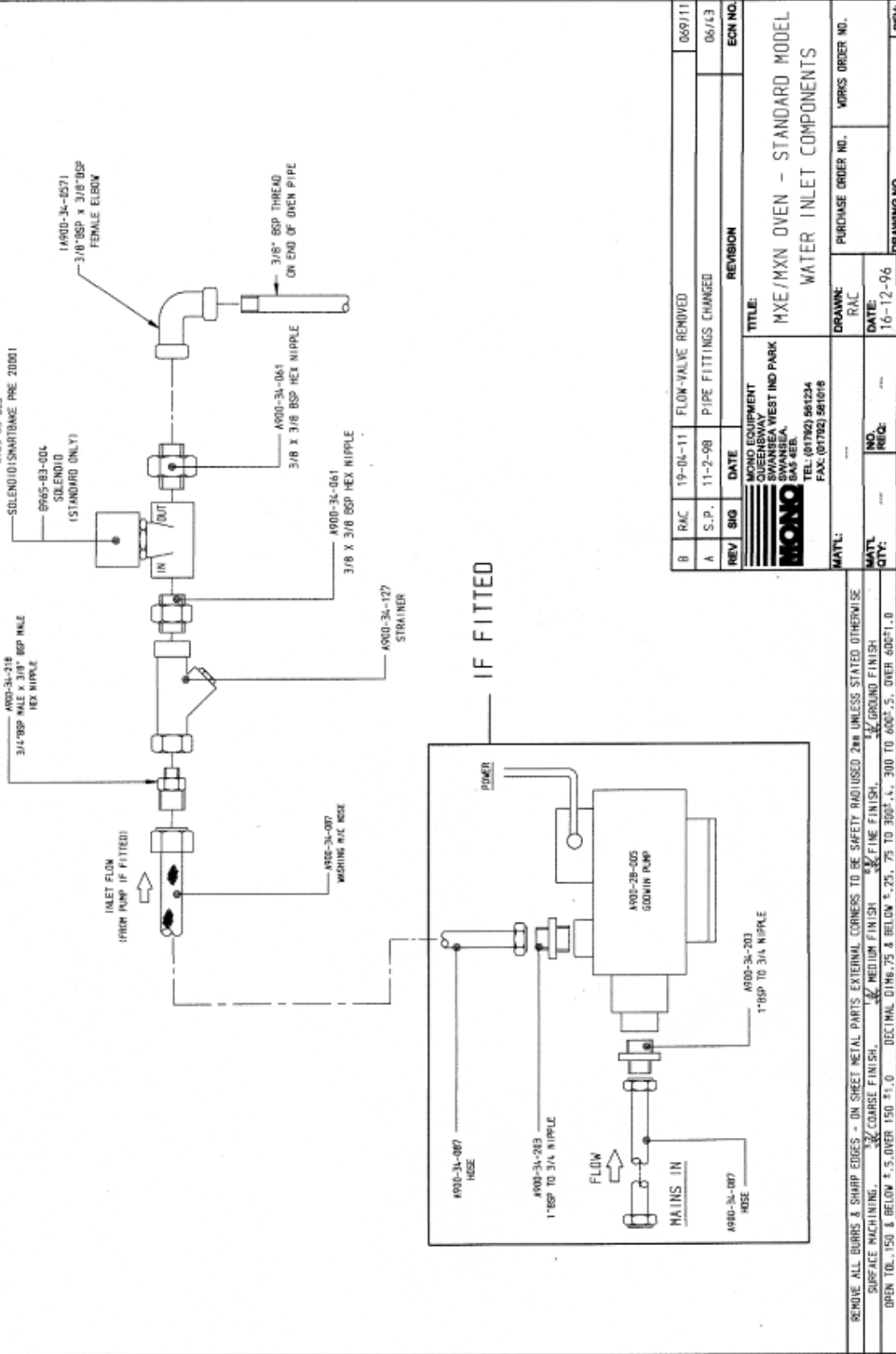
Fax. 01792 561016



19.0 ELECTRICS (WITHOUT PUMP)

DO NOT SCALE - IF IN DOUBT ASK

ALL DIMENSIONS IN MM UNLESS OTHERWISE STATED



REV	SIG	DATE	DESCRIPTION	ECN NO.
B	RAC	19-04-11	FLOW-VALVE REMOVED	069/11
A	S.P.	11-2-98	PIPE FITTINGS CHANGED	06/43
TITLE:			MXE/MXN OVEN - STANDARD MODEL	
DRAWING NO.			M164-01-02300	
SCALE:			A3 NTS	
PURCHASE ORDER NO.			WORKS ORDER NO.	
DRAWING:			RAC	
DATE:			16-12-96	
NO.:			---	
CITY:			---	
FINISH:			---	
SIZE:			A3	

REMOVED ALL BURRS & SHARP EDGES - ON SHEET METAL PARTS EXTERNAL CORNERS TO BE SAFETY RADIUSED 2mm UNLESS STATED OTHERWISE
 SURFACE FINISH: $\frac{1}{2}$ COARSE FINISH $\frac{1}{4}$ MEDIUM FINISH $\frac{1}{8}$ FINE FINISH $\frac{1}{16}$ GROUND FINISH
 OPEN TOE, 150 & BELOW ± 0.5 , OVER 150 ± 1.0 DECIMAL DIMS. 0.25 & BELOW ± 0.02 , 0.300 TO 600 ± 0.05 , OVER 600 ± 0.10
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IF FITTED

1st W/LE

MONO EQUIPMENT
 QUEENSWAY
 SWANSEA, WEST MID PARK
 SWANSEA, SA5 4EB.
 TEL: (01792) 561234
 FAX: (01792) 561016

MONO

19-04-11 FLOW-VALVE REMOVED 069/11
 11-2-98 PIPE FITTINGS CHANGED 06/43

MXE/MXN OVEN - STANDARD MODEL
 WATER INLET COMPONENTS

M164-01-02300

A3 NTS

RAC

16-12-96

A3

WORKS ORDER NO.

RAC

16-12-96

A3

WORKS ORDER NO.

RAC

16-12-96

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WORKS ORDER NO.

RAC

16-12-96

A3

WORKS ORDER NO.

IF IN ANY DOUBT - ASK

R.H. OVEN

- PT-26 TAIL WIRE
- PT-24 STEAM SCREENS
- TOP JUNCTION BOX
- PT-34 SOLIDATOR SWITCH
- PT-38 SAFETY SWITCH
- PT-42 REMOTE CALL EXTENSION LEAD (25 METRE)
- PT-34 MAIN FIBRE BOARD
- PT-33 NET SWITCH
- MAIN BOX
- PT-35 HEATING ELEMENTS
- PT-31 WIREMESH LAMPS

- PT-41 WIRE MESH (10 FITTED)
- PT-27 THERMAL WIRE
- PT-29 INTERRUPTIBLE
- PT-28 THERMAL WIRE SWITCH
- PT-30 TEMP. SWITCH
- PT-32 FAN MOTOR


L.H. OVEN

- PT-26 TAIL WIRE
- PT-24 STEAM SCREENS
- TOP JUNCTION BOX
- PT-36 SOLIDATOR SWITCH
- PT-38 SAFETY SWITCH
- PT-42 REMOTE CALL EXTENSION LEAD (25 METRE)
- PT-34 MAIN FIBRE BOARD
- PT-33 NET SWITCH
- MAIN BOX
- PT-35 HEATING ELEMENTS
- PT-31 WIREMESH LAMPS

REV	SIG	DATE	REVISION	ECH NO.
MOND EQUIPMENT 150 SWANSEA WEST IND PARK SWANSEA, SA5 4EB. TEL: (01782) 581234 FAX: (01782) 581018				
TITLE: MXC MAIN COMPONENTS LAYOUT			DRAWN: JC	
ELECTRICAL SPECIFICATIONS:- 4.15V 3PH 50Hz			ELECTRICALLY APPROVED BY:- P. BOYLES	
DATE: 13-06-02			DRAWING NO. M164E25-30100	
REV:			REV:	

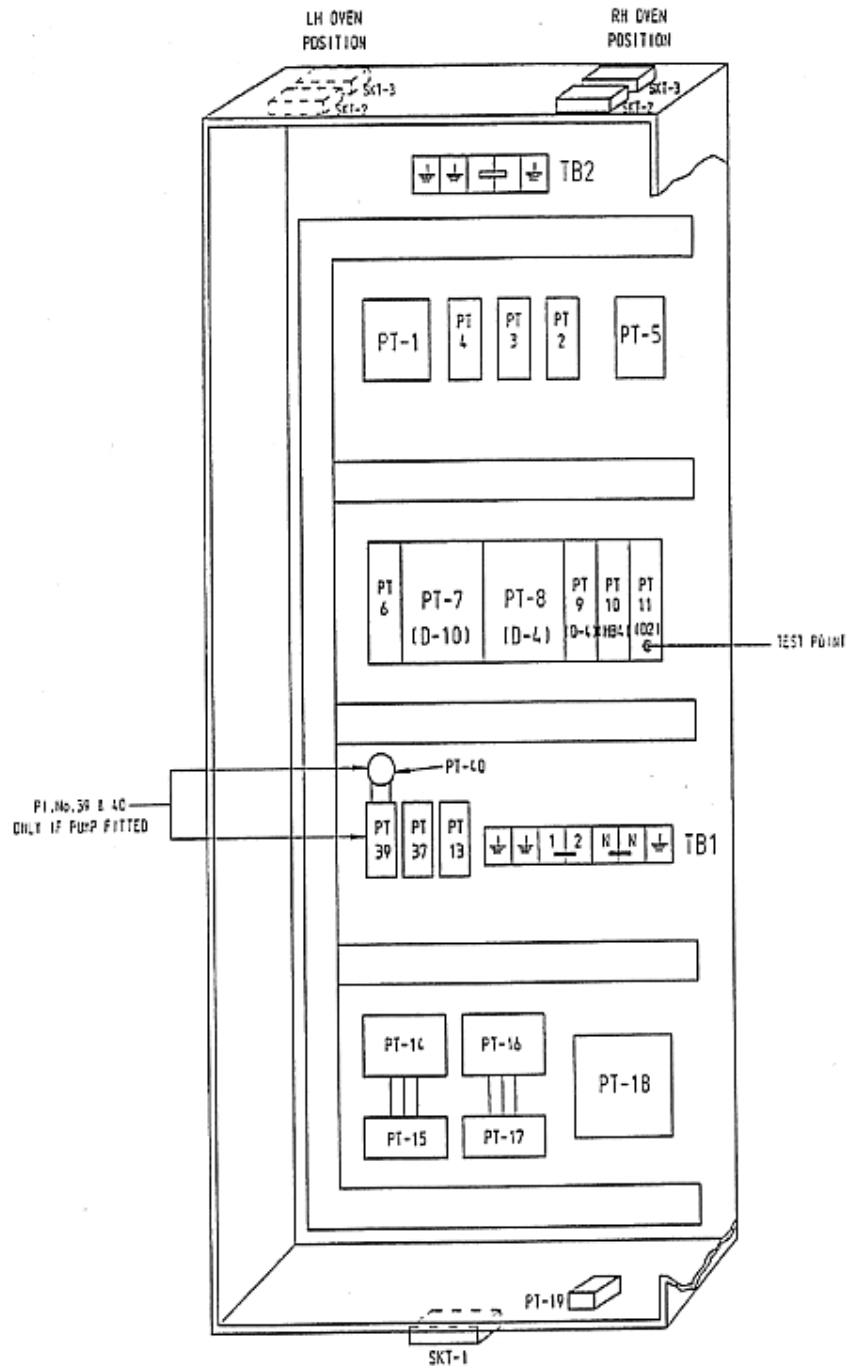
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IF IN ANY DOUBT - ASK

DRAWING		DESCRIPTION		MONO	
PT-Ref		DESCRIPTION	MONO PART NUMBER	DRAWING	DESCRIPTION
PT-1	OVERHEAT THERMOSTAT		8873-30-015	PT-31A	INTERIOR LIGHT HOLDER.
PT-2	HEATING ELEMENT MCB.		8872-22-074	PT-31B	INTERIOR LIGHT BULB.
PT-3	HEATING ELEMENT MCB.		8872-22-074	PT-32A	INTERIOR LIGHT PUSHBUTTON.
PT-4	HEATING ELEMENT MCB.		8872-22-074	PT-32B	INTERIOR LIGHT PUSHBUTTON CONTACT BLOCK
PT-5	HEATING ELEMENT CONTACTOR		8801-08-032	PT-32C	INTERIOR LIGHT PUSHBUTTON ENCLOSURE.
PT-6	MAIN FAN MOTOR MCB AUXILIARY CONTACT		8872-07-004	PT-32D	INTERIOR LIGHT PUSHBUTTON LEGEND.
PT-7	MAIN FAN MOTOR MCB.		8872-22-054	PT-33	KEYSWITCH.
PT-8	TURNABLE MOTOR MCB.		8872-22-052	PT-34	PCB ASSY
PT-9	INTERIOR LIGHT MCB..		8872-22-003	PT-35	HEATING ELEMENT. 240V 220V
PT-10	PUMP MOTOR MCB.		8872-22-042	PT-36A	MOULDDED CASE CIRCUIT BREAKER.
PT-11	CONTROL MOTOR MCB.		8872-22-061	PT-36B	UNDervOLTAGE RELEASE COIL.
PT-13A	INTERIOR LIGHT RELAY.		8801-37-001	PT-36C	DOOR HANDLE AND SHAFT.
PT-13B	INTERIOR LIGHT RELAY BASE.		8801-36-001	PT-37A	HEATER CONTACTOR RELAY.
PT-14	MAIN FAN MOTOR CONTACTOR.		8801-08-031	PT-37B	HEATER CONTACTOR RELAY BASE.
PT-15	MAIN FAN MOTOR THERMAL OVERLOAD.		8801-01-042	PT-38	SERIAL OUTPUT SOCKET.
PT-16	TURNABLE MOTOR CONTACTOR.		8801-08-031	PT-39a	PUMP RELAY (IF PUMP FITTED)
PT-17	TURNABLE MOTOR THERMAL OVERLOAD.		8801-01-041	PT-39b	PUMP RELAY BASE (IF PUMP FITTED).
PT-18	24V DC POWER SUPPLY.		8801-93-005	PT-40	SUPPRESSOR UNIT (IF PUMP FITTED).
PT-19	BUZZER		8723-92-002	PT-41	WATER PUMP (IF FITTED).
PT-24	STEAM SOLENOID.		8965-83-004	PT-42	34 WAY RIBBON CABLE EXTENSION.
PT-25	DAMPER SOLENOID.		8749-83-004	E	RAC 16-09-11 PT25 was B998-83-005 224/09
PT-26	MAIN FAN MOTOR.		8859-74-024	D	RAC 16-09-11 PT31A/B P/No Changed. (HALOGEN) 16/7/11
PT-27	TURNABLE MOTOR UNIT.		8912-74-009	C	RAC 22-01-10 PT34A/B now PT34, P/No Changed. 338/09
PT-28A	TURNABLE INDEX SWITCH BODY.		8801-11-013	B	JC 11-2-10 (B01 WAS B822 & B859. 2926
PT-28B	TURNABLE INDEX SWITCH HEAD.		8801-45-003	A	JC 21-11-05 B822- (RELAY & BASE PT13 & PT99) WAS B723- 2594
PT-28C	TURNABLE INDEX SWITCH ACTUATOR.		8801-45-004	REV	B/D DATE REVISION ECH NO.
PT-29	THERMOCOUPLE.		8709-95-001	 <p>MONO EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SWANSEA SA5 4EB. TEL: (01782) 561234 FAX: (01782) 561016</p>	
PT-30A	DOOR SWITCH BODY.		8801-11-013	TITLE: COMPONENT PART LIST FOR MXC COLOURSMART OVEN	
PT-30B	DOOR SWITCH HEAD.		8801-45-003	DRAWN:	JC ELECTRICALLY APPROVED BY:- P. BOYLES
PT-30C	DOOR SWITCH ACTUATOR.		8801-45-004	DATE:	13-06-02
				REV:	2 of 2 M164E25-30100 E

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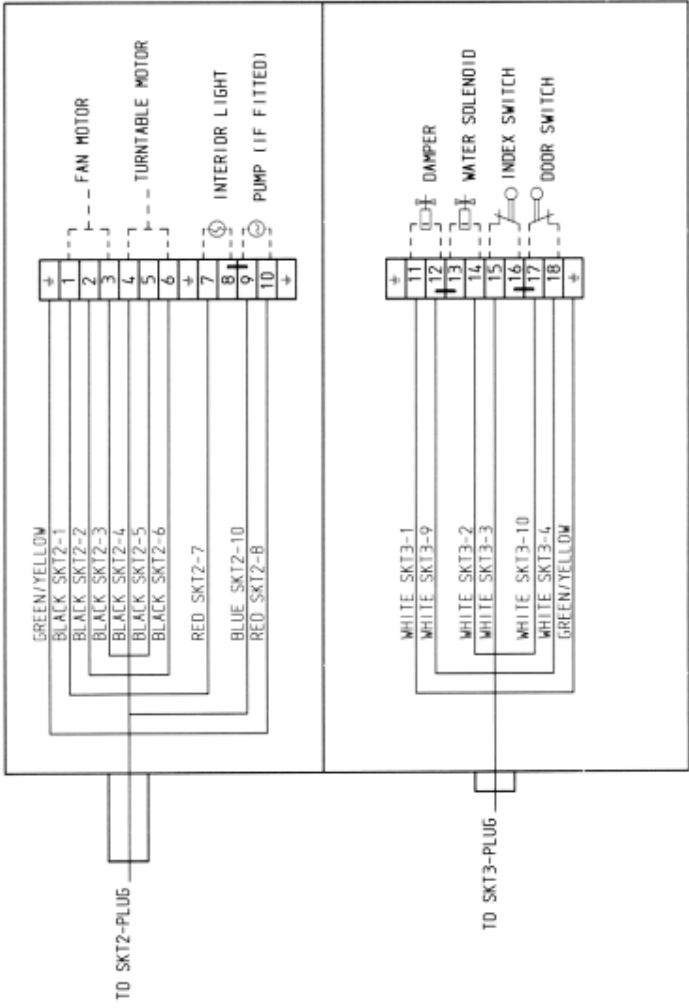
MAIN ELECTRICAL BOX LAYOUT FOR MXN SMARTBAKE



OVEN TOP JUNCTION BOX CONNECTORS FOR RH MX (WITHOUT PUMP)

IF IN ANY DOUBT - ASK

RIGHT HAND



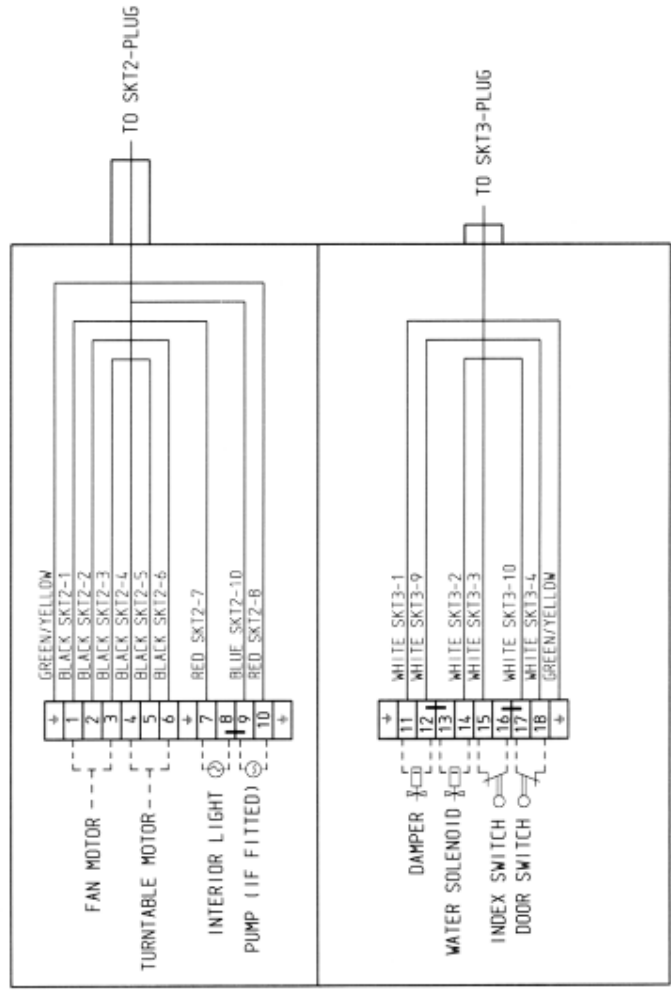
REV	SIG	DATE	REVISION	ECHN NO.
		TITLE: RH OVEN OVEN TOP JUNCTION BOX CONNECTORS MXN-PROG PCB-24VDC		
MOND EQUIPMENT 1000 S.W. 10TH AVE. SWANSEA WEST IND PARK SWANSEA, FL 34454 TEL: (01782) 561234 FAX: (01782) 561016		DRAWN: ELECTRICALLY APPROVED BY:- R.A.C.		
ELECTRICAL SPECIFICATIONS:-		DATE: 12-1-94 DRAWING NO. M164-25-16600 REV:		

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OVEN TOP JUNCTION BOX CONNECTORS FOR LH MX (WITHOUT PUMP)

IF IN ANY DOUBT - ASK

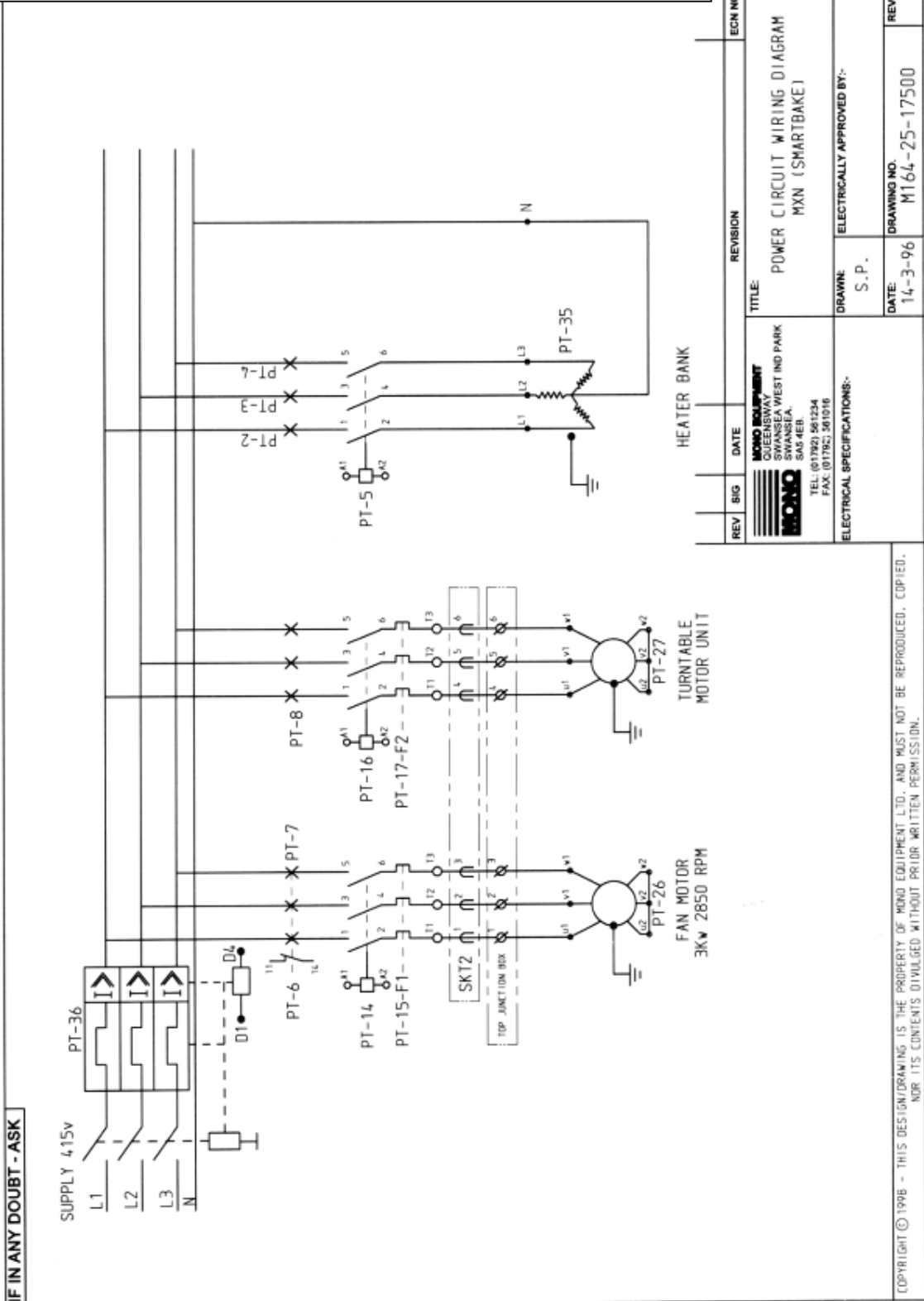
LEFT HAND



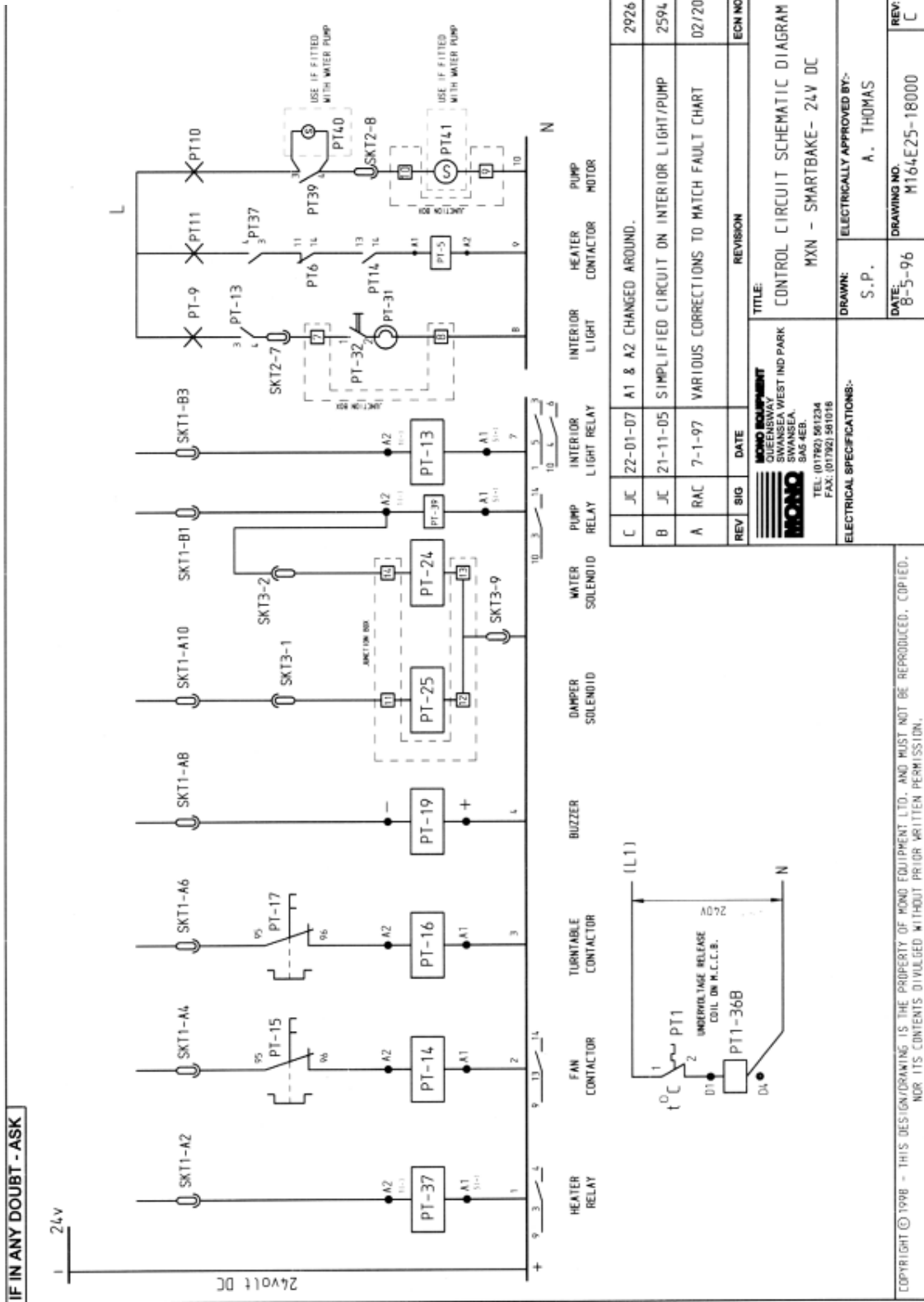
REV	SIG	DATE	REVISION	ECN NO.
<p>MOMO EQUIPMENT SHERWOOD ROAD SWANSEA SA5 4ER TEL: 01792 561234 FAX: 01792 561016</p>		<p>TITLE: LH OVEN OVEN TOP JUNCTION BOX CONNECTORS MXN-PROG PCB-24VDC</p>		
ELECTRICAL SPECIFICATIONS:-		DRAWN: ELECTRICALLY APPROVED BY:-		
		R.A.C.		
		DATE: 12-1-94		
		DRAWING NO. M164-25-16601		
		REV:		

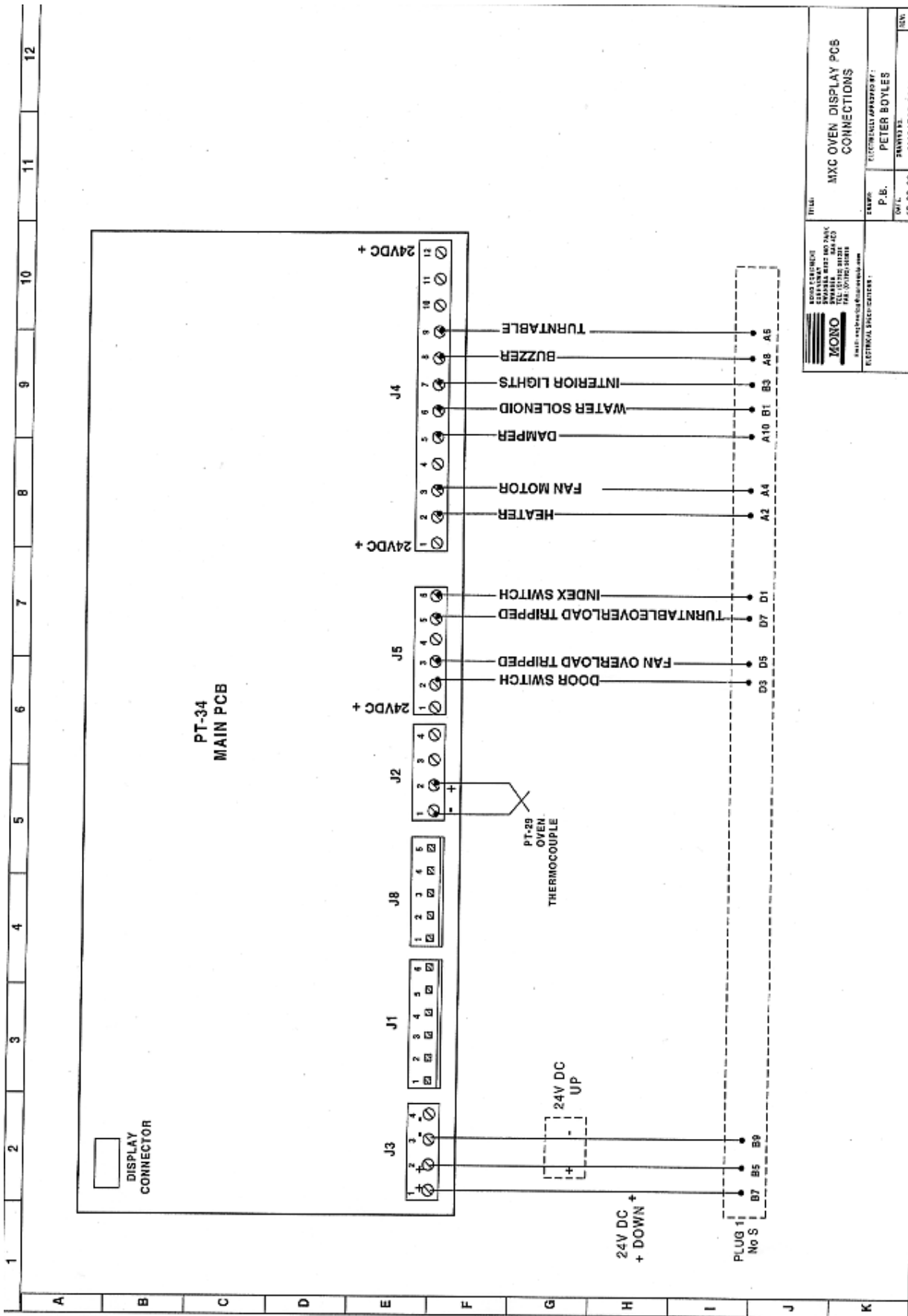
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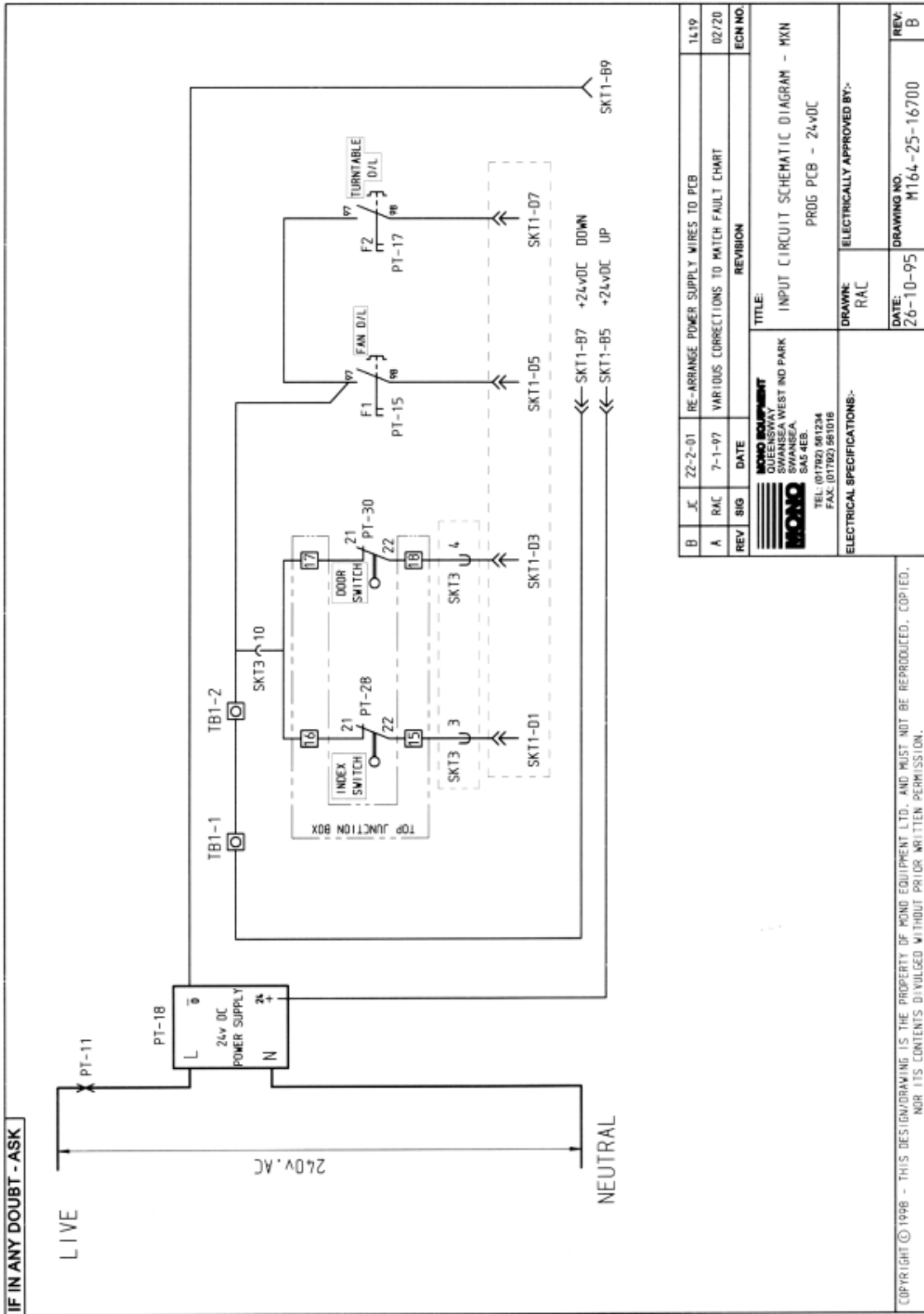
POWER CIRCUIT WIRING DIAGRAM FOR MX SMARTBAKE (WITHOUT PUMP)



CONTROL CIRCUIT SCHEMATIC DIAGRAM FOR MXN

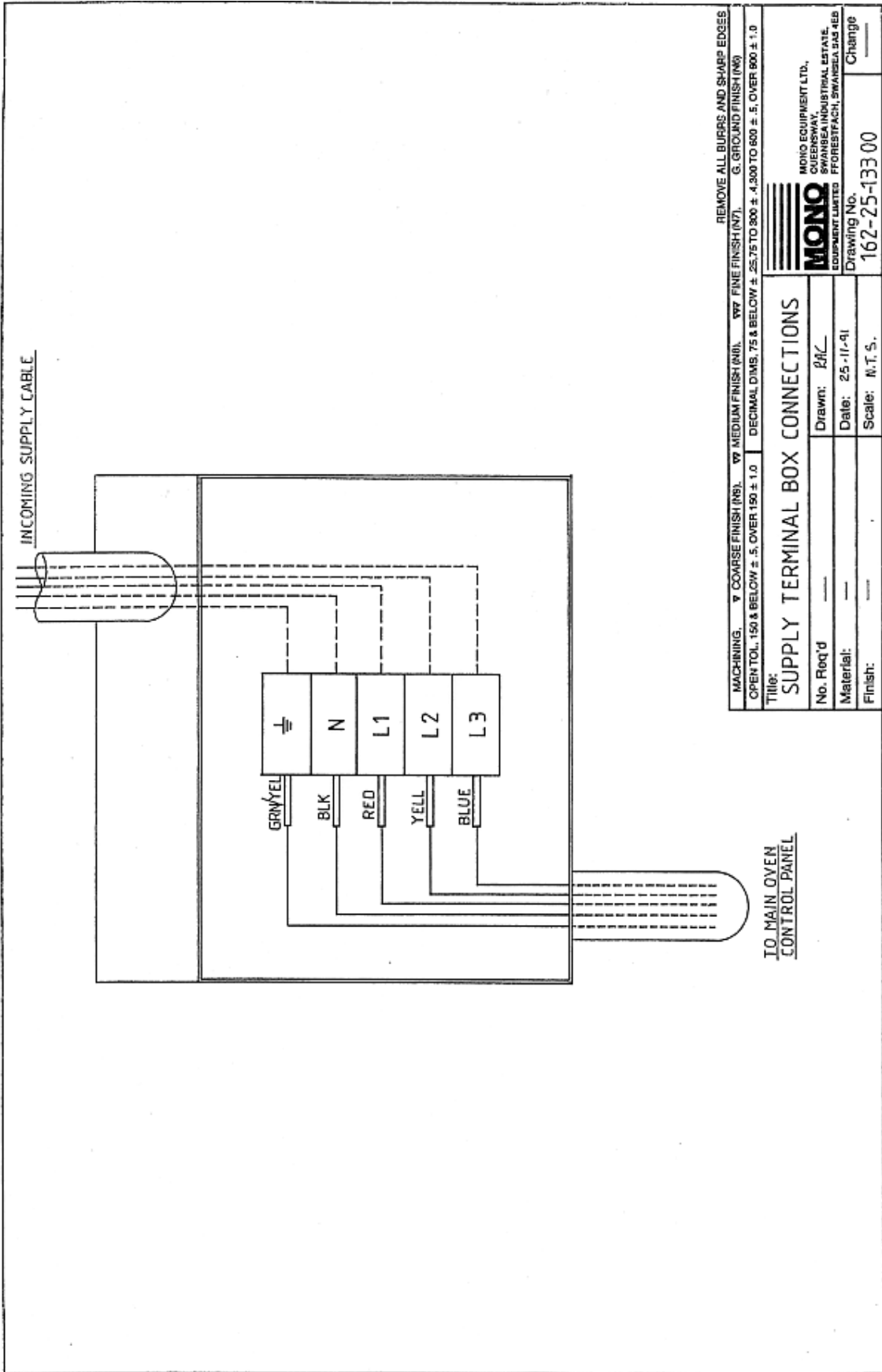








20.0 ELECTRICS (WITH PUMP)



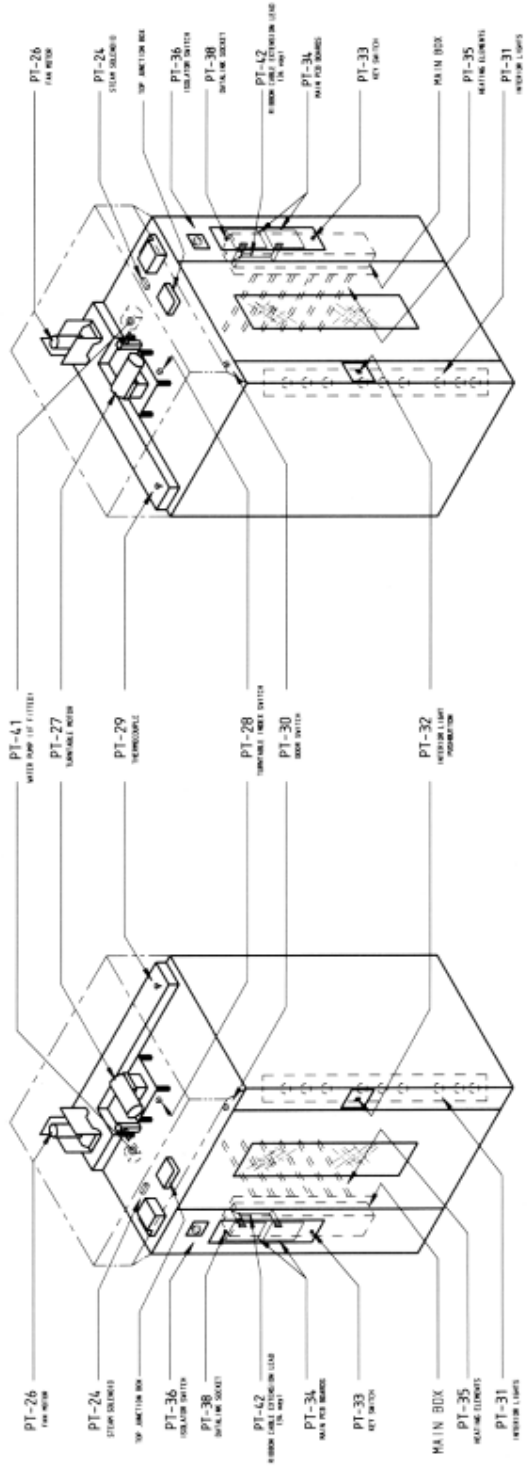
MACHINING: ▽ COARSE FINISH (M6), ▽ MEDIUM FINISH (M1), ▽ FINE FINISH (M7), G. GROUND FINISH (M8)	
OPER. TOL. 150 & BELOW ± .5, OVER 150 ± 1.0	DECIMAL DIMS. 75 & BELOW ± .25, 75 TO 300 ± .4, 300 TO 600 ± .5, OVER 600 ± 1.0
Title: SUPPLY TERMINAL BOX CONNECTIONS	
No. Req'd: —	Drawn: <i>RAC</i>
Material: —	Date: 25-11-91
Finish: —	Scale: N.T.S.
Drawing No. 162-25-133-00	
Change: —	

TO MAIN OVEN
CONTROL PANEL

MONO EQUIPMENT LTD.
SWANSEA INDUSTRIAL ESTATE
EQUENY LIMITED, FFORESTFACH, SWANSEA, SA3 4EB

IF IN ANY DOUBT - ASK

R.H. DVEN




L.H. DVEN

REV	SIG	DATE	REVISION	ECN NO.
MOND EQUIPMENT 1005 BAYVIEW SWANSEA WEST IND PARK SWANSEA SA5 4EB. TEL: (01792) 581234 FAX: (01792) 581016			TITLE: MXC MAIN COMPONENTS LAYOUT	
ELECTRICAL SPECIFICATIONS:- 415V 3PH 50Hz			DRAWN: JC ELECTRICALLY APPROVED BY:- P. BOYLES	
COPYRIGHT © 1998 - THIS DESIGN/DRAWING IS THE PROPERTY OF MOND EQUIPMENT LTD. AND MUST NOT BE REPRODUCED, COPIED, OR ITS CONTENTS DIVULGED WITHOUT PRIOR WRITTEN PERMISSION.			DATE: 13-06-02 DRAWING NO. M164E25-30100 REV: 1 of 2	

IF IN ANY DOUBT - ASK

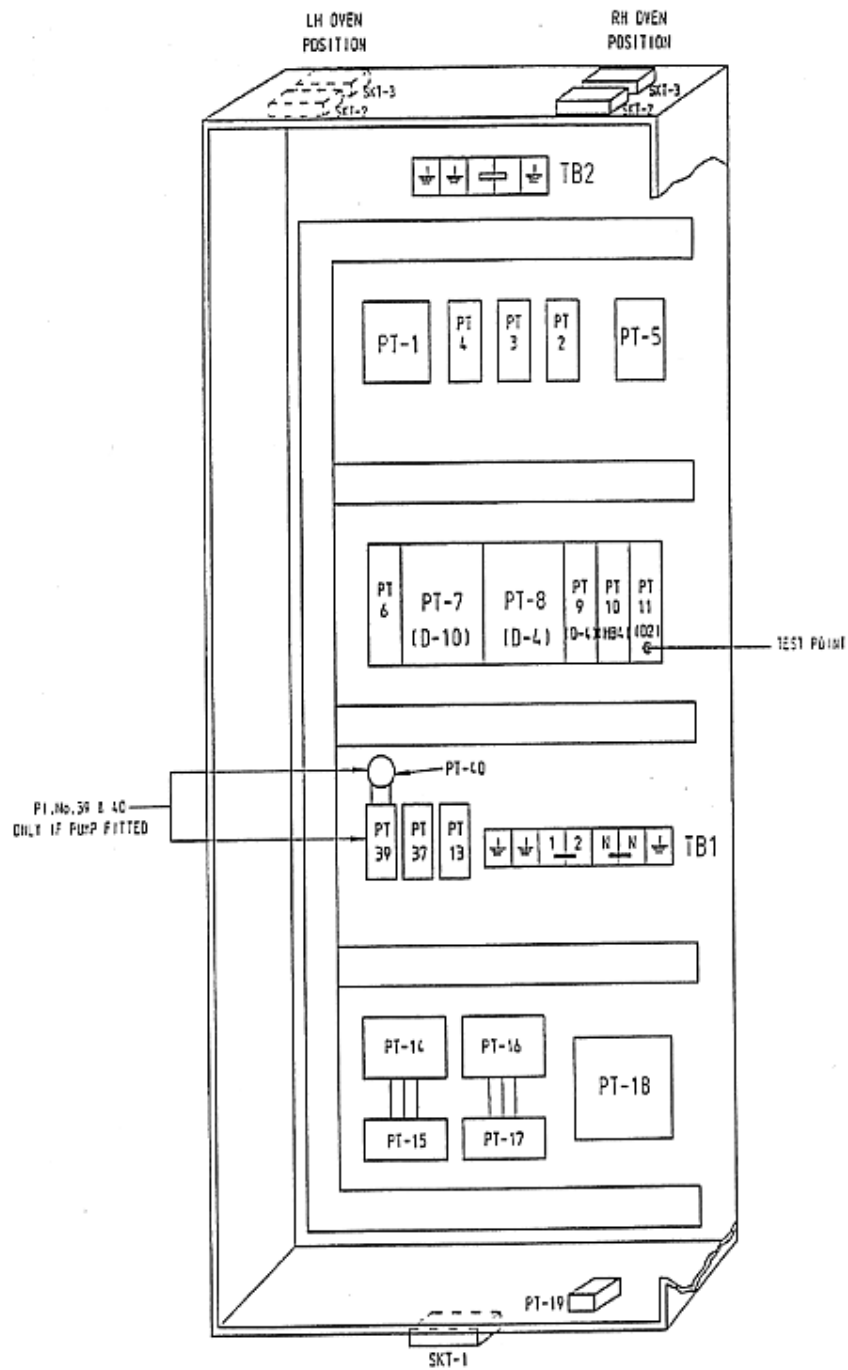
DRAWING		DESCRIPTION		MONO	
PT-Ref				PART NUMBER	
PT-1	OVERHEAT THERMOSTAT			8873-30-015	
PT-2	HEATING ELEMENT MCB.			8872-22-074	
PT-3	HEATING ELEMENT MCB.			8872-22-074	
PT-4	HEATING ELEMENT MCB.			8872-22-074	
PT-5	HEATING ELEMENT CONTACTOR			8801-08-032	
PT-6	MAIN FAN MOTOR MCB AUXILIARY CONTACT			8872-07-004	
PT-7	MAIN FAN MOTOR MCB.			8872-22-054	
PT-8	TURNABLE MOTOR MCB.			8872-22-052	
PT-9	INTERIOR LIGHT MCB..			8872-22-003	
PT-10	PUMP MOTOR MCB.			8872-22-042	
PT-11	CONTROL MOTOR MCB.			8872-22-061	
PT-13A	INTERIOR LIGHT RELAY.			8801-37-001	
PT-13B	INTERIOR LIGHT RELAY BASE.			8801-36-001	
PT-14	MAIN FAN MOTOR CONTACTOR.			8801-08-031	
PT-15	MAIN FAN MOTOR THERMAL OVERLOAD.			8801-01-042	
PT-16	TURNABLE MOTOR CONTACTOR.			8801-08-031	
PT-17	TURNABLE MOTOR THERMAL OVERLOAD.			8801-01-041	
PT-18	24V DC POWER SUPPLY.			8801-93-005	
PT-19	BUZZER			8723-92-002	
PT-24	STEAM SOLENOID.			8965-83-004	
PT-25	DAMPER SOLENOID.			8749-83-004	
PT-26	MAIN FAN MOTOR.			8859-74-024	
PT-27	TURNABLE MOTOR UNIT.			8912-74-009	
PT-28A	TURNABLE INDEX SWITCH BODY.			8801-11-013	
PT-28B	TURNABLE INDEX SWITCH HEAD.			8801-45-003	
PT-28C	TURNABLE INDEX SWITCH ACTUATOR.			8801-45-004	
PT-29	THERMOCOUPLE.			8709-95-001	
PT-30A	DOOR SWITCH BODY.			8801-11-013	
PT-30B	DOOR SWITCH HEAD.			8801-45-003	
PT-30C	DOOR SWITCH ACTUATOR.			8801-45-004	
PT-31A	INTERIOR LIGHT HOLDER.			8721-67-011	
PT-31B	INTERIOR LIGHT BULB.			8857-94-007	
PT-32A	INTERIOR LIGHT PUSHBUTTON.			8801-12-022	
PT-32B	INTERIOR LIGHT PUSHBUTTON CONTACT BLOCK			8801-14-005	
PT-32C	INTERIOR LIGHT PUSHBUTTON ENCLOSURE.			8801-09-011	
PT-32D	INTERIOR LIGHT PUSHBUTTON LEGEND.			8801-15-024	
PT-33	KEYSWITCH.			8705-07-003	
PT-34	PCB ASSY			158-25-14000	
PT-35	HEATING ELEMENT.			240V 220V 8979-04-001 8979-04-007	
PT-36A	MOULDED CASE CIRCUIT BREAKER.			8872-22-078	
PT-36B	UNDervOLTAGE RELEASE COIL.			8872-02-002	
PT-36C	DOOR HANDLE AND SHAFT.			8872-19-001	
PT-37A	HEATER CONTACTOR RELAY.			8801-37-001	
PT-37B	HEATER CONTACTOR RELAY BASE.			8801-36-001	
PT-38	SERIAL OUTPUT SOCKET.			8705-25-001	
PT-39a	PUMP RELAY (IF PUMP FITTED)			8801-37-001	
PT-39b	PUMP RELAY BASE (IF PUMP FITTED).			8801-36-001	
PT-40	SUPPRESSOR UNIT (IF PUMP FITTED).			8842-48-010	
PT-41	WATER PUMP (IF FITTED).			A900-28-005	
PT-42	34 WAY RIBBON CABLE EXTENSION.			8705-25-003	

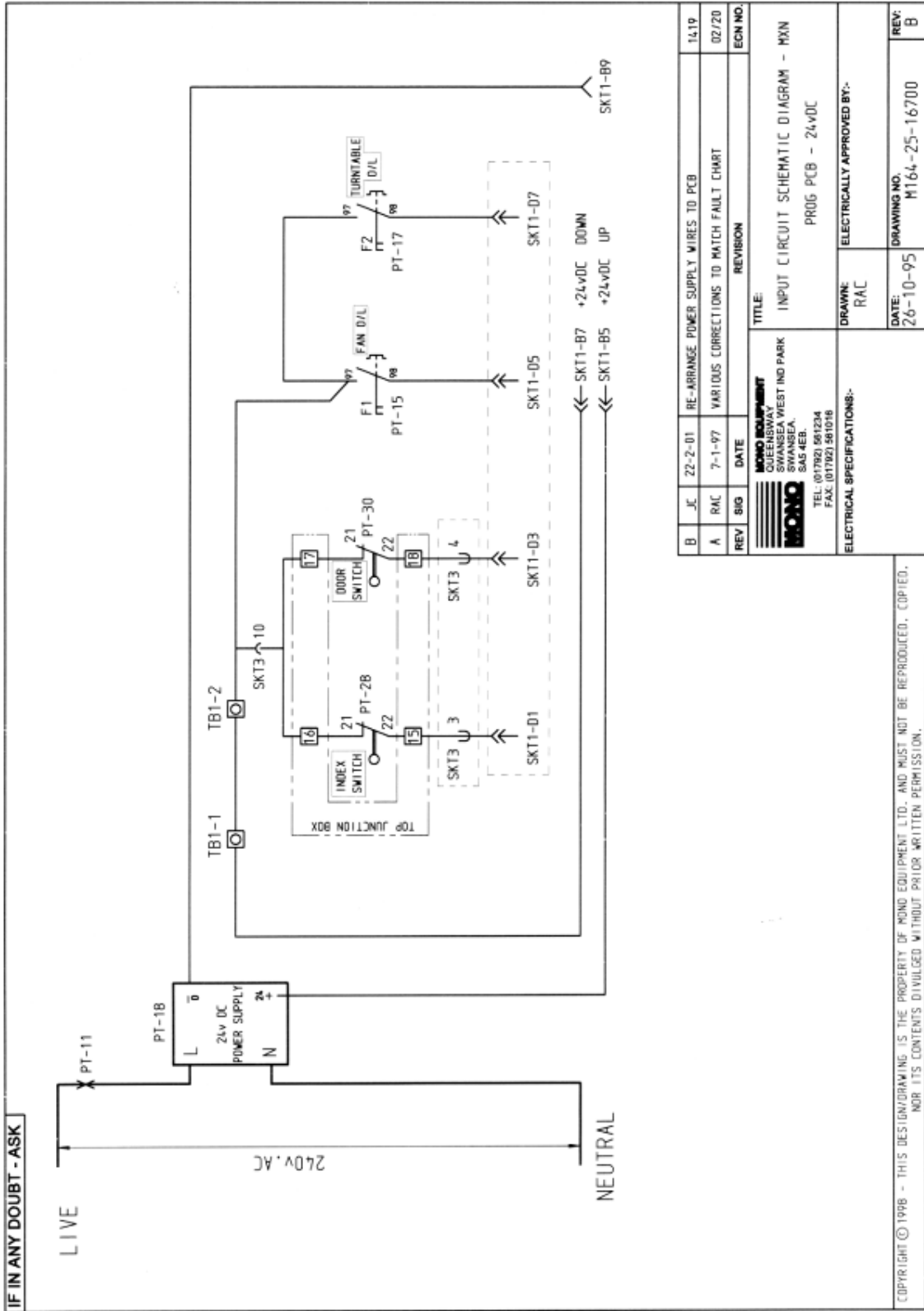
REV	BY	DATE	REVISION	ECH NO.
E	RAC	16-09-11	PT25 was B998-83-005	224/09
D	RAC	16-09-11	PT31AB P/No Changed. (HALOGEN)	167/11
C	RAC	22-01-10	PT31AB now PT34. P/No Changed.	338/09
B	JC	11-2-10	8801 WAS 8822 & 8859.	2926
A	JC	21-11-05	8822- (RELAY & BASE PT13 & PT39) WAS 8723- SIMPLIFIED CIRCUIT ON INTERIOR LIGHT/PUMP	2594

 <p>MONO EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SWANSEA SA5 4EB. TEL: (01782) 86224 FAX: (01782) 561016</p>		<p>TITLE: COMPONENT PART LIST FOR MXC COLOURSMART OVEN</p>
<p>ELECTRICAL SPECIFICATIONS:- DRAWN: JC DATE: 13-04-02</p>	<p>REVISION ELECTRICALLY APPROVED BY:- P. BOYLES</p>	<p>REV: DRAWING NO. M164E25-30100 SHT 2 of 2 E</p>

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MAIN ELECTRICAL BOX LAYOUT FOR MX SMARTBAKE





REV	SIG	DATE	REVISION	ECN NO.
B	JC	22-2-01	RE-ARRANGE POWER SUPPLY WIRES TO PCB	1419
A	RAC	7-1-97	VARIOUS CORRECTIONS TO MATCH FAULT CHART	02/20

MONDRO
 MONDRO INDUSTRIES
 SWANSEA WEST IND PARK
 SWANSEA,
 SA5 4EB.
 TEL: (01792) 561234
 FAX: (01792) 561016

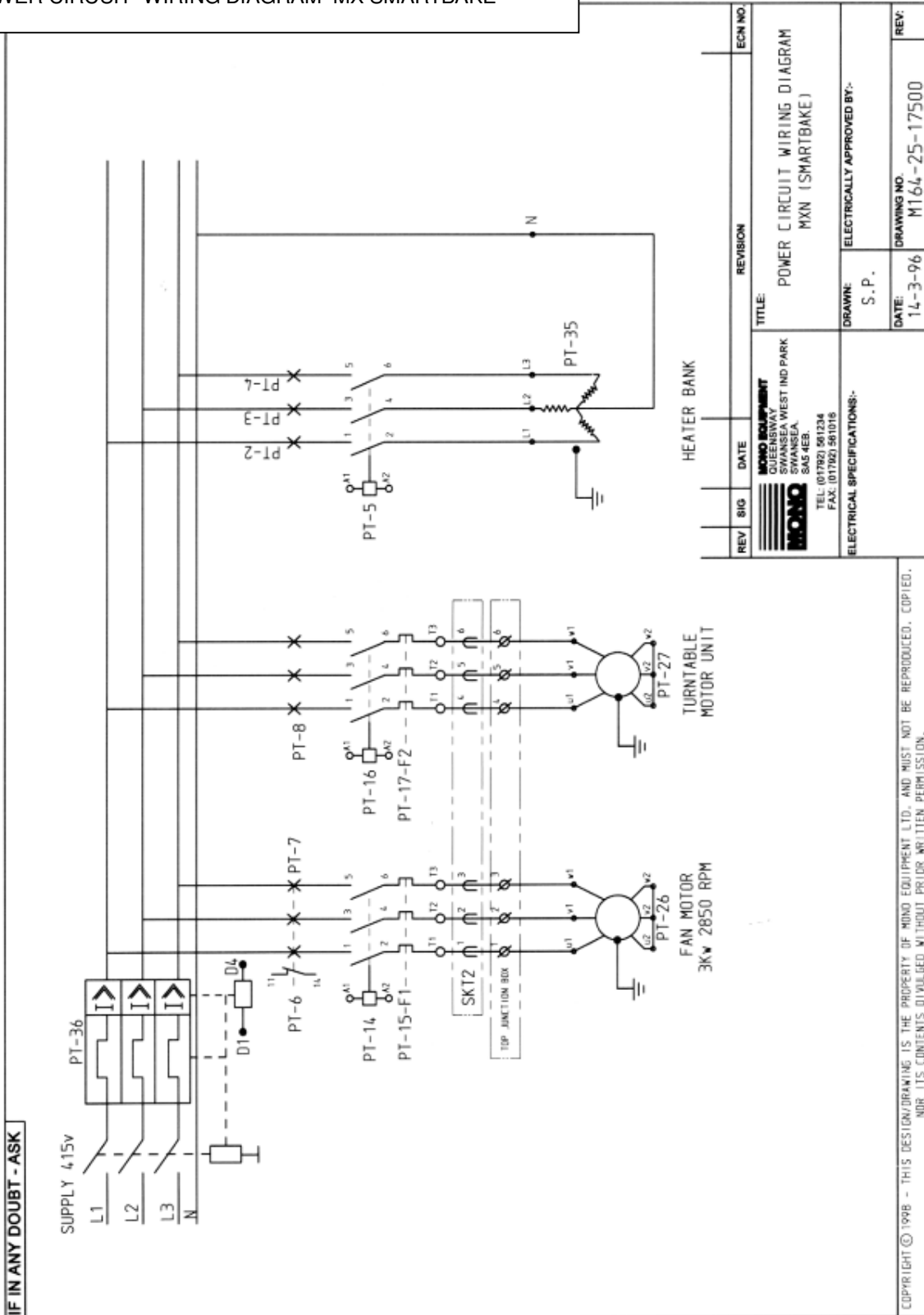
TITLE:
 INPUT CIRCUIT SCHEMATIC DIAGRAM - MXN
 PROG PCB - 24vDC

ELECTRICAL SPECIFICATIONS:-
 DRAWN: RAC
 ELECTRICALLY APPROVED BY:-

DATE: 26-10-95
 DRAWING NO. M164-25-16700
 REV: B

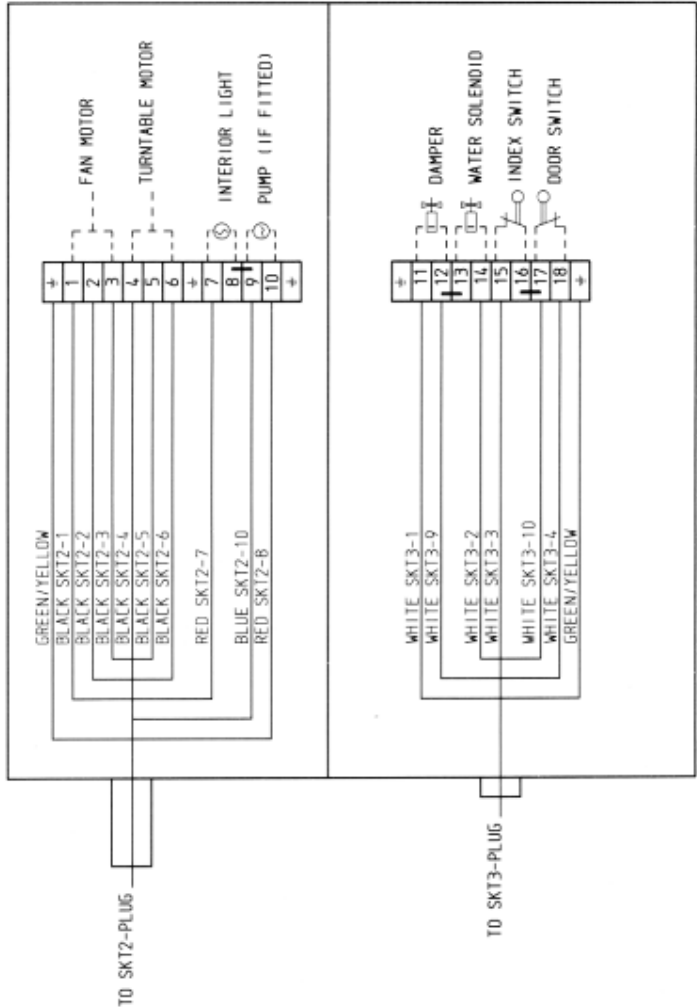
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POWER CIRCUIT WIRING DIAGRAM MX SMARTBAKE



OVEN TOP JUNCTION BOX CONNECTORS FOR RH MX (WITH PUMP)

IF IN ANY DOUBT - ASK



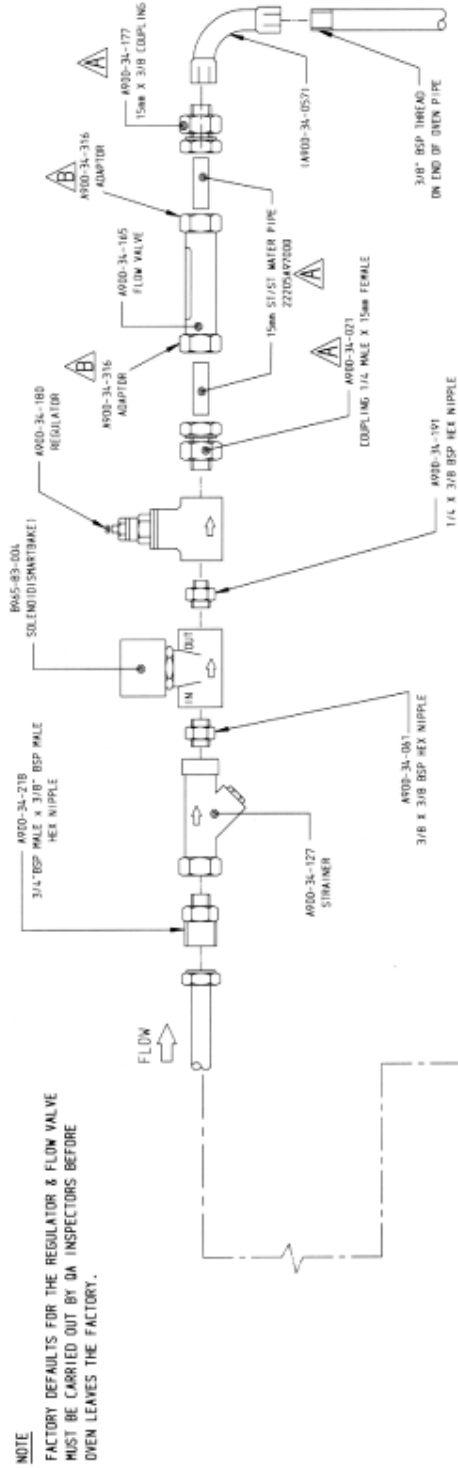
REV	SIG	DATE	REVISION	ECH NO.
<p>MOND EQUIPMENT 1001 BROADWAY SWANSEA WEST IND PARK SWANSEA, SA5 4EB. TEL: (01792) 561234 FAX: (01792) 561016</p>		TITLE: RH OVEN OVEN TOP JUNCTION BOX CONNECTORS MXN-PROG PCB-24VDC		
ELECTRICAL SPECIFICATIONS:-			DRAWN: ELECTRICALLY APPROVED BY:-	
			R. A. C.	
			DATE: 12-1-94	
			DRAWING NO. M164-25-16600	
			REV:	

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ALL DIMENSIONS IN mm UNLESS OTHERWISE STATED

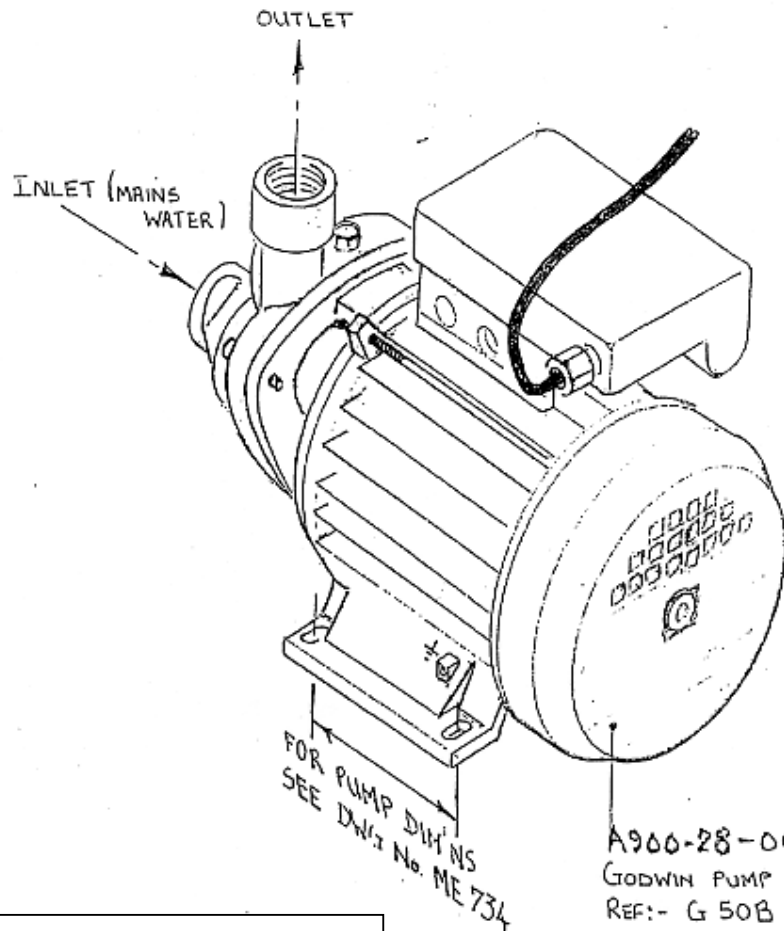
DO NOT SCALE - IF IN DOUBT ASK

NOTE
 FACTORY DEFAULTS FOR THE REGULATOR & FLOW VALVE
 MUST BE CARRIED OUT BY QA INSPECTORS BEFORE
 OVEN LEAVES THE FACTORY.

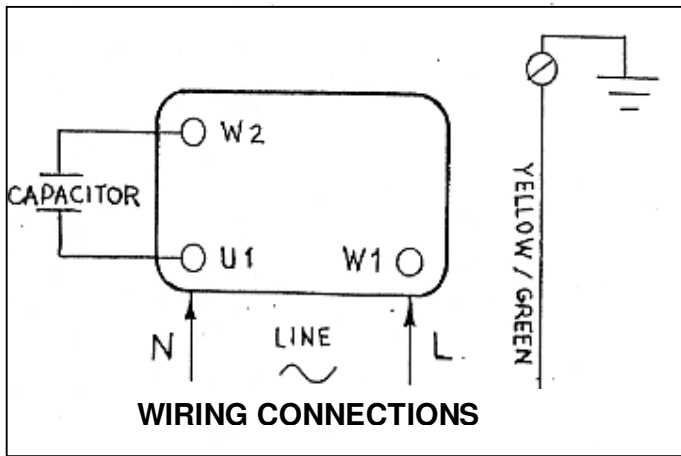


REV	BIG	DATE	REVISION	ECN NO.
B	RJJ	151104	A900-34-316 x 2 ADDED	2350
A	RJJ	150103	15mm ST/ST WATER PIPE ADDED A900-34-177 WAS A900-34-061 A900-34-021 WAS A900-34-191 A900-34-219 REMOVED	1922

MATERIAL:		TITLE:	
MONO EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SWANSEA, SA5 4EB. TEL: (01792) 581234 FAX: (01792) 581016		MXE/MXN WATER INLET COMPONENTS / TESCO OVEN (WITH PUMP)	
DRAWN: C D		PURCHASE ORDER NO. WORKS ORDER NO.	
NO. REQ: 1		3-7-70	
FINISH: ALL JOINTS MUST BE W/ BITE / A3		DRAWING SCALE: NTS	
MATERIAL FINISH: REMOVE ALL BURRS & SHARP EDGES - ON SHEET METAL PARTS EXTERNAL COMPONENTS TO BE SAFETY RADIUSED 2mm UNLESS STATED OTHERWISE		DRAWING NO. M164-01-03000	
SURFACE MACHINING: 3% COARSE FINISH, 3% MEDIUM FINISH, 3% FINE FINISH, 3% GROUND FINISH		REV: B	
TOLERANCES: OPEN TOL. 150 & BELOW +.5, OVER 150 ±1.0 DECIMAL DIMS. .75 & BELOW +.25, .75 TO 300 ±.4, 300 TO 600 ±.5, OVER 600 ±1.0		DRAWING SIZE: A3	
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A900-28-005
 GODWIN PUMP
 REF:- G 50B
 0.5 HP
 240V-50Hz-1PH
 2850 RPM 2.4 AMPS



WATER PUMP (GODWIN) DIAGRAM
 (IF FITTED)

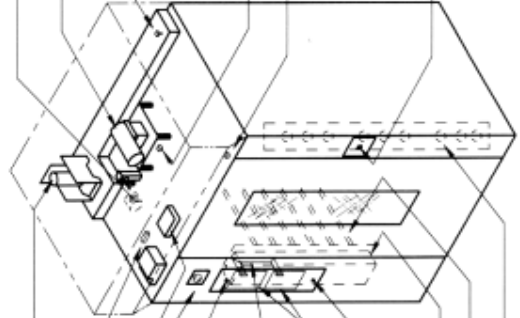


21.0 SPARES

IF IN ANY DOUBT - ASK

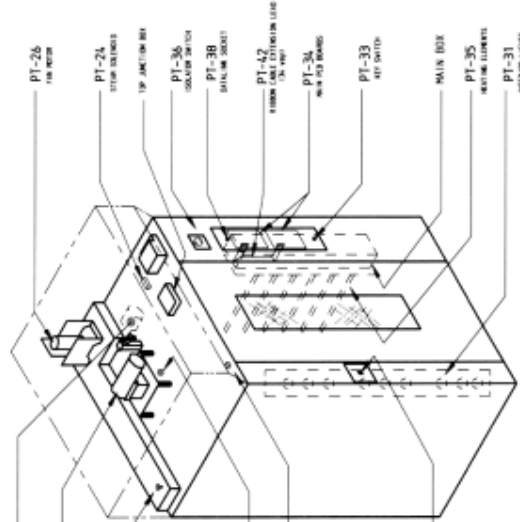
R. H. OVEN

- PT-26 FAN MOTOR
- PT-24 STEAM RELIEF VALVE
- TOP JACKET ON BOX
- PT-36 ISOLATION SWITCH
- PT-38 MAIN LINE SOCKET
- PT-42 FURROW TIE IN CONNECTION LINE
- PT-34 MAIN FCB BOARD
- PT-33 GYI SWITCH
- MAIN BOX
- PT-35 HEATING ELEMENTS
- PT-31 INTERIOR LIGHTS



L. H. OVEN


- PT-41 WATER PUMP (10 FILTERS)
- PT-27 TURNTABLE MOTOR
- PT-29 FERRULES
- PT-28 TURNTABLE HEAT SWITCH
- PT-30 DOOR SWITCH
- PT-32 FURROW LIGHT POSITIONER



REV	SIG	DATE	REVISION	ECN NO.
<p>MOND EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SWANSEA SA5 4EB. TEL: (01792) 961254 FAX: (01792) 967016</p>				
<p>MOND</p>				
<p>ELECTRICAL SPECIFICATIONS:- 415V 3PH 50Hz</p>				
<p>TITLE: MXC MAIN COMPONENTS LAYOUT</p>				
<p>DRAWN: JC</p>				
<p>ELECTRICALLY APPROVED BY:- P. BOYLES</p>				
<p>DATE: 13-06-02</p>				
<p>DRAWING NO. SHIT 1 of 2 M164E25-30100</p>				
<p>REV: _____</p>				

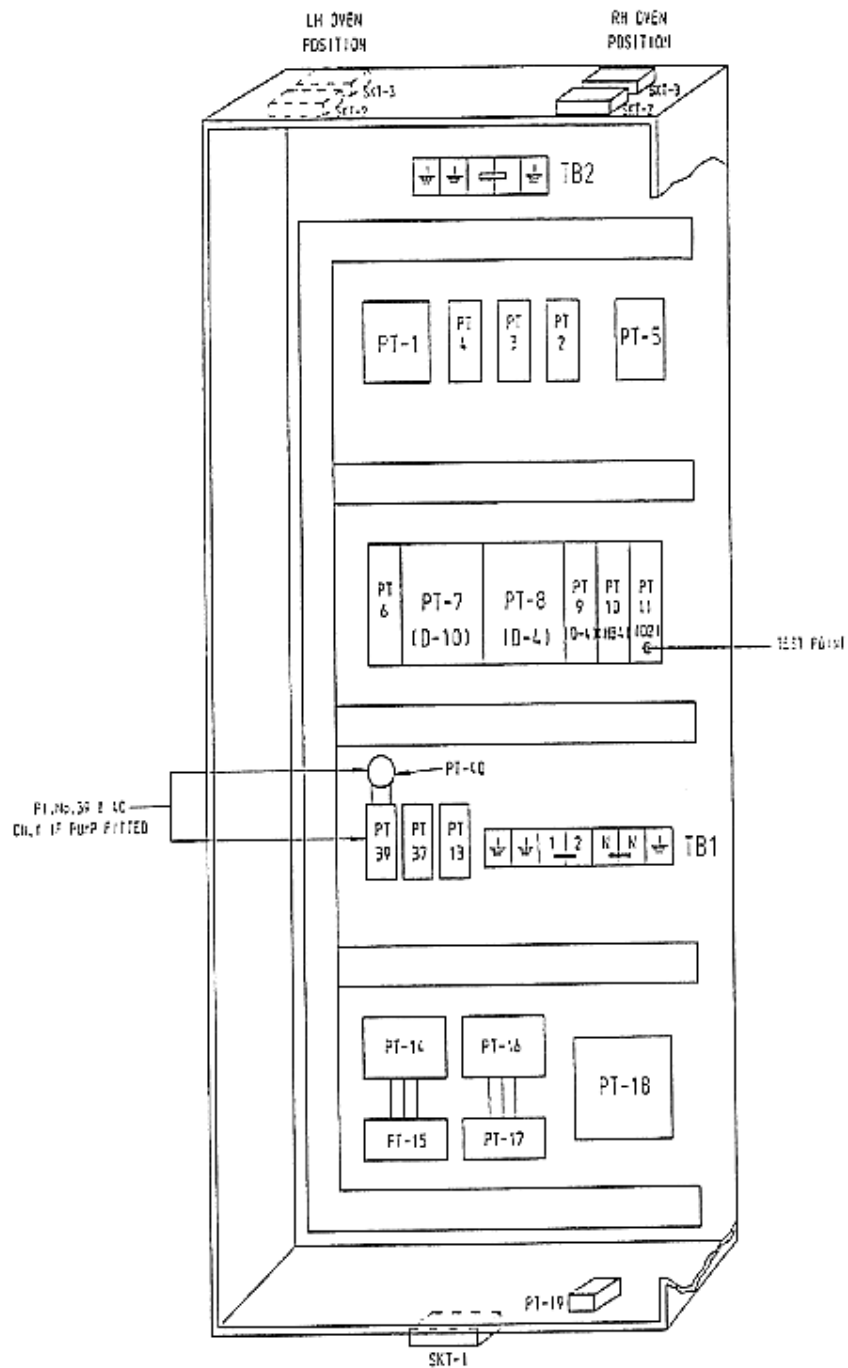
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IF IN ANY DOUBT - ASK

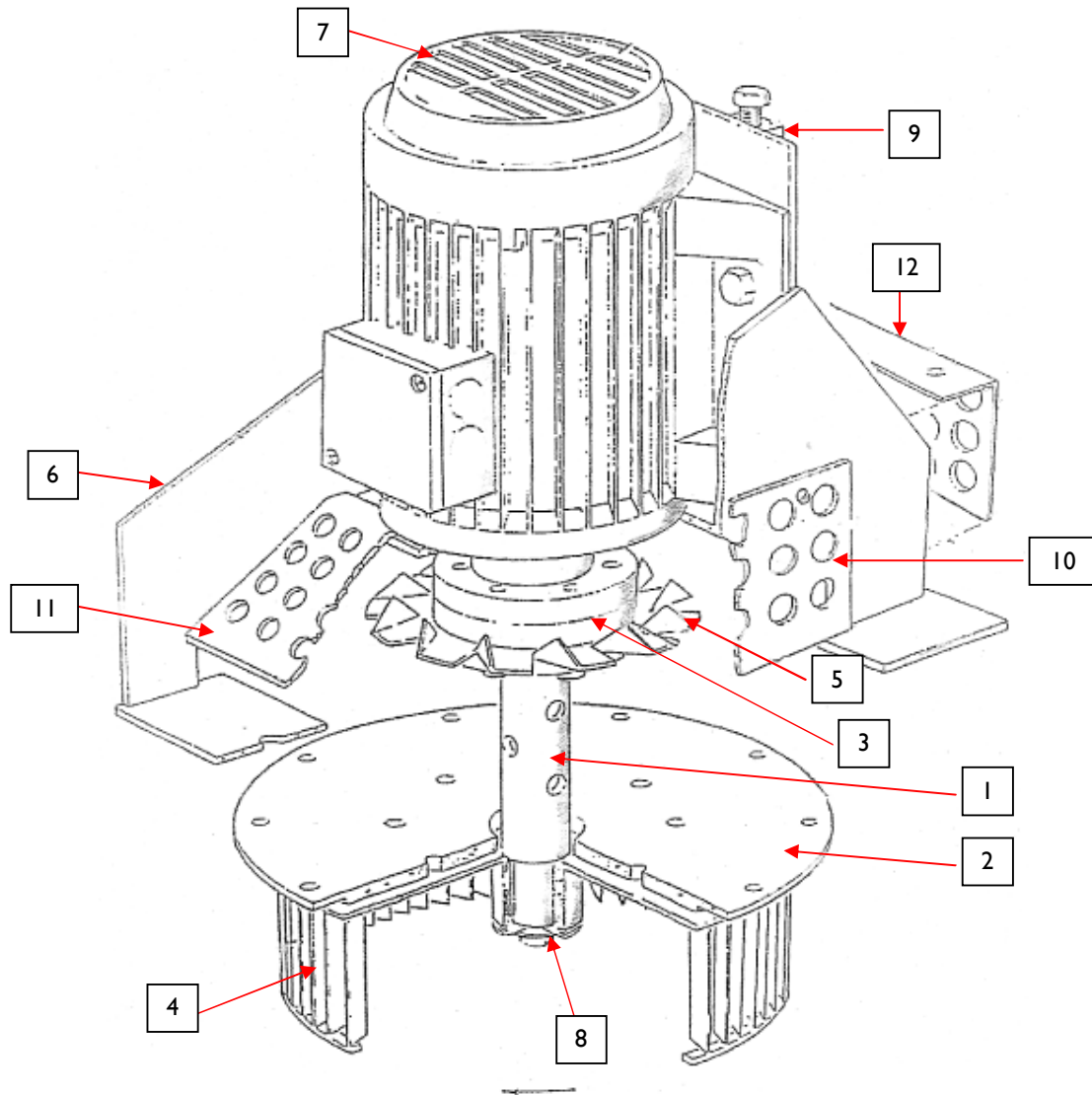
DRAWING		DESCRIPTION		MONO	
PT-Ref		DESCRIPTION	MONO PART NUMBER		
PT-1	OVERHEAT THERMOSTAT		8873-30-015		
PT-2	HEATING ELEMENT MCB.		8872-22-074		
PT-3	HEATING ELEMENT MCB.		8872-22-074		
PT-4	HEATING ELEMENT MCB.		8872-22-074		
PT-5	HEATING ELEMENT CONTACTOR		8801-08-032		
PT-6	MAIN FAN MOTOR MCB AUXILIARY CONTACT		8872-07-004		
PT-7	MAIN FAN MOTOR MCB.		8872-22-054		
PT-8	TURNABLE MOTOR MCB.		8872-22-052		
PT-9	INTERIOR LIGHT MCB..		8872-22-003		
PT-10	PUMP MOTOR MCB.		8872-22-042		
PT-11	CONTROL MOTOR MCB.		8872-22-061		
PT-13A	INTERIOR LIGHT RELAY.		8801-37-001		
PT-13B	INTERIOR LIGHT RELAY BASE.		8801-36-001		
PT-14	MAIN FAN MOTOR CONTACTOR.		8801-08-031		
PT-15	MAIN FAN MOTOR THERMAL OVERLOAD.		8801-01-042		
PT-16	TURNABLE MOTOR CONTACTOR.		8801-08-031		
PT-17	TURNABLE MOTOR THERMAL OVERLOAD.		8801-01-041		
PT-18	24V DC POWER SUPPLY.		8801-93-005		
PT-19	BUZZER		8723-92-002		
PT-24	STEAM SOLENOID.		8965-83-004		
PT-25	DAMPER SOLENOID.		8749-83-004		
PT-26	MAIN FAN MOTOR.		8859-74-024		
PT-27	TURNABLE MOTOR UNIT.		8912-74-009		
PT-28A	TURNABLE INDEX SWITCH BODY.		8801-11-013		
PT-28B	TURNABLE INDEX SWITCH HEAD.		8801-45-003		
PT-28C	TURNABLE INDEX SWITCH ACTUATOR.		8801-45-004		
PT-29	THERMOCOUPLE.		8709-95-001		
PT-30A	DOOR SWITCH BODY.		8801-11-013		
PT-30B	DOOR SWITCH HEAD.		8801-45-003		
PT-30C	DOOR SWITCH ACTUATOR.		8801-45-004		
PT-31A	INTERIOR LIGHT HOLDER.		8721-67-011		
PT-31B	INTERIOR LIGHT BULB.		8857-94-007		
PT-32A	INTERIOR LIGHT PUSHBUTTON.		8801-12-022		
PT-32B	INTERIOR LIGHT PUSHBUTTON CONTACT BLOCK		8801-14-005		
PT-32C	INTERIOR LIGHT PUSHBUTTON ENCLOSURE.		8801-09-011		
PT-32D	INTERIOR LIGHT PUSHBUTTON LEGEND.		8801-15-024		
PT-33	KEYSWITCH.		8705-07-003		
PT-34	PCB ASSY		158-25-14000		
PT-35	HEATING ELEMENT.	240V	8979-04-001		
		220V	8979-04-007		
PT-36A	MOULDED CASE CIRCUIT BREAKER.		8872-22-078		
PT-36B	UNDervOLTAGE RELEASE COIL.		8872-02-002		
PT-36C	DOOR HANDLE AND SHAFT.		8872-19-001		
PT-37A	HEATER CONTACTOR RELAY.		8801-37-001		
PT-37B	HEATER CONTACTOR RELAY BASE.		8801-36-001		
PT-38	SERIAL OUTPUT SOCKET.		8705-25-001		
PT-39a	PUMP RELAY (IF PUMP FITTED)		8801-37-001		
PT-39b	PUMP RELAY BASE (IF PUMP FITTED).		8801-36-001		
PT-40	SUPPRESSOR UNIT (IF PUMP FITTED).		8842-48-010		
PT-41	WATER PUMP (IF FITTED).		A900-28-005		
PT-42	34 WAY RIBBON CABLE EXTENSION.		8705-25-003		
E	RAC	16-09-11	PT25 was B998-83-005		224/09
D	RAC	16-09-11	PT31AB P/No Changed. (HALOGEN)		16/7/11
C	RAC	22-01-10	PT34AB now PT34, P/No Changed.		3/8/09
B	JC	11-2-10	8801 WAS 8822 & 8859.		2926
A	JC	21-11-05	8822- (RELAY & BASE) PT13 & PT391 WAS 8723- SIMPLIFIED CIRCUIT ON INTERIOR LIGHT/PUMP		2594
REV	BY	DATE	REVISION		ECH NO.
			TITLE: COMPONENT PART LIST FOR MXC COLOURSMART OVEN		
MONO EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SWANSEA SA5 4EB. TEL: (01782) 56224 FAX: (01782) 561016			DRAWN: JC ELECTRICALLY APPROVED BY: P. BOYLES		
ELECTRICAL SPECIFICATIONS:-			DATE: 13-06-02 REV: E		

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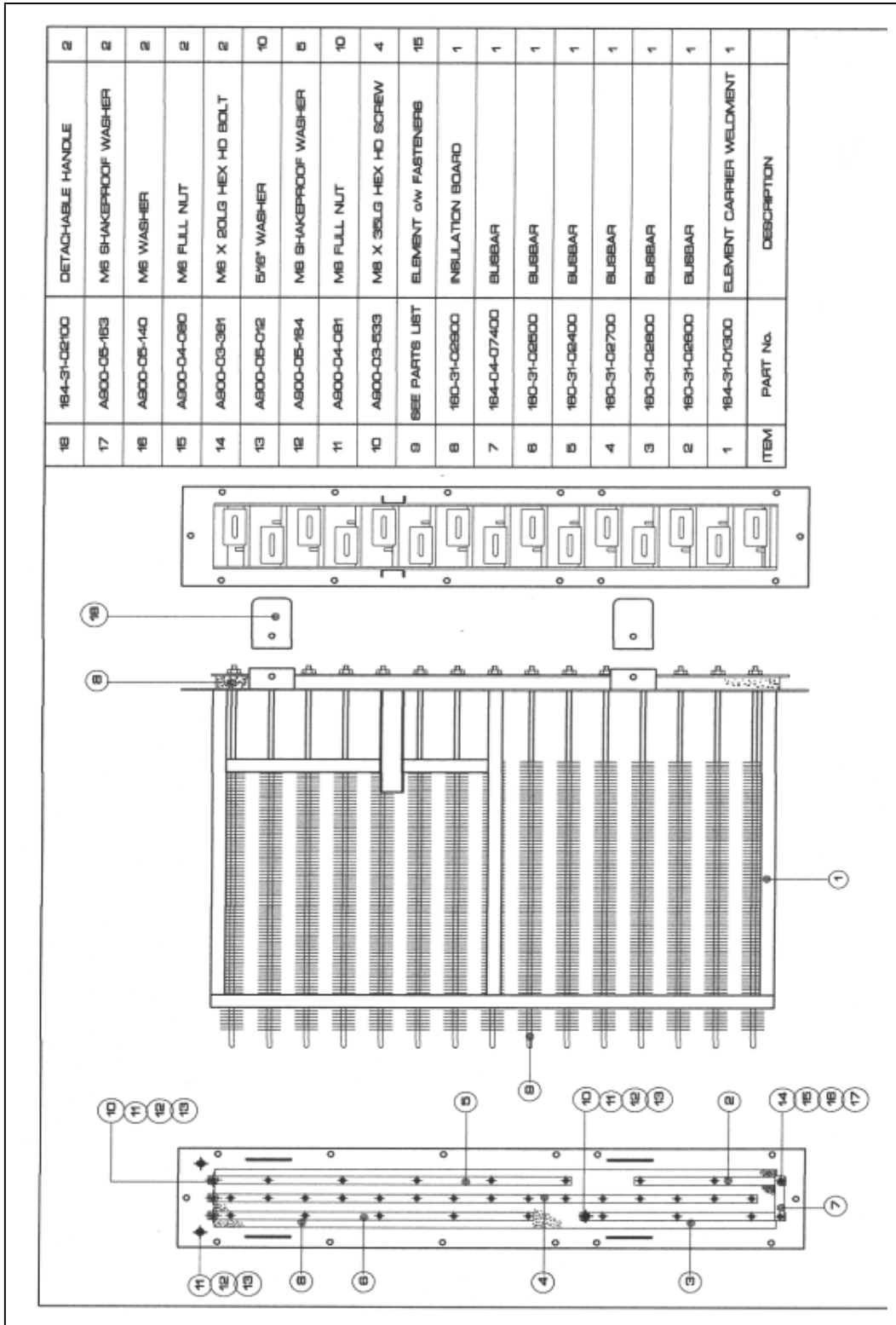
MAIN ELECTRICAL BOX LAYOUT FOR MXN SMARTBAKE

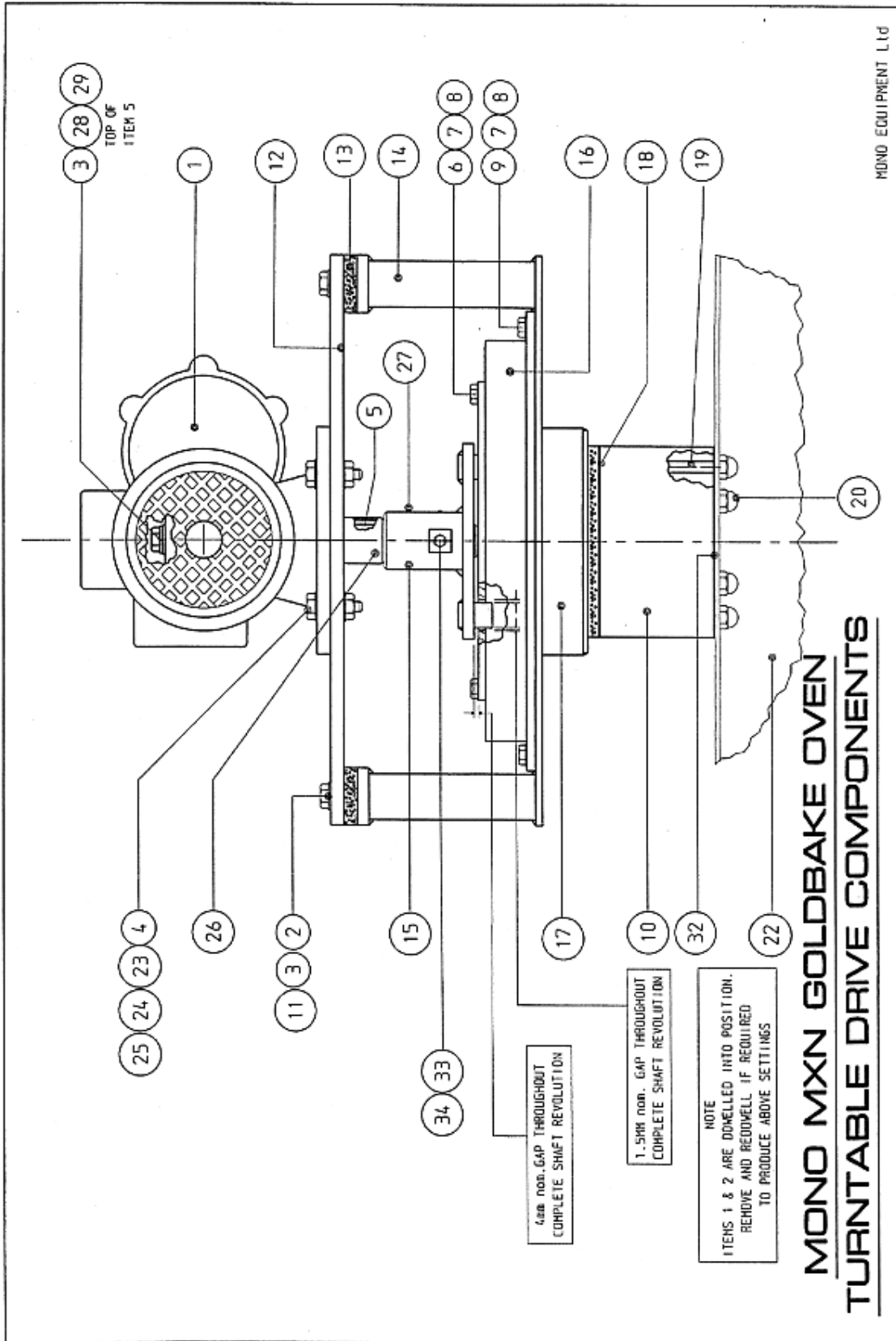


MAIN FAN ASSEMBLY



1	Fan shaft lower	160-14-01700
2	Lower fan access cover	160-35-01000
3	Driving flange	160-14-10000
4	Main fan	A900-27-049
5	Cooling fan	164-14-02400
6	Fan support bracket	160-35-00500
7	Motor	B859-74-029
8	Retaining washer	160-14-10100
9	Motor slip plate assy	160-35-00100
10	Fan side guard	160-35-01500
11	Fan guard	160-35-01600
12	Fan guard rear	160-35-01600





**MONO MXC GOLDBAKE OVEN TURNTABLE DRIVE
COMPONENTS DESCRIPTION**

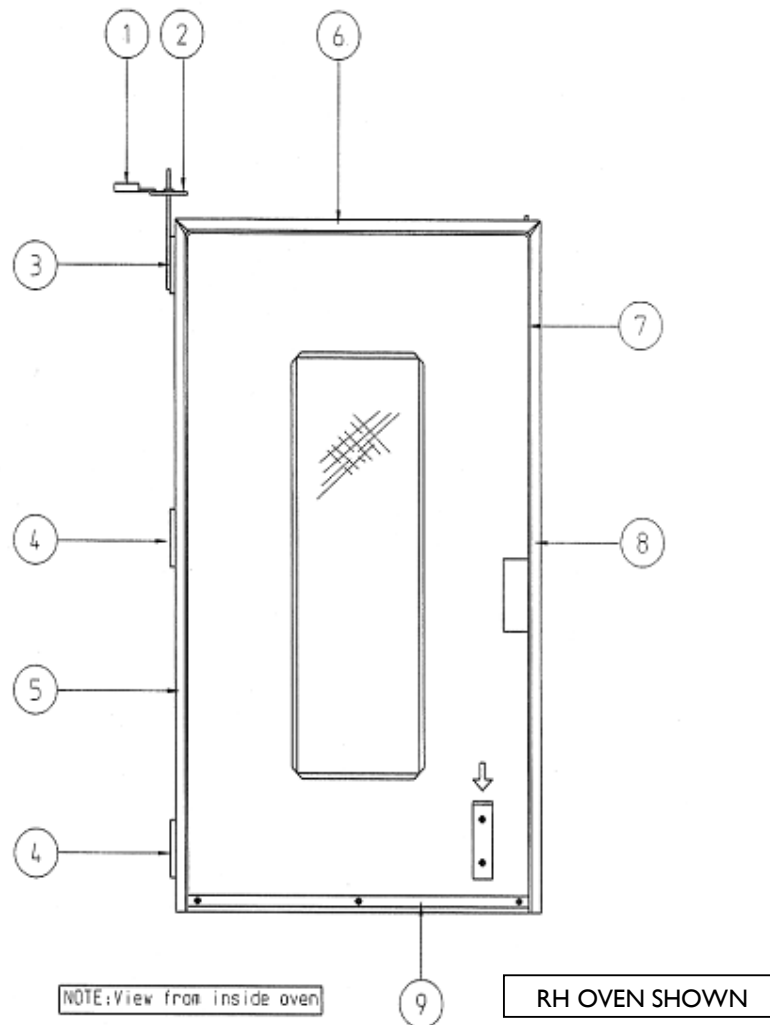
(see drawing on previous page)

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)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

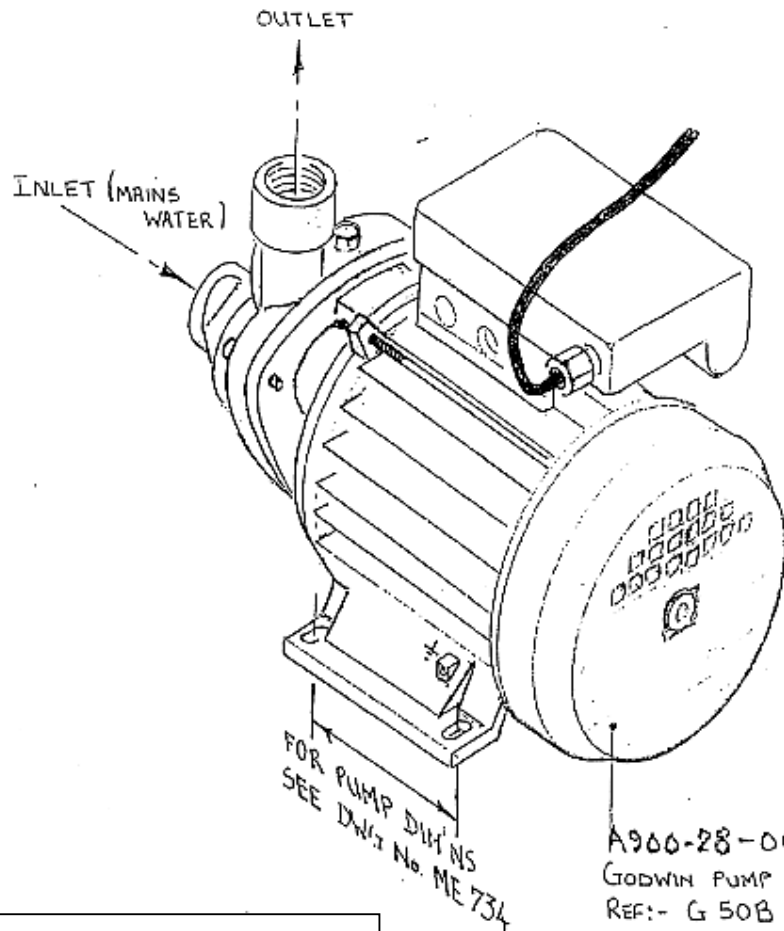
ROPE SEAL PT No. A900-32-016 (NOT SHOWN)

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

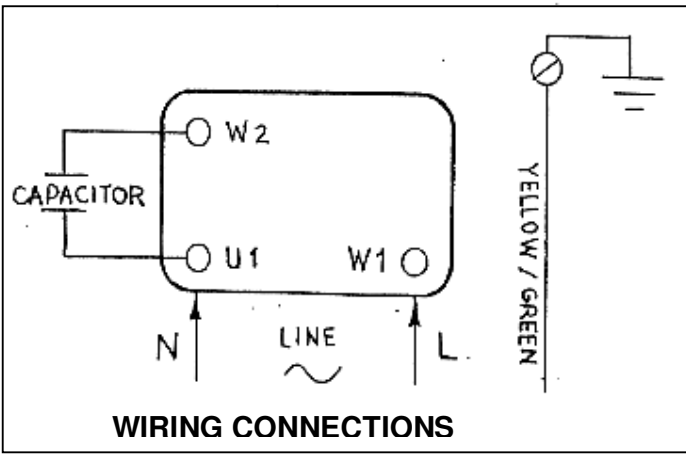
MAIN DOOR COMPONENTS



- | | |
|---|---|
| ① | B801-11-013 SWITCH
B801-45-003 OPERATING HEAD
B801-45-004 OPERATING LEVER |
| ② | 160-06-02200 CAM |
| ③ | 160-06-06700 TOP HINGE – RH DOOR
160-06-06701 -- LH DOOR
160-06-08500 MIDDLE AND BOTTOM HINGE |
| ⑤ | 160-06-07101 INNER CLAMP
160-06-07001 OUTER CLAMP |
| ⑥ | 160-06-07300 INNER CLAMP
160-06-07200 OUTER CLAMP |
| ⑦ | A900-12-037 “P” SEAL |
| ⑧ | 160-06-07100 INNER CLAMP
160-06-07000 OUTER CLAMP |
| ⑨ | 160-48-06400 BOTTOM CLAMP
160-48-06000 BOTTOM SEAL |



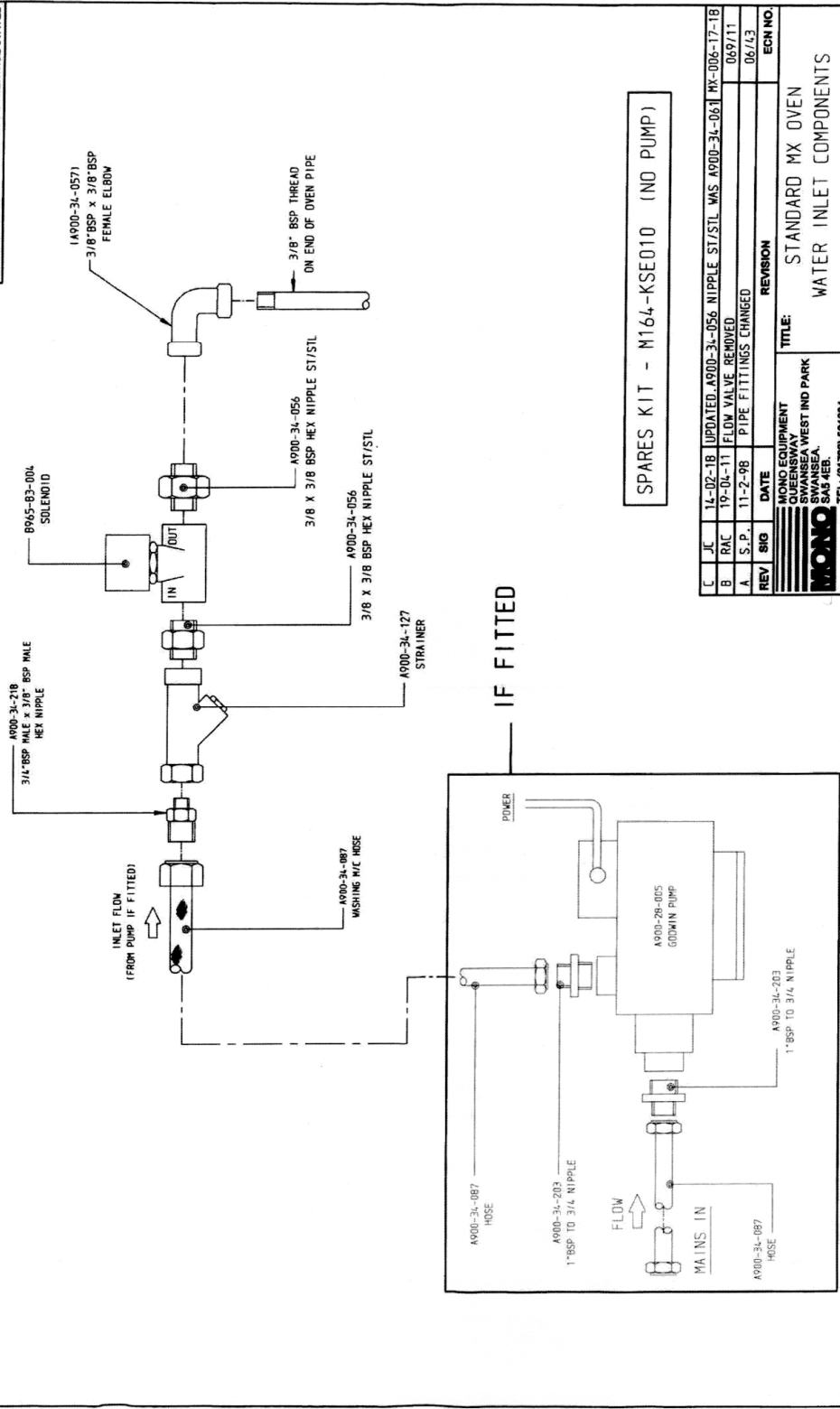
A900-28-005
 GODWIN PUMP
 REF:- G 50B
 0.5 HP
 240V-50Hz-1PH
 2850 RPM 2.4 AMPS



WATER PUMP (GODWIN) DIAGRAM
 (IF FITTED)

DO NOT SCALE - IF IN DOUBT ASK

ALL DIMENSIONS IN mm UNLESS OTHERWISE STATED

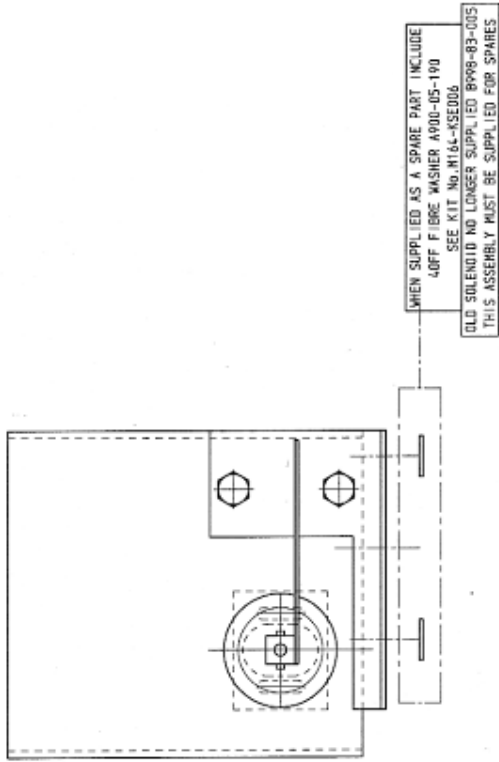


SPARES KIT - M164-KSE010 (NO PUMP)

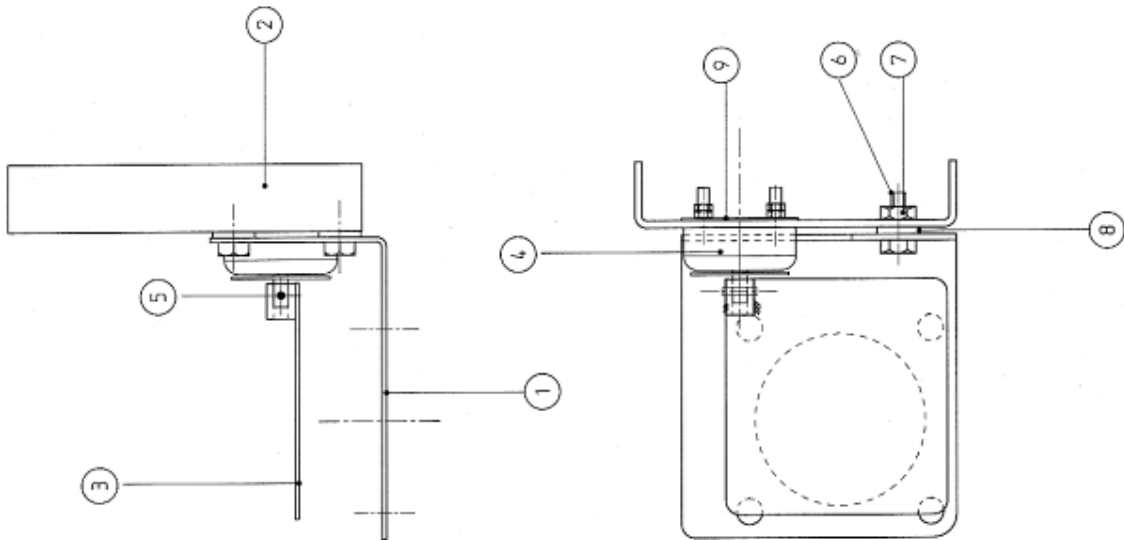
C	J.C.	14-02-18	UPDATED. A900-34-056 NIPPLE ST/STL WAS A900-34-061 PX-006-17-1B	069711
B	RAC	19-04-11	FLOW VALVE REMOVED	06/43
A	S.P.	11-2-98	PIPE FITTINGS CHANGED	
REV	SHG	DATE	REVISION	EGN NO.
			TITLE: STANDARD MX OVEN	
			WATER INLET COMPONENTS	
			(PUMP IF FITTED)	
MFG: MONO EQUIPMENT QUEENSWAY SWANSEA SWANSEA TEL: 07920 861934 FAX: (01792) 861016			DRAWN: RAC WORKS ORDER NO.	
MNTL: ...			DATE: 16-12-96	
MNTL QTY: ...			REQ: ...	
FINISH: ...			DRAWING SCALE: NTS	
			DRAWING NO. M164-01-02300	
			REV: C	

REMOVE ALL BURRS & SHARP EDGES - ON SHEET METAL PARTS EXTERNAL CORNERS TO BE SAFETY RADIUS 2mm UNLESS STATED OTHERWISE
 SURFACE FINISHING: $\frac{3}{16}$ COARSE FINISH $\frac{3}{32}$ FINE FINISH $\frac{1}{16}$ GROUND FINISH
 OPEN TOL. 150 & BELOW $\pm .5$. OVER 150 ± 1.0 DECIMAL DIMS. 75 & BELOW $\pm .25$. 75 TO 300 $\pm .4$. 300 TO 600 ± 1.0
 1st ANGLE
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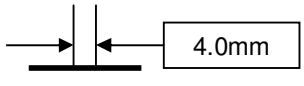
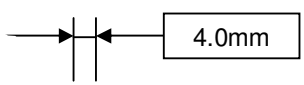
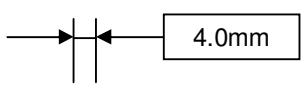
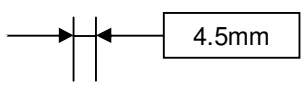
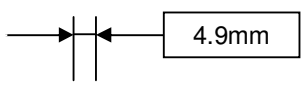
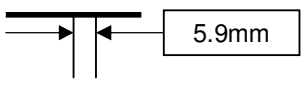
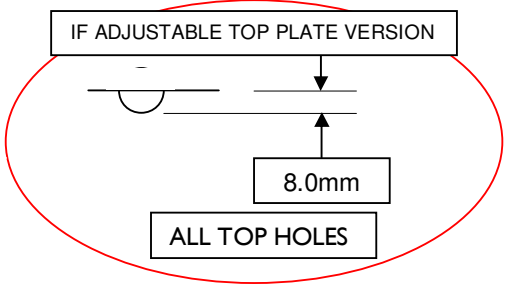
DAMPER ASSEMBLY



ITEM	PART NUMBER	DESCRIPTION	QTY
1	M160-38-03100	BASE BRACKET	1
2	M160-38-03200	SOLENOID BRACKET	1
3	M160-38-03300	DAMPER FLAP	1
4	B749-83-004	SOLENOID	1
5	A900-01-197	PIN	1
6	A900-03-532	H8 X 20 HEX HEAD	2
7	A900-04-143	H8 BINX	2
8	M145-03-11300	FIBRE WASHER	2
9	M164-38-03400	WASHER PLATE	1



MXn OVEN AIR DOOR DEFAULT SETTINGS





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)