



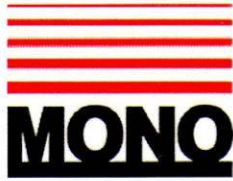
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Enter **Serial No.** here. _____

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




OPERATION and MAINTENANCE
and PROGRAMMING INSTRUCTIONS.
MXn ROTARY RACK OVEN



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 2006 / 95 / 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. | |
|-----------------------------|--|-------------------------------|--|

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 35,
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 food service 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 disconnector to connect to, which is easily accessible for switching off and safe isolation purposes. The switch disconnector must meet the specification requirements of IEC 60947.

Your attention is drawn to:

BS 7671:2018 – Guidance Note 8 – 8.13 : Other locations of increased risk

It is recognised that there may be locations of increased risk of electrical shock other than those specifically addressed in Part 7 of BS 7671. Examples of such locations could include laundries where there are washing and drying machines in close proximity, and water is present, and commercial kitchens with stainless steel units, where once again, water is present. Where, because of the perception of additional risks being likely, the installation designer decides that an installation or location warrants further protective measures, the options available includes:

- Automatic Disconnection of Supply (ADS) by means of a residual current device having a residual operating current not exceeding 30 mA;
- Supplementary protective equipotential bonding; and
- Reduction of maximum fault clearance time.

The provision of RCDs and supplementary bonding must be specified by the host organisation's appointed installation designer or electrical contractor and installed by a suitably qualified and competent electrician so as to comply with Regulations 419.2 and 544.2.



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

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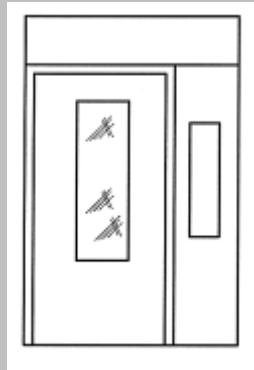
TRAINED ENGINEERS ONLY TO USE THE FOLLOWING SECTIONS

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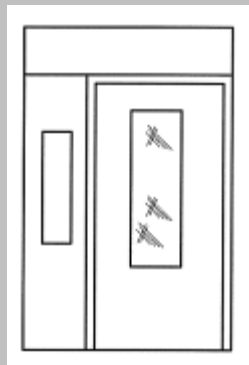
Failure to adhere to the cleaning and maintenance instructions detailed in this booklet could affect the warranty of this machine.

NOTE

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



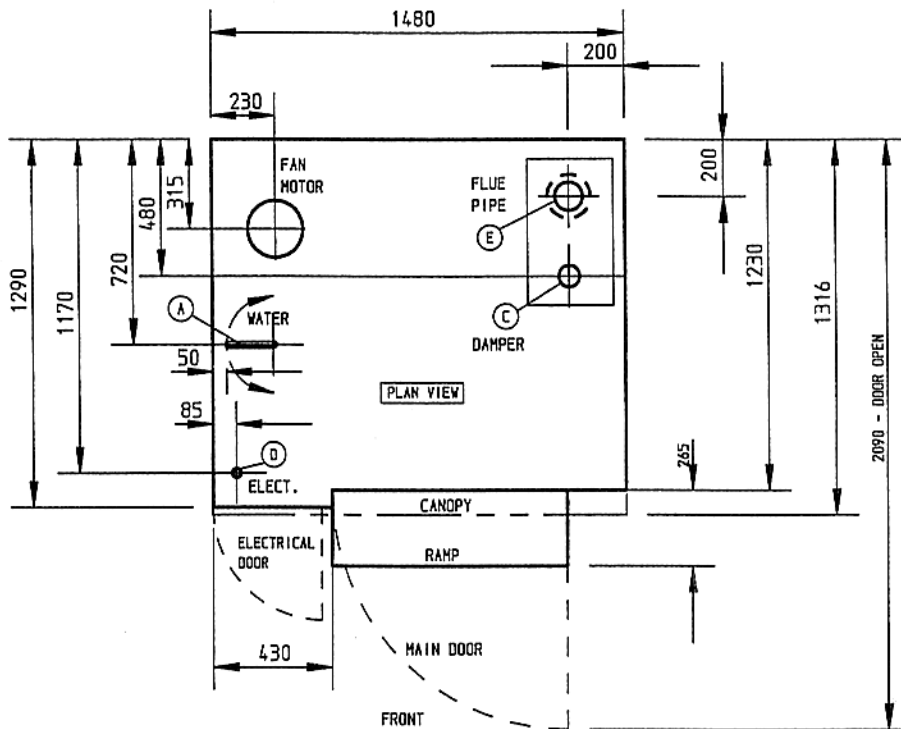
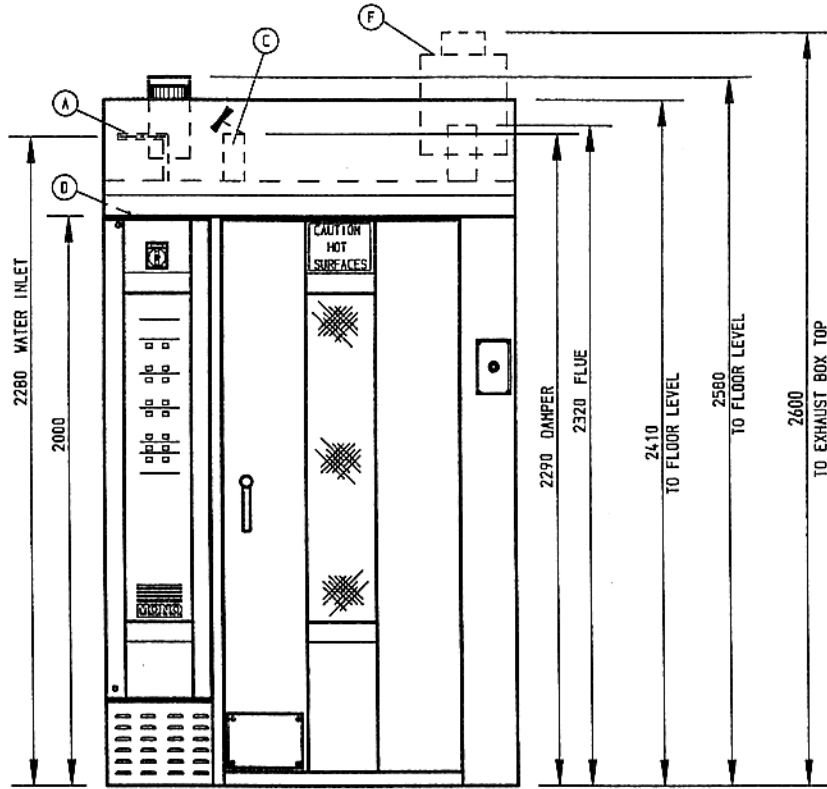
All reference to RIGHT HAND ovens means that main door is hinged on the right and the control panel is on the left.



1.0 INTRODUCTION

- The **MONO MXn** 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: 415V. 3pH. 50Hz.



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: | 415V 3pH 50Hz mains, 24V DC auxiliaries. |
| NOISE LEVEL: | Less than 85 dB. |

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.

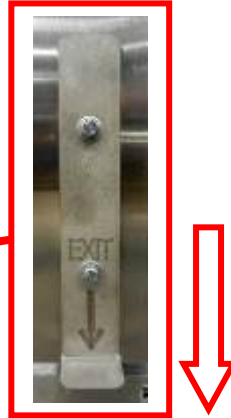
- 1 This oven is designed for baking bread, confectionery and savoury bakery products. Do not use the oven for baking other items without consulting the manufacturers.
- 2 All repairs and maintenance of electrical units should only be carried out by authorized electricians.
-  3 Electrical panels and 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 MXn** 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.

| 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 | | Exhausts into exhaust box |
| D | Main electrical supply | 50KW 3 Phase & Neutral | Connection by client |
| E | Main vent pipe | | Exhausts into exhaust box |
| F | Exhaust Box | 150mm (6") Outlet diameter | Connection by client |

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:-
4 off 25mm² - Coloured
1 off 25mm² - Earth } In flexible conduit

MAINS CONNECTIONS
(RIGHT HAND OVEN SHOWN)

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

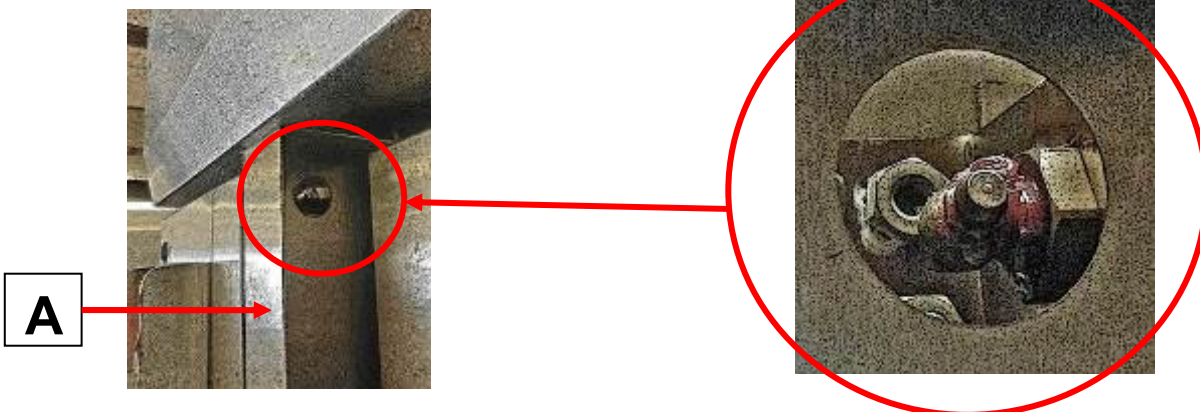
The oven has been designed with sealed components, which are used wherever possible. The minimum of routine cleaning is required, but it is essential that it be properly and regularly carried out.

- 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.



9.0 OPERATING CONDITIONS

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

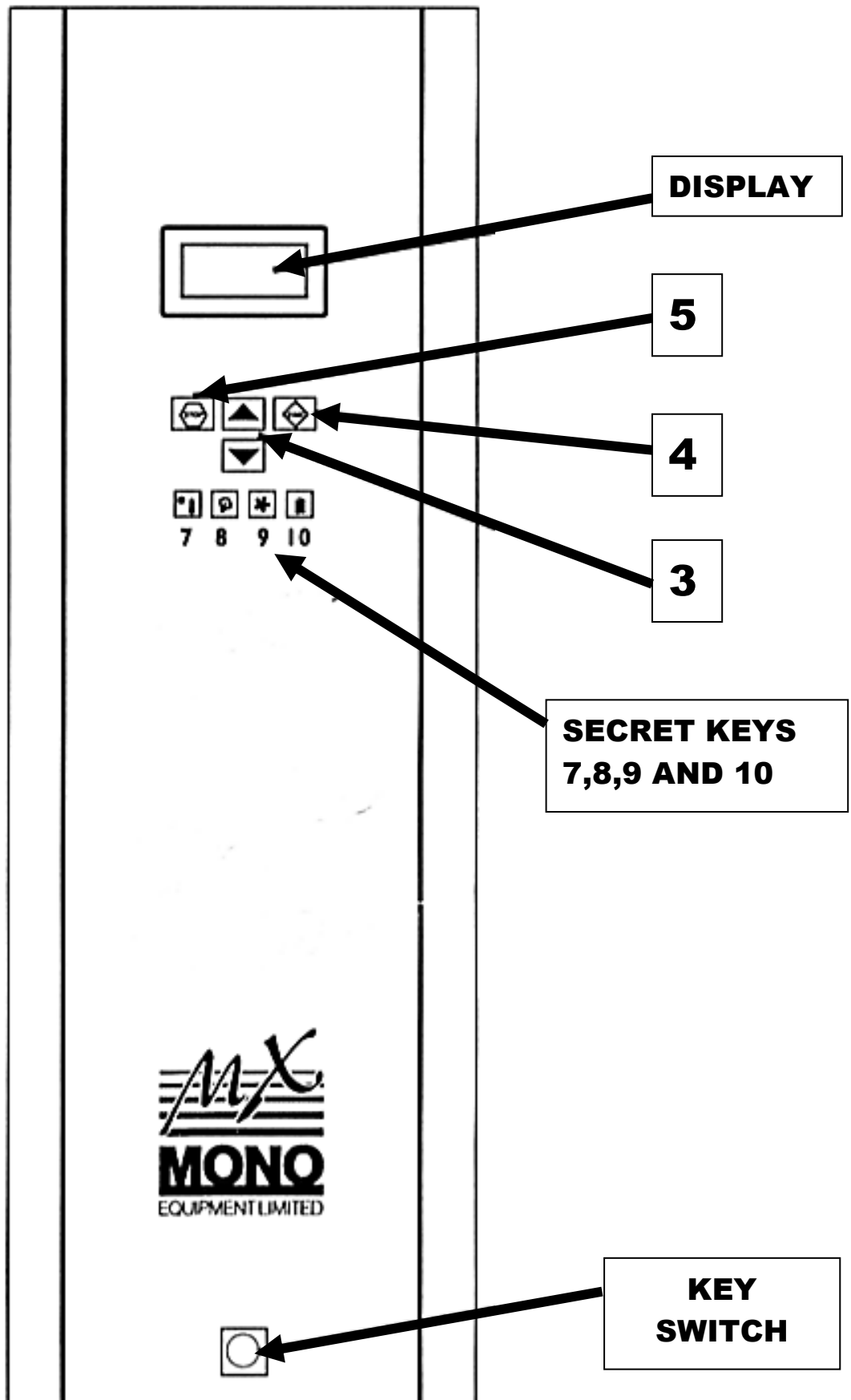
10.0 GENERAL MAINTENANCE

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

(USE WITH FOLLOWING SECTIONS)

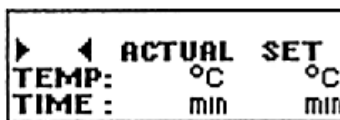


11.0 PROGRAMMING INSTRUCTIONS

A. SETTING PARAMETERS

ENSURE ISOLATOR SWITCH IS ON

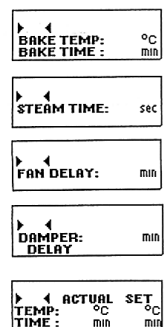
1. Switch power on using start button (4)
2. Turn programming key (6) clockwise 90 degrees to illuminate “secret till lit” programming buttons (7,8,9,and 10). Press start (4)
3. Select program number 0-99 using up/down keys (3). Display will show actual and set parameters,
4. Press the first programming button (7) which relates to TEMP and TIME



5. Move flashing highlight to the required selection using up/down keys (3).
6. Press start (4) to stop highlight flashing.
7. Using up/down keys (3) select required value.
8. Press start (4) once more to make highlight flash.
9. Any other parameters on this screen requiring programming are done so by following steps 5 to 8. (for program title see the next section).
10. Once required inputs have been completed press stop (5) to finish.
11. Repeat 4 to 10 using buttons 8,9 and 10 if required.

Button usage: -

- | | |
|---|----------------------------|
| Button 7 = Bake duration. | (minutes) |
| Temperature. | (degrees C) |
| Button 8 = Steam duration. | (seconds) |
| Button 9 = Delay before fan starts. | (minutes—usually set at 0) |
| Button 10 = Delay before damper opens. | (minutes) |



12. Press stop (5) to save programs and again to return to the main menu.
13. Return key to the original position.(KEEP KEY SAFE AT ALL TIMES).

All programs are now saved even if the oven is switched off.
To turn the oven off always use button (5) **DO NOT USE MAIN ISOLATOR** .

B. PROGRAMMING BAKE TITLE

1. When program number is selected , press start (4) to move to individual parameter view screen.
2. Press any "secret till lit" button (7,8,9 or 10)
3. Move flashing cursor to the top of the screen using adjustment button (3)
4. Press start (4) to obtain character file.
5. Move cursor to extreme left of input field using start button (4).
6. Choose required character for input by moving the cursor using buttons 7,8,9,and 10.
7. Press start (4) to input chosen character.
8. Repeat 5 and 6 until program title is complete.
9. Press stop (5) to return to the individual parameters screen.
10. Press stop (5) to return to the bake parameters screen.
11. Press stop (5) to save.
12. Press stop (5) to return to main menu.

NOTE

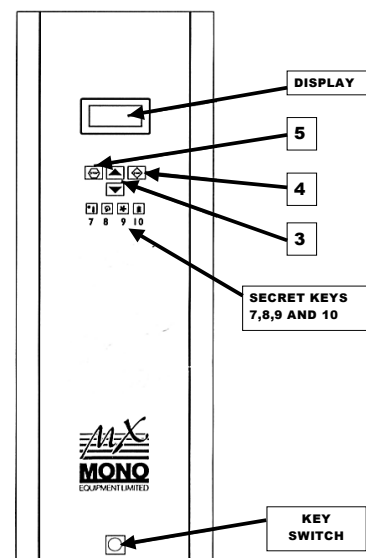
Should an error be made when inputting, press stop (5) then start (4). Move cursor to required character to change by pressing start (4)

C. REAL TIME CLOCK SETTING

1. Press start (4)
2. Press and hold up/down arrow keys(3) together, (up first) for about 5 seconds until the display changes to clock settings.
3. A censor will flash for day 1 (Sunday)
Use the up/down keys(3) to select the required field (DAY,HRS,MINs)
Press start (4) to select.
4. Use up/down keys(3) to alter the value
5. Press start (4) to confirm entry then move on to next field.

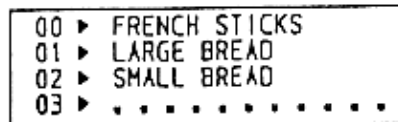
D. 7 DAY TIMER SETTING

1. Proceed as 1.,2.,3. in section C above.
2. A censor will flash for day 1 (Sunday)
Use the up/down keys(3) to select the required field :-
DAY
ON TIME HRs - ON TIME MINs
OFF TIME HRs – OFF TIME MINs
Press start (4) to select.
3. Use up/down(3)keys to alter the value
(TO DISABLE TIMER ENTER 00:00)
4. Press start (4) to confirm entry then move on to next field.
5. When every day has been set, use the stop button (5) to exit completely out of the program.



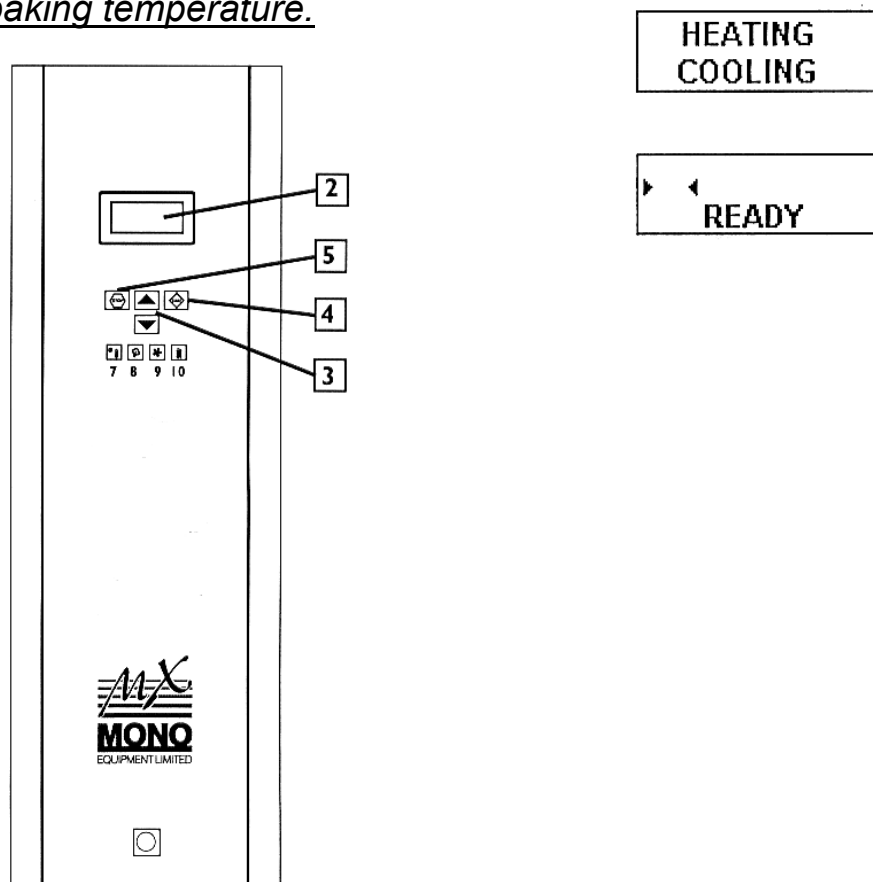
12.0 OPERATING INSTRUCTIONS ---

- 1 Ensure door is fully closed
- 2 Switch oven on using start button (4)
- 3 Select programme required on visual display using up/down arrow keys (3).



- 4 Press start button (4) to warm up oven for programme selected.

Never place product directly into cold oven, always preheat to the given baking temperature.



- 5 When display (2) reads **READY** , open door, load rack and close the door.

Do not have the door open longer than absolutely necessary.

- 6 Press start button (4)
7. At the end of the bake time, a buzzer will sound.
This will stop if stop button (5) is pressed.

IMPORTANT WARNING



STAND CLEAR OF THE OVEN WHEN OPENING THE DOOR TO AVOID SCALDING VAPOURS.

- 8 Open door and unload oven
- 9 **Close door to preserve heat.**
- 10 Repeat 2 – 9 as required
- 11 To turn oven off at the end of use, press stop button (5)

DO NOT USE ISOLATOR SWITCH TO TURN OVEN OFF.

This will tell the oven to warm up from cold so baking will not be able to take place for up to 45 minutes.

NOTE

Programmes using steam cannot be stopped and started again half way through a bake. Once steam has been used the oven will not steam again for a set time.

As a guide one second of steam means you cannot steam again for one minute.

i.e. 10 seconds steam = 10 minutes before another steaming can take place.

13.0 ELEMENT BANK REMOVAL

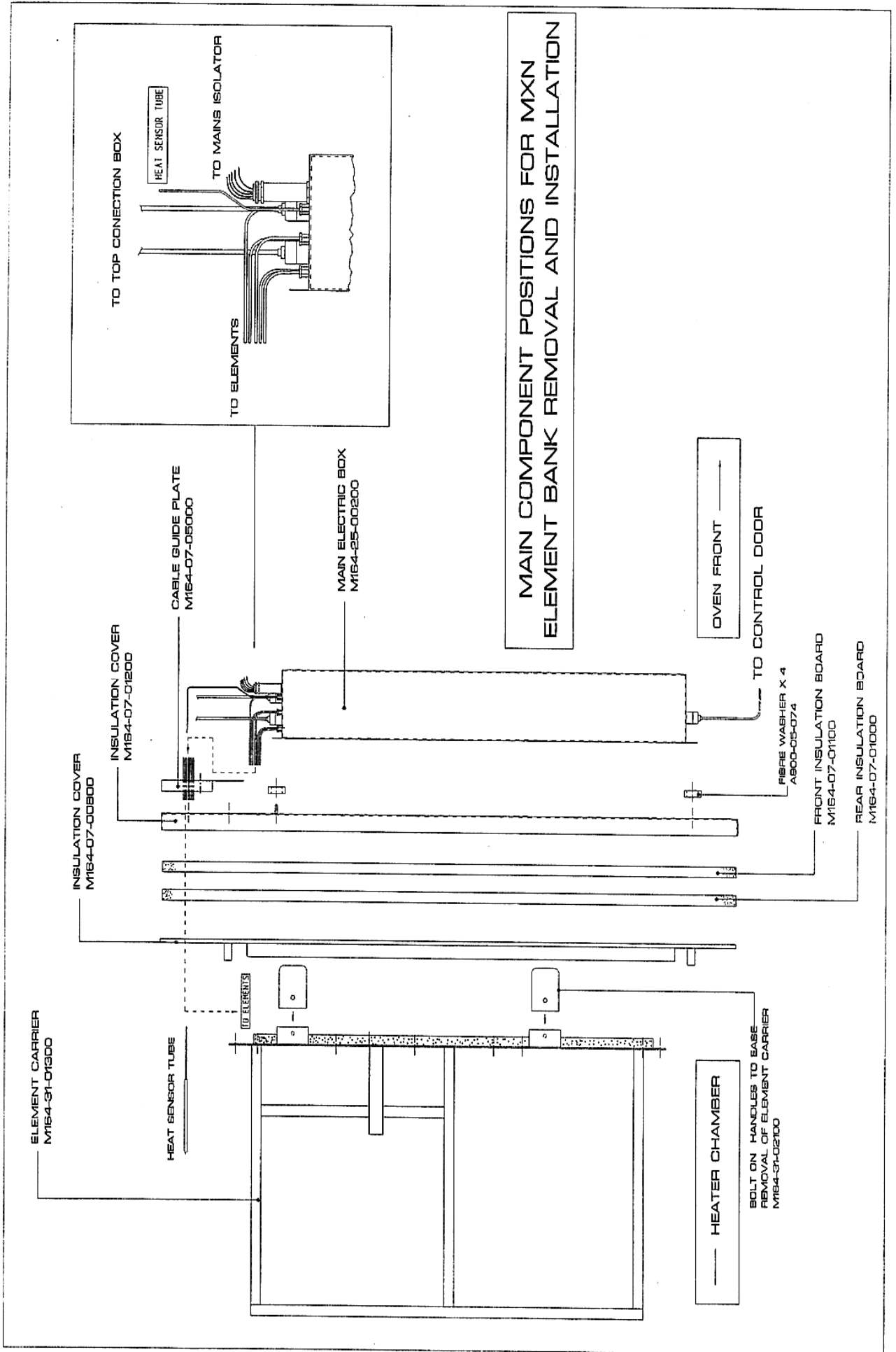
(SEE DRAWINGS ON NEXT PAGES)

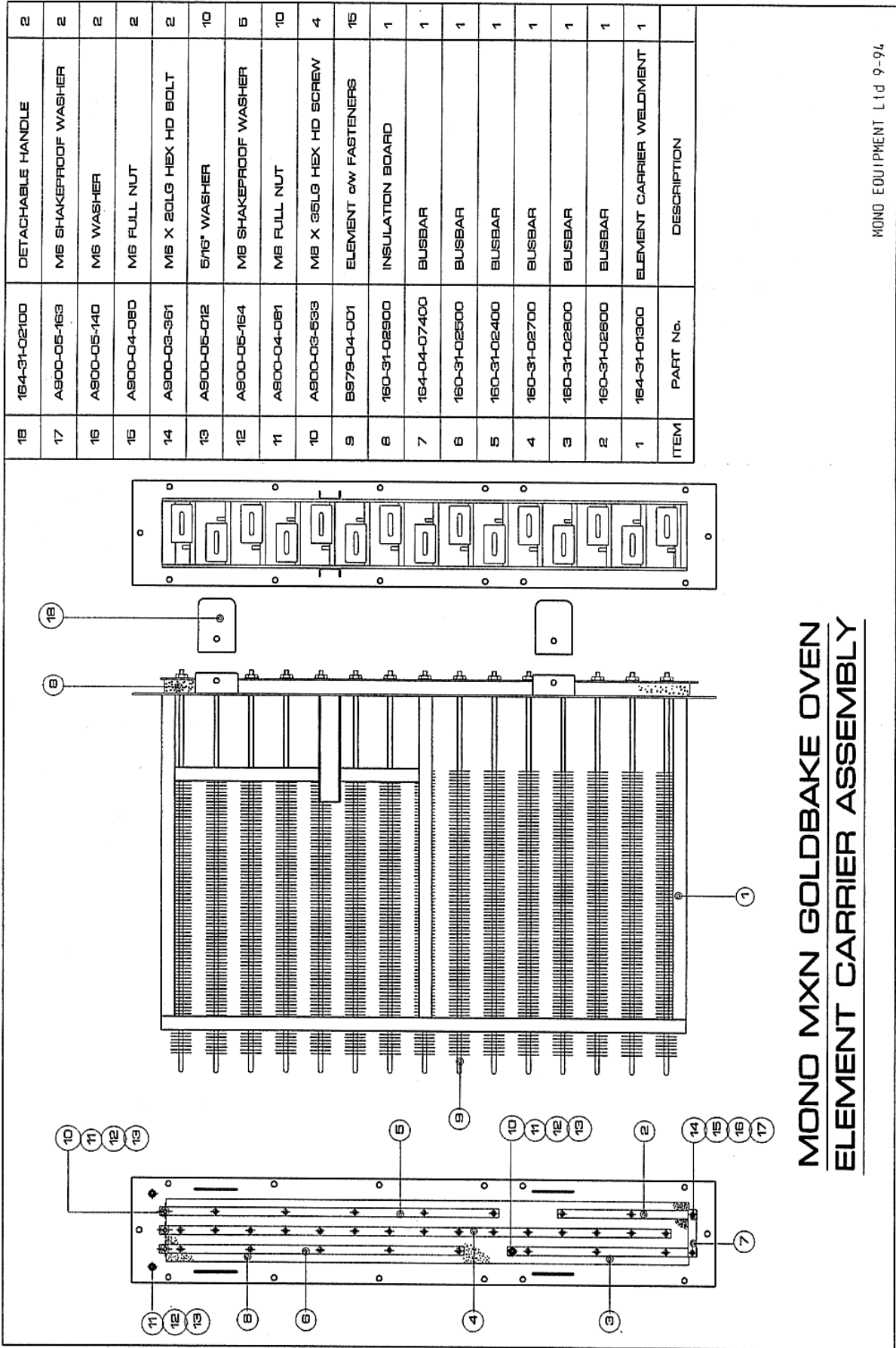


- 1 Ensure oven is **DISCONNECTED** from power supply.
*****(NOT ONLY OVEN ISOLATOR)*****
- 2 Disconnect two plug connectors from sockets at the top of main electrical box and one plug connector from the bottom of the box.
- 3 Disconnect element supply cables from inside the box.
- 4 Disconnect cables 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.
- 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.

14.0 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 EQUIPMENT Ltd 9-94

**MONO MXN GOLDBAKE OVEN
ELEMENT CARRIER ASSEMBLY**

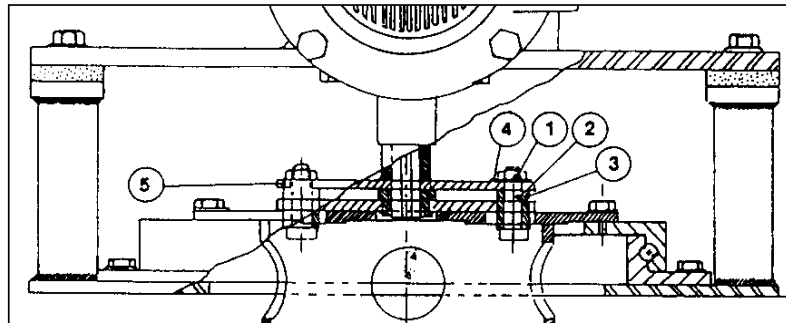
15.0 MAINTENANCE

(Rack Drive Bushes / Seals / Drive)



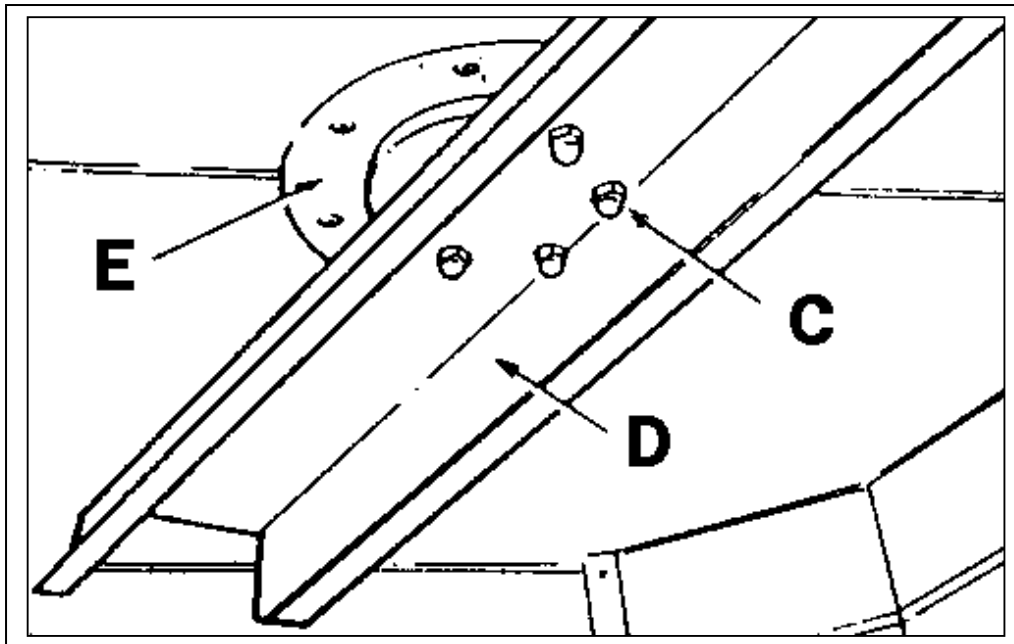
WARNING: KEEP CLEAR OF LARGE FLUE PIPE ON ROOF WHEN DOING ANY MAINTENANCE ON TOP OF OVEN. VERY HOT AIR IS EJECTED.

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



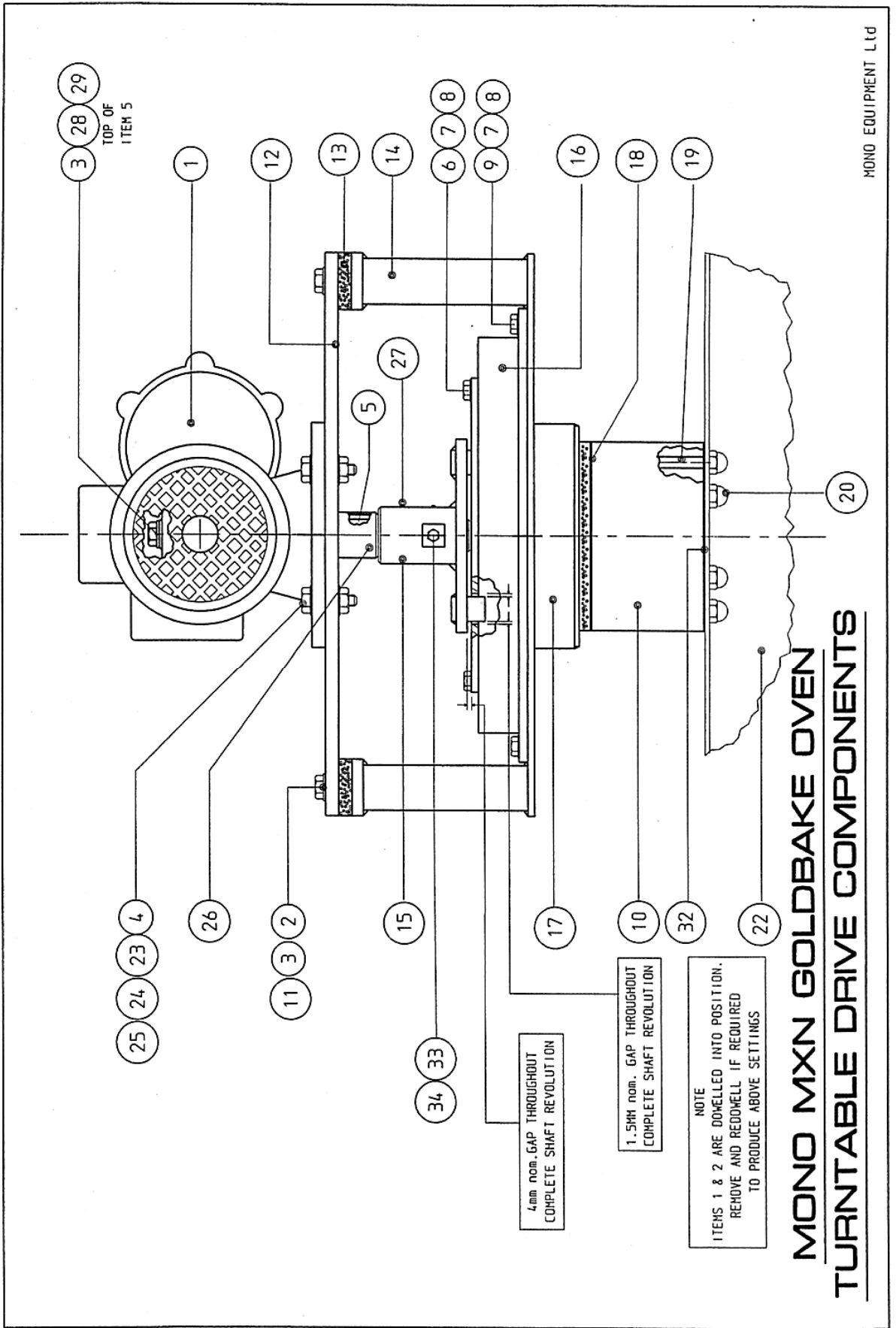
- 1 Isolate the oven at mains. Open electrical panel and isolate rack drive motor.
- 2 Remove restraining strap on top of gearbox and draw shaft upwards until drive spider bushes clear the driven plate.
- 3 Remove nuts 1, bolts 2, and bushes 3 from spider 5.
- 4 Replace bushes and reinstall in reverse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

B....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 coiled seal from within the cavity thus exposed and carefully coil in the new seal, ensuring that it is not distorted.
- 3** Refit the ring plate and the rack hanger.



MONO MXN 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 |

16.0 SPARES AND SERVICE

If a fault arises, please do not hesitate to contact MONO's
Customer Service Department.

MONO Equipment

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

Tel. 01792 561234 Fax. 01792 561016

Email: mono@monoequip.com

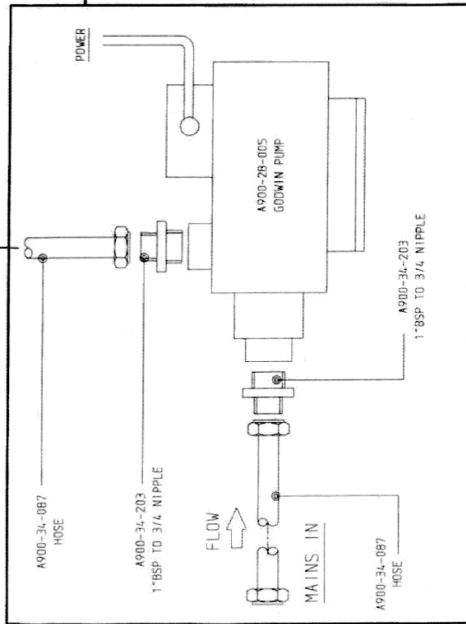
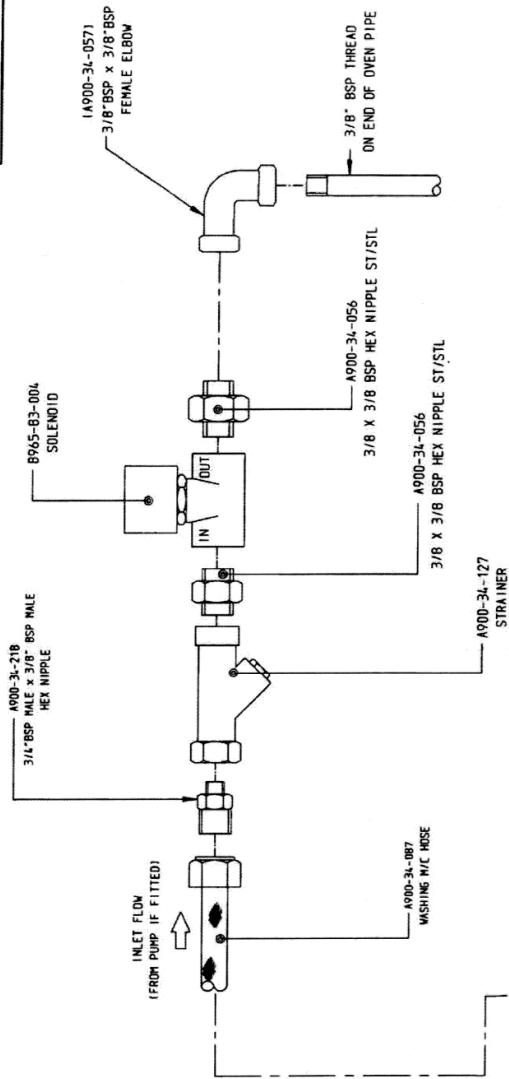
www.monoequip.com



17.0 ELECTRICS (WITHOUT PUMP)

DO NOT SCALE - IF IN DOUBT ASK

ALL DIMENSIONS IN mm UNLESS OTHERWISE STATED



IF FITTED

SPARES KIT - M164-KSE010 (NO PUMP)

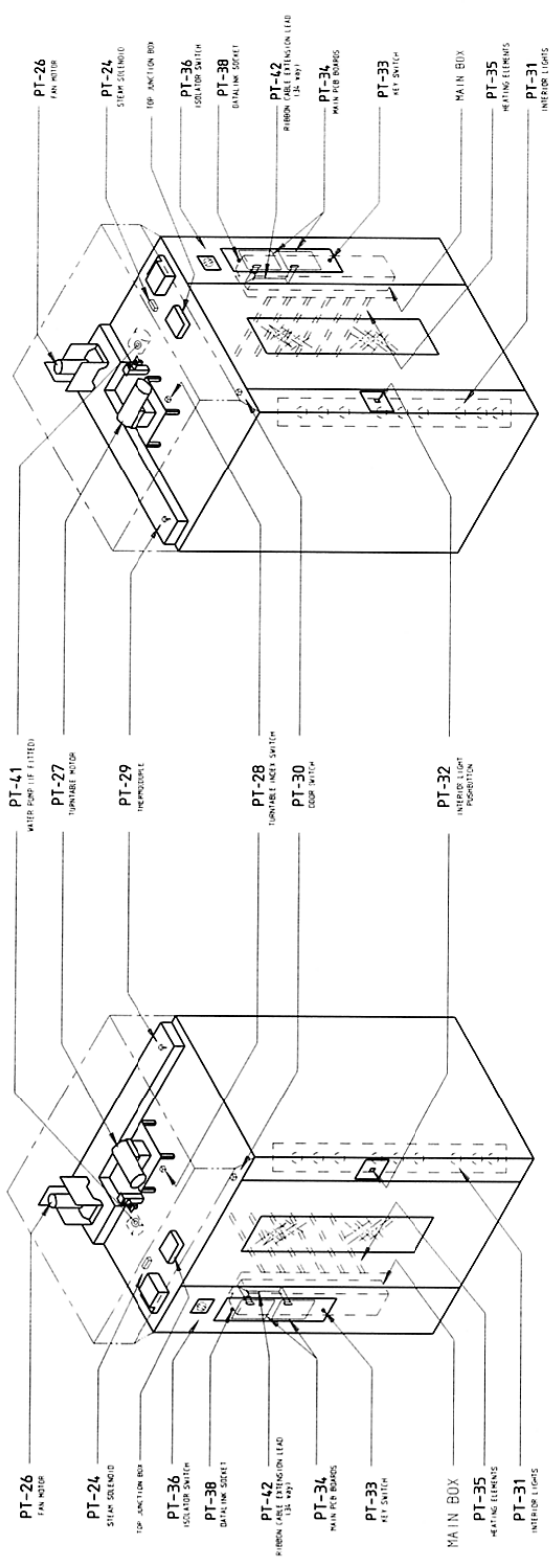
| | | | |
|--|------|-----------------------|--|
| C | JC | 14-02-18 | UPDATED_A900-34-056 NIPPLE ST/STL WAS A900-34-061 MX-006-17-18 |
| B | RAC | 19-04-11 | FLOW VALVE REMOVED |
| A | S.P. | 11-2-98 | PIPE FITTINGS CHANGED |
| REV | SIG | DATE | REVISION |
| | | | MONO EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SWANSEA, WYVERN, SA5 8AF, WEA. TEL: (01792) 861284 FAX: (01792) 861016 |
| TITLE: STANDARD MX OVEN WATER INLET COMPONENTS (PUMP IF FITTED) | | | ECN NO. 069/11 06/43 |
| MAT'L: --- | | DRAWN: RAC | PURCHASE ORDER NO. --- |
| MAT'L QTY: --- | | NO. REQ: --- | WORKS ORDER NO. --- |
| FINISH: --- | | DATE: 16-12-96 | DRAWING NO. M164-01-02300 |
| --- | | DRAWING SCALE: NTS | REV: [] |
| --- | | SIZE: A3 | --- |

REMOVE ALL BURRS & SHARP EDGES - ON SHEET METAL PARTS EXTERNAL CORNERS TO BE SAFETY RADIUSED 2mm UNLESS STATED OTHERWISE
 SURFACE MACHINING. $\frac{3}{4}$ COARSE FINISH. $\frac{3}{4}$ FINE FINISH. $\frac{3}{4}$ GROUND FINISH
 OPEN TOL. 150 & BELOW ± 0.15 OVER 150 ± 0.25 DECIMAL DIMS. 75 & BELOW ± 0.25 TO 300 ± 0.4 300 TO 600 ± 0.5 OVER 600 ± 1.0
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IF IN ANY DOUBT - ASK

R.H. OVEN

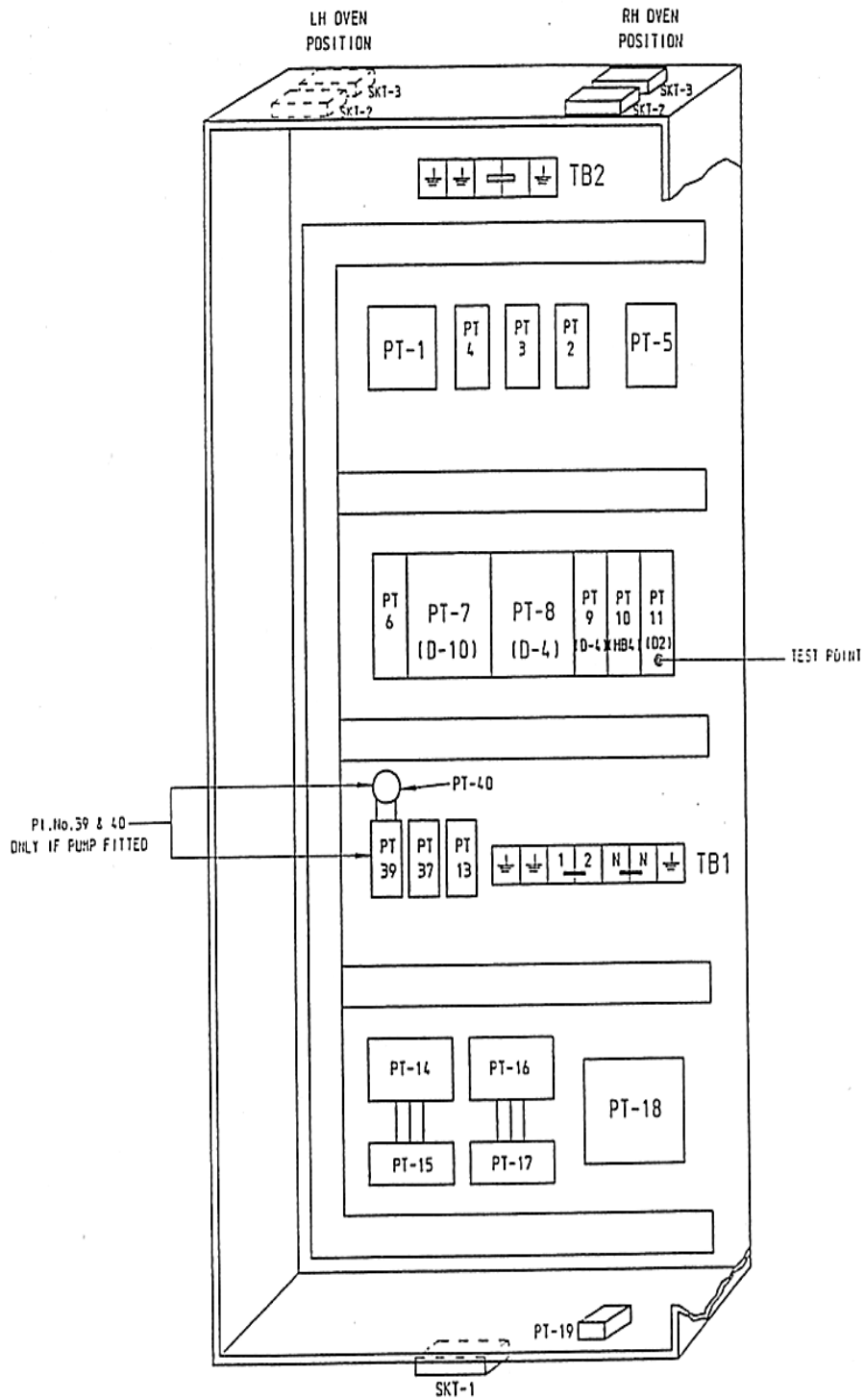
L.H. OVEN



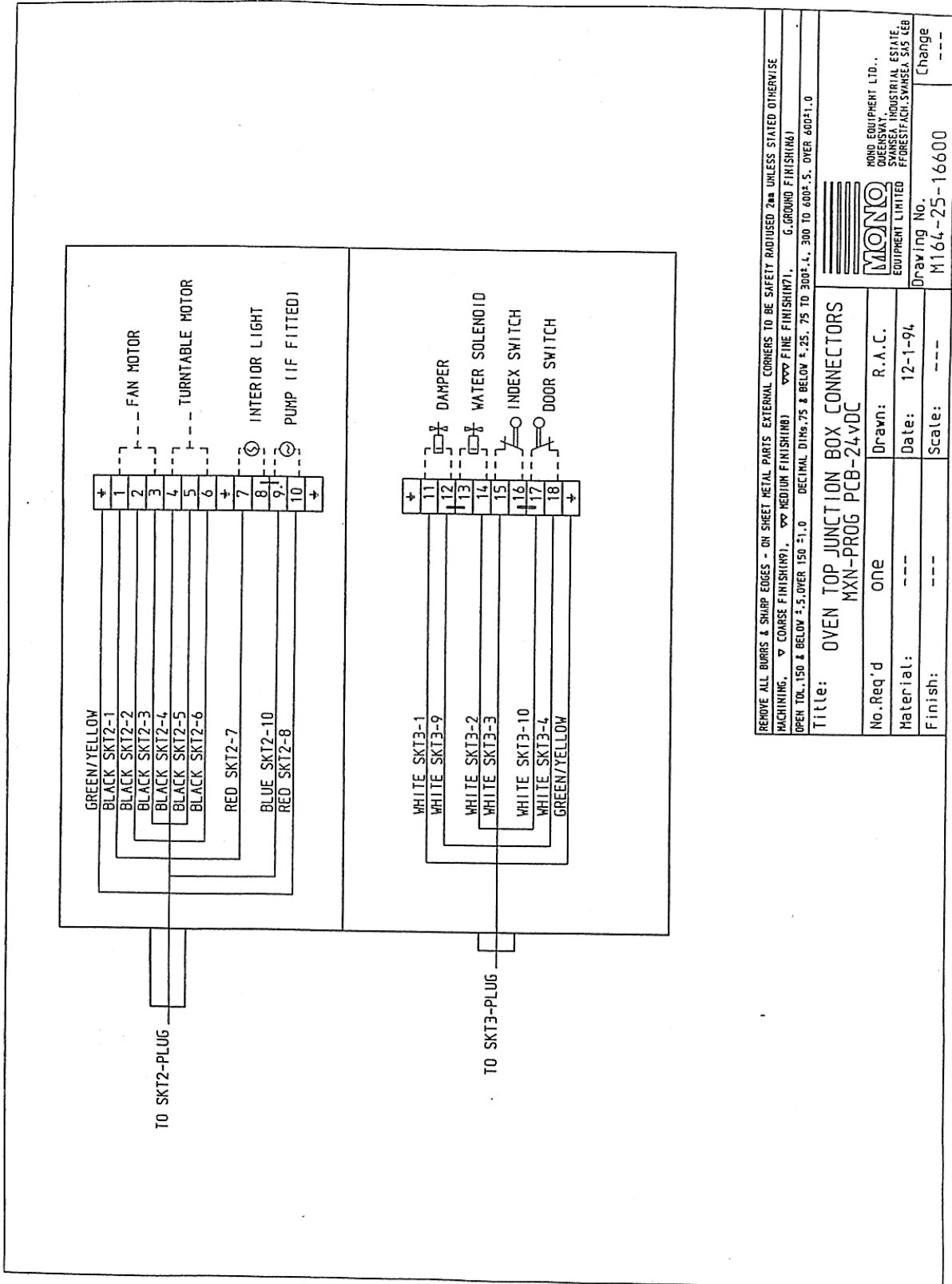
| | | | | |
|---|-----|----------|---|---------|
| E | JC | 30-9-00 | SEE SHEET 2 | 09/73 |
| D | JC | 8-9-98 | SEE SHEET 2 | 07/98 |
| C | S.P | 16-1-98 | SEE SHEET 2 | 06/31 |
| B | RAC | 7-1-97 | TOP JUNCTION BOX ADDED TO MATCH FAULT CHART. | 02/20 |
| A | S.P | 27-11-96 | PART 34 (P.C.8) WAS 8705-93-007 & PT 42 ADDED | 01/59 |
| REV | SIG | DATE | REVISION | ECN NO. |
| <p>SWANSEA IND EST. MONO FORESTFACH. SWANSEA, SA5 4EE. TEL: (01792) 561234 EMPHALL LANE, L10 6X (01782) 561016 Email: 100432.505@compuserve.com</p> | | | | |
| <p>TITLE: MXN MAIN COMPONENTS LAYOUT ALL VERSIONS</p> | | | | |
| <p>DRAWN: RAC/JC ELECTRICALLY APPROVED BY:- P. BOYLES 9-1-98</p> | | | | |
| <p>DATE: 25-10-95 DRAWING NO. M164-25-17100 SHIT 1 of 2 REV: E</p> | | | | |
| <p>4.15V 3PH 50HZ</p> | | | | |

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MAIN ELECTRICAL BOX LAYOUT FOR MXN SMARTBAKE



**OVEN TOP JUNCTION BOX CONNECTORS FOR RH MXN SMARTBAKE
(Without Pump)**



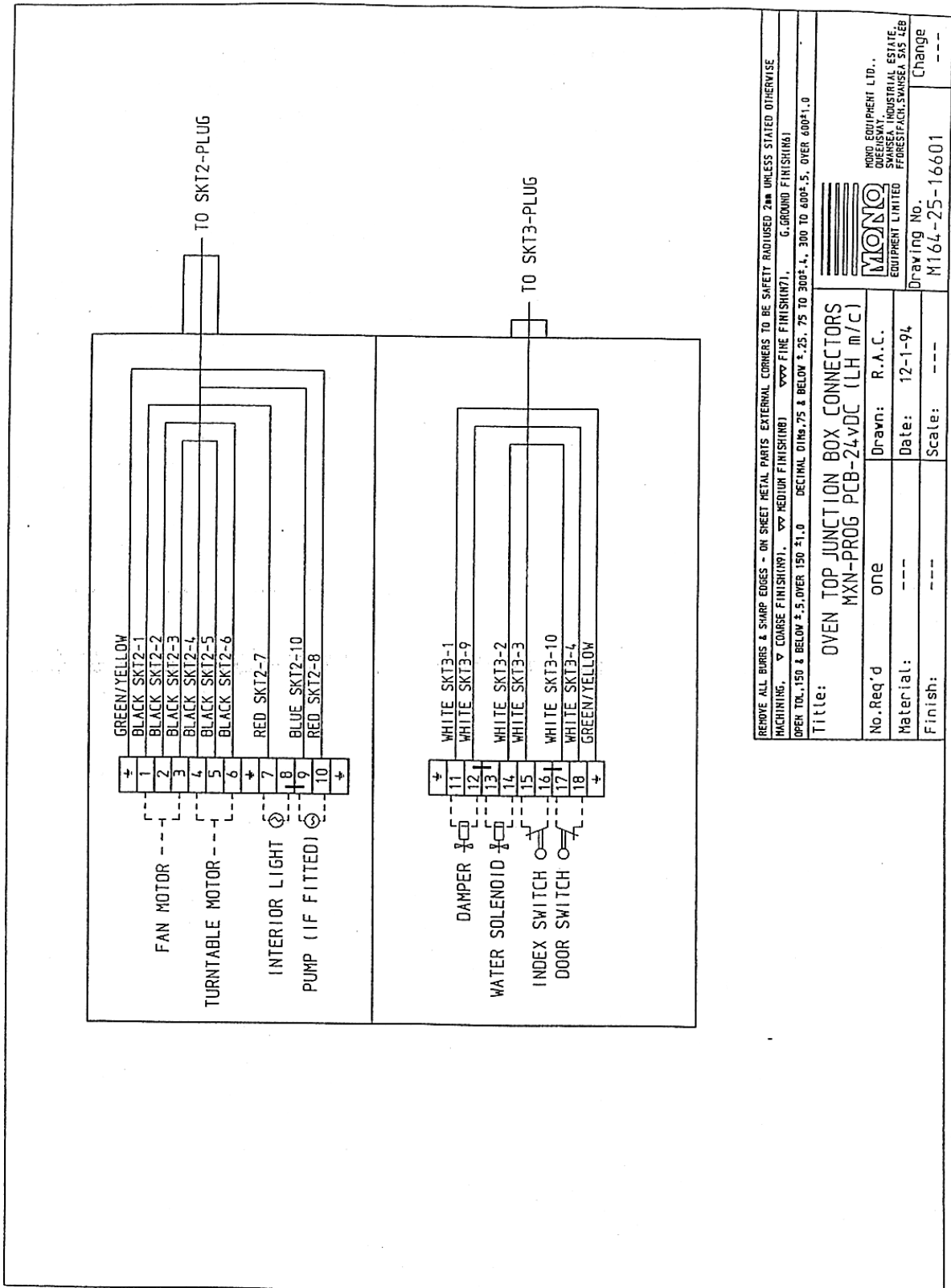
REMOVE ALL BURRS & SHARP EDGES - ON SHEET METAL PARTS EXTERNAL CORNERS TO BE SAFETY RADIUS 2mm UNLESS STATED OTHERWISE
MACHINING, ▽ COARSE FINISHING, ▽ MEDIUM FINISHING, ▽ FINE FINISHING, ▽ GROUND FINISHING
OPEN TOL. 150 & BELOW ±.5, OVER 150 ±1.0 DECIMAL DIMS. 75 & BELOW ±.25, 75 TO 300 ±.4, 300 TO 600 ±.5, OVER 600 ±1.0

Title: OVEN TOP JUNCTION BOX CONNECTORS
MXN-PROG PCB-24VDC

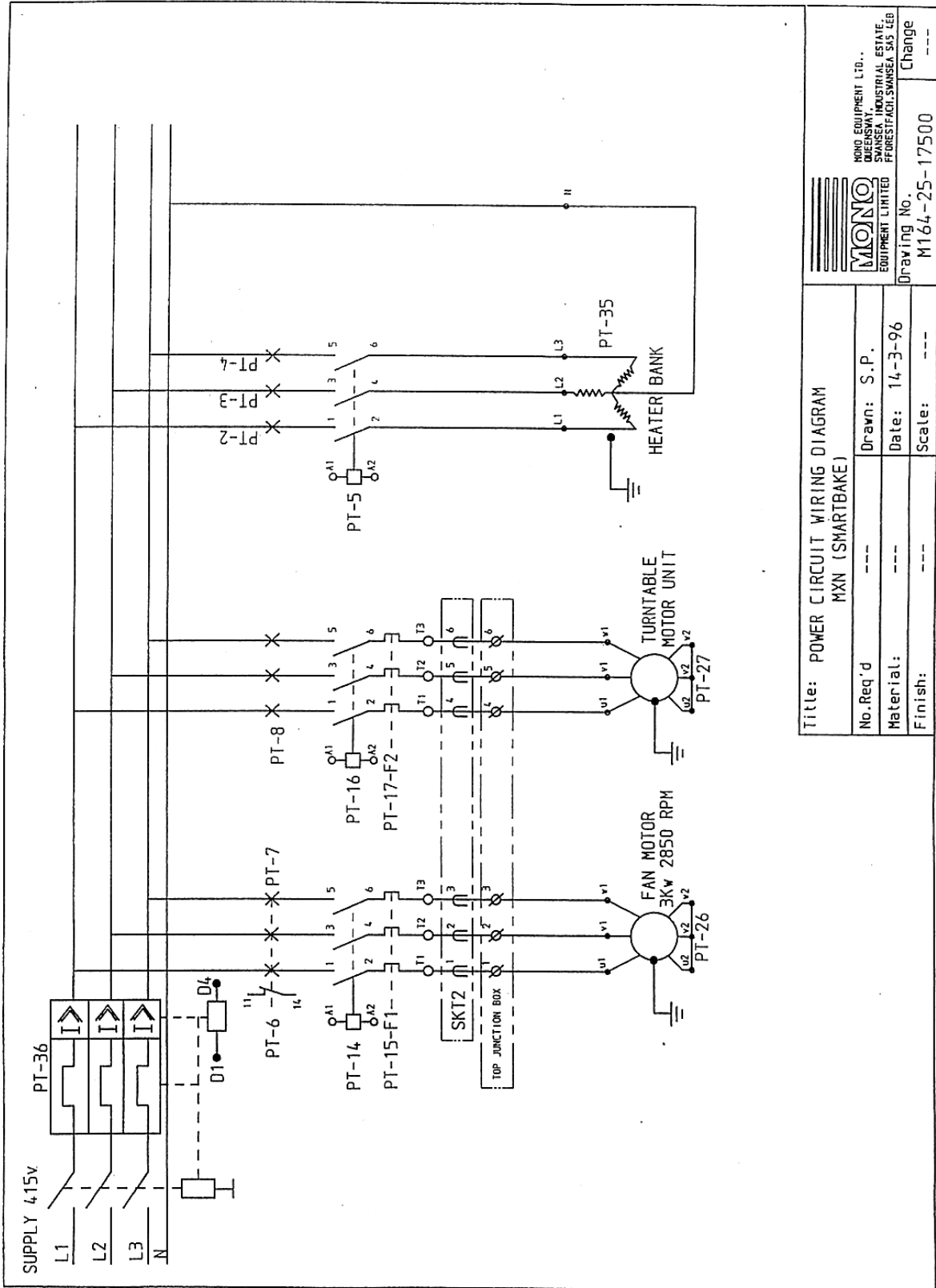
| | | | |
|---------------|-----|--------|---------|
| No. Req'd | ONE | Drawn: | R.A.C. |
| Material: | --- | Date: | 12-1-94 |
| Finish: | --- | Scale: | --- |
| Drawing No. | | | Change |
| M164-25-16600 | | | --- |

MONO
MONROE EQUIPMENT LTD.,
QUEENSWAY INDUSTRIAL ESTATE
FFRISTFACH, SWANSEA S15 1EG

**OVEN TOP JUNCTION BOX CONNECTORS FOR LH MXN SMARTBAKE
(Without Pump)**



**POWER CIRCUIT WIRING DIAGRAM FOR MXN SMARTBAKE
(Without Pump)**



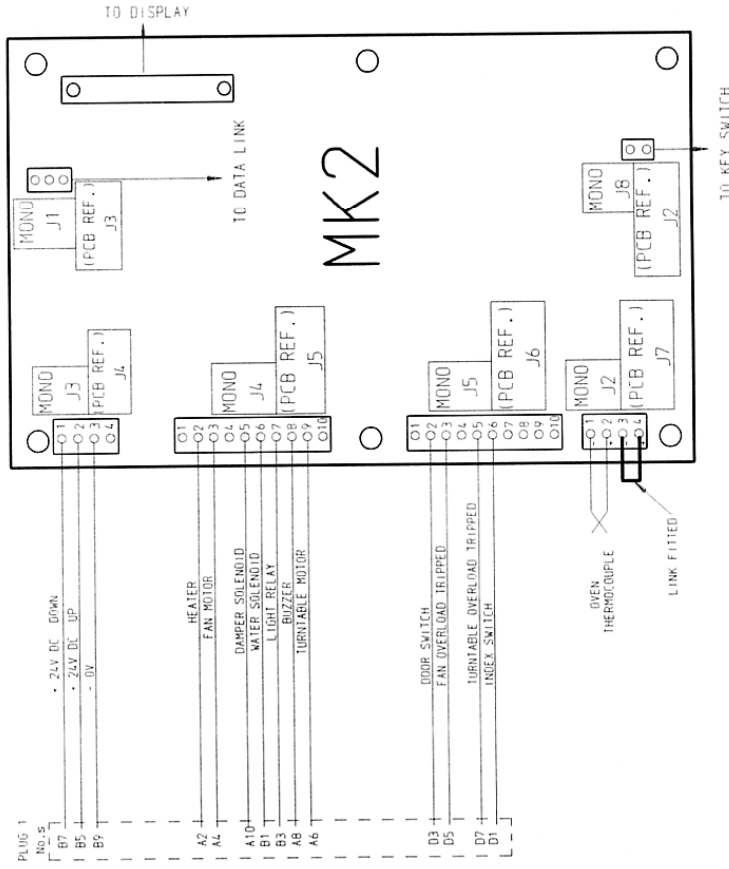
Title: POWER CIRCUIT WIRING DIAGRAM
MXN (SMARTBAKE)

| | | | |
|---------------------------|-----|---------------|--------|
| No. Req'd | --- | Drawn: S.P. | Change |
| Material: | --- | Date: 14-3-96 | --- |
| Finish: | --- | Scale: --- | --- |
| Drawing No. M164-25-17500 | | Change --- | |



MONO EQUIPMENT LTD.,
QUEENSWAY,
SWANSEA INDUSTRIAL ESTATE,
FFORESTFACH, SWANSEA SA5 4EB

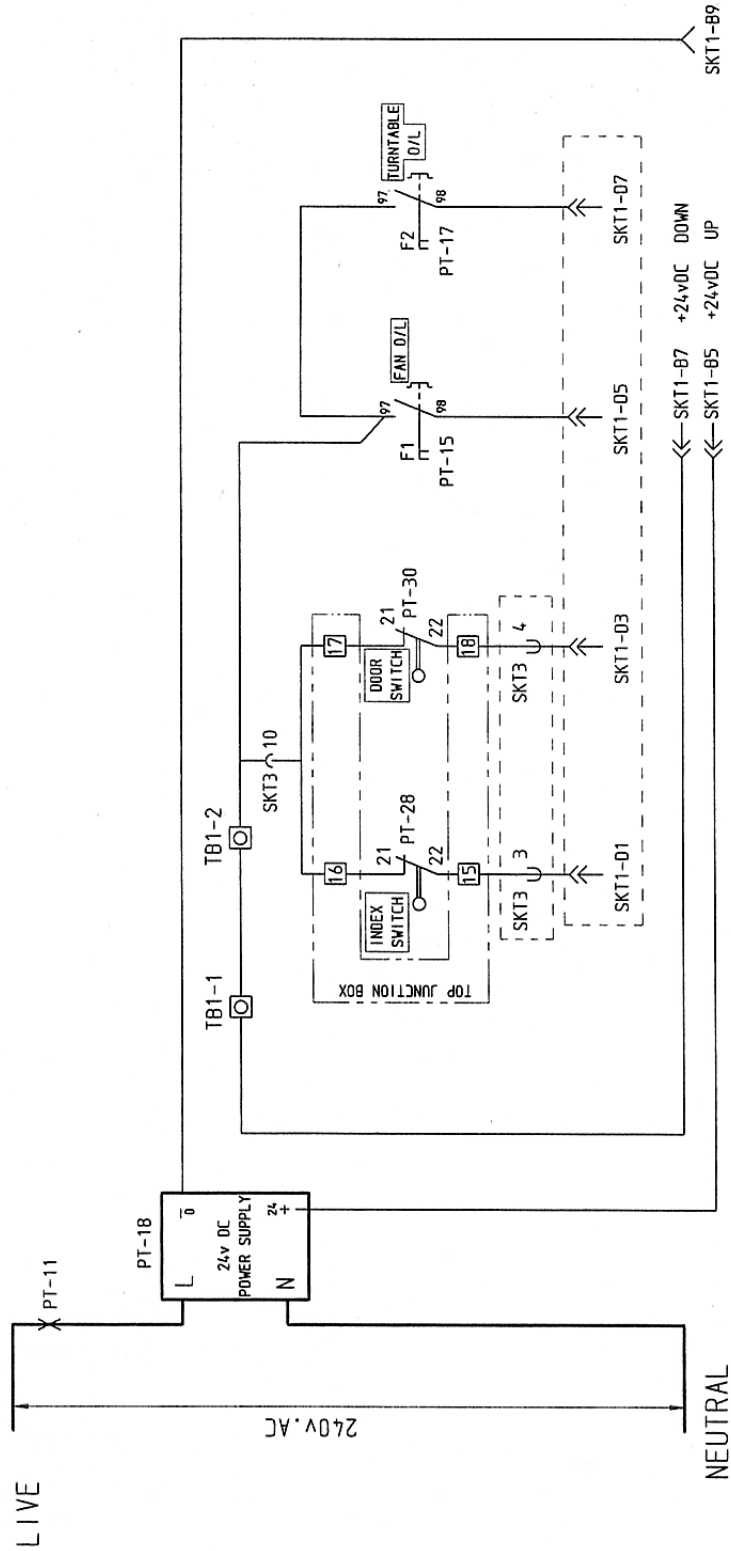
IF IN ANY DOUBT - ASK



| | | | | | |
|---|-----|---------|--|-------|---------|
| A | JC | 22-2-01 | RE-ARRANGE POWER CIRCUIT WIRES TO PCB | 14/19 | ECN NO. |
| REV | SIG | DATE | REVISION | | |
| <p>SWANSEA INDUST. FORESTFACH, SWANSEA, SA5 4EB. TEL: (01792) 561234 EQUIPMENT FAX: (01792) 561016 Email: 100432.505@compuserve.com</p> | | | | | |
| TITLE: | | | MK2 SMARTBAKE P.C.B. CONNECTIONS (24v DC CONTROL CIRCUIT WITH MCCB) | | |
| DRAWN: | | | J.C. | | |
| ELECTRICALLY APPROVED BY: | | | P. BOYLES | | |
| DATE: | | | 15-5-97 | | |
| DRAWING NO. | | | M164-25-20700 | | |
| REV: | | | A | | |

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IF IN ANY DOUBT - ASK



| | | | | |
|---|-----|---------|--|---------|
| B | JC | 22-2-01 | RE-ARRANGE POWER SUPPLY WIRES TO PCB | 14/19 |
| A | RAC | 7-1-97 | VARIOUS CORRECTIONS TO MATCH FAULT CHART | 02/20 |
| REV | SIG | DATE | REVISION | ECN NO. |
| <p>SWANSEA IND. EST. 15 SPYFACI, SWANSEA, SA5 4EB. MONO EQUIPMENT TEL: (01792) 581234 FAX: (01792) 561016 Email: 100432.505@compuserve.com</p> | | | | |
| <p>TITLE: INPUT CIRCUIT SCHEMATIC DIAGRAM - MXN PROJ PCB - 24VDC</p> | | | | |
| <p>ELECTRICAL SPECIFICATIONS:- DRAWN: RAC ELECTRICALLY APPROVED BY:</p> | | | | |
| <p>DATE: 26-10-95 DRAWING NO. M164-25-16700</p> | | | | |
| <p>REV: B</p> | | | | |

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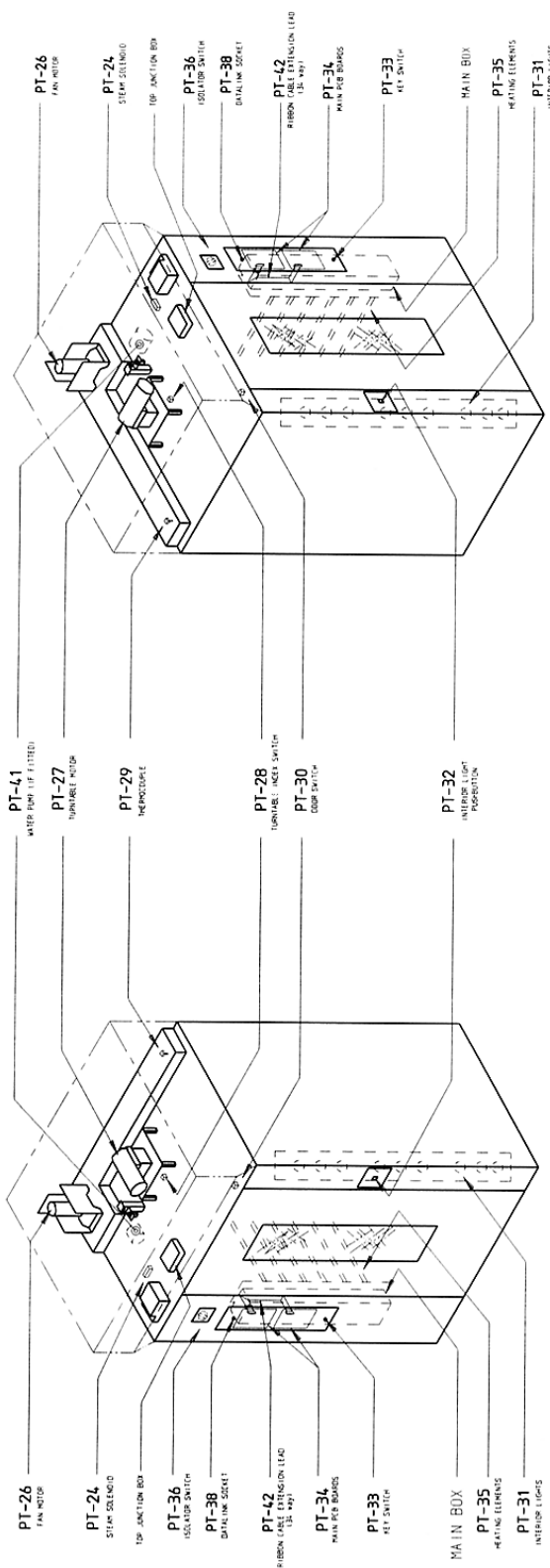


18.0 ELECTRICS (WITH PUMP)

IF IN ANY DOUBT - ASK

R.H. OVEN


L.H. OVEN



| | | | | |
|---|-----|----------|---|---------|
| E | JC | 30-9-00 | SEE SHEET 2 | 09/73 |
| D | JC | 8-9-98 | SEE SHEET 2 | 07/98 |
| C | S.P | 16-1-98 | SEE SHEET 2 | 06/31 |
| B | RAC | 7-1-97 | TOP JUNCTION BOX ADDED TO MATCH FAULT CHART. | 02/20 |
| A | S.P | 27-11-96 | PART 34 (P.C.B) WAS B705-93-007 & PT 42 ADDED | 01/59 |
| REV | SIG | DATE | REVISION | ECN NO. |
| SWANSEA IND. EST. FFORESTFACH, SWANSEA, GLOS. GLS. GL5 2EJ TEL: (01792) 561234 FAX: (01792) 561016 Email: 100432.505@compuserve.com | | | | |
| TITLE: MXN MAIN COMPONENTS LAYOUT ALL VERSIONS | | | | |
| ELECTRICAL SPECIFICATIONS:- DRAWN: RAC/JC ELECTRICALLY APPROVED BY:- P. BOYLES 9-1-98 | | | | |
| 4.15V 3PH 50HZ | | | | |
| DATE: 23-10-95 9-1-98 | | | | |
| DRAWING NO. M164-25-17100 REV: E | | | | |

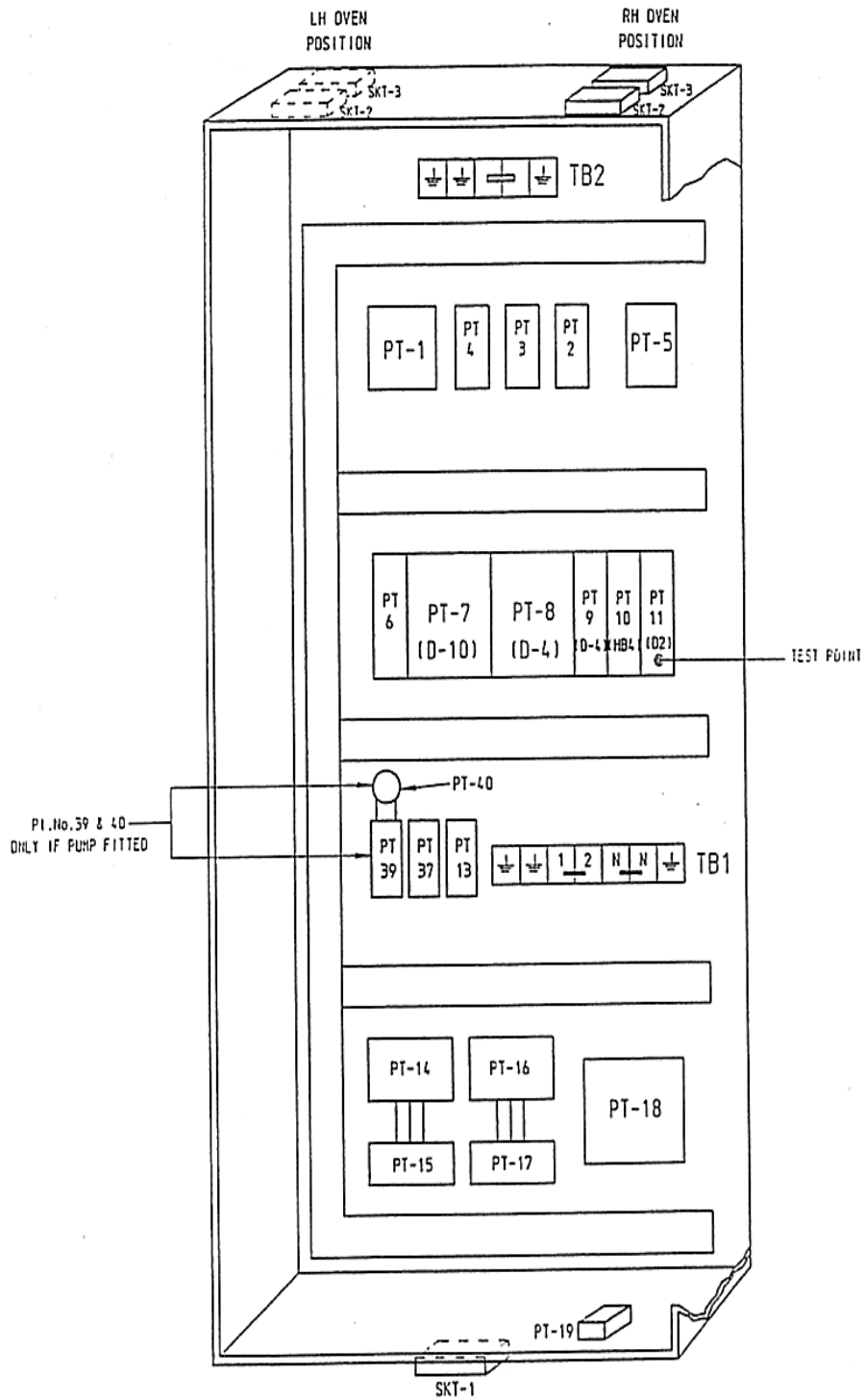
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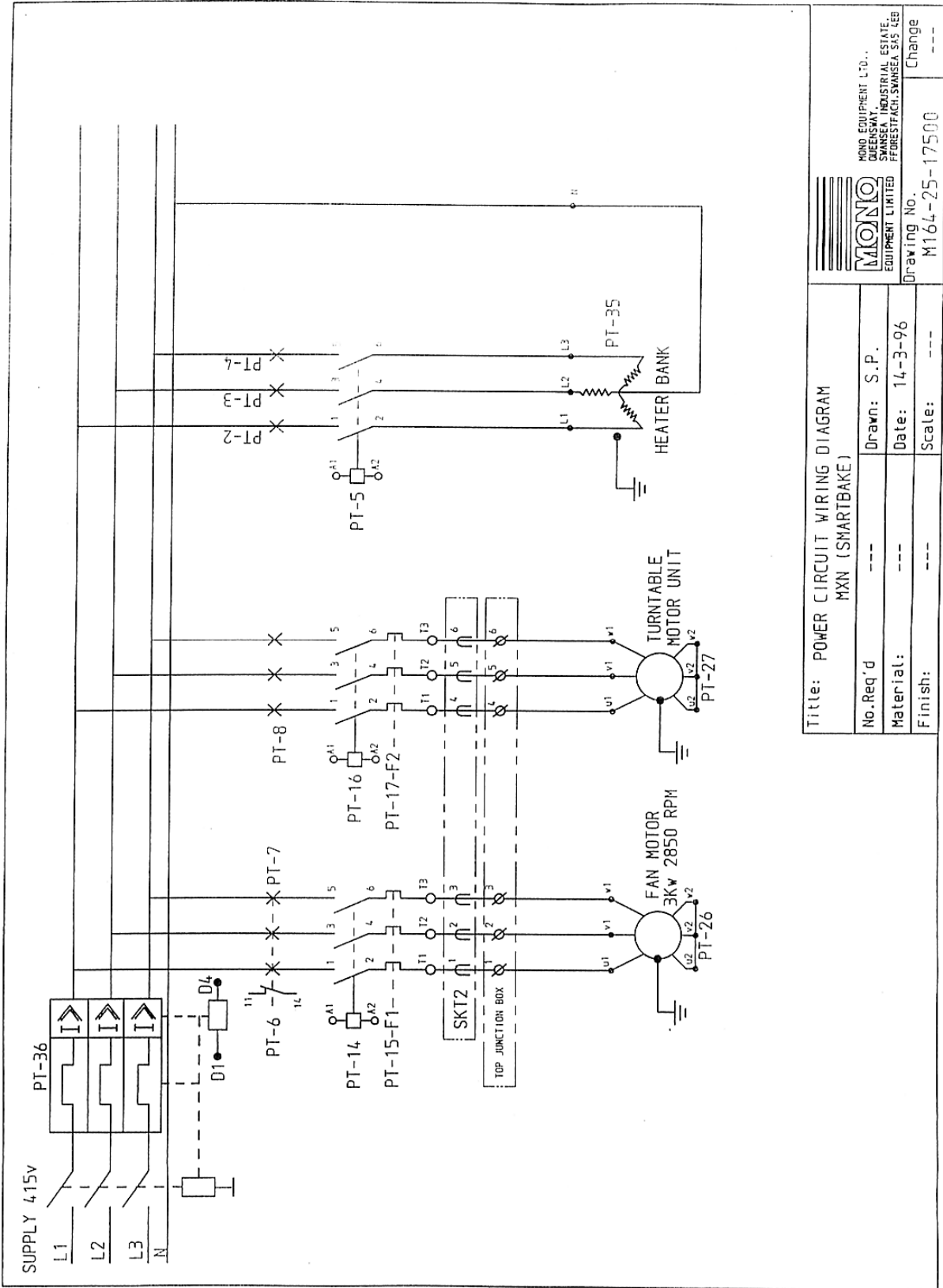
| DRAWING | | DESCRIPTION | | MONO | |
|---------|---|-------------|--|-------------|------|
| PT-Ref | | DESCRIPTION | | PART NUMBER | MONO |
| PT-1 | OVERHEAT THERMOSTAT | | | 8873-30-001 | |
| PT-2 | HEATING ELEMENT MCB. | | | 8872-22-074 | |
| PT-3 | HEATING ELEMENT MCB. | | | 8872-22-074 | |
| PT-4 | HEATING ELEMENT MCB. | | | 8872-22-074 | |
| PT-5 | HEATING ELEMENT CONTACTOR | | | 8859-08-040 | |
| 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. | | | 8872-22-062 | |
| PT-11 | CONTROL MOTOR MCB. | | | 8872-22-061 | |
| PT-13A | INTERIOR LIGHT RELAY. | | | 8723-37-004 | |
| PT-13B | INTERIOR LIGHT RELAY BASE. | | | 8723-36-001 | |
| PT-14 | MAIN FAN MOTOR CONTACTOR. | | | 8859-08-046 | |
| PT-15 | MAIN FAN MOTOR THERMAL OVERLOAD. | | | 8859-01-006 | |
| PT-16 | TURNABLE MOTOR CONTACTOR. | | | 8859-08-046 | |
| PT-17 | TURNABLE MOTOR THERMAL OVERLOAD. | | | 8859-01-002 | |
| PT-18 | 24V DC POWER SUPPLY. | | | 8822-93-001 | |
| PT-19 | BUZZER | | | 8723-92-002 | |
| PT-24 | STEAM SOLENOID. | | | 8965-83-004 | |
| PT-25 | DAMPER SOLENOID. | | | 8998-83-005 | |
| 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. | | | 8980-67-001 | |
| PT-31B | INTERIOR LIGHT BULB. | | | 8857-94-002 | |
| PT-32A | INTERIOR LIGHT PUSHBUTTON. | | | 8801-12-020 | |
| 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-34A | MAIN C.P.U. PRINTED CIRCUIT BOARD. | | | 8705-97-012 | |
| PT-34B | MAIN DISPLAY PRINTED CIRCUIT BOARD. | | | 8705-97-009 | |
| PT-35 | HEATING ELEMENT. | | | 8979-04-001 | |
| PT-36A | MOULDED CASE CIRCUIT BREAKER. | | | 8872-22-078 | |
| PT-36B | UNDervOLTAGE RELEASE COIL. | | | 8872-02-001 | |
| PT-36C | DOOR HANDLE AND SHAFT. | | | 8872-19-001 | |
| PT-37A | HEATER CONTACTOR RELAY. | | | 8822-37-019 | |
| PT-37B | HEATER CONTACTOR RELAY BASE. | | | 8822-36-009 | |
| PT-38 | SERIAL OUTPUT SOCKET. | | | 8705-25-001 | |
| PT-39a | PUMP RELAY (IF PUMP FITTED) | | | 8723-37-004 | |
| PT-39b | PUMP RELAY BASE (IF PUMP FITTED). | | | 8822-36-009 | |
| 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 | JC | 30-9-00 | PT-19 WAS 8982-92-001 | 09/73 |
| D | JC | 8-9-98 | 8723-37-004 WAS 8822-37-018; 8723-36-001 WAS 8822-36-005. | 07/98 |
| C | S.P | 16-1-98 | PART 33 (KEYSWITCH) WAS 8705-07-001 | 06/31 |
| B | RAC | 7-1-97 | SEE SHEET 1 | 02/20 |
| A | S.P | 27-11-96 | PT34 (P.C.B.) WAS 8705-93-007 | 01/99 |
| REV | SIG | DATE | REVISION | ECN NO. |
|  SWANSEA IND EST. FLORESTAACH. SWANSEA SAS 4EB. EQUIPMENT LIMITED TEL: (01792) 581234 FAX: (01792) 561016 Email: 100432.505@compuserve.com | | | | |
| TITLE: COMPONENT PART LIST FOR MXN SMARTBAKE ALL VERSIONS | | | | |
| DRAWN: RAC/JC ELECTRICALLY APPROVED BY: P. BOYLES 9-1-98 | | | | |
| DATE: 25-10-95 REV: 9-1-98 DRAWING NO. M164-25-17100 SHT 2 of 2 REV: E | | | | |

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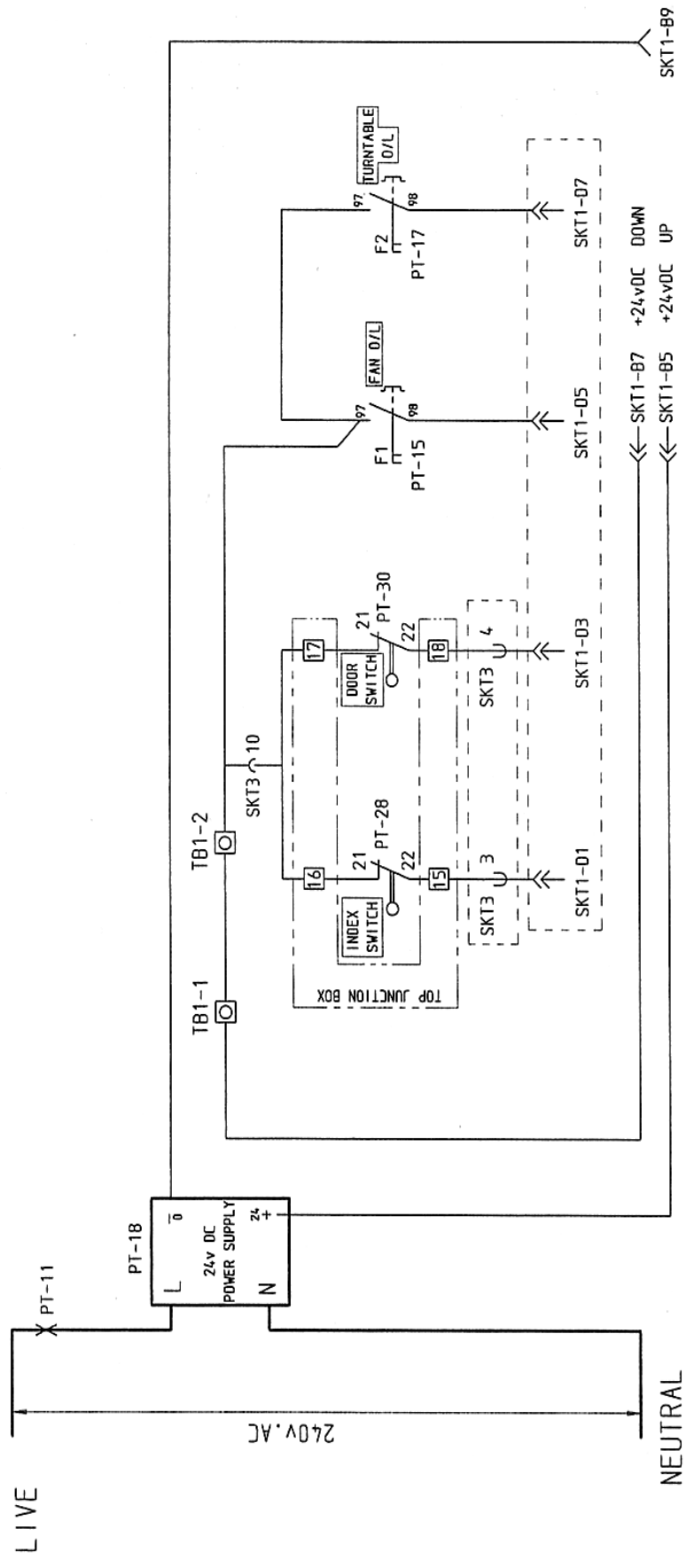
MAIN ELECTRICAL BOX LAYOUT FOR MXN SMARTBAKE





| | |
|---|---------------|
| MONO EQUIPMENT LTD... QUEENSWAY, INDUSTRIAL ESTATE, PARKWAY, WARRINGTON, CHESHIRE, WA3 4EB EQUIPMENT LIMITED | |
| Title: POWER CIRCUIT WIRING DIAGRAM MXN (SMARTBAKE) | |
| No. Req'd | --- |
| Drawn: | S.P. |
| Material: | --- |
| Date: | 14-3-96 |
| Finish: | --- |
| Scale: | --- |
| Drawing No. | M164-25-17500 |
| Change | --- |

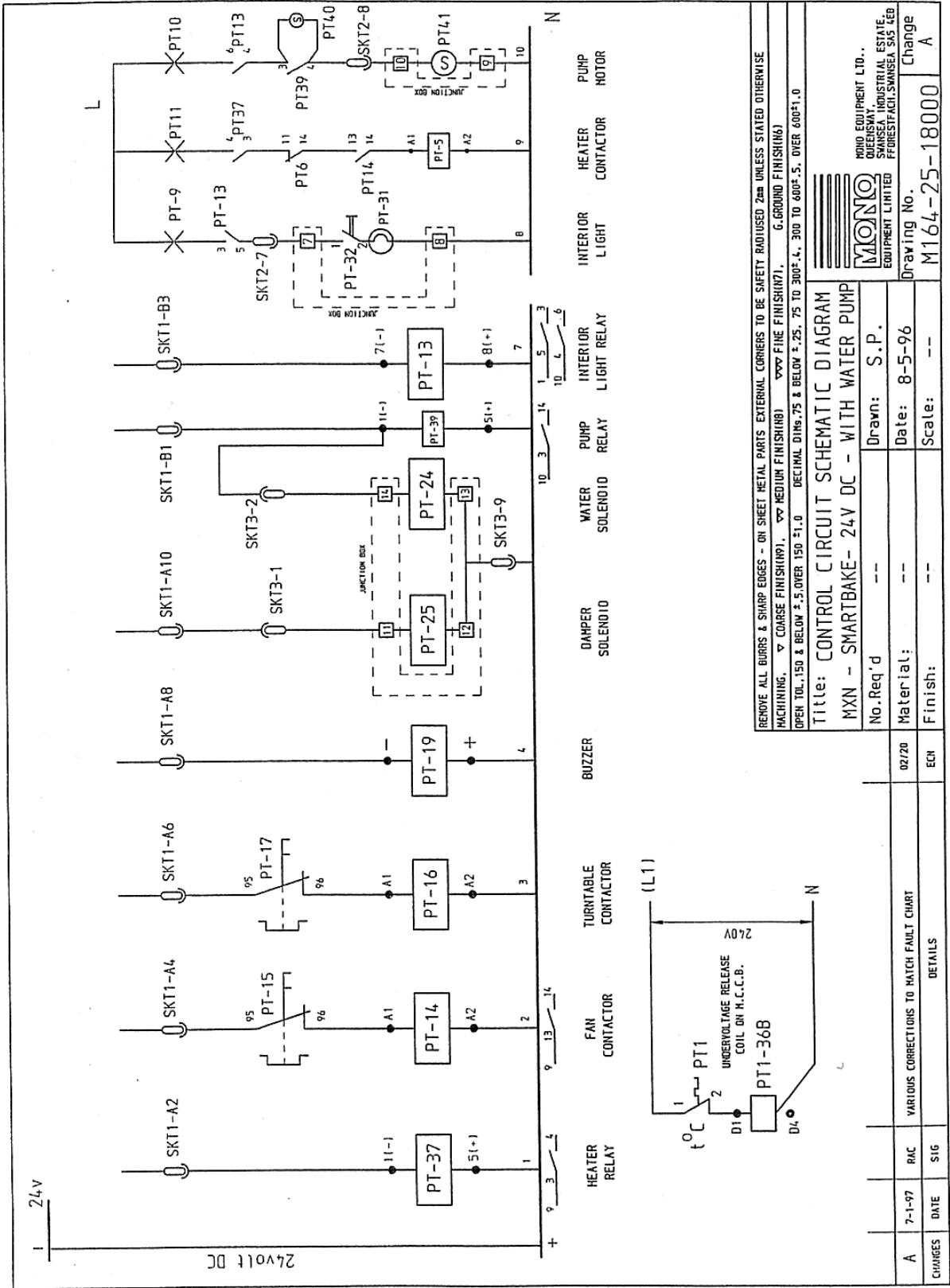
IF IN ANY DOUBT - ASK



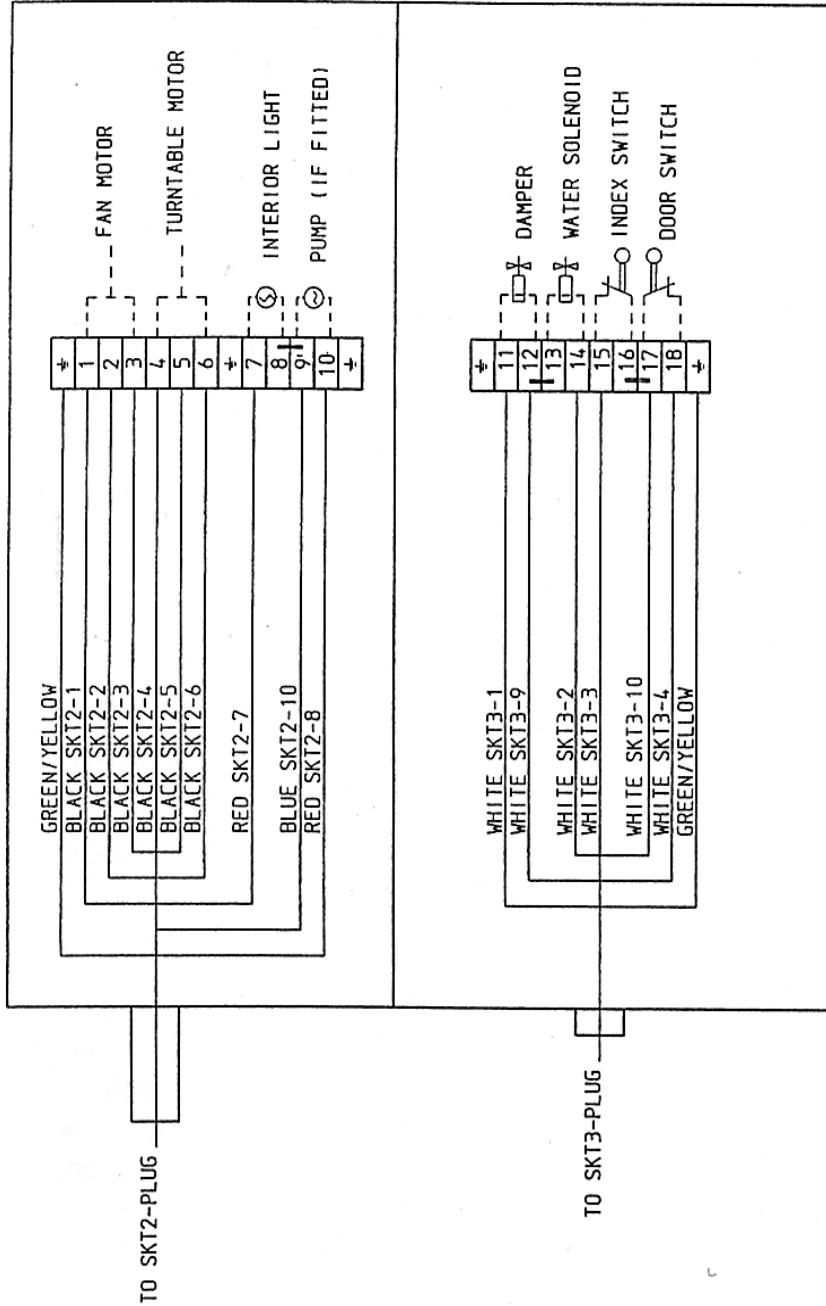
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|----------------------------------|-----|---------|--|---------|
| REV | SIG | DATE | REVISION | ECN NO. |
| B | JC | 22-2-01 | RE-ARRANGE POWER SUPPLY WIRES TO PCB | 1419 |
| A | RAC | 7-1-97 | VARIOUS CORRECTIONS TO MATCH FAULT CHART | 02/20 |
| TITLE: | | | | |
| SWANSEA IND EST. | | | | |
| FFORESTFACH, | | | | |
| SWANSEA, | | | | |
| SA5 4EB. | | | | |
| TEL: (01792) 561234 | | | | |
| FAX: (01792) 561016 | | | | |
| Email: 100432.505@compuserve.com | | | | |
| ELECTRICAL SPECIFICATIONS:- | | | | |
| DRAWN: RAC | | | | |
| ELECTRICALLY APPROVED BY:- | | | | |
| DATE: 26-10-95 | | | | |
| DRAWING NO. M164-25-16700 | | | | |
| REV: B | | | | |

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 NOR ITS CONTENTS DIVULGED WITHOUT PRIOR WRITTEN PERMISSION.

CONTROL CIRCUIT SCHEMATIC DIAGRAM FOR MXN SMARTBAKE (With Pump)



OVEN TOP JUNCTION BOX CONNECTORS FOR RH MXN SMARTBAKE (With Pump)



REMOVE ALL BURRS & SHARP EDGES - ON SHEET METAL PARTS. EXTERNAL CORNERS TO BE SAFETY RADIUSSED 2mm UNLESS STATED OTHERWISE
 MACHINING: ▽ COARSE FINISH(R7), ▽ MEDIUM FINISH(R6), ▽ FINE FINISH(R7), ▽ G. GROUND FINISH(R6)
 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

Title: OVEN TOP JUNCTION BOX CONNECTORS
 MXN-PROG PCB-24VDC

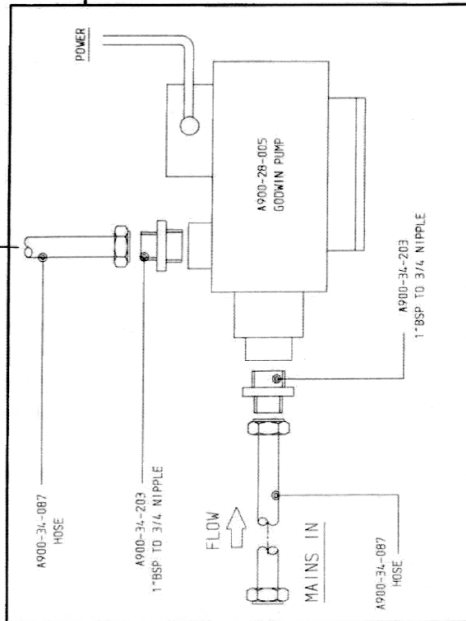
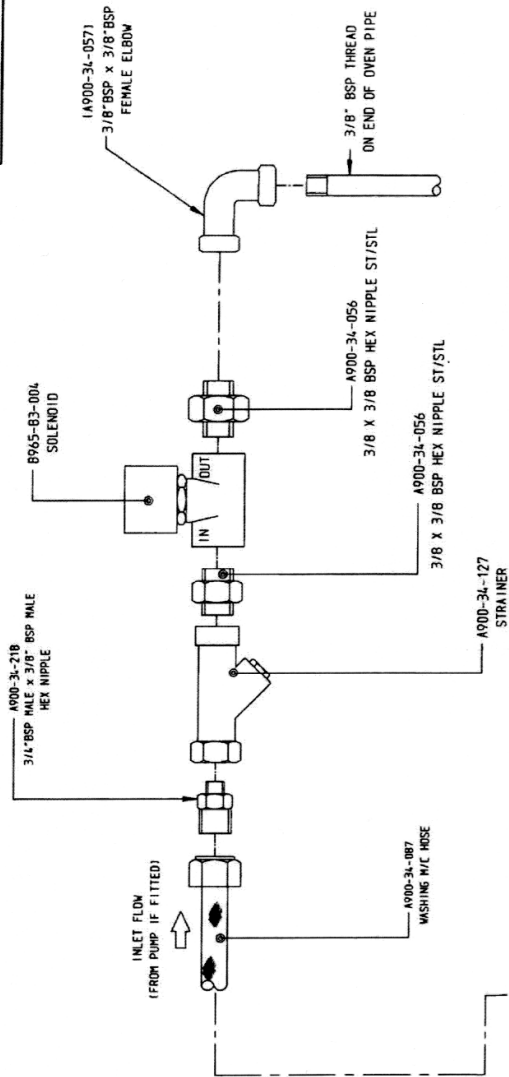
| | | | |
|-----------|-----|--------|---------|
| No. Req'd | one | Drawn: | R.A.C. |
| Material: | --- | Date: | 12-1-94 |
| Finish: | --- | Scale: | --- |

MONO EQUIPMENT LTD.
 QUEENSWAY,
 INDUSTRIAL ESTATE,
 FFORESTFACH, SWANSEA SA5 4EB

MONO EQUIPMENT LIMITED
 Drawing No. M164-25-16600
 Change ---

DO NOT SCALE - IF IN DOUBT ASK

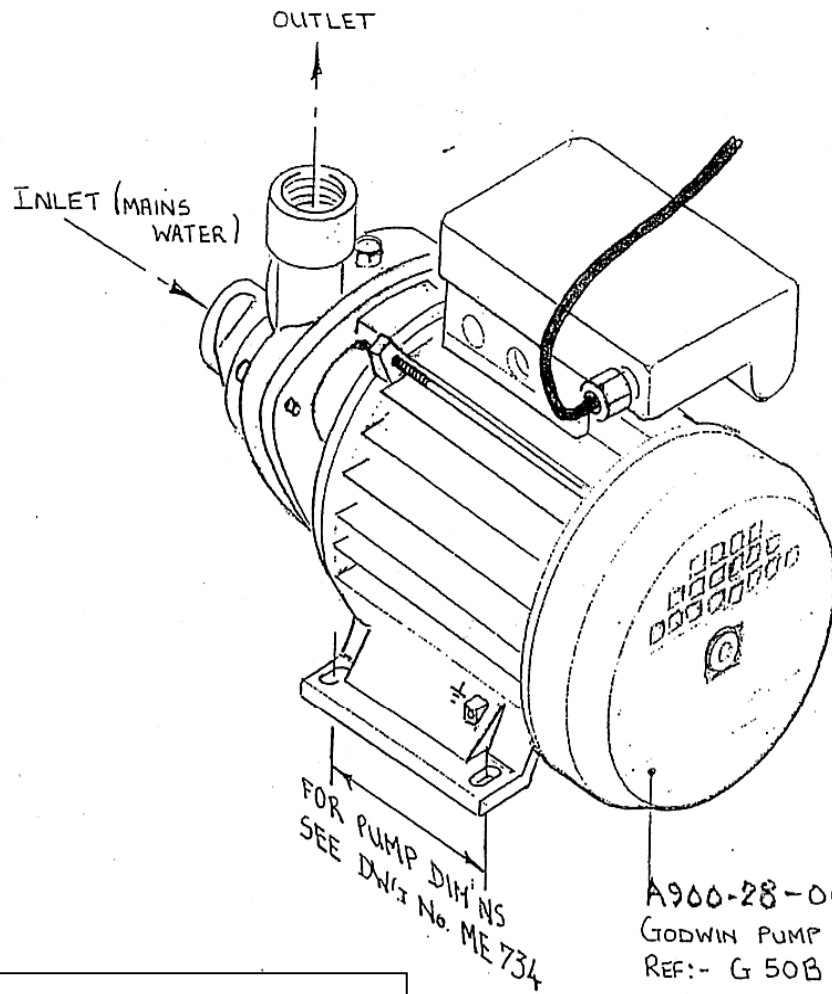
ALL DIMENSIONS IN mm UNLESS OTHERWISE STATED



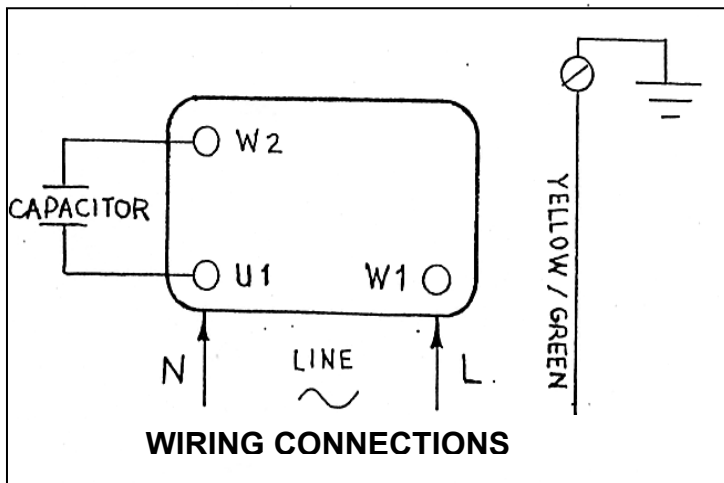
IF FITTED

SPARES KIT - M164-KSE010 (NO PUMP)

| C | JL | 14-02-18 | UPDATED A900-34-056 NIPPLE ST/STL WAS A900-34-061 MX-006-17-18 | 06/9/11 |
|--|------|----------|--|---------|
| B | RAC | 19-04-11 | FLOW VALVE REMOVED | 06/7/3 |
| A | S.P. | 11-2-08 | PIPE FITTINGS CHANGED | |
| REV | SIG | DATE | REVISION | ECN NO. |
| MONO EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SWANSEA, SA5 1BB, SA5 1BB TEL: (01782) 861234 FAX: (01782) 861016 | | | | |
| TITLE: STANDARD MX OVEN WATER INLET COMPONENTS (PUMP IF FITTED) | | | PURCHASE ORDER NO. WORKS ORDER NO. | |
| DRAWING NO. M164-01-02300 | | | DRAWING SCALE: NTS | |
| FINISH: 1st NIPPLE | | | DRAWING SIZE: A3 | |
| REMOVE ALL BURRS & SHARP EDGES - ON SHEET METAL PARTS EXTERNAL CORNERS TO BE SAFETY RADIUSED 2mm UNLESS STATED OTHERWISE SURFACE MACHINING. $\frac{3}{32}$ COARSE FINISH. $\frac{3}{32}$ MEDIUM FINISH. $\frac{3}{32}$ FINE FINISH. $\frac{3}{32}$ GROUND FINISH. | | | MATL: RAC | |
| OPEN TOL. 150 & BELOW ± 0.15 OVER 150 ± 0.25 DECIMAL DIMS. 75 & BELOW ± 0.25 TO 300 ± 0.4 300 TO 600 ± 0.5 OVER 600 ± 1.0 | | | NO. REQ: ... DATE: 16-12-96 | |
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A900-28-005
 GODWIN PUMP
 REF:- G 50B
 0.5 HP
 240V-50Hz-1PH
 2850 RPM 2.4 AMPS



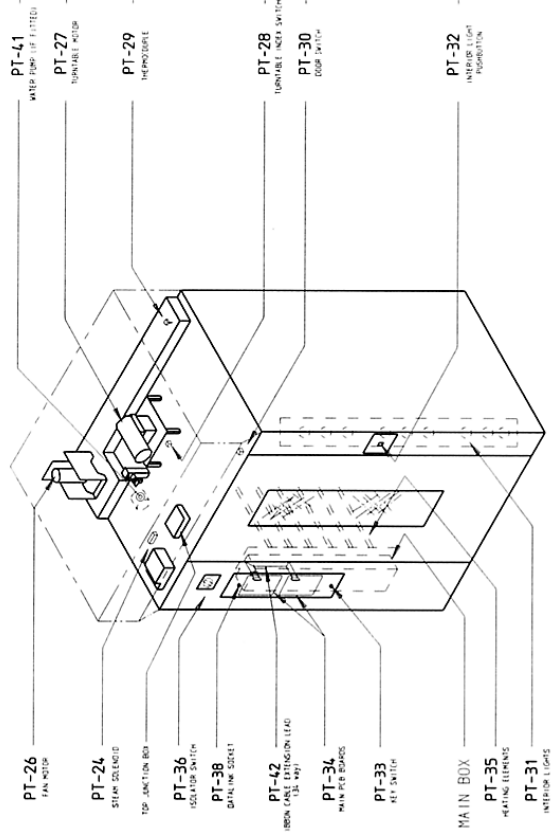
WATER PUMP (GODWIN) DIAGRAM (IF FITTED)



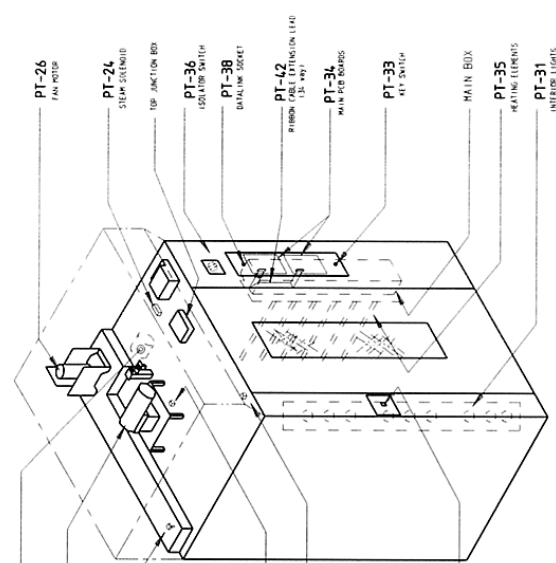
19.0 SPARES

IF IN ANY DOUBT - ASK

R.H. OVEN



L.H. OVEN



| | | | | |
|-----|-----|----------|---|---------|
| E | JC | 30-9-00 | SEE SHEET 2 | 09/73 |
| D | JC | 8-9-98 | SEE SHEET 2 | 07/98 |
| C | S.P | 16-1-98 | SEE SHEET 2 | 06/31 |
| B | RAC | 7-1-97 | TOP JUNCTION BOX ADDED TO MATCH FAULT CHART. | 02/20 |
| A | S.P | 27-11-96 | PART 34 (P.C.B) WAS 8705-93-007 & PT 42 ADDED | 01/59 |
| REV | SIG | DATE | REVISION | ECH NO. |

MONO
 SWANSEA IND. EST.
 FORESTFACH,
 WALSLEY,
 S45 4EB.
 TEL: (01782) 561234
 FAX: (01782) 561016
 Email: 100432.505@compuserve.com

TITLE:
MXN MAIN COMPONENTS LAYOUT
 ALL VERSIONS

ELECTRICAL SPECIFICATIONS:-
 415V 3PH 50Hz

DRAWN: RAC / JC
 ELECTRICALLY APPROVED BY: P. BOYLES 9-1-98

DATE: 25-10-95
 DRAWING NO. M164-25-17100
 9-1-98
 REV: E
 SHIT 1 of 2

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| DRAWING | | DESCRIPTION | | MONO | |
|---------|--------------------------------------|-------------|---|--------|---|
| PT-Ref | | PT-Ref | | PT-Ref | |
| PT-1 | OVERHEAT THERMOSTAT | PT-31A | INTERIOR LIGHT HOLDER. | PT-31A | INTERIOR LIGHT HOLDER. |
| PT-2 | HEATING ELEMENT MCB. | PT-31B | INTERIOR LIGHT BULB. | PT-31B | INTERIOR LIGHT BULB. |
| PT-3 | HEATING ELEMENT MCB. | PT-32A | INTERIOR LIGHT PUSHBUTTON. | PT-32A | INTERIOR LIGHT PUSHBUTTON. |
| PT-4 | HEATING ELEMENT MCB. | PT-32B | INTERIOR LIGHT PUSHBUTTON CONTACT BLOCK | PT-32B | INTERIOR LIGHT PUSHBUTTON CONTACT BLOCK |
| PT-5 | HEATING ELEMENT CONTACTOR | PT-32C | INTERIOR LIGHT PUSHBUTTON ENCLOSURE. | PT-32C | INTERIOR LIGHT PUSHBUTTON ENCLOSURE. |
| PT-6 | MAIN FAN MOTOR MCB AUXILIARY CONTACT | PT-32D | INTERIOR LIGHT PUSHBUTTON LEGEND. | PT-32D | INTERIOR LIGHT PUSHBUTTON LEGEND. |
| PT-7 | MAIN FAN MOTOR MCB. | PT-33 | KEYSWITCH. | PT-33 | KEYSWITCH. |
| PT-8 | TURNABLE MOTOR MCB. | PT-34A | MAIN C.P.U. PRINTED CIRCUIT BOARD. | PT-34A | MAIN C.P.U. PRINTED CIRCUIT BOARD. |
| PT-9 | TURNABLE MOTOR MCB. | PT-34B | MAIN DISPLAY PRINTED CIRCUIT BOARD. | PT-34B | MAIN DISPLAY PRINTED CIRCUIT BOARD. |
| PT-10 | INTERIOR LIGHT MCB .. | PT-35 | HEATING ELEMENT. | PT-35 | HEATING ELEMENT. |
| PT-11 | PUMP MOTOR MCB. | PT-36A | MOULDED CASE CIRCUIT BREAKER. | PT-36A | MOULDED CASE CIRCUIT BREAKER. |
| PT-13A | CONTROL MOTOR MCB. | PT-36B | UNDervOLTAGE RELEASE COIL. | PT-36B | UNDervOLTAGE RELEASE COIL. |
| PT-13B | INTERIOR LIGHT RELAY. | PT-36C | DOOR HANDLE AND SHAFT. | PT-36C | DOOR HANDLE AND SHAFT. |
| PT-14 | INTERIOR LIGHT RELAY BASE. | PT-37A | HEATER CONTACTOR RELAY. | PT-37A | HEATER CONTACTOR RELAY. |
| PT-15 | MAIN FAN MOTOR CONTACTOR. | PT-37B | HEATER CONTACTOR RELAY BASE. | PT-37B | HEATER CONTACTOR RELAY BASE. |
| PT-16 | MAIN FAN MOTOR THERMAL OVERLOAD. | PT-38 | SERIAL OUTPUT SOCKET. | PT-38 | SERIAL OUTPUT SOCKET. |
| PT-17 | TURNABLE MOTOR CONTACTOR. | PT-39a | PUMP RELAY (IF PUMP FITTED) | PT-39a | PUMP RELAY (IF PUMP FITTED) |
| PT-18 | TURNABLE MOTOR THERMAL OVERLOAD. | PT-39b | PUMP RELAY BASE (IF PUMP FITTED). | PT-39b | PUMP RELAY BASE (IF PUMP FITTED). |
| PT-19 | 24V DC POWER SUPPLY. | PT-40 | SUPPRESSOR UNIT (IF PUMP FITTED). | PT-40 | SUPPRESSOR UNIT (IF PUMP FITTED). |
| PT-24 | BUZZER | PT-41 | WATER PUMP (IF FITTED). | PT-41 | WATER PUMP (IF FITTED). |
| PT-25 | STEAM SOLENOID. | PT-42 | 34 WAY RIBBON CABLE EXTENSION. | PT-42 | 34 WAY RIBBON CABLE EXTENSION. |
| PT-26 | DAMPER SOLENOID. | | | | |
| PT-27 | MAIN FAN MOTOR. | | | | |
| PT-28A | TURNABLE MOTOR UNIT. | | | | |
| PT-28B | TURNABLE INDEX SWITCH BODY. | | | | |
| PT-28C | TURNABLE INDEX SWITCH HEAD. | | | | |
| PT-29 | TURNABLE INDEX SWITCH ACTUATOR. | | | | |
| PT-30A | THERMOCOUPLE. | | | | |
| PT-30B | DOOR SWITCH BODY. | | | | |
| PT-30C | DOOR SWITCH HEAD. | | | | |
| PT-30D | DOOR SWITCH ACTUATOR. | | | | |

| DRAWING | | DESCRIPTION | | MONO | |
|-------------|---|-------------|---|-------------|-----------------------------------|
| PT-Ref | | PT-Ref | | PT-Ref | |
| PT-19 | PT-19 WAS 8982-92-001 | PT-19 | PT-19 WAS 8982-92-001 | PT-19 | PT-19 WAS 8982-92-001 |
| PT-37-004 | PT-37-004 WAS 8822-37-018; 8723-36-001 WAS 8822-36-005. | PT-37-004 | PT-37-004 WAS 8822-37-018; 8723-36-001 WAS 8822-36-005. | PT-37-004 | PT-37-004 WAS 8822-36-005. |
| PT-33 | PT-33 (KEYSWITCH) WAS 8705-07-001 | PT-33 | PT-33 (KEYSWITCH) WAS 8705-07-001 | PT-33 | PT-33 (KEYSWITCH) WAS 8705-07-001 |
| SEE SHEET 1 | | SEE SHEET 1 | | SEE SHEET 1 | |
| PT34 | PT34 (P.C.B.) WAS 8705-93-007 | PT34 | PT34 (P.C.B.) WAS 8705-93-007 | PT34 | PT34 (P.C.B.) WAS 8705-93-007 |

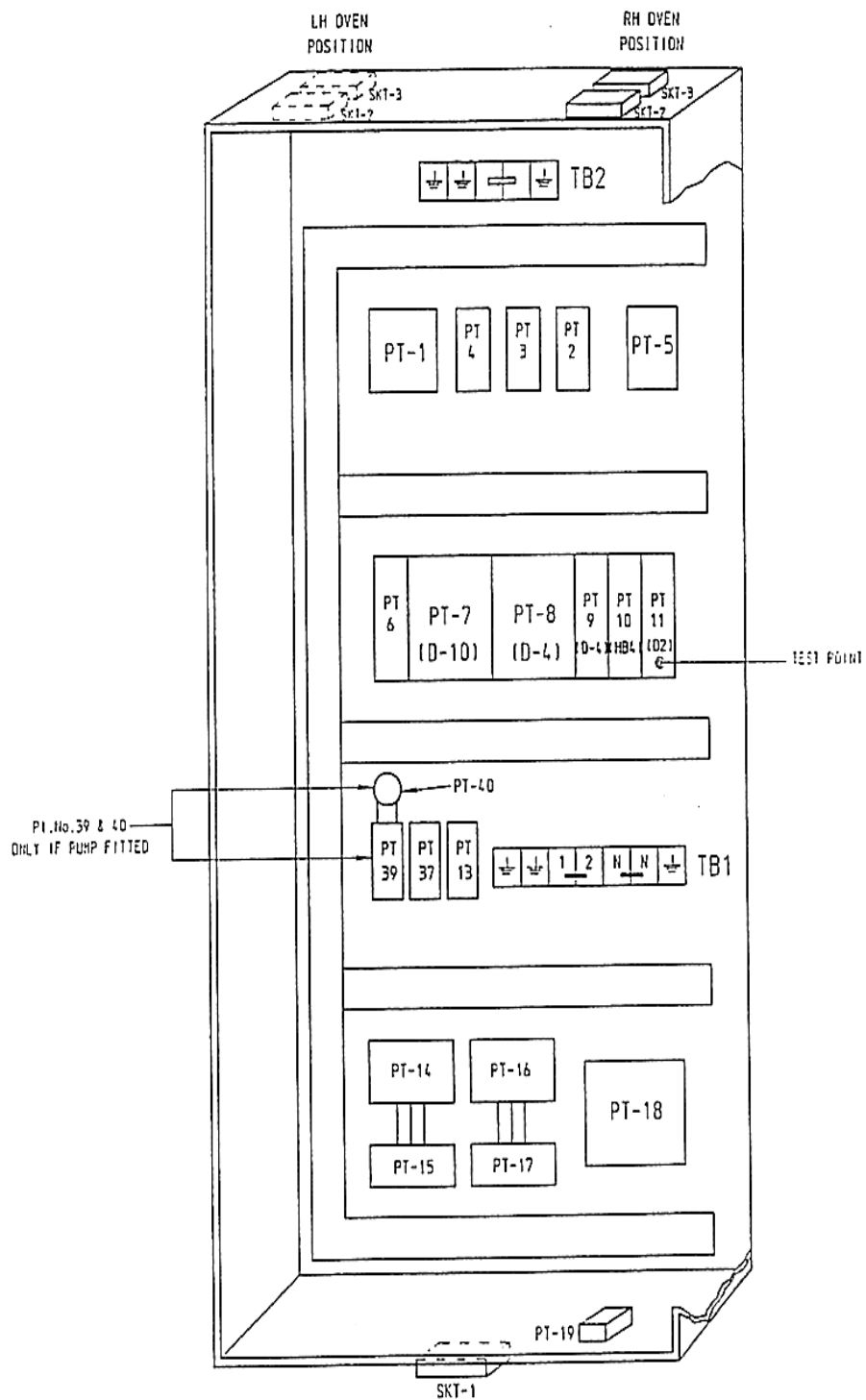

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REVISION
 TITLE:
 COMPONENT PART LIST FOR MXN SMARTBAKE
 ALL VERSIONS

DRAWN: ELECTRICALLY APPROVED BY:
 RAC/JC P. BOYLES 9-1-98
 DATE: 25-10-95
 9-1-98
 DRAWING NO. M164-25-17100
 REV: E

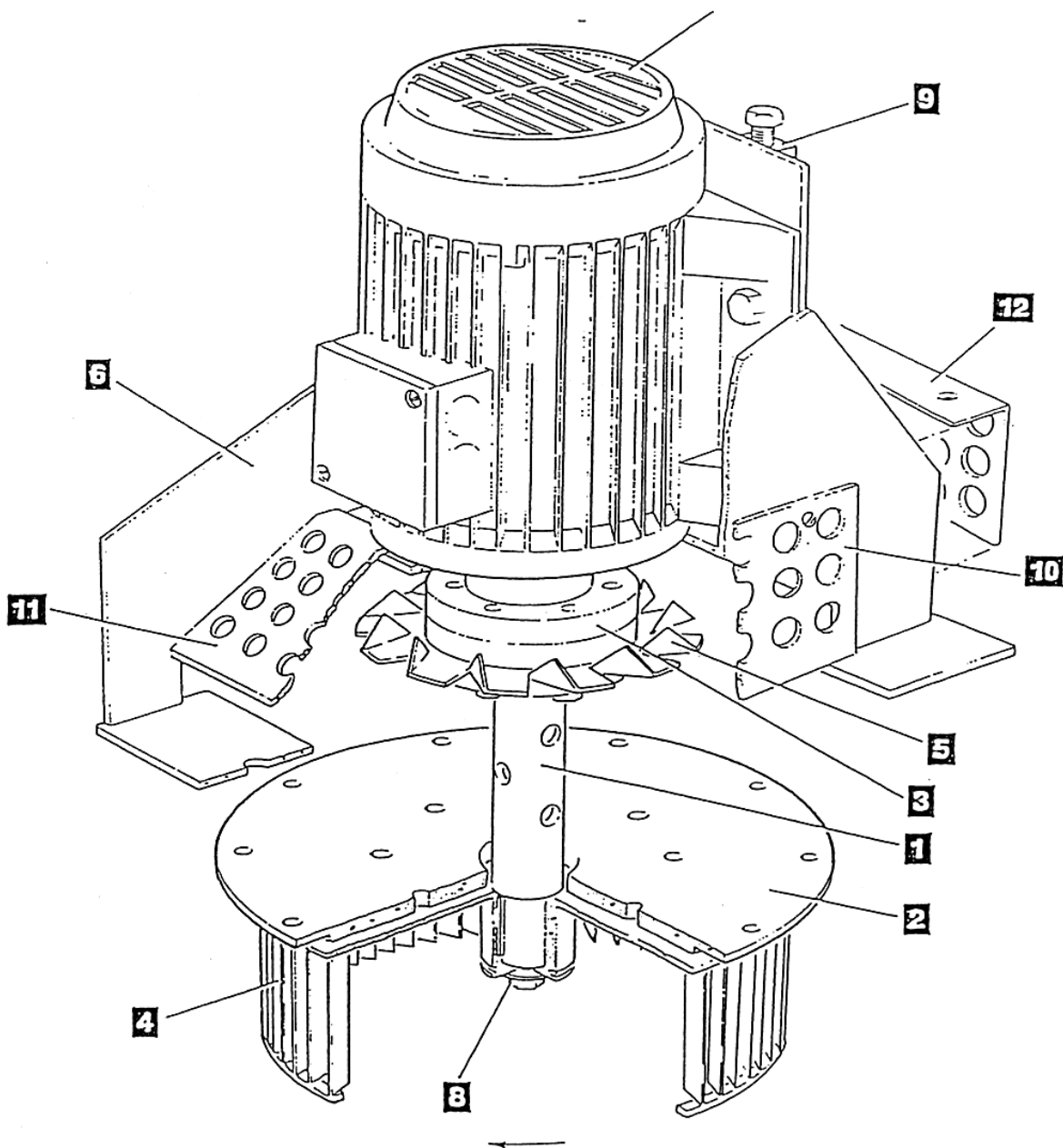
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MAIN ELECTRICAL BOX LAYOUT FOR MXN SMARTBAKE

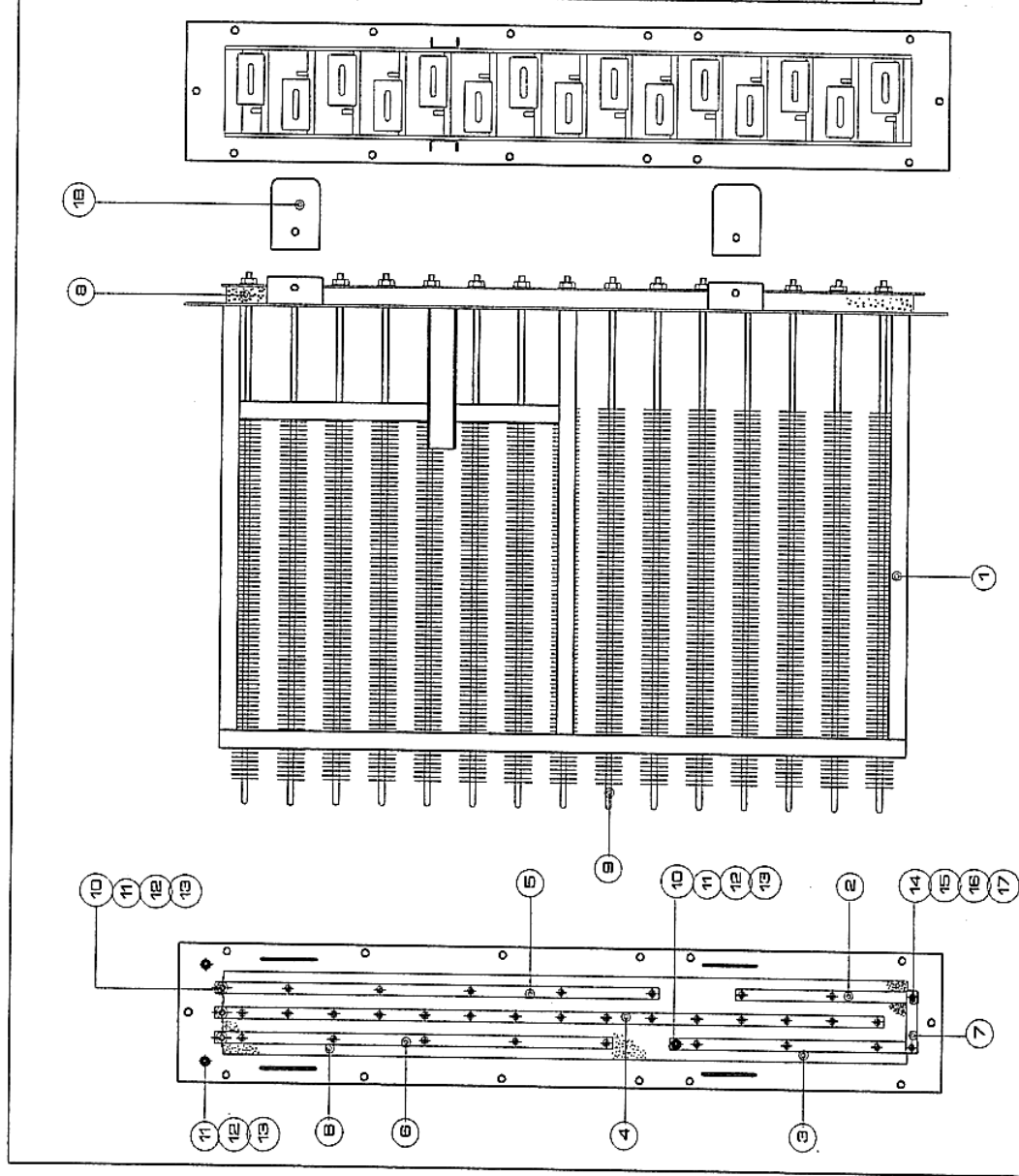


MAIN FAN ASSEMBLY FOR MXN SMARTBAKE OVEN

| ITEM NO. | DESCRIPTION | PART NO. | QTY PER ASSY |
|----------|---------------------------|--------------|--------------|
| 1 | Fan Shaft (Lower) | 160-14-01700 | 1 |
| 2 | Lower Fan Access Cover | 160-35-01000 | 1 |
| 3 | Driving Flange | 160-14-10000 | 1 |
| 4 | Main Fan | A900-27-049 | 1 |
| 5 | Cooling Fan | 160-14-02400 | 1 |
| 6 | Fan Support Bracket | 160-35-00500 | 1 |
| 7 | Motor | B859-74-024 | 1 |
| 8 | Retaining Washer | 160-14-10100 | 1 |
| 9 | Motor Slip Plate Assembly | 160-35-00100 | 1 |
| 10 | Fan Guard Side | 160-35-01500 | 2 |
| 11 | Fan Guard Front | 160-35-01600 | 1 |
| 12 | Fan Guard Rear | 160-35-01600 | 1 |

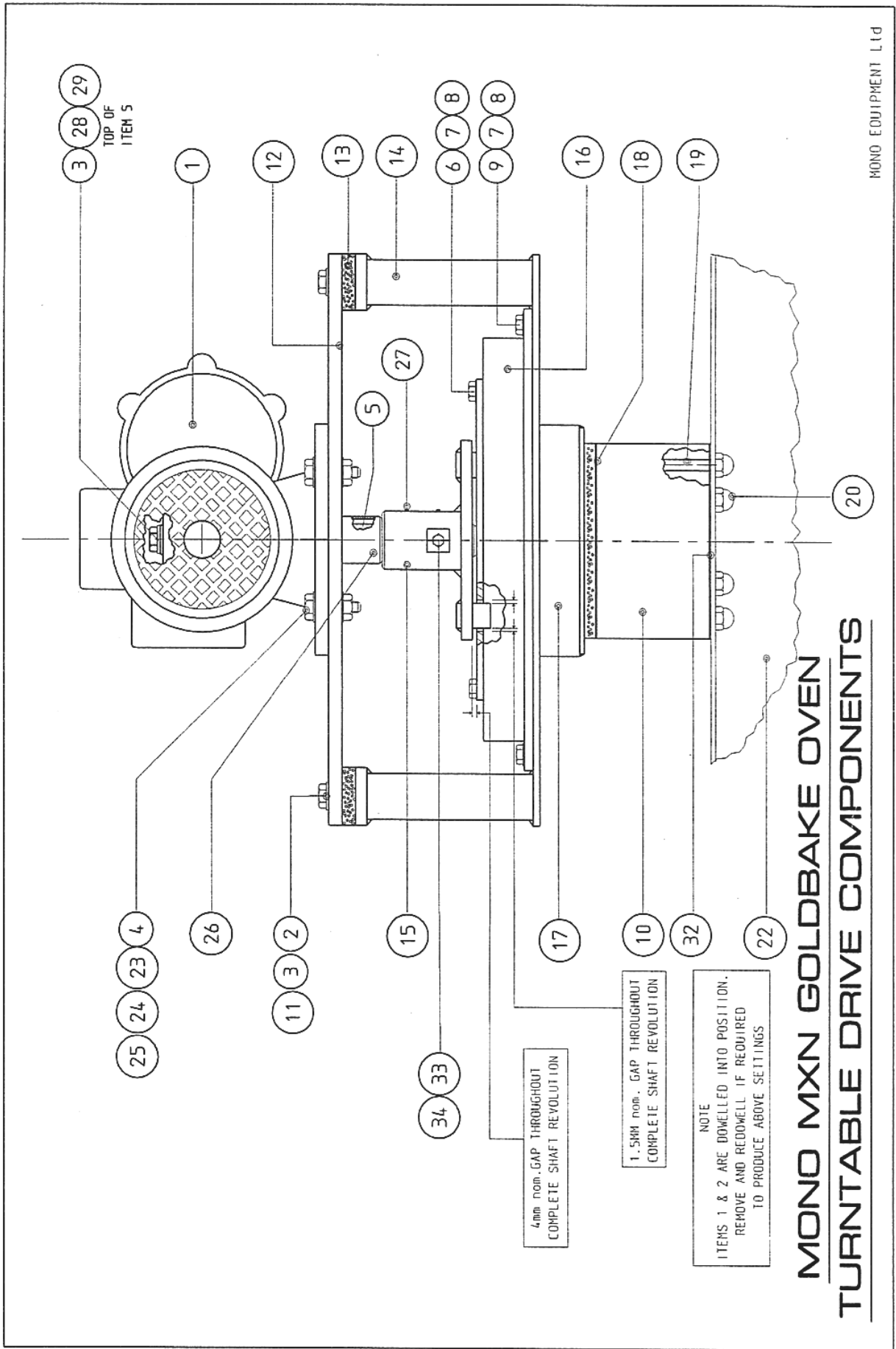


| | | | |
|------|--------------|--------------------------|----|
| 18 | 164-31-02100 | DETACHABLE HANDLE | 2 |
| 17 | A900-05-163 | M6 SHAKEPROOF WASHER | 2 |
| 16 | A900-05-140 | M6 WASHER | 2 |
| 15 | A900-04-080 | M6 FULL NUT | 2 |
| 14 | A900-03-361 | M6 X 20LG HEX HD BOLT | 2 |
| 13 | A900-05-012 | 5/16" WASHER | 10 |
| 12 | A900-05-164 | M6 SHAKEPROOF WASHER | 6 |
| 11 | A900-04-081 | M6 FULL NUT | 10 |
| 10 | A900-03-633 | M6 X 36LG HEX HD SCREW | 4 |
| 9 | B979-04-001 | ELEMENT c/w FASTENERS | 16 |
| 8 | 160-31-02900 | INSULATION BOARD | 1 |
| 7 | 164-04-07400 | BUSBAR | 1 |
| 6 | 160-31-02500 | BUSBAR | 1 |
| 5 | 160-31-02400 | BUSBAR | 1 |
| 4 | 160-31-02700 | BUSBAR | 1 |
| 3 | 160-31-02800 | BUSBAR | 1 |
| 2 | 160-31-02600 | BUSBAR | 1 |
| 1 | 164-31-01300 | ELEMENT CARRIER WELDMENT | 1 |
| ITEM | PART No. | DESCRIPTION | |



**MONO MXN GOLDBAKE OVEN
ELEMENT CARRIER ASSEMBLY**

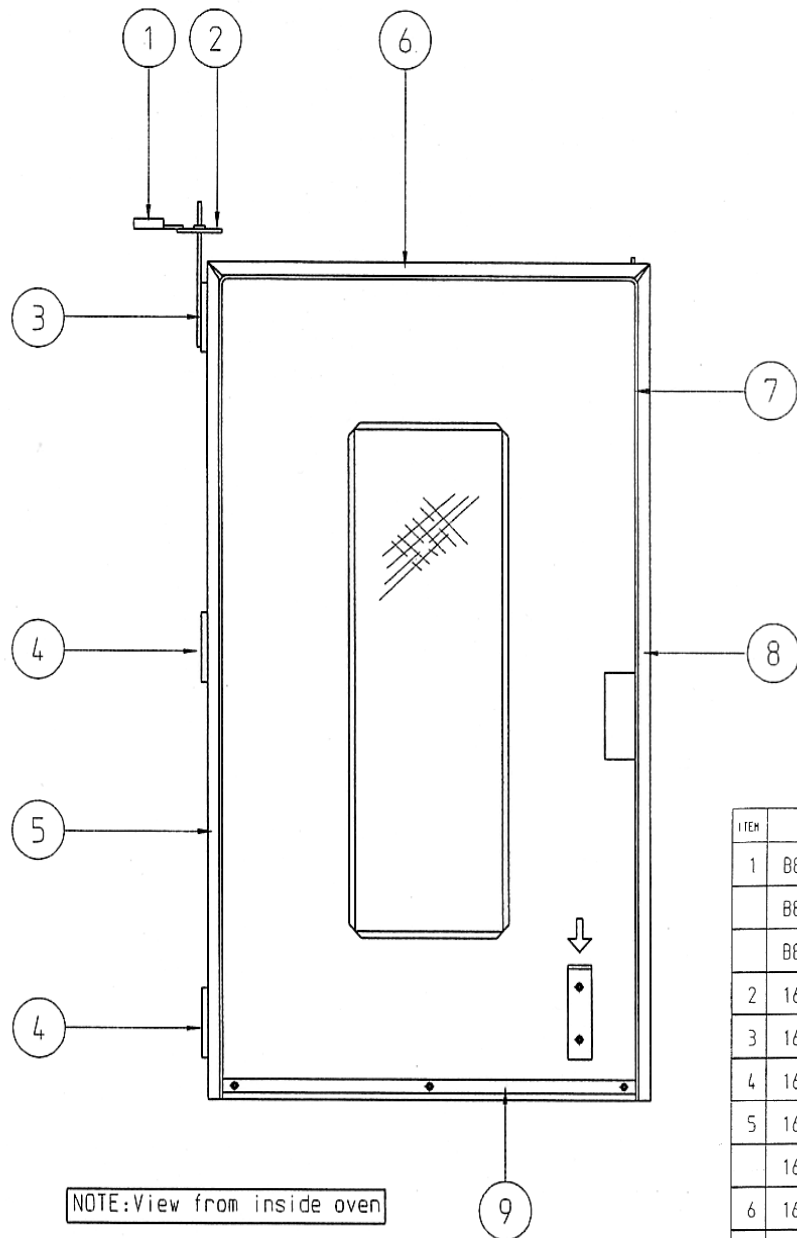
MONO EQUIPMENT Ltd 9-94



| |
|---|
| MONO MX GOLDBAKE OVEN TURNTABLE DRIVE COMPONENTS DESCRIPTION |
|---|

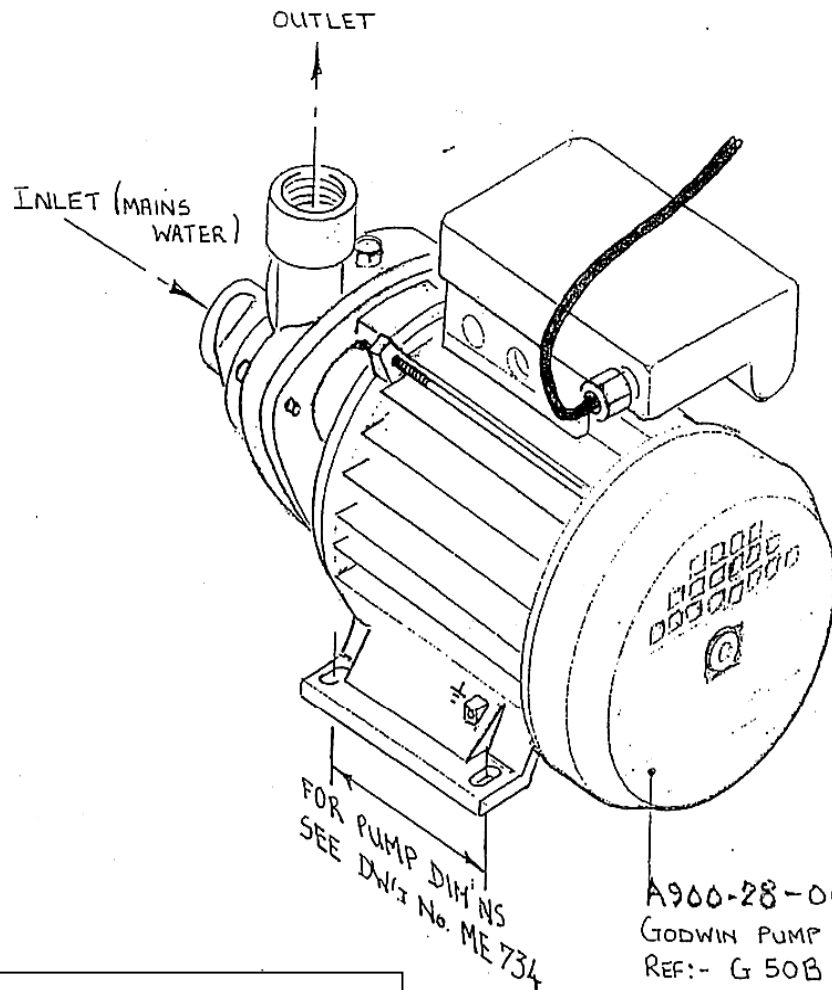
(see drawing on previous page)

| 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 |

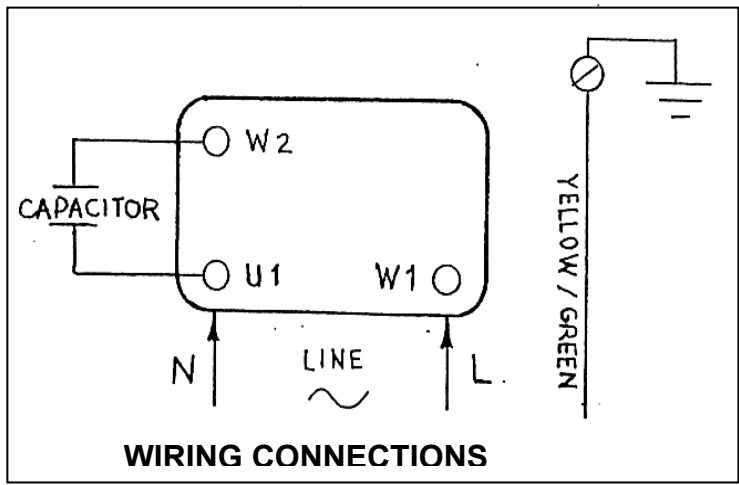


MAIN DOOR COMPONENTS

| ITEM | PART NO. | DESCRIPTION | QTY |
|------|--------------|-----------------------|-----|
| 1 | B801-11-013 | SWITCH | 1 |
| | B801-45-003 | OPERATING HEAD | 1 |
| | B801-45-004 | OPERATING LEVER | 1 |
| 2 | 160-06-02200 | CAM | 1 |
| 3 | 160-06-06700 | TOP HINGE | 1 |
| 4 | 160-06-08500 | MIDDLE & BOTTOM HINGE | 2 |
| 5 | 160-06-07101 | INNER CLAMP | 1 |
| | 160-06-07001 | OUTER CLAMP | 1 |
| 6 | 160-06-07300 | INNER CLAMP | 1 |
| | 160-06-07200 | OUTER CLAMP | 1 |
| 7 | A900-12-037 | "P" SEAL | 1 |
| 8 | 160-06-07100 | INNER CLAMP | 1 |
| | 160-06-07000 | OUTER CLAMP | 1 |
| 9 | 160-48-06400 | BOTTOM CLAMP | 1 |
| | 160-48-06000 | BOTTOM SEAL | 1 |



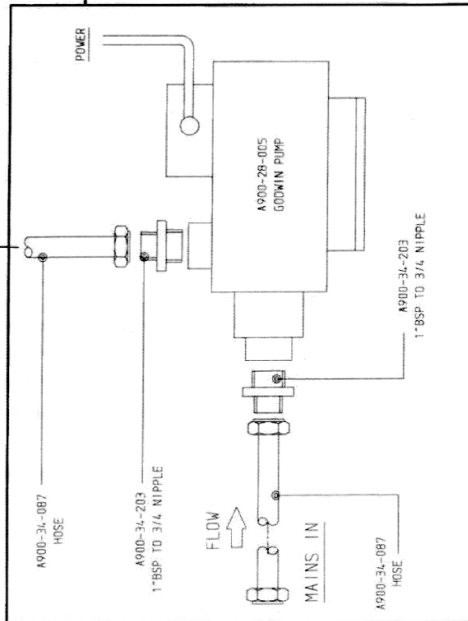
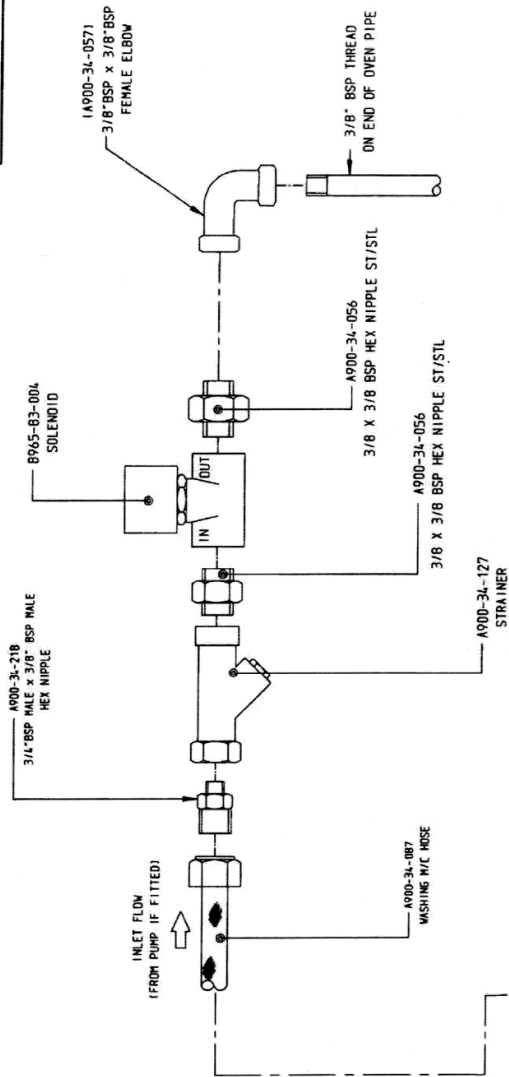
A900-28-005
 GODWIN PUMP
 REF:- G 50B
 0.5 HP
 240V-50Hz-1PH
 2850 RPM 2.4 AMPS



WATER PUMP (GODWIN) DIAGRAM
 (IF FITTED)

DO NOT SCALE - IF IN DOUBT ASK

ALL DIMENSIONS IN mm UNLESS OTHERWISE STATED



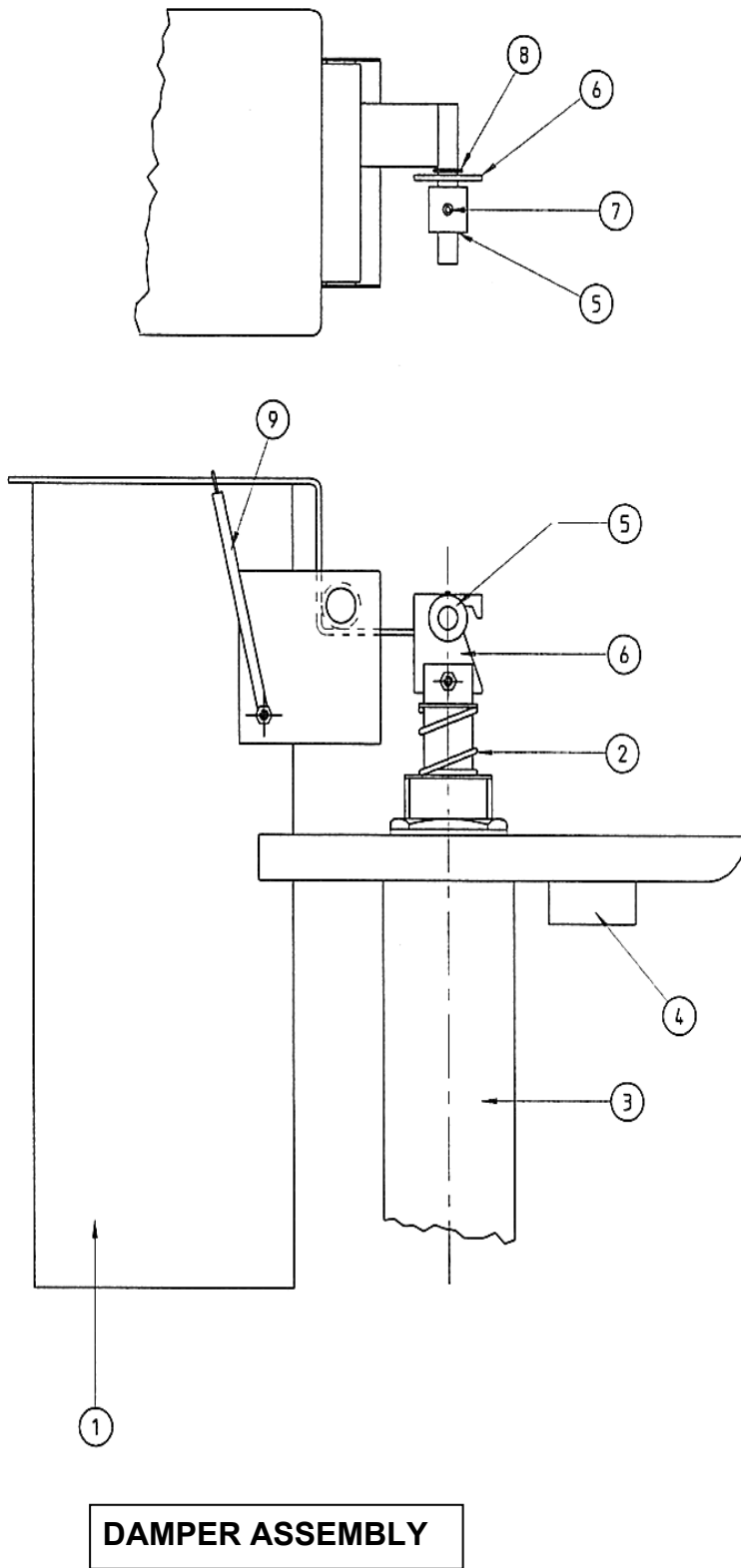
IF FITTED

SPARES KIT - M164-KSE010 (NO PUMP)

| C | JL | 14-02-18 | UPDATED A900-34-056 NIPPLE ST/STL WAS A900-34-061 MX-006-17-18 | 06/9/11 | ECN NO. |
|--|------|----------|---|--|-------------------------------------|
| B | RAC | 19-04-11 | FLOW VALVE REMOVED | 06/7/43 | |
| A | S.P. | 11-2-98 | PIPE FITTINGS CHANGED | | |
| REV | SIG | DATE | REVISION | | |
| | | | TITLE: STANDARD MX OVEN WATER INLET COMPONENTS (PUMP IF FITTED) | PURCHASE ORDER NO. WORKS ORDER NO. | DRAWING NO. M164-01-02300 |
| MONO EQUIPMENT QUEENSWAY SWANSEA WEST IND PARK SAKWALEA, SAKAIAE, TEL: (01782) 861234 FAX: (01782) 861016 | | | MATL: RAC DATE: 16-12-96 | NO. REQ: NTS | FINISH: SIZE A3 |

REMOVE ALL BURRS & SHARP EDGES - ON SHEET METAL PARTS EXTERNAL CORNERS TO BE SAFETY RADIUSED 2mm UNLESS STATED OTHERWISE
 SURFACE MACHINING. $\frac{3}{32}$ COARSE FINISH. $\frac{3}{32}$ MEDIUM FINISH. $\frac{3}{64}$ FINE FINISH. $\frac{3}{64}$ GROUND FINISH
 OPEN TOL. 150 & BELOW ± 0.10 DECIMAL DIMS. 75 & BELOW ± 0.25 . 75 TO 300 ± 0.4 . 300 TO 600 ± 0.5 . OVER 600 ± 1.0
 1st ANGLE

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| ITEM | DESCRIPTION | PART No. | QTY |
|------|-----------------------------------|--------------|-----|
| 1 | DAMPER TUBE FABRICATION | 160-38-00100 | 1 |
| 2 | COMPRESSION SPRING | A900-19-066 | 1 |
| 3 | DAMPER SOLENIOD C/W PIN | B998-83-005 | 1 |
| 4 | PORCELAIN TERMINAL BLOCK | B842-50-005 | 1 |
| 5 | COLLAR | 160-38-02000 | 1 |
| 6 | CONNECTING LINK | 160-38-01600 | 1 |
| 7 | M4 X 5LG GRUB SCREW | A900-03-686 | 1 |
| 8 | 3/16" ID X 1/2" OD X 18SWG WASHER | A900-05-003 | 1 |
| 9 | SPRING | A900-19-064 | 2 |

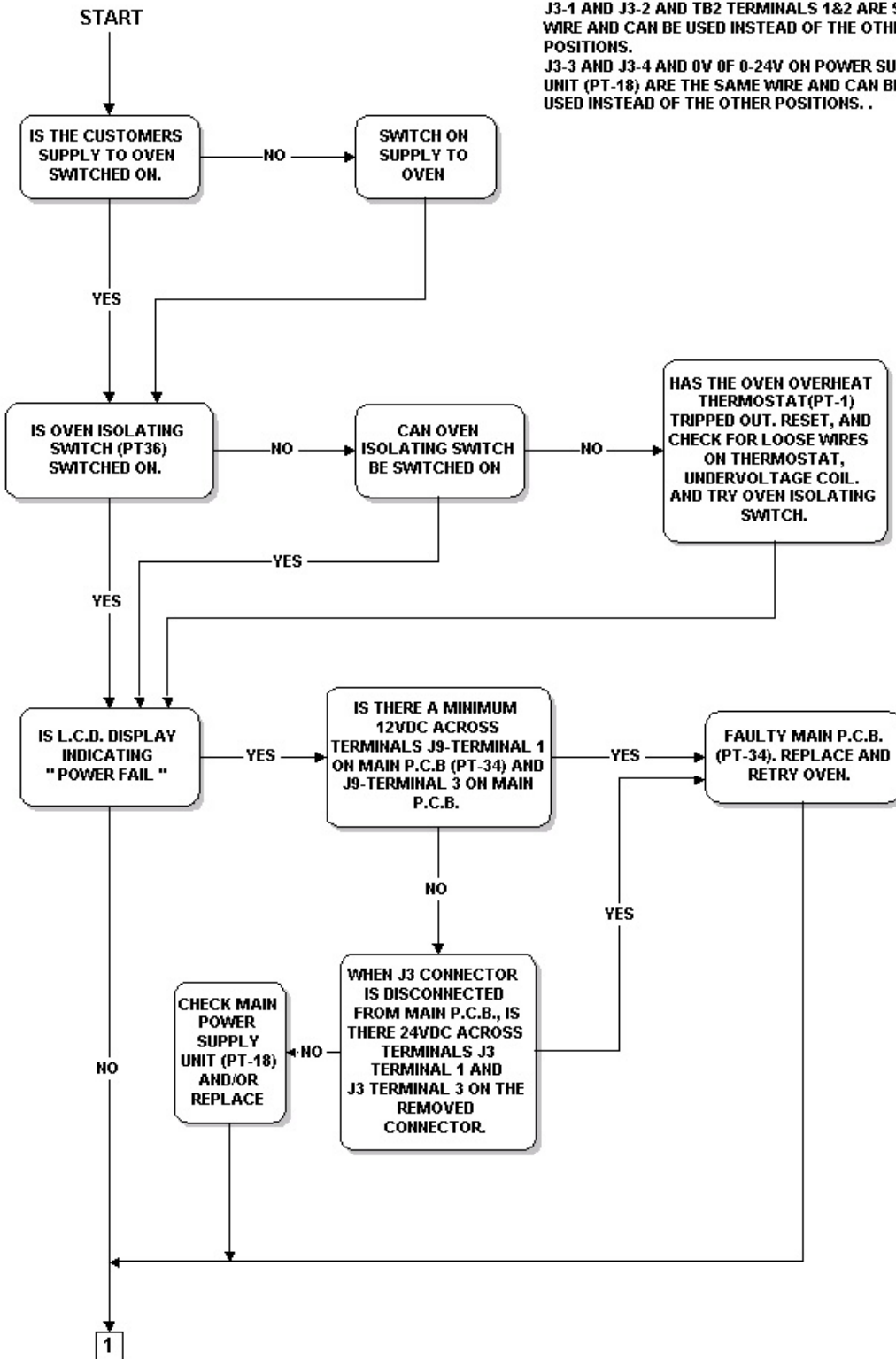


20.0 FAULT CHARTS

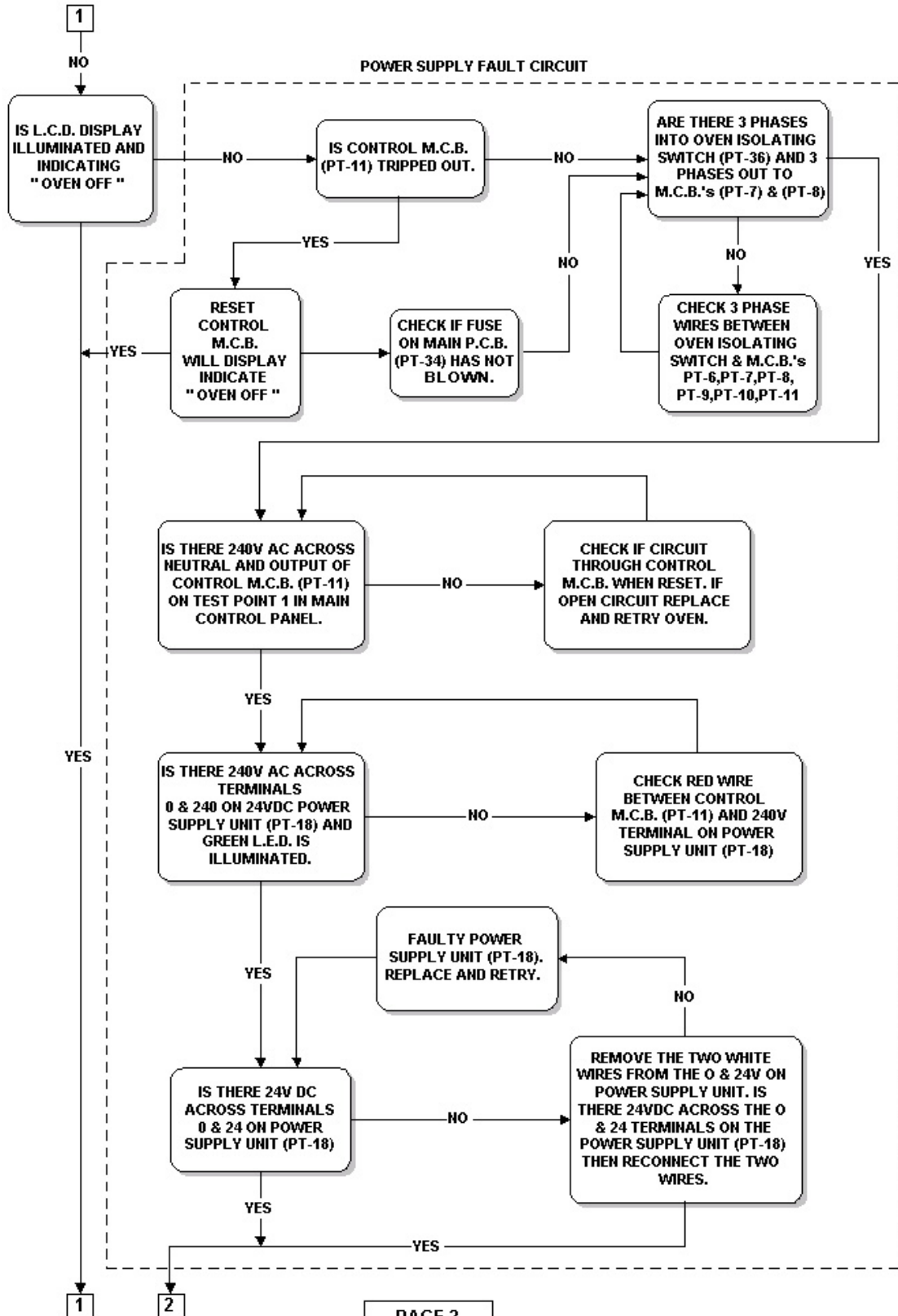
MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.

REFERENCE TO TERMINALS:-

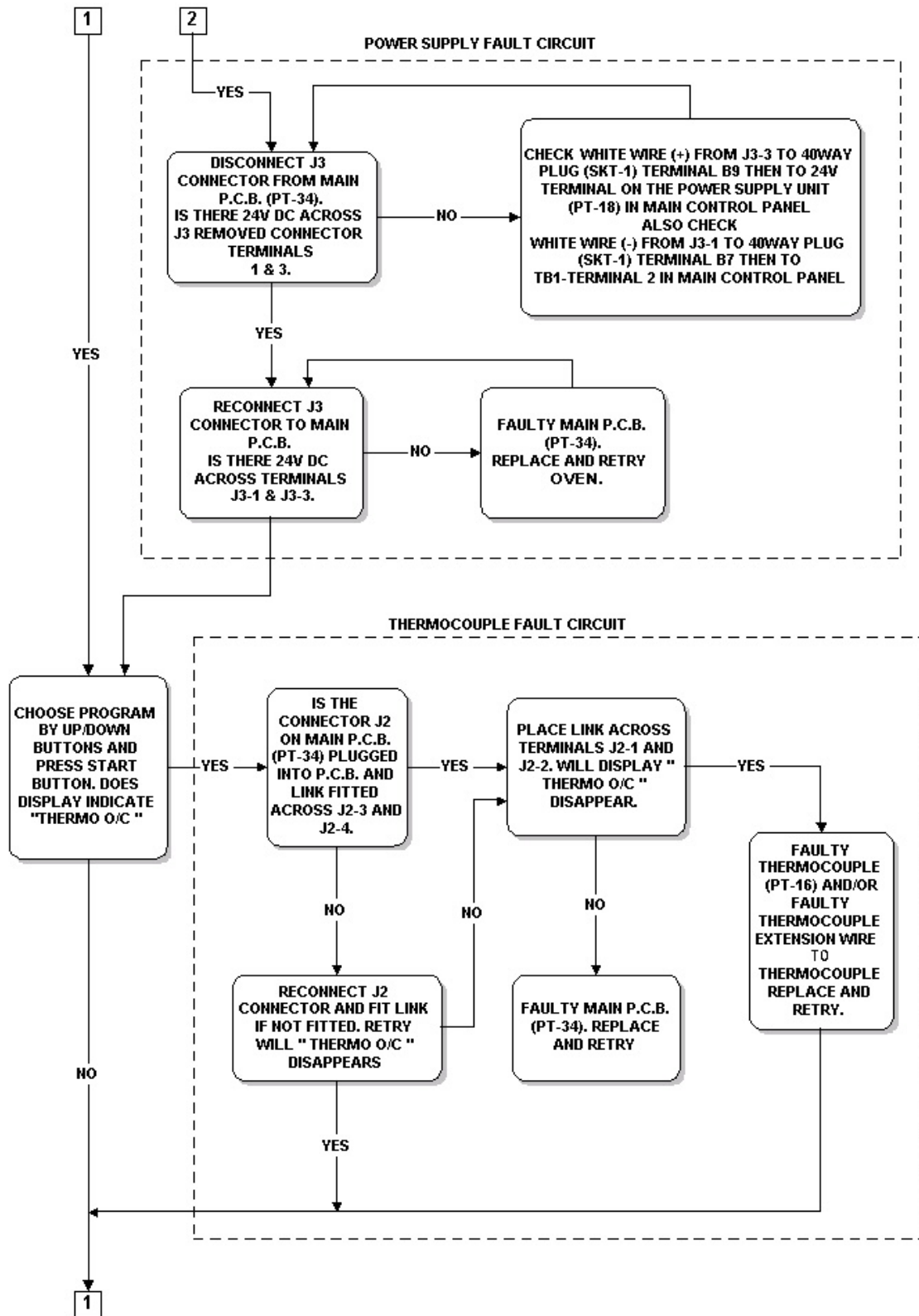
J3-1 AND J3-2 AND TB2 TERMINALS 1&2 ARE SAME WIRE AND CAN BE USED INSTEAD OF THE OTHER POSITIONS.
 J3-3 AND J3-4 AND 0V OF 0-24V ON POWER SUPPLY UNIT (PT-18) ARE THE SAME WIRE AND CAN BE USED INSTEAD OF THE OTHER POSITIONS. .



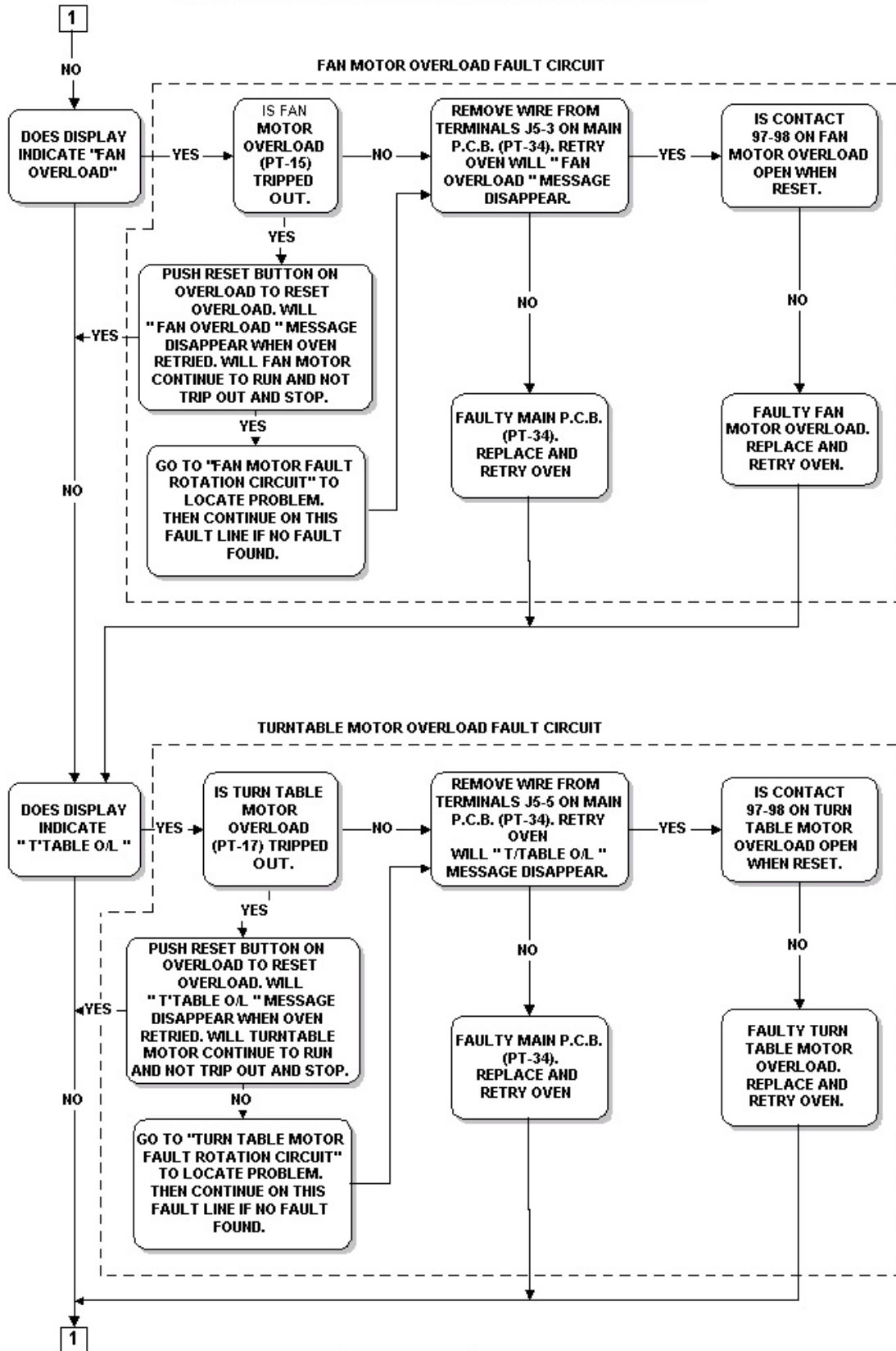
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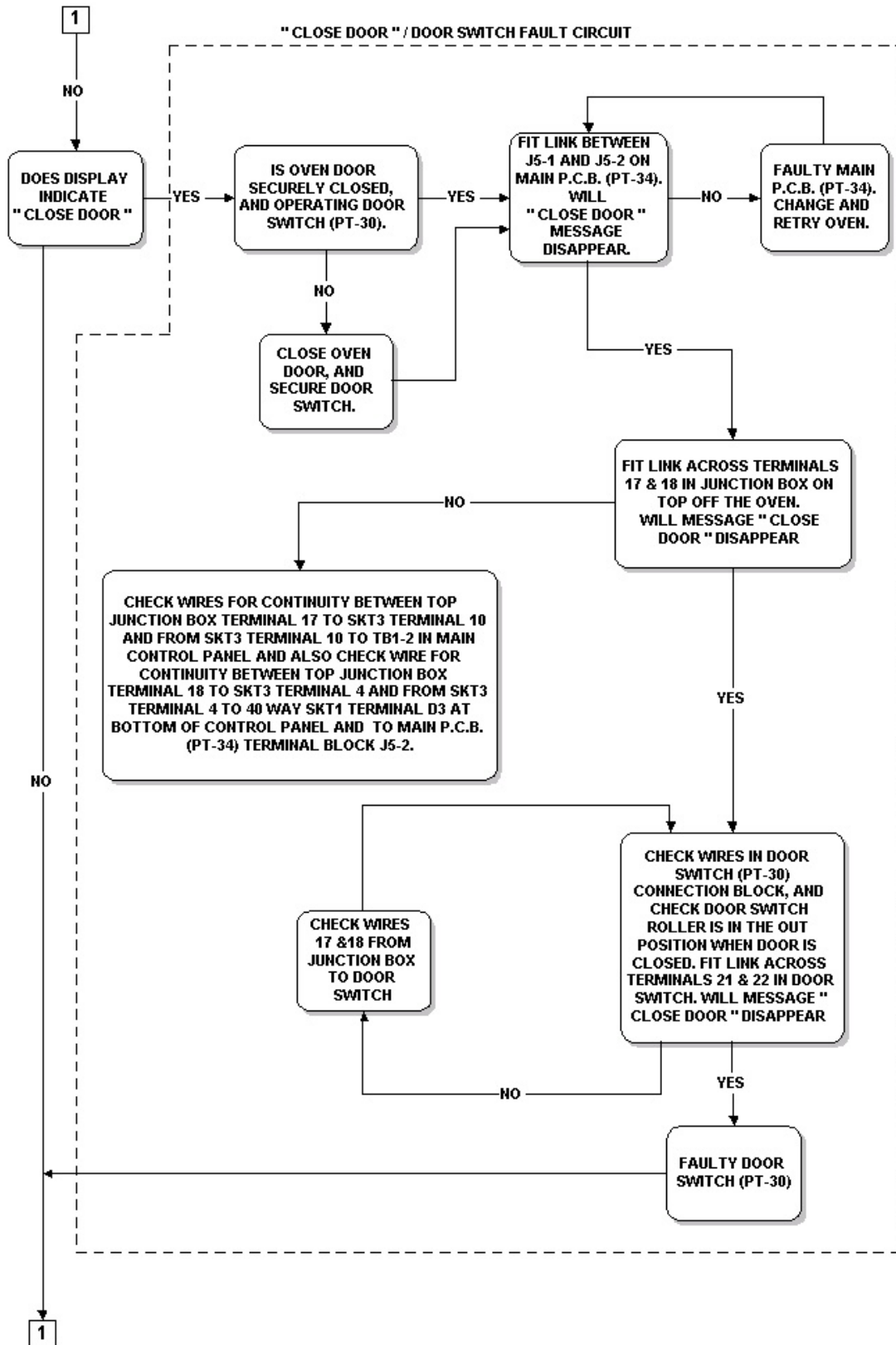
MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.



MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.

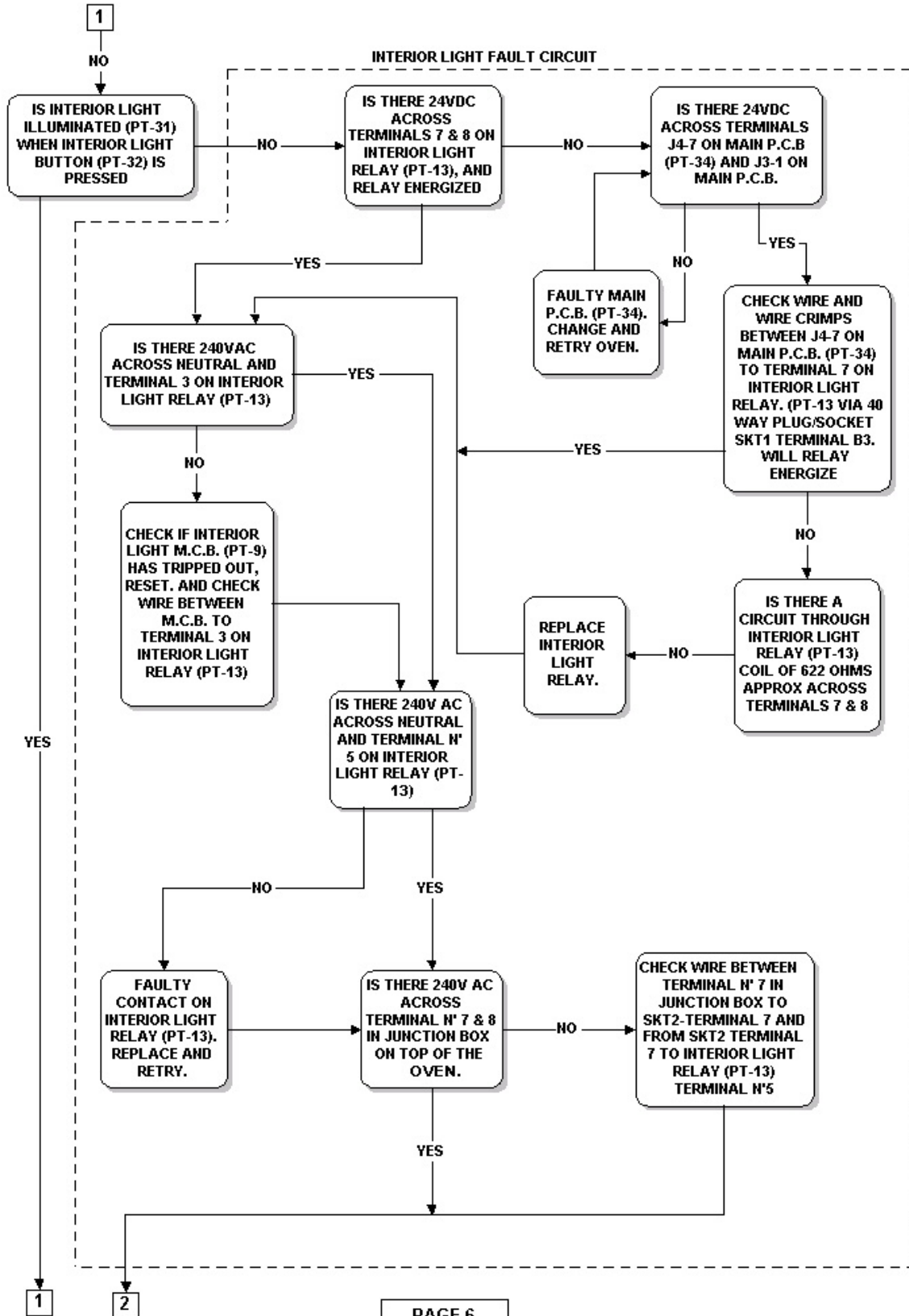


MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.

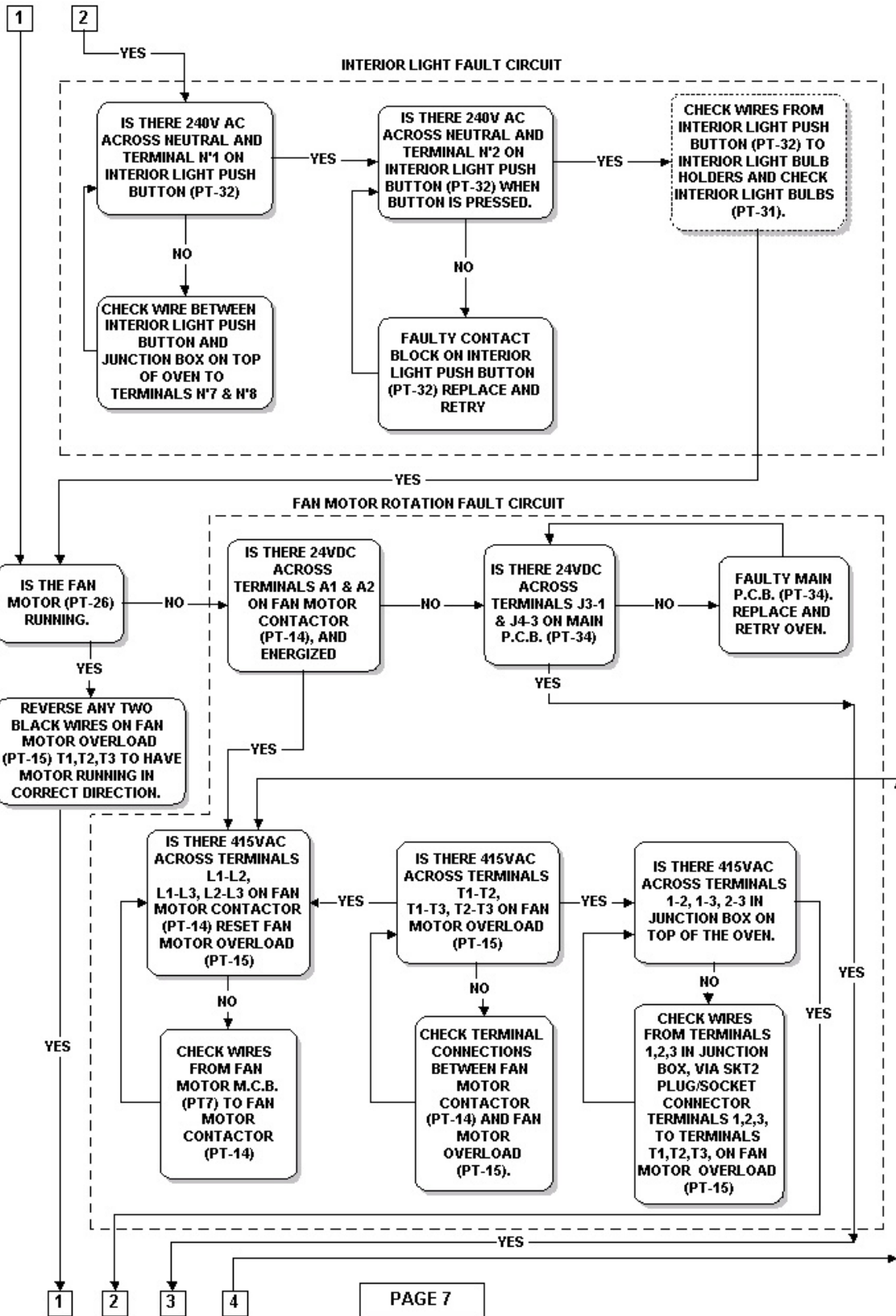


PAGE 5

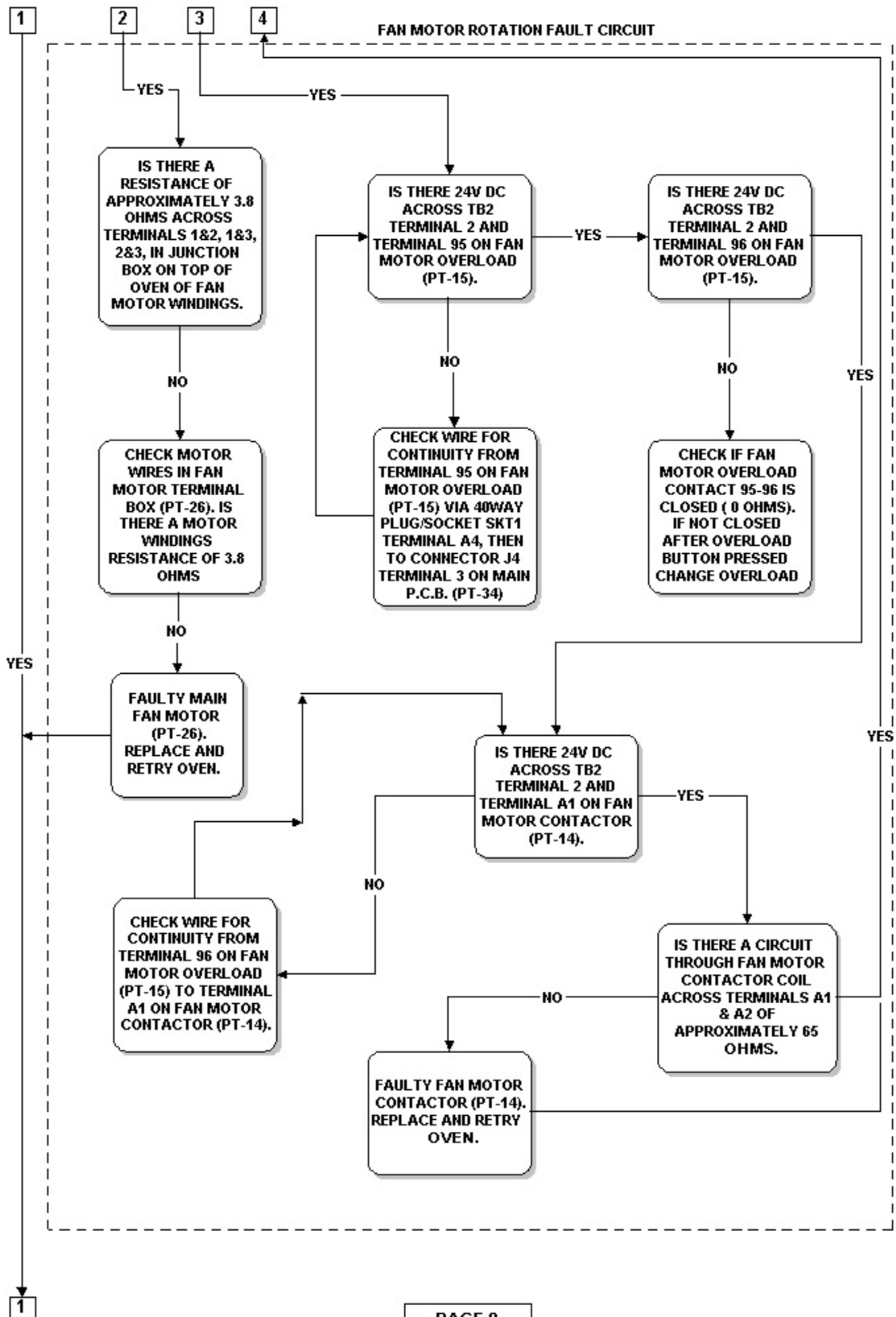
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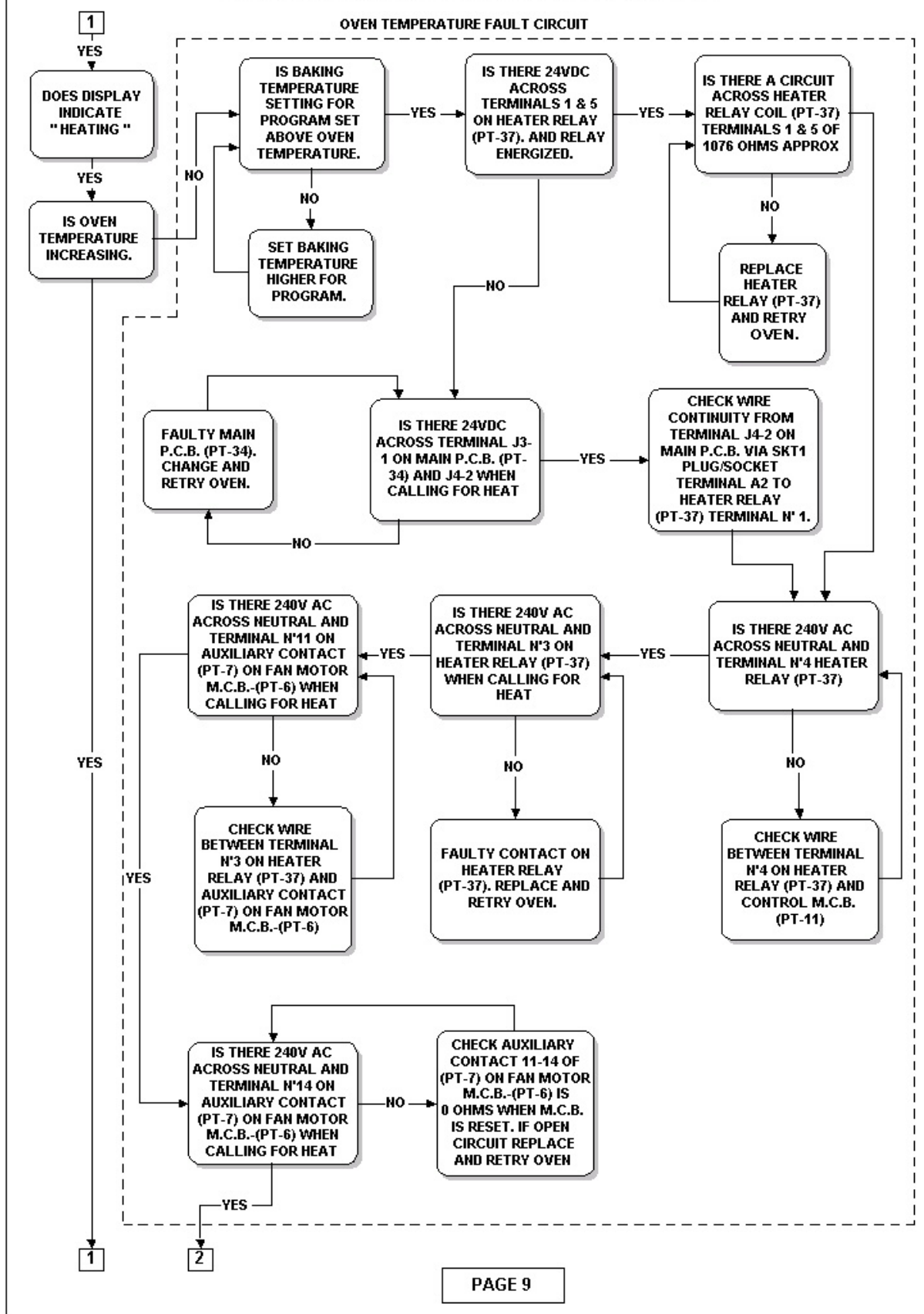
MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.



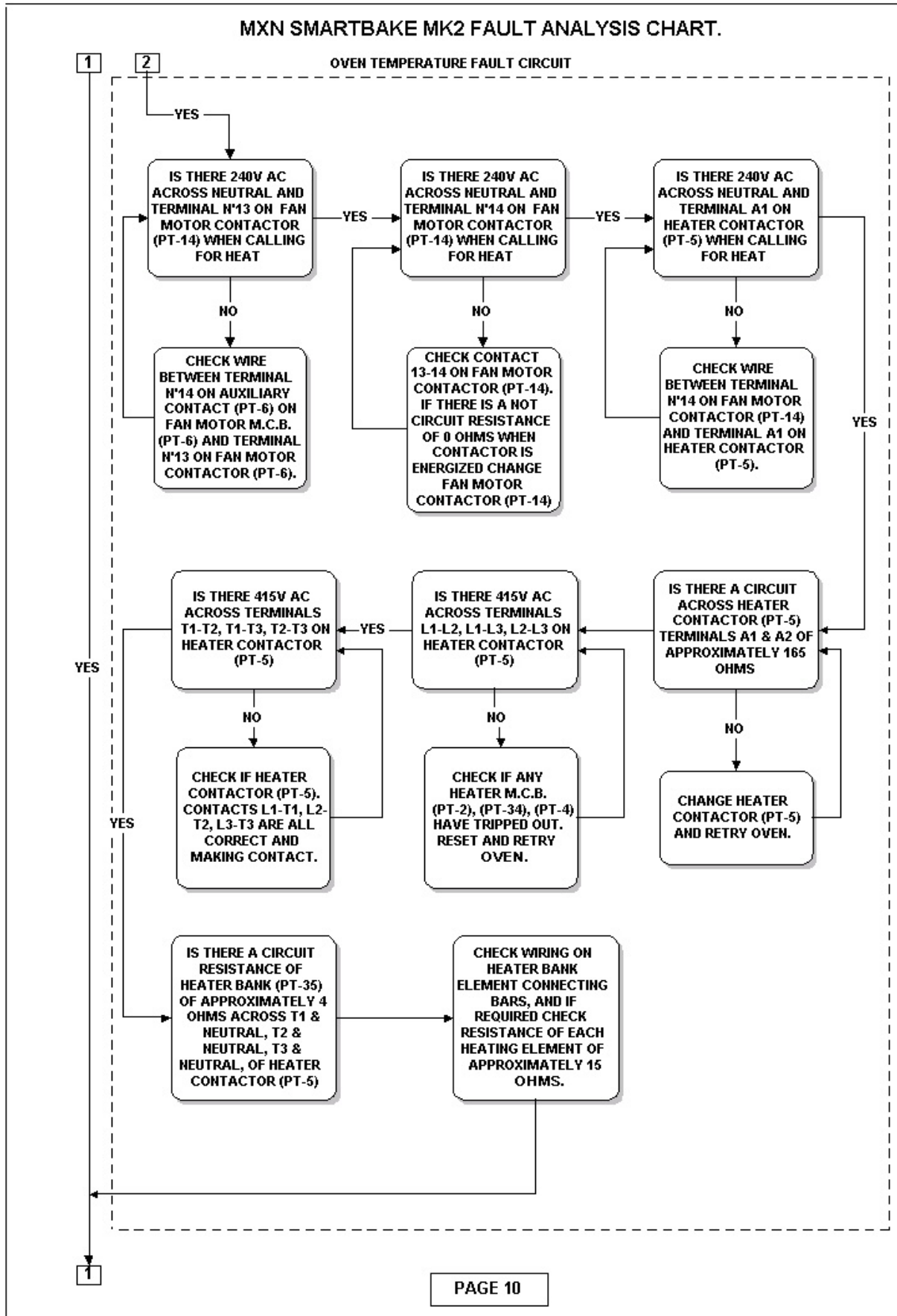
MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.



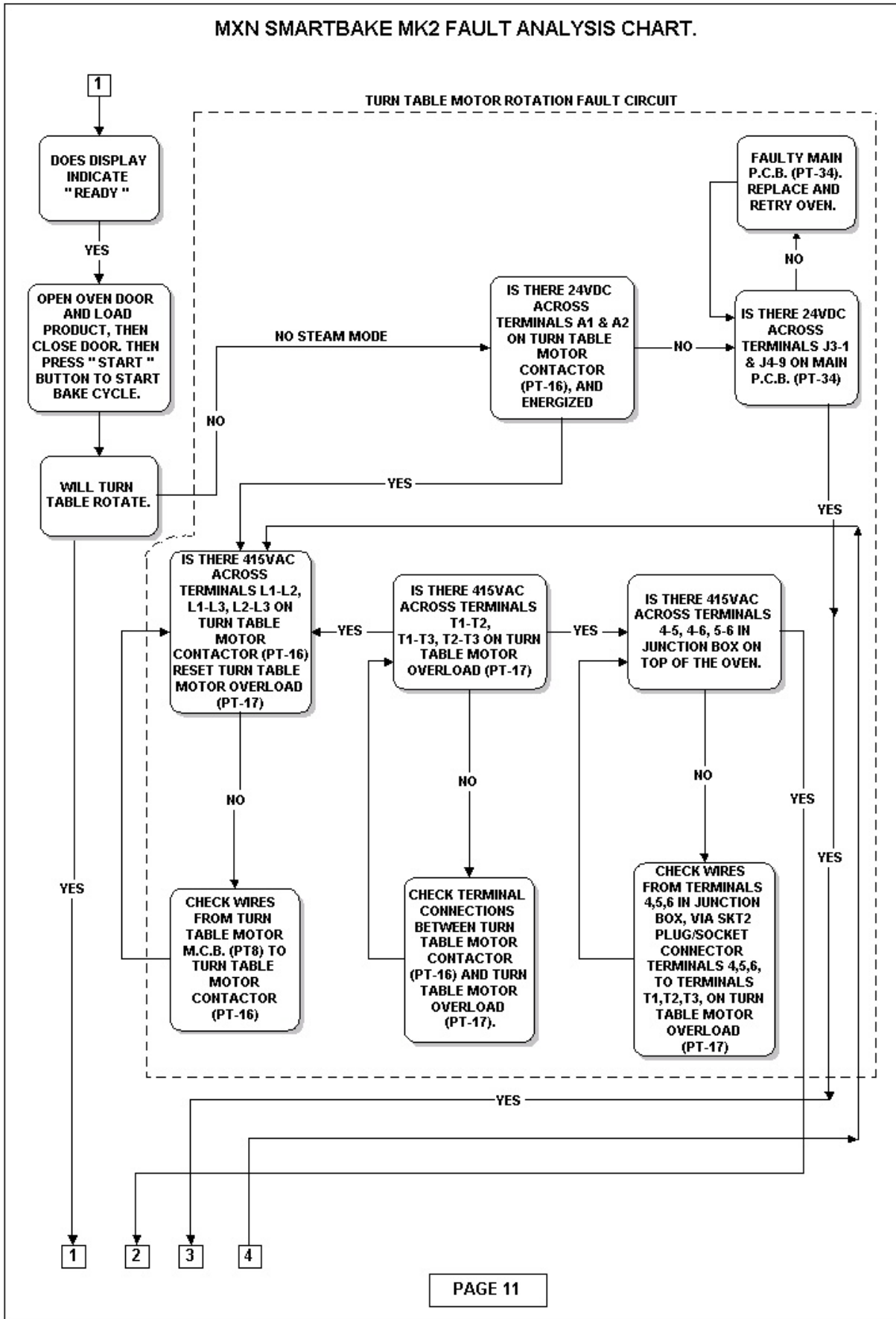
MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.



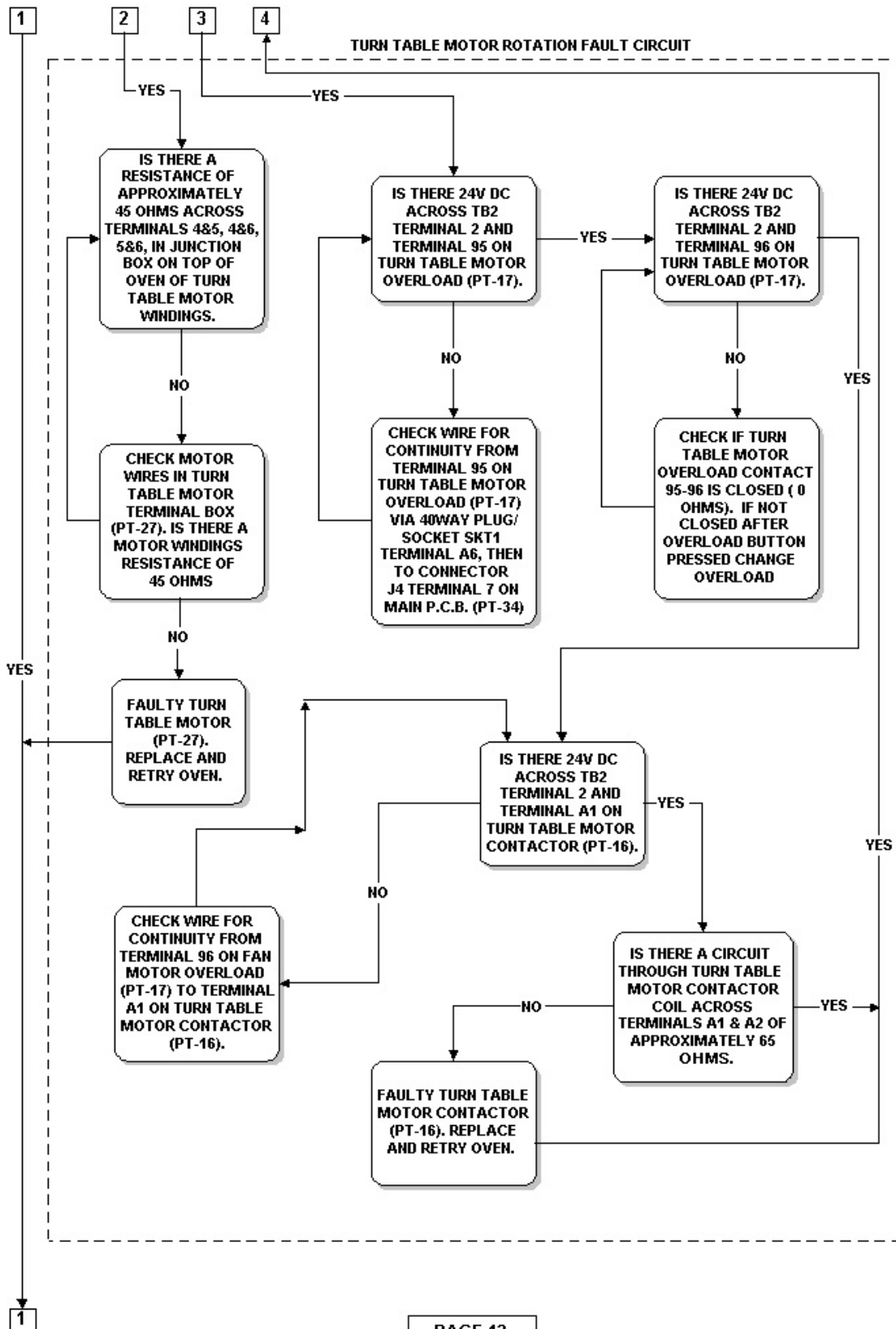
MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.



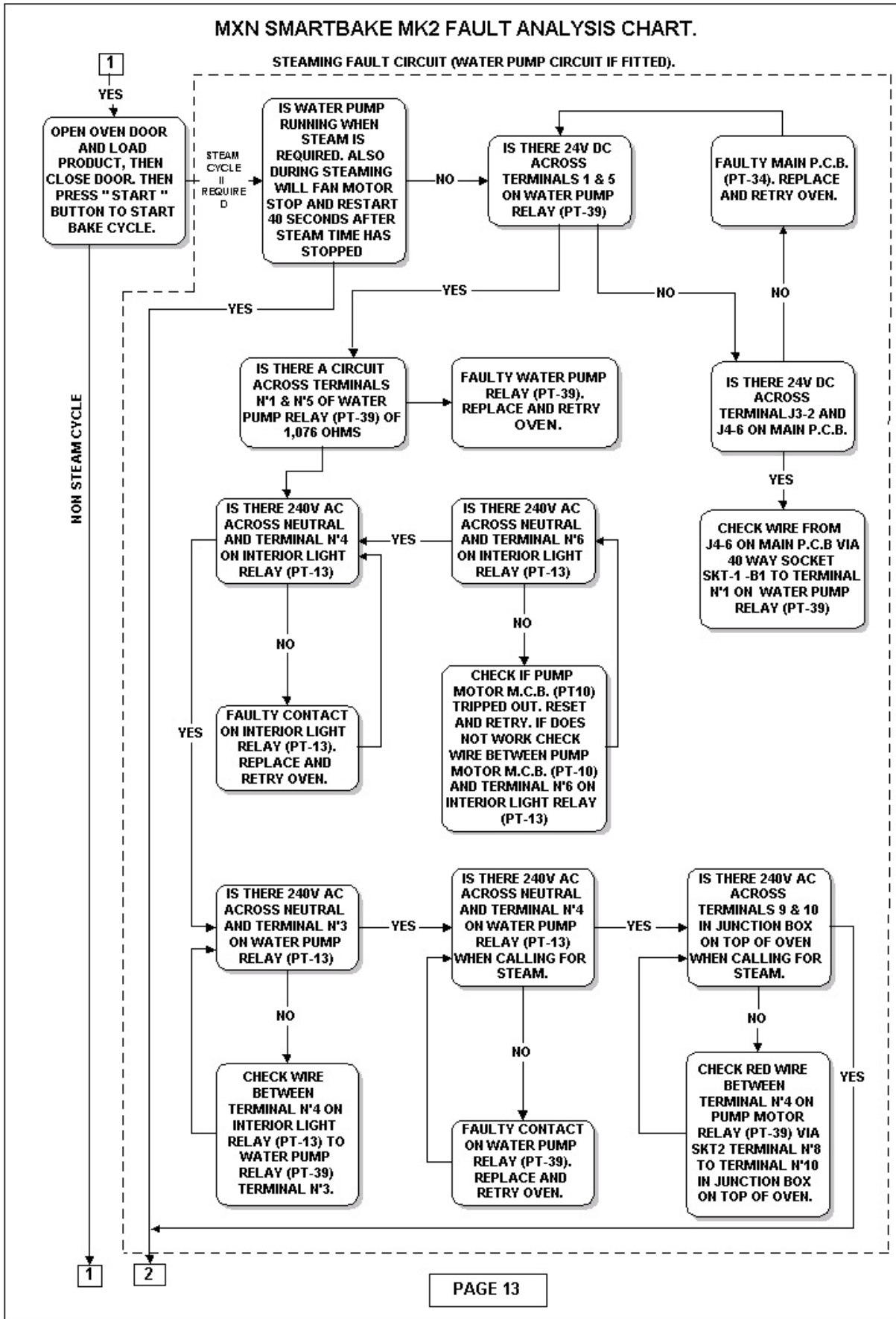
MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.



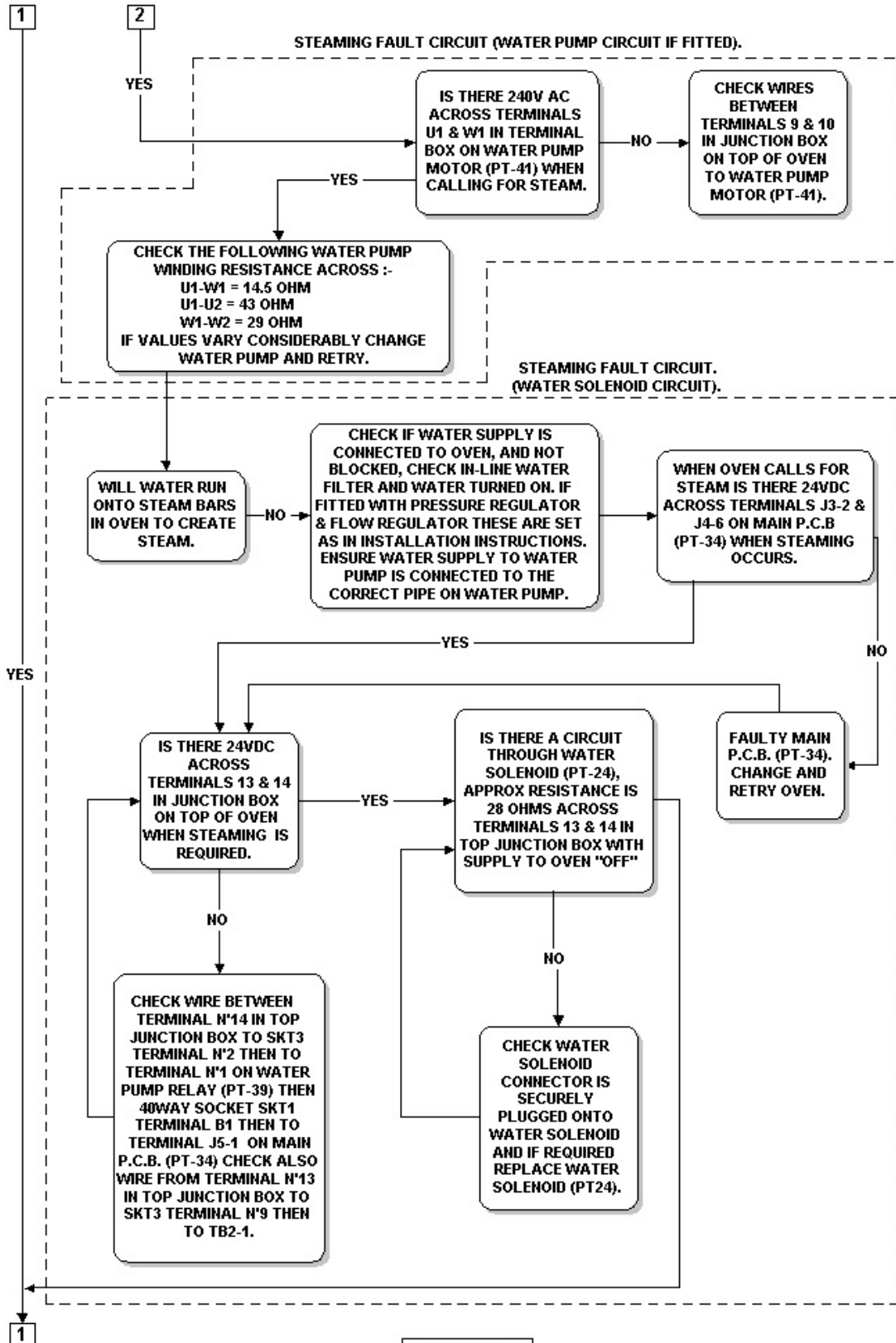
MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.



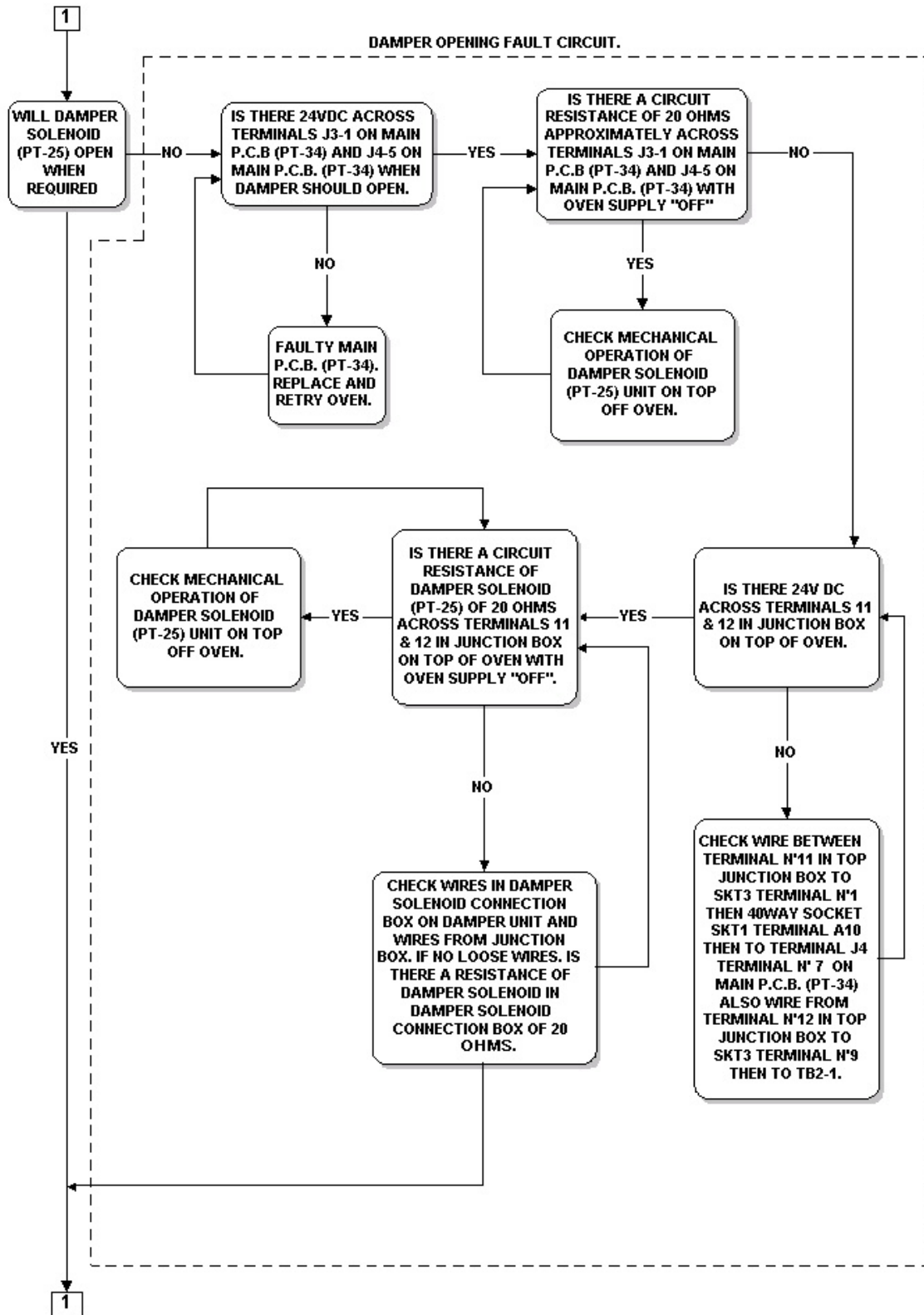
MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.



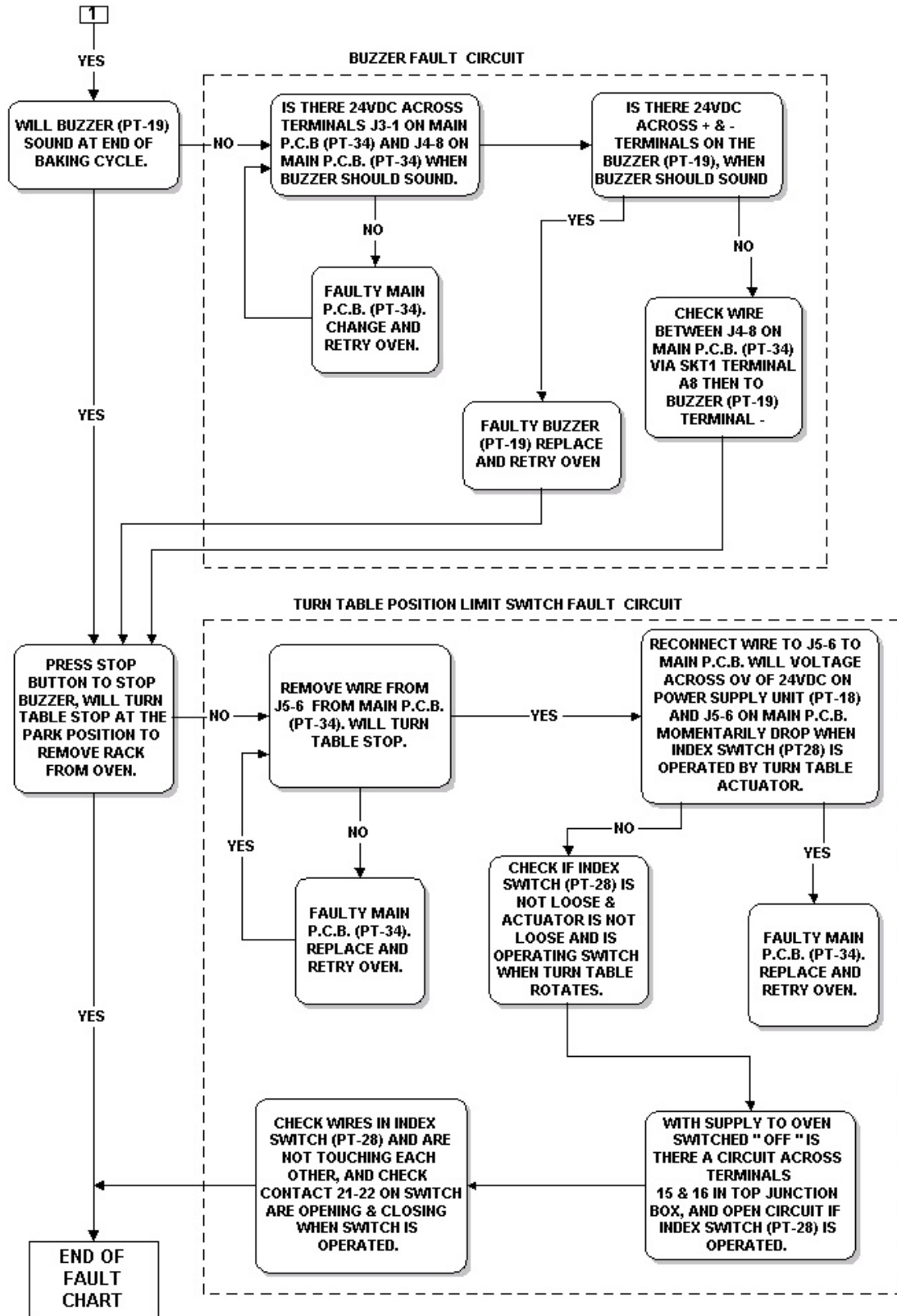
MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.



MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.



MXN SMARTBAKE MK2 FAULT ANALYSIS CHART.



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Tel. 01792 561234 Fax. 01792 561016
Email:mono@monoequip.com

www.monoequip.com

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