



MonoEquip.com

Enter **Serial No.** here. \_\_\_\_\_

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



# **Epsilon** colour

## **OPERATING AND MAINTENANCE MANUAL**

NOTE: THIS MACHINE IS FOR USE WITH SOFT DOUGH ONLY


The use of templates and/or accessories not produced or supplied by MONO Equipment will invalidate the machine's warranty



# 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 2014/30/EU incorporating standards
  - o EN 55014-1:2017/A11:2020
  - o EN 55014-2:1997+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
- Good manufacturing practice for materials intended to come in to contact with food – Regulation (EC) No.2023/2006

<b>Signed</b>	
<b>Craig Petherbridge – Quality Manager</b>	

<b>Date</b>	
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<b>Machine FG Code.</b>		<b>Machine Serial No.</b>	
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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 **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  
UK

QD 001

Dated 22/07/2022

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



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# SAFETY SYMBOLS

The following safety symbols are used throughout this product documentation and manual (available at [www.monoequip.com](http://www.monoequip.com)).

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.



## **CAUTION**

Indicates a hazardous situation if hand is placed in this area, if not avoided, will result in minor or moderate injury.



## **CAUTION**

Indicates a hazardous situation if hand is placed under hopper nozzles, if not avoided, will result in minor or moderate injury.



## Electrical safety and advice regarding supplementary electrical protection

Commercial 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 the 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 power 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 safety guidelines.

### We recommend:-

- Supplementary electrical protection with the use of a Residual Current Device (RCD)
- Fixed wiring appliances should also 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 safety 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.



### Warning!

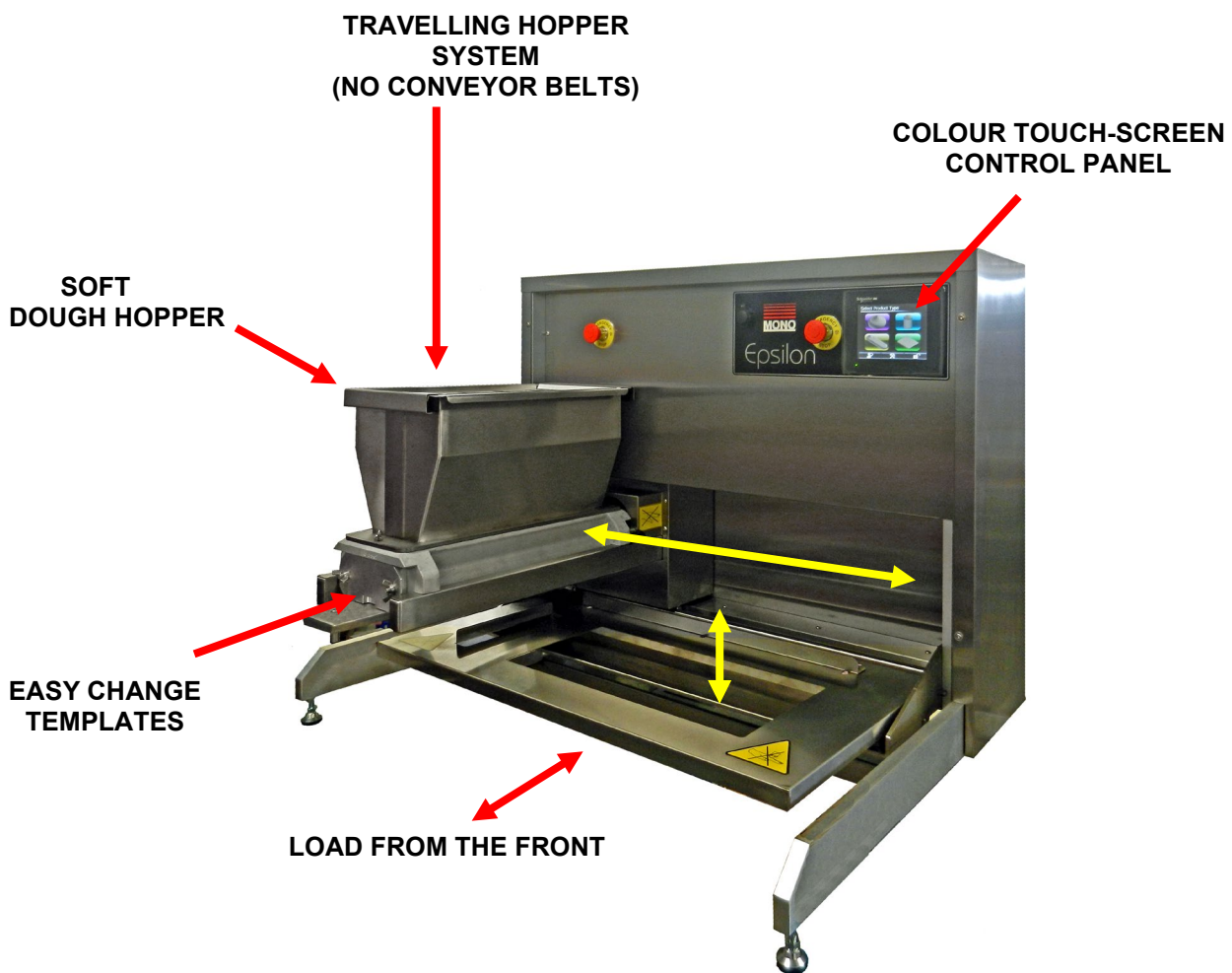
- A 30mA-rated Type A RCD must protect the supply to this machine.
-

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- 2.0 - DIMENSIONS
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# 1.0 INTRODUCTION

**EPSILON**

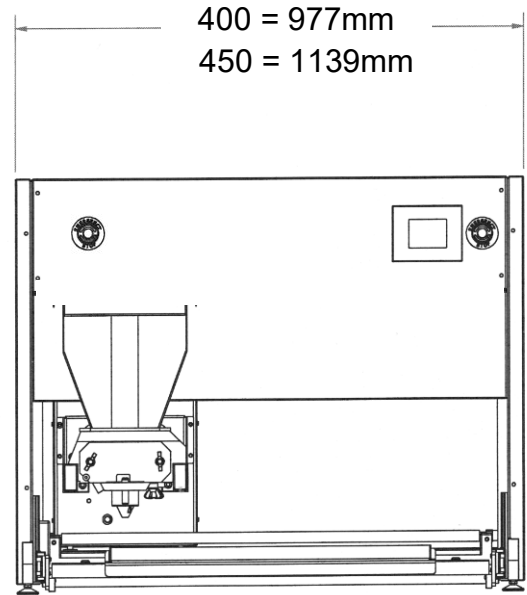
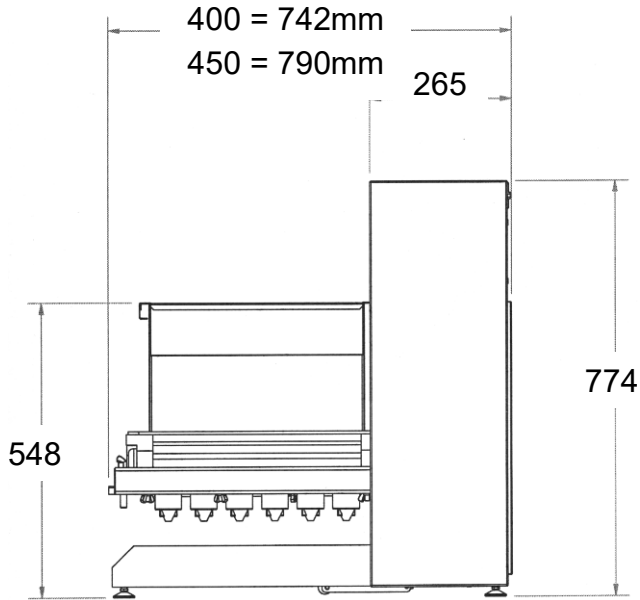
- The ground-breaking **EPSILON** tabletop confectionary depositor requires less than 1 square metre of space to operate.
- The unique travelling hopper system removes the need for a conveyor belt which means trays can be loaded and unloaded in the most ergonomically efficient way – directly from the front.
- The **EPSILON** can be transported through a normal doorway and plugged into a standard 13amp socket.
- Control is by a user-friendly colour touchscreen (in 14 languages) and can be used to store up to 96 programs.
- Robust stainless-steel construction for durability and ease of cleaning.
- A matching stainless-steel table is also available to make the **EPSILON** freestanding.



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

# 2.0 DIMENSIONS

EPSILON





# 3.0 SPECIFICATIONS

## SOFT DOUGH

<b>MODEL</b> (Nom. hopper width (mm))	<b>400</b>	<b>450</b>
<b>Weight</b> (with hopper fitted):	<b>100kg</b>	<b>110kg</b>
<b>Standard hopper Capacity</b> (litre) :	<b>20</b>	<b>22.5</b>

**Power:** Single phase, 13A max load. Suitable for 110v,200v, 220v, 230v, and 240v, 50-60 Hz supply.  
**MAX RATING** 2.5kW single phase fused at 13A



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

Cycles per minute	= Depends on product. i.e. 5 across 30g drop = 16 per minute.
Max program storage	= 96
Number of languages	= 14
Noise level	= Less than 85dB
Electronics	= All microprocessor controlled


### NOTE:

The minimum deposit that can be made depends on several factors – Recipe, mixing method, template size, nozzle size and deposit speed. As a guide the following is the minimum that should be attempted:

Macaroons	6g.
Meringues	3g.
Choux Paste	5g.
Viennese	4g.
Sponge Drops	4g.

However, consult **Mono Equipment** if your intended product falls outside the above general machine specification.

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

- 1 **Never use a machine in a faulty condition** and always report any damage.
- 2 **Only trained engineers** should remove parts from this machine if a tool is required.
- 3  Always ensure hands are dry before touching any electrical appliance (including cable, switch and plug). **NEVER move machinery by pulling on the power cords or cables.**

- 4 **Ensure that the floor area around the Epsilon is clean to avoid slipping** – especially if carrying heavy hopper and template components to and from the machine.

- 5 **All operatives must be fully trained.**

Use of the machine can prove dangerous if:



- ❑ the machine is operated by **untrained or unskilled staff**
- ❑ the machine is not used for its **intended purpose**
- ❑ the machine is **not operated correctly**

**All safety devices applied to the machine during manufacture and the operating instructions in this manual are required to operate this machine safely. The owner and the operator are responsible for operating this machine safely.**

- 6 People undergoing training on the machine must be under **direct supervision.**

- 7 Do not operate the machine with **any panels or guards removed.**



They are there to protect you.

- 8 **No loose clothing or jewellery** should be worn while operating the machine.



They could cause damage to the machine and person.

- 9 **Switch off power** at the mains isolator when machine is not in use and before carrying out any **cleaning** or **maintenance.**

10 The bakery manager or the bakery supervisor should carry out **daily safety checks** on the machine.



11 Do not operate machine without the hopper **template fitted correctly**.



12 Due to the essential requirement for handling heavy components during cleaning, it is recommended that **protective footwear** be worn when carrying out such procedures.



**CAUTION:**

The feed hopper and pump assembly can exceed 25kg and will need to be lifted off by two people, or dismantled into smaller components while still on the machine.

**ALL CLEANING AND MAINTENANCE OPERATIONS MUST  
BE MADE WITH MACHINE DISCONNECTED FROM  
THE POWER SUPPLY.**



## 5.0 INSTALLATION

EPSILON

- 1 Ensure that the depositor is connected to the correct electric supply as specified on the serial number plate on the side of the machine.



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

- 2 Ensure that the correct fuse rating is fitted in the electrical supply.
- 3 The support table should be level and strong enough to support the machine and loaded hopper.



- 4 This machine should be lifted by more than one person.

## 6.0 ISOLATION

**IN AN EMERGENCY, SWITCH OFF AT THE MAINS WALL ISOLATOR (UNPLUG), OR PUSH ONE OF THE EMERGENCY STOP BUTTONS.**



*To release an emergency stop button, turn clockwise.*



# 7.0 CLEANING INSTRUCTIONS

EPSILON

## NOTE:



- Cleaning must be carried out by fully trained personnel only.
- Isolate machine from mains supply before carrying out any cleaning.
- Do not steam clean or use a jet of water (hose or pressure washer).

**-Do not use any form of caustic detergent or abrasive cleaners.-**

All the outer surfaces of the machine should be wiped over daily with warm soapy water.

## **DOUGH HOPPERS** **BETWEEN PRODUCT MIX CHANGES**

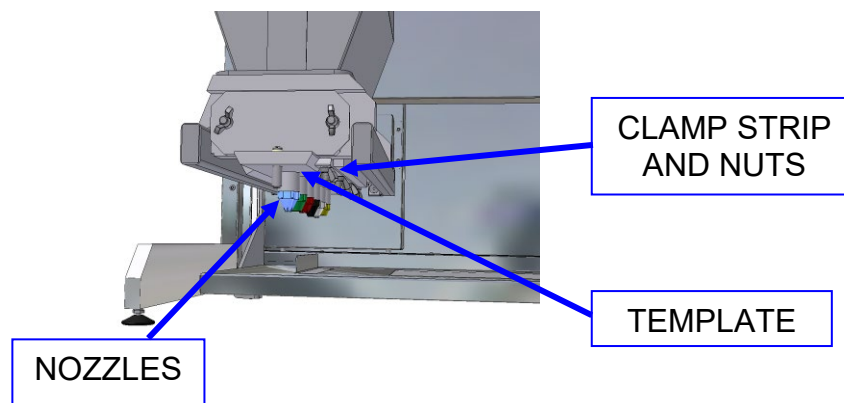
*The feed hopper, pump assembly, template, nozzles etc. should be removed from the machine and dismantled for thorough cleaning between product mix changes.*

1. Open top safety guard (lift front and unhook the back edge) and remove excess mixture remaining in the feed hopper.
2. Slacken template clamp strip nuts and remove fitted template from pump assembly by sliding out while supporting it to avoid damage.

## **NOTE.**

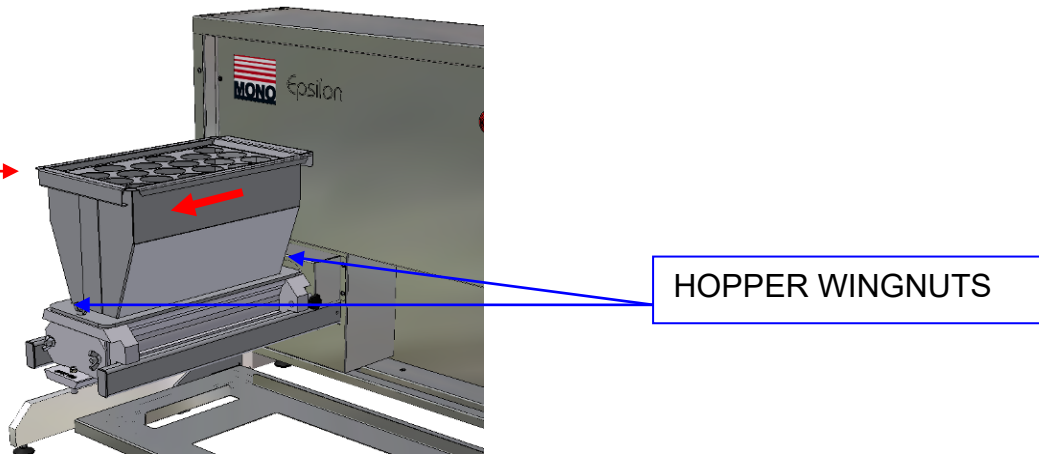
*Thumbscrews only need to be released slightly to allow the template to slide away from the pump assembly. If loosened too much, the template will have to be supported.*

### **DOUGH HOPPER**



- 3 To reduce weight and bulk, separate and remove the empty feed hopper from the pump assembly, by unscrewing the wing nuts, whilst still on the machine.

*To gain access to the inner wing nut, slide the complete hopper away from the machine body slightly (keep on support bars) - this will also disengage the pump assembly from the drive shaft.*



*Ensure that the wing nuts are placed where they will not be lost.*

# DOUGH HOPPER

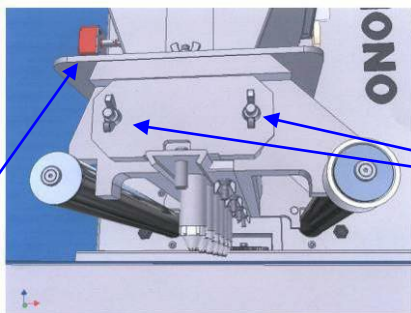
EPSILON

NOTE: THIS MACHINE IS FOR USE WITH SOFT DOUGH ONLY

**CAUTION:**  
The feed hopper and pump assembly can exceed 25kg and will need to be lifted off by two people, or dismantled into smaller components while still on the machine.

Take care to avoid damage to the sealing surface of the feed hopper during removal, cleaning, assembly and storage.

1. After removing the feed hopper, check condition of feed hopper seal.
2. Unscrew the end cap retaining nuts from the accessible side of the pump assembly.  
*Ensure that the nuts are placed where they will not be lost.*

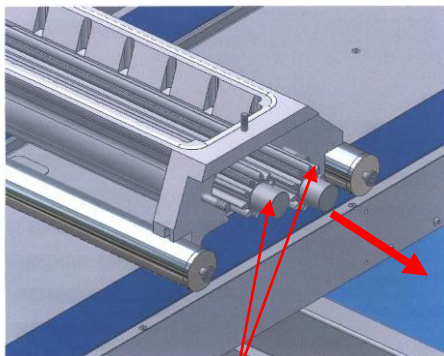


FEED HOPPER  
SEALING SURFACE

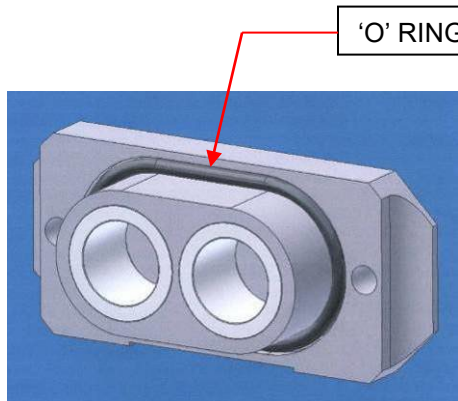
ENDCAP NUTS

3. Withdraw the end-cap with the pump gears.

*Ensure that the 'O' sealing ring on the inside of the end-cap is not damaged during cleaning.*



PUMP GEARS  
REMOVE WITH END CAP  
(NOT SHOWN)



'O' RING IN GROOVE

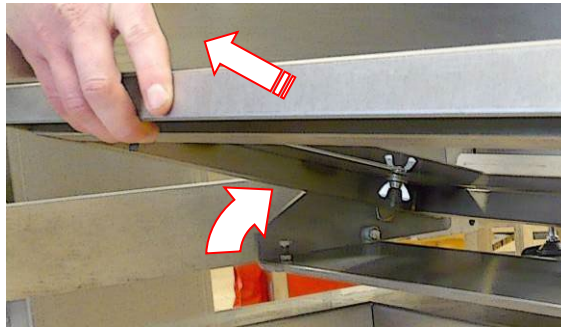
END CAP

4. To fully dismantle pump assembly components for cleaning, remove remainder of pump assembly from the machine and remove remaining end-cap.

PICTORIAL VIEWS SHOWN COULD BE DIFFERENT TO THE MACHINE BEING WORKED ON BUT THE INSTRUCTIONS ARE THE SAME FOR ALL MODELS.

To remove the table for cleaning:

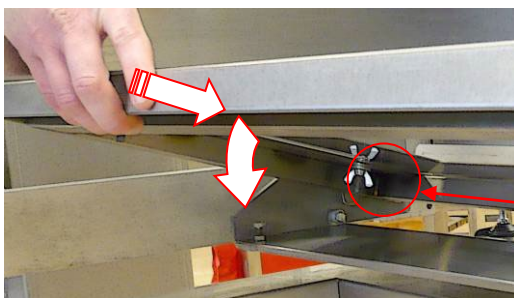
1. Push the table down to its lowest level.
2. Lift the front edge and lift the table towards you.  
The table will release from the back pins and can be placed in a washer for cleaning.



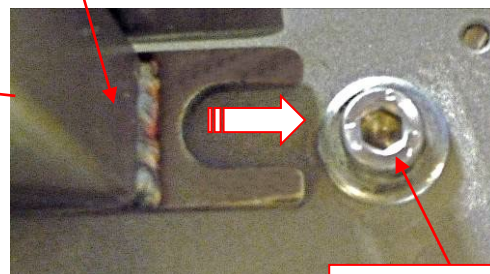
To replace the table after cleaning:

1. Hold table with the front edge raised and engage the slots over the pin on both sides.
2. Lower the table front edge.

When in the correct position the table will not slide forward.



TABLE



LOCATING PIN



## 8.0 OPERATING CONDITIONS

To obtain the best product results and consistent operation,

- ✓ Make sure the depositor is used on a **level surface**.  
(Adjust feet if required)
- ✓ Ensure **flat trays** are used.
- ✓ Ensure **undamaged** nozzles and templates are used.
- ✓ Keep the machine **clean**.
- ✓ Do not leave any components in the hopper.



## 9.0 PREPARING FOR OPERATION

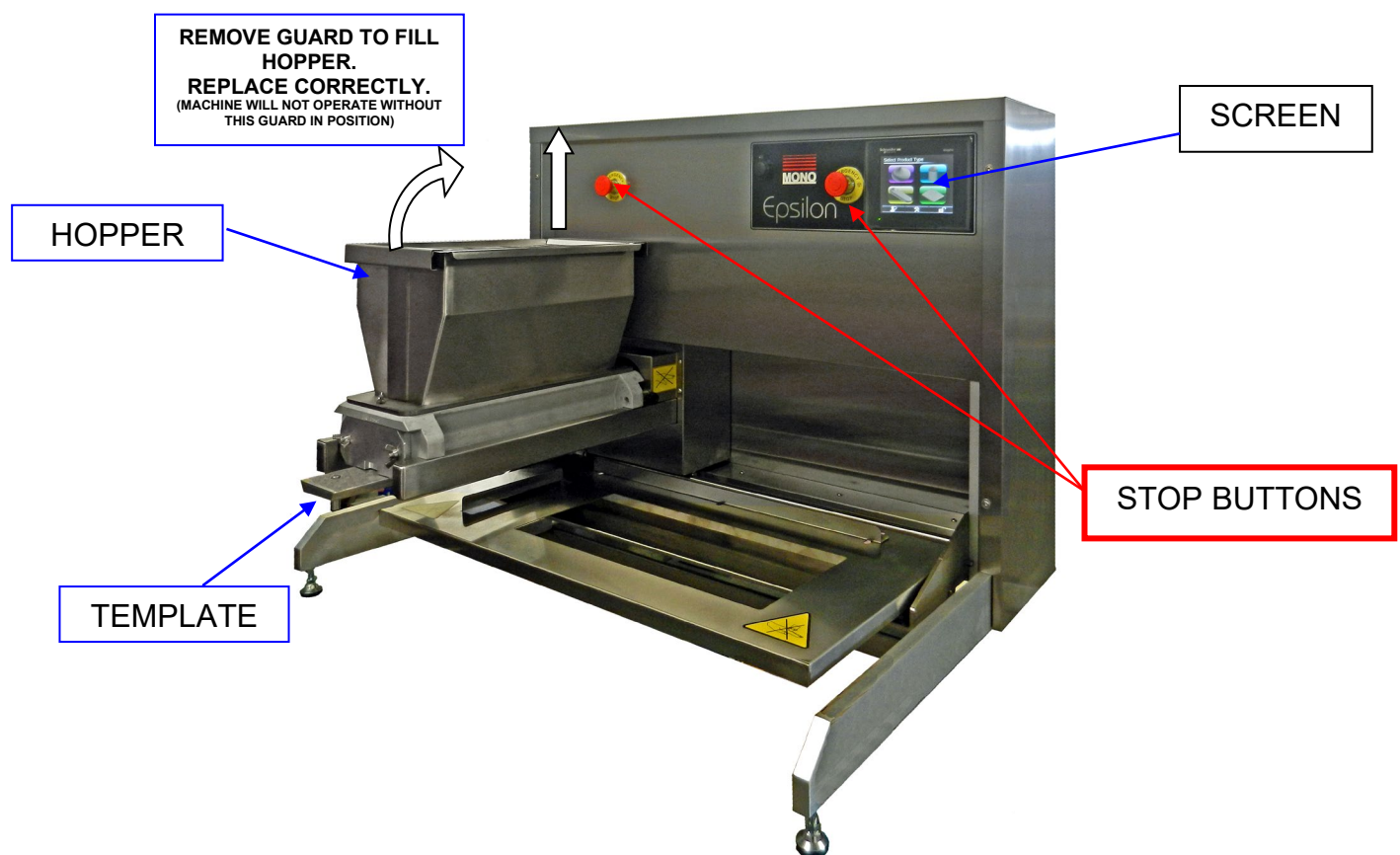
EPSILON

NOTE: THIS MACHINE IS FOR USE WITH SOFT DOUGH ONLY

**The use of templates and/or accessories not produced or supplied by MONO Equipment will invalidate the machine's warranty**

- 1 Select template and nozzles required and fit as section 9a & 9b following.  
Check that nothing has been left or fallen in the hopper.  
Fill hopper with mix and close hopper guard.

*It is recommended that when heavy mixes are used, the inside of the hopper should be coated with vegetable oil and for lighter mixes such as meringue, dampen with water. The oil or water will help the mix to settle down the hopper walls and prevent air being sucked in.*

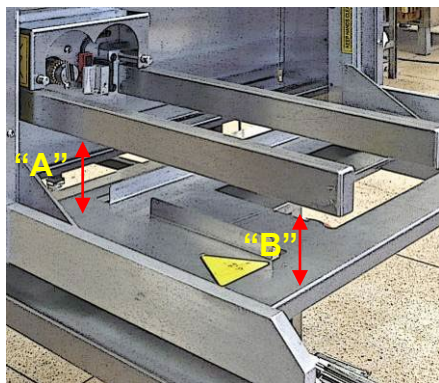


- 2 Connect power cable to the correct electrical supply.  
*Make sure stop buttons are in released position (turn clockwise if required).*
- 3 Select an existing program or create a new program through the on-screen menus.  
(see section 10 operation)
- 4 The machine is now ready for operation.

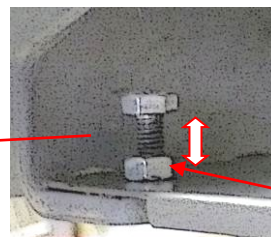
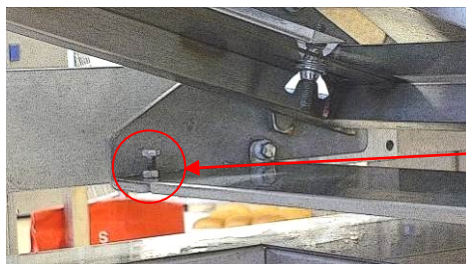
## TABLE ADJUSTMENTS

It is important that the table is parallel with the hopper.  
*(If this is not correct the nozzles will not be the same distance from the trays and the deposits will differ across the tray).*

Measure the distance at "A" and "B" below and check that they are the same.  
This should be checked with the hopper bars positioned at both the full left position and the full right position.



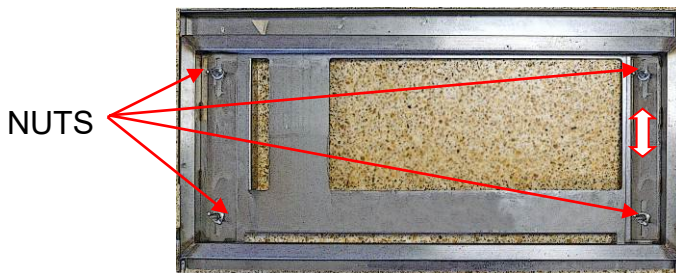
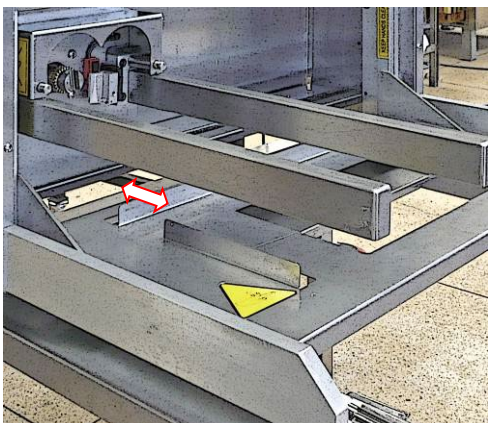
If not the same, an adjustment can be made by raising or lowering the adjusters under the table. There is one each side to allow the table to be adjusted evenly.



Lift the front edge of the table and, with a suitable spanner, release the locking nut. Screw the adjuster bolt up or down and then lock it in position with the locking nut.

## TRAY GUIDE ADJUSTMENT

This allows different width trays to be accommodated. To adjust the position of the back guide, remove the table and turn it over. Loosen the thumb nuts and slide the sheet across to the desired position. Tighten the nuts and replace the table.



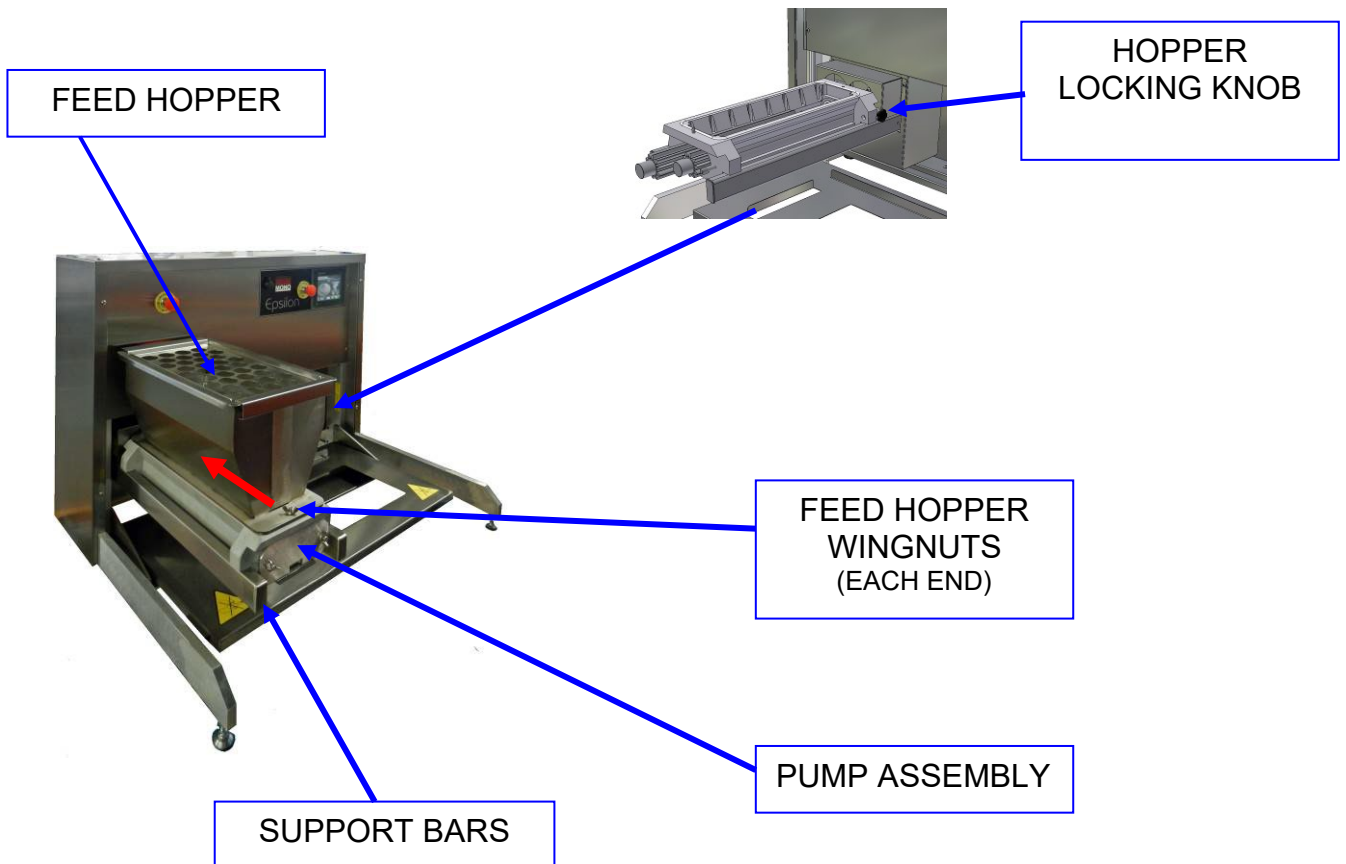
## 9a FITTING THE HOPPER



**CAUTION SHOULD BE TAKEN WHEN FITTING HOPPER AND PUMP ASSEMBLY AS WEIGHT EXCEEDS 25KGS ON SOME MODELS**  
It will need to be lifted off by two people, or dismantled into smaller components while still on the machine.  
MAKE SURE FLOOR AREA AROUND MACHINE IS CLEAN

To reduce weight and bulk fit the complete hopper assembly in two stages - first the pump assembly onto the support bars, then the feed hopper body onto the pump assembly.

- 1 By hand, align pump assembly drive gear roller with drive shaft on machine.
- 2 Fit hopper to pump assembly and secure with wing nuts.
- 3 Slide hopper on support bars until fully up against machine.
- 4 Screw hopper locking knob hand tight.

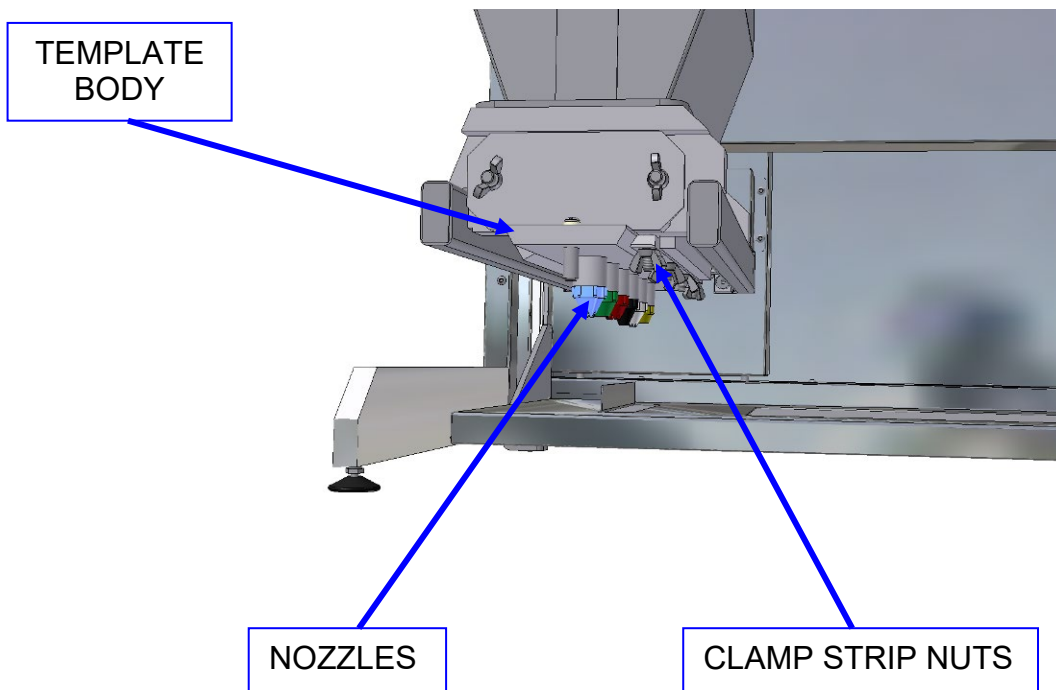


**DO NOT OPERATE MACHINE WITHOUT TEMPLATE FITTED**



## 9b FITTING A TEMPLATE

- 1 Select template and nozzles required.  
(Nozzles are not required for sheeting, staggered or stub templates)
- 2 Attach nozzles to template body:



- 3 Slide template into matching recess at base of pump assembly until the stop is in position.
- 4 Tighten nuts on clamp strip (on underside of pump assembly) to secure template.

**NOTE.** *If the nuts are not securely tightened, leakage of mix will occur, affecting deposit weights.*

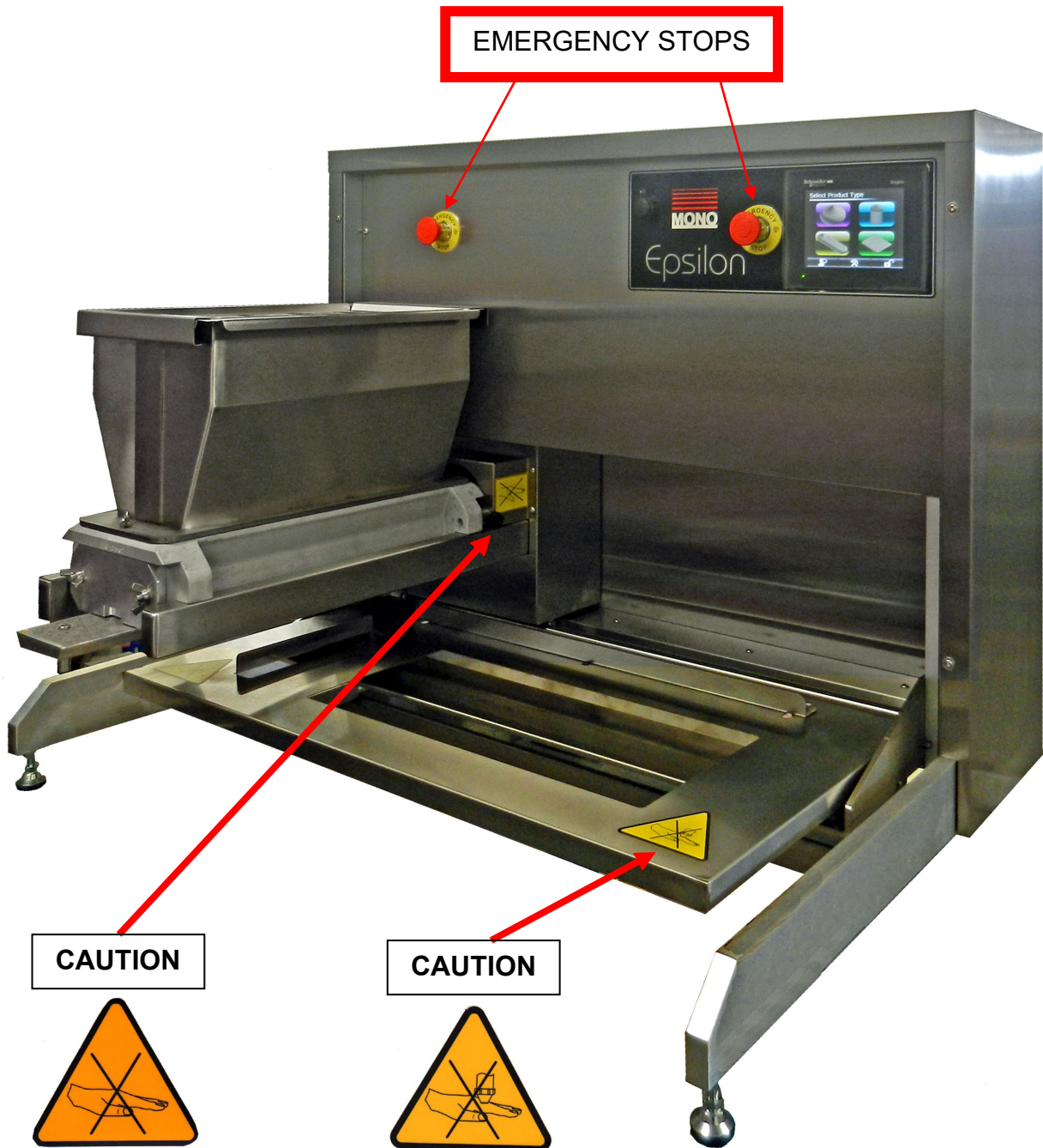


**DO NOT OPERATE MACHINE WITHOUT TEMPLATE FITTED**



# 10.0 'Epsilon' OPERATION

EPSILON



EMERGENCY STOPS

CAUTION



KEEP HANDS AWAY FROM THIS AREA

CAUTION



DO NOT PLACE HANDS UNDER HOPPER NOZZLES

ALL OPERATIONS ARE ACTIVATED BY TOUCHING AREAS ON THE SCREEN WITH A FINGER. DO NOT USE EXCESSIVE FORCE OR HARD OBJECTS AS THIS WILL INVALIDATE MACHINE WARRANTY.

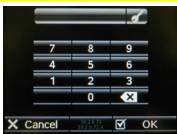
# OPERATING KEY FOR FOLLOWING INSTRUCTIONS

**BLUE = OPERATION**

FOLLOW BLUE ARROWS AND BOXES TO OPERATE THE DEPOSITOR WITH ALREADY SAVED PROGRAMS

**RED = CHANGE SETTINGS**

FOLLOW RED ARROWS AND BOXES TO CHANGE SETTINGS AND CREATE NEW PROGRAMS



**= KEYBOARD ENTRY  
= REQUIRED**

WHEN KEYBOARD APPEARS, A CODE MUST BE ENTERED BY TOUCHING THE NUMBERS IN THE CORRECT ORDER

# SELECT PRODUCT TYPE

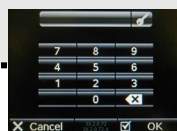
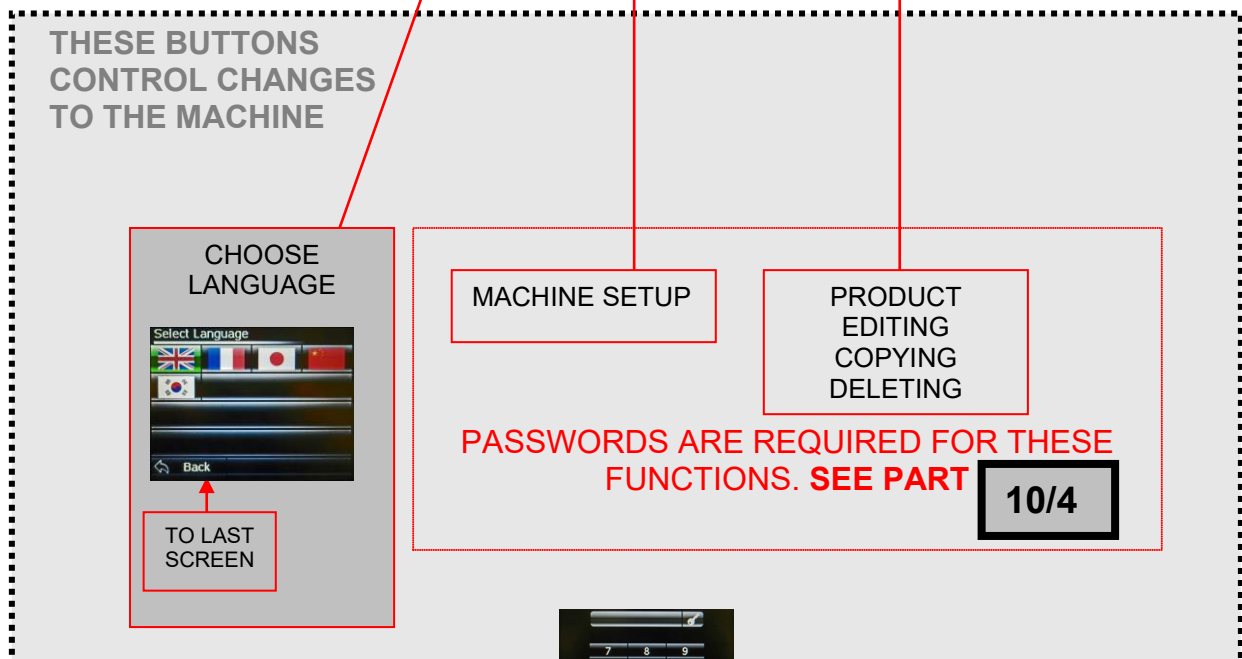
SELECT PRODUCT TO DEPOSIT OR TO CREATE NEW PROGRAM

PART  
**10/1**

1. Touch anywhere on the first screen to start.

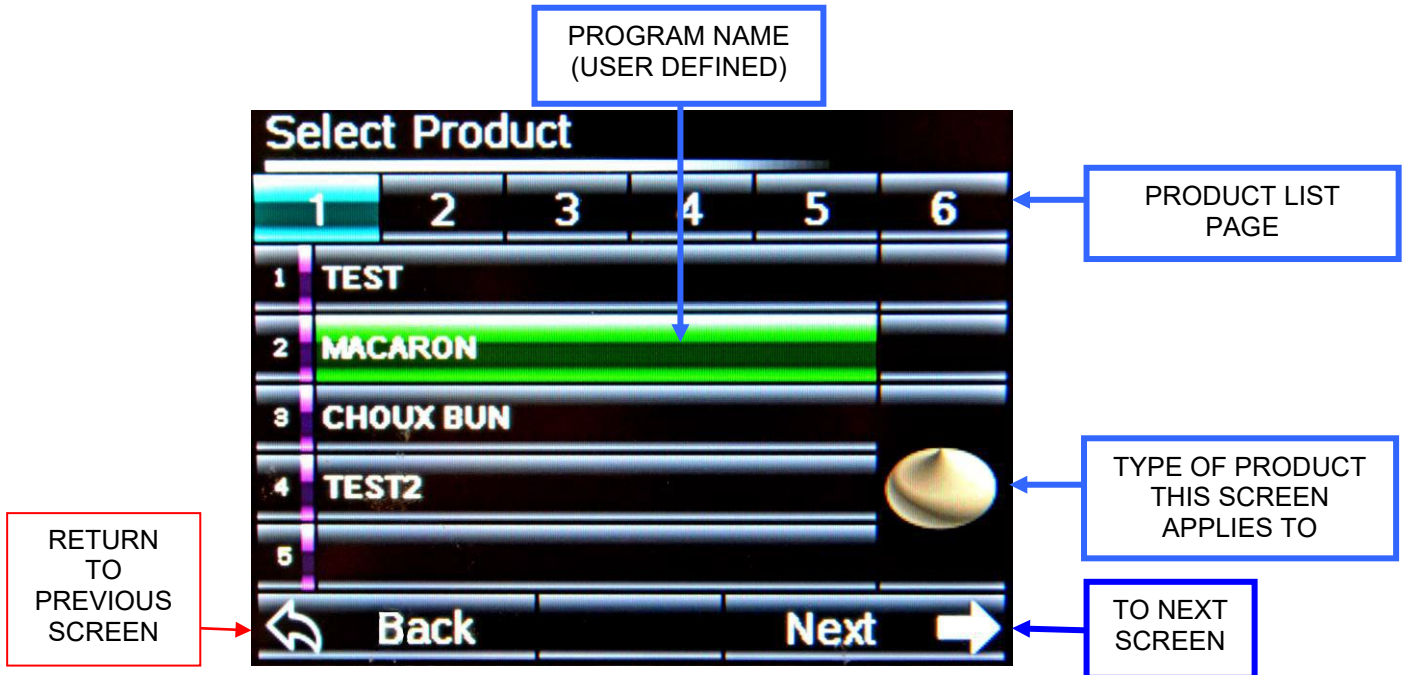


2. Touch the screen for the type of product required.  
Display will move on to the next screen.

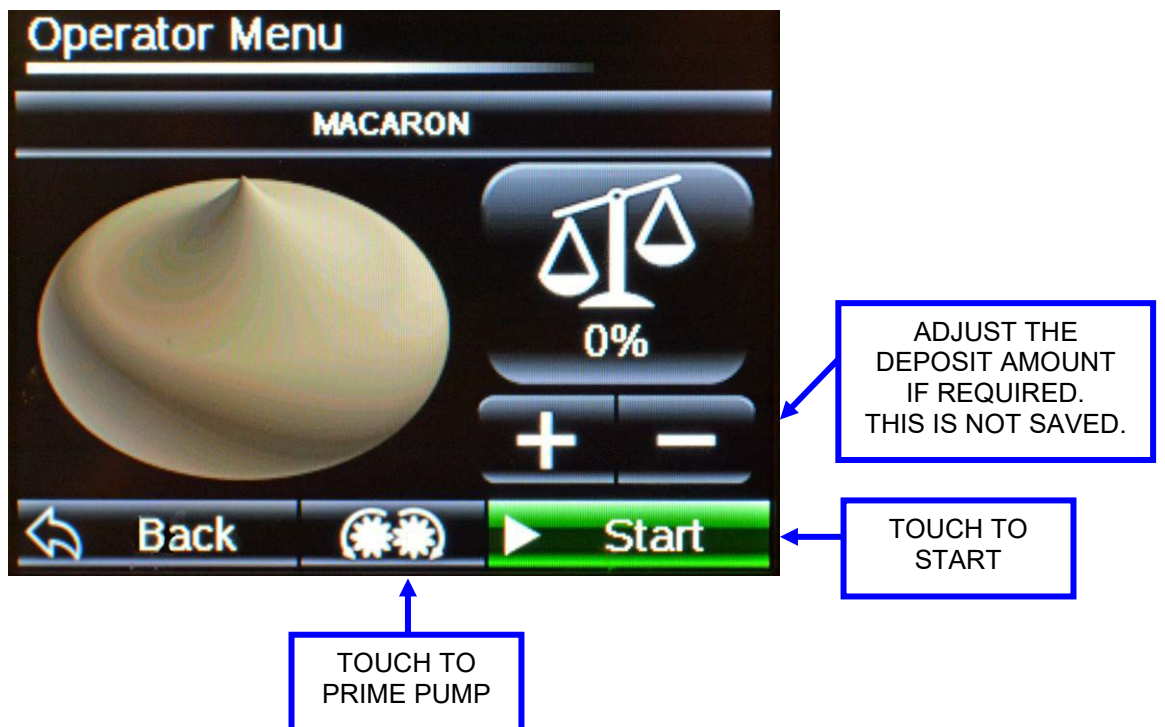




1. Select the product required from the list.



2. Touch "next" to go to next screen.



3. Place tray under nozzles and touch prime button until deposit is even.  
(touch continuously to operate).

4. Place a clean tray under nozzles and touch start. Touch stop at any time to stop depositing and return hopper to start position.



EDIT BUTTON

1. Touch the edit button.

2. Enter password.



Touch ok. (Screen shows



)

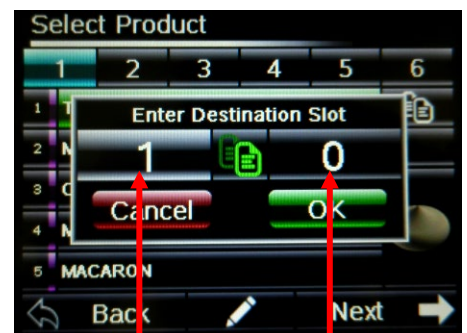
3. Select the product type on screen. (drop, tower, strip, sheeting)

4. Select the product



EDIT BUTTON

TO EDIT EXISTING PROGRAM SETTINGS FOR A NEW PRODUCT, COPY PRODUCT TO NEW LOCATION FOR EDITING



FROM SLOT NUMBER

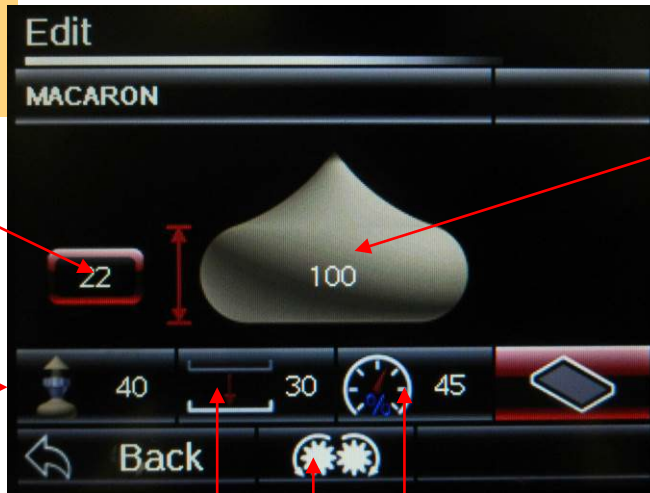
TO NEW SLOT NUMBER

5. Touch the edit button.

**EXAMPLE EDIT:  
DROP**

**NOZZLE HEIGHT  
ABOVE TRAY  
SURFACE**

**SUCK BACK  
QUANTITY**



**PRODUCT QUANTITY**  
THIS IS A SETTING NUMBER AND  
DOES NOT INDICATE A MEASURE OF  
ACTUAL VOLUME

**TABLE  
JOG DISTANCE (mm)**

**OVERALL  
MACHINE SPEED  
(% OF MAXIMUM)**

**PRIME PUMP**

**ENTER TRAY  
SETUP  
SCREEN  
(SEE 6 BELOW)**

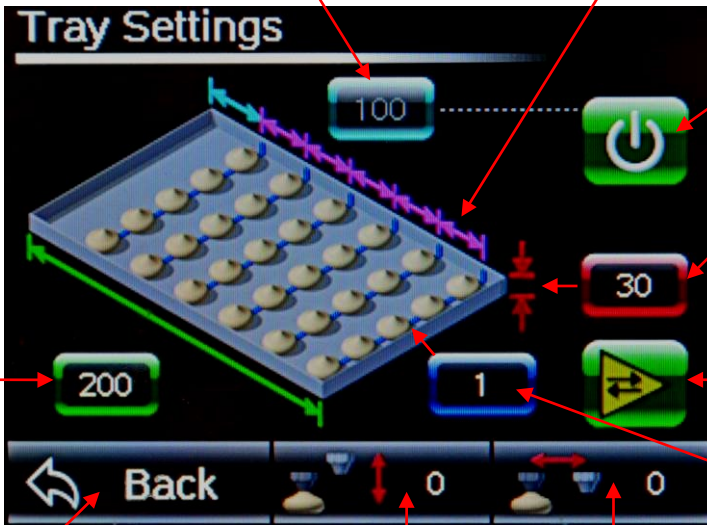
5. Touch each adjustment required and make changes with the keyboard that appears.

6. The tray setting brings up another screen as below.

**DISTANCE (mm) TO 1<sup>ST</sup> ROW ON TRAY**

**DISTANCE (mm) BETWEEN ROWS  
(WHEN USING MANUAL OVER-RIDE)**

**TRAY LENGTH  
(mm)**



**MANUAL OVER-RIDE FOR  
ROW SPACING  
ON/OFF**

**TRAY EDGE  
HEIGHT (mm)**

**DEPOSIT  
DIRECTION**  
TOGGLES BETWEEN  
TWO WAY (DEFAULT) OR  
ONE WAY

**NUMBER OF ROWS  
TO BE DEPOSITED**

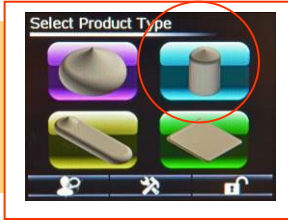
**TO PREVIOUS  
SCREEN**

**VERTICAL DISTANCE  
MOVED BY HOPPER AFTER  
DEPOSIT**

**HORIZONTAL DISTANCE  
MOVED BY HOPPER AFTER  
DEPOSIT**

**WIPE BACK**

**EXAMPLE EDIT:  
TOWER**



**DEPOSIT QUANTITY  
FOR EACH LAYER**

**NOZZLE HEIGHT (mm)  
FOR EACH LAYER**

**NOZZLE HEIGHT (mm)  
FROM TRAY SURFACE**

**SUCK BACK  
QUANTITY**

**TABLE  
JOG DISTANCE (mm)**

**OVERALL  
MACHINE SPEED  
(% OF MAXIMUM)**

**ENTER TRAY  
SETUP  
SCREEN  
(SEE 6 PREVIOUS PAGE)**

**PRIME PUMP**



**EXAMPLE EDIT:  
STRIP**



**DEPOSIT QUANTITY  
FOR BEGINNING OF  
PRODUCT**

**DEPOSIT QUANTITY  
FOR LENGTH**

**DEPOSIT QUANTITY  
FOR END OF  
PRODUCT  
(-VE VALUES POSSIBLE)**

**NOZZLE HEIGHT  
ABOVE TRAY  
SURFACE**

**LENGTH (mm) OF  
DEPOSIT**

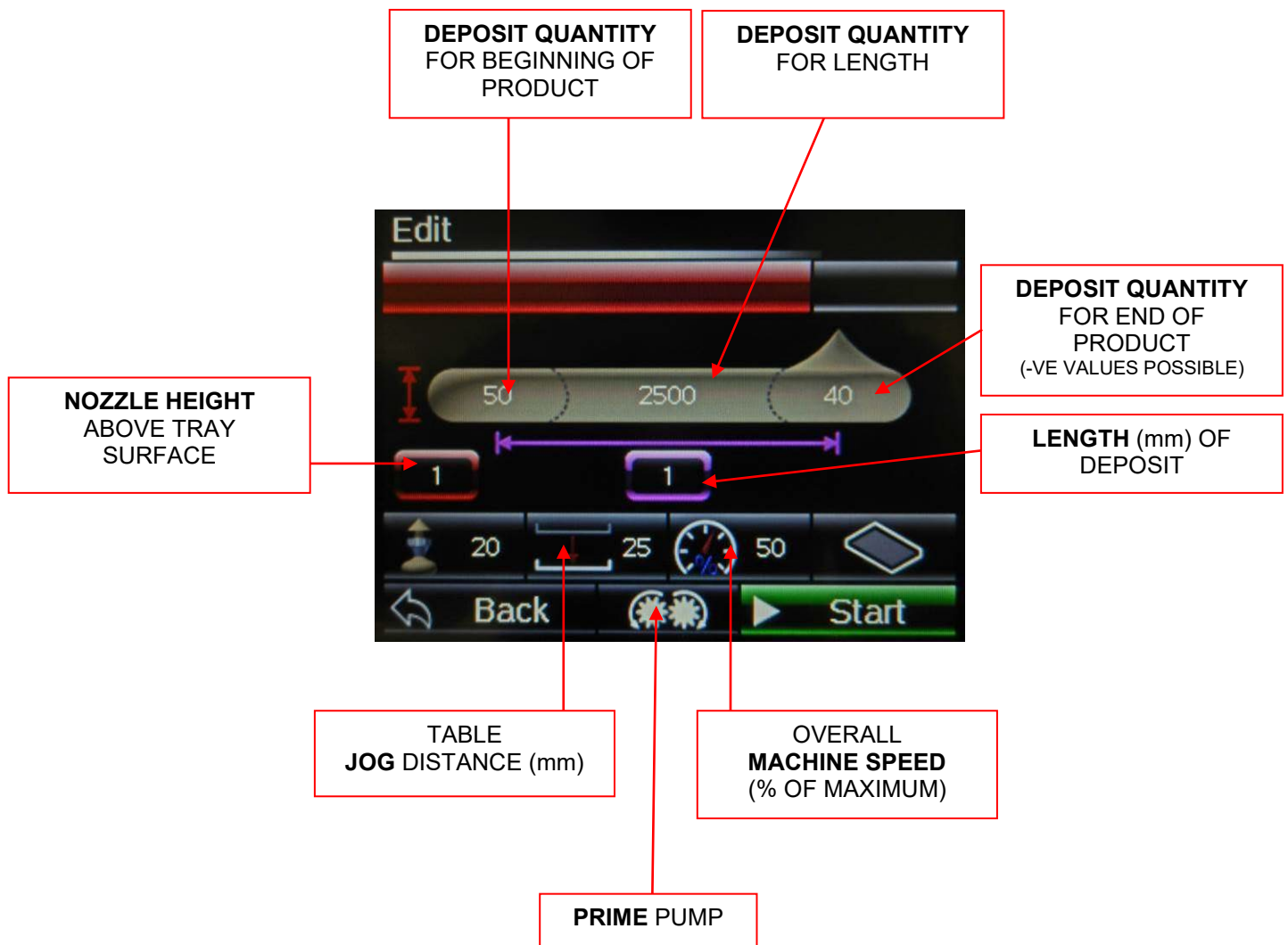


**TABLE  
JOG DISTANCE (mm)**

**OVERALL  
MACHINE SPEED  
(% OF MAXIMUM)**

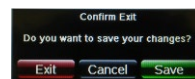
**PRIME PUMP**


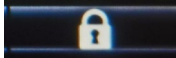
**EXAMPLE EDIT:  
SHEETING**



7. Make adjustments and touch back.

8. Touch back again and confirm exit screen appears.  
*Exit, cancel or save as required.*



9. When finished, touch  and it will change to   
(This will password lock the settings)

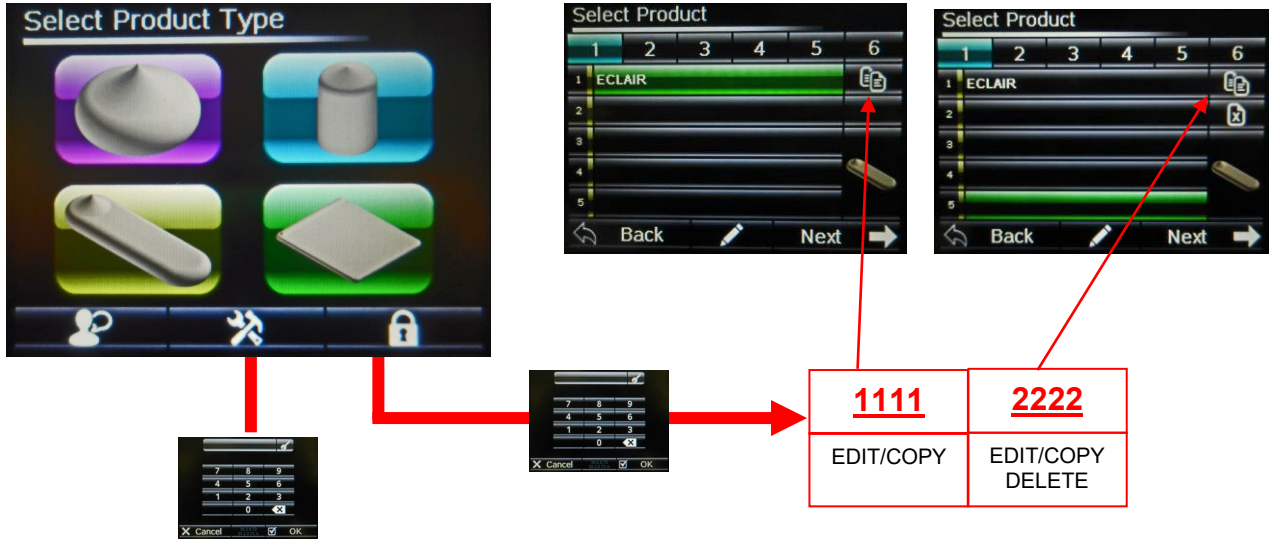
# PASSWORDS

**SUGGESTION**

To stop unauthorised changes to the Epsilon setup, it is suggested that this page is removed from this manual and kept in a safe place for future reference.  
If tampering could be a problem, It is also a good idea to change the passcodes at regular intervals.

**CAUTION**

DO NOT ATTEMPT TO MAKE ADJUSTMENTS UNLESS YOU ARE FULLY AWARE OF THE RESULTS



**654321 – CHANGE PASSCODE**

CHANGE EDIT/COPY PASSWORD

CHANGE EDIT/COPY/DELETE PASSWORD

**1234 – SCREEN ADJUSTMENT**

THIS SECTION IS FOR TRAINED ENGINEERS ONLY

**3142 -- ENGINEERING SETTINGS**

**2808 -- DIAGNOSTICS**

**777460--RESET FACTORY DEFAULTS**  
ONLY USE THIS IF INSTRUCTED TO DO SO.

THIS SECTION IS FOR TRAINED ENGINEERS ONLY

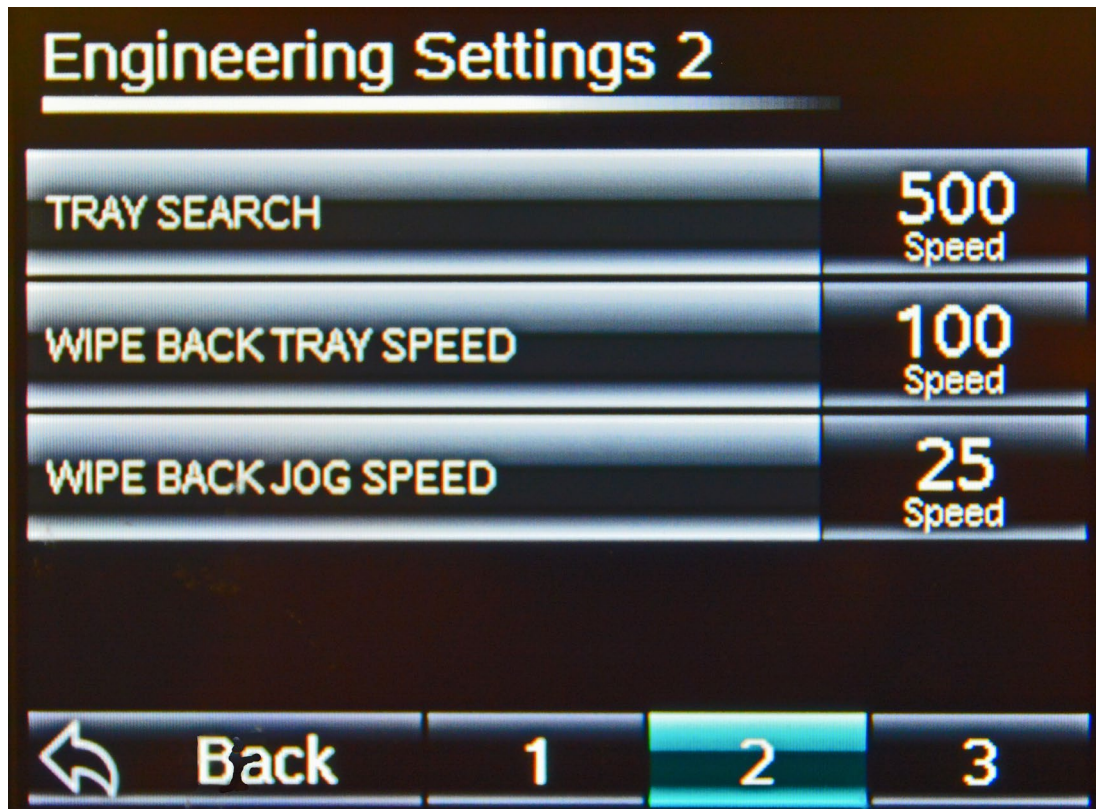
Engineering Settings 1		
DEFAULT PUMP	700 Speed	3000 Acceleration
DEFAULT JOG	450 Speed	3000 Acceleration
DEFAULT TRAY	400 Speed	3000 Acceleration
PRIME PUMP	500 Speed	
	Back	1 2 3

## CAUTION

**DO NOT ATTEMPT TO MAKE ADJUSTMENTS UNLESS YOU ARE FULLY AWARE OF THE RESULTS**



THIS SECTION IS FOR TRAINED ENGINEERS ONLY

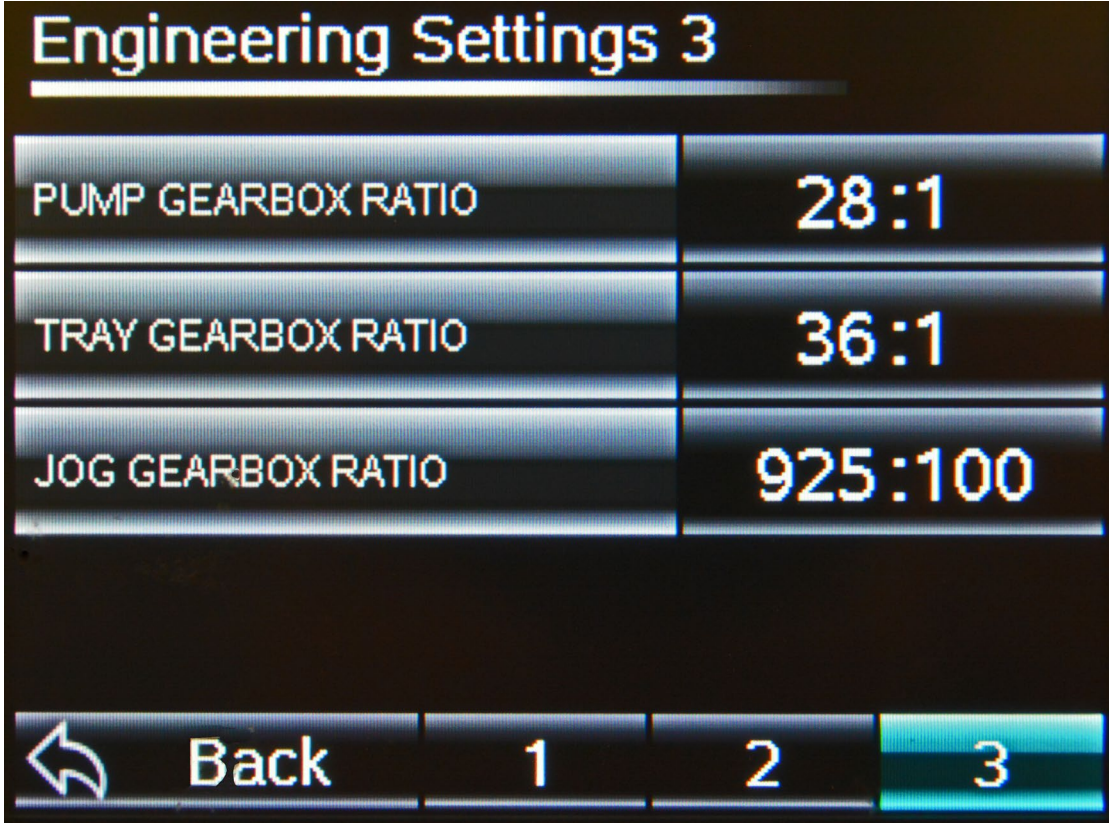


## **CAUTION**

**DO NOT ATTEMPT TO MAKE ADJUSTMENTS UNLESS YOU ARE FULLY AWARE OF THE RESULTS**

THIS SECTION IS FOR TRAINED ENGINEERS ONLY

## GEARBOX RATIOS

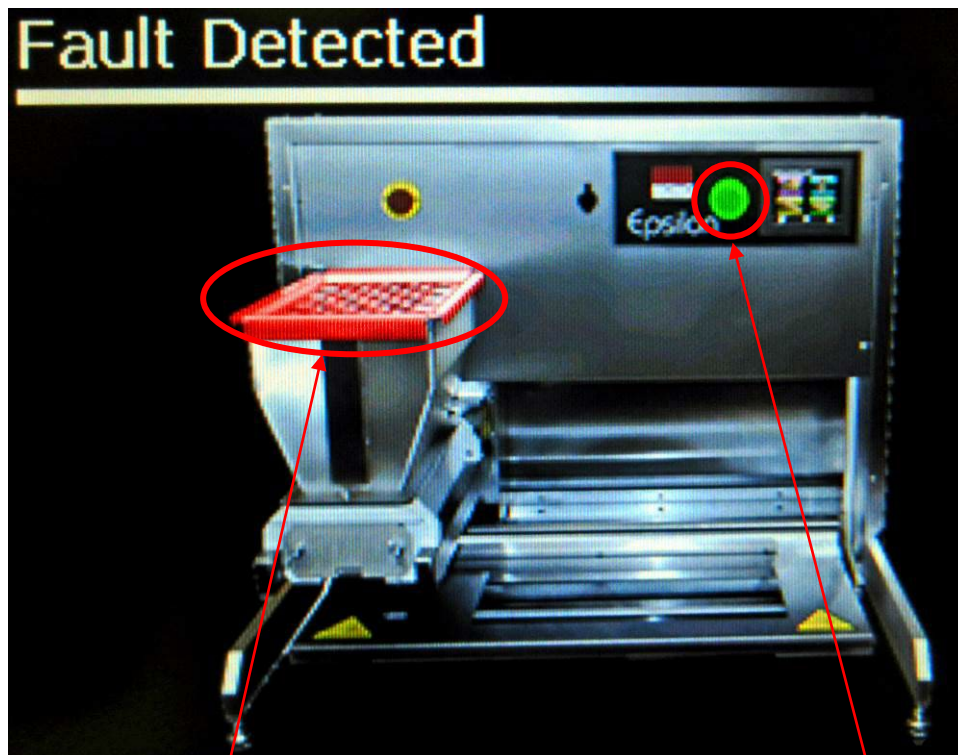


The screenshot shows a control panel interface titled "Engineering Settings 3". It features three rows of settings, each with a label on the left and a ratio on the right. At the bottom, there is a navigation bar with a back arrow, the word "Back", and three numbered buttons (1, 2, 3). The button "3" is highlighted in blue.

Setting	Ratio
PUMP GEARBOX RATIO	28 : 1
TRAY GEARBOX RATIO	36 : 1
JOG GEARBOX RATIO	925 : 100

### **CAUTION**

**DO NOT ATTEMPT TO MAKE ADJUSTMENTS UNLESS YOU ARE FULLY AWARE OF THE RESULTS**




HOPPER COVER

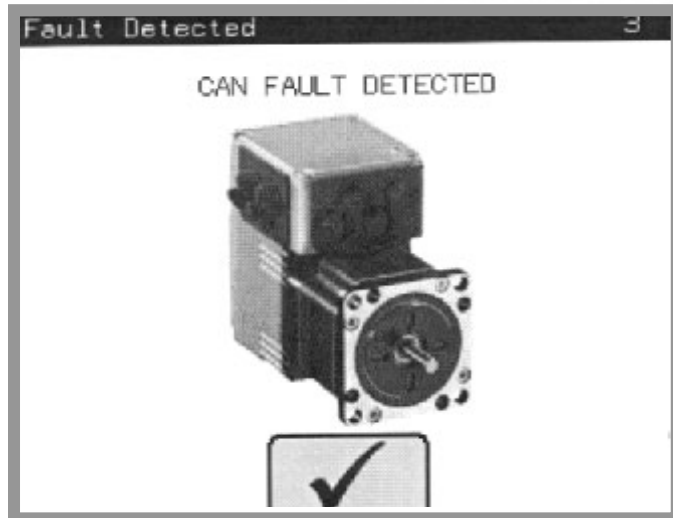
STOP BUTTON

**THIS SCREEN INDICATES A FAULT CONDITION IN THE SAFETY AREAS.**

WHEN **RED**, CLOSE COVER, RESET STOP BUTTONS OR CLEAR OBSTRUCTIONS TO CLEAR FAULT.

WHEN SCREEN CLEARS, FAULT HAS BEEN CORRECTED.

IF THE FOLLOWING SCREEN OR SOMETHING SIMILAR APPEARS, CHECK THAT THE HOPPER MOVEMENT ETC. IS NOT JAMMED WITH SOMETHING. IF IT IS, CLEAR THE OBSTRUCTION AND PRESS  TO PROCEED.



IF THE FAULT IS NOT OBVIOUS AND NOT ABLE TO BE CLEARED SAFELY, A SUITABLY TRAINED ENGINEER SHOULD BE CALLED



- WARNING**
- This appliance must be maintained at regular intervals. The frequency of maintenance will depend upon your specific use and location. The maximum service interval should be 12 months.
  - Service and maintenance should only be undertaken by suitably qualified, trained, and competent engineers.
  - You must immediately report any damage or defect arising with the appliance.
  - Unsafe equipment is dangerous. Do not use the appliance. Isolate the power supply and contact MONO or your appointed service agent.

Under most conditions the machine only needs to be kept clean and used as instructed in this manual.



**WARNING: DO NOT UNDER ANY CIRCUMSTANCES USE A WATER HOSE OR PRESSURE WASHER TO CLEAN THIS MACHINE.**

# 12.0 SPARES AND SERVICE

EPSILON

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

## UK SERVICE, SPARES and OVERSEAS SUPPORT:



Queensway  
Swansea West Industrial Estate  
Swansea. SA5 4EB UK

email: [spares@monoequip.com](mailto:spares@monoequip.com)  
SPARES TEL. +44(0)1792 564039

Web site: [www.monoequip.com](http://www.monoequip.com)  
Tel. 01792 561234

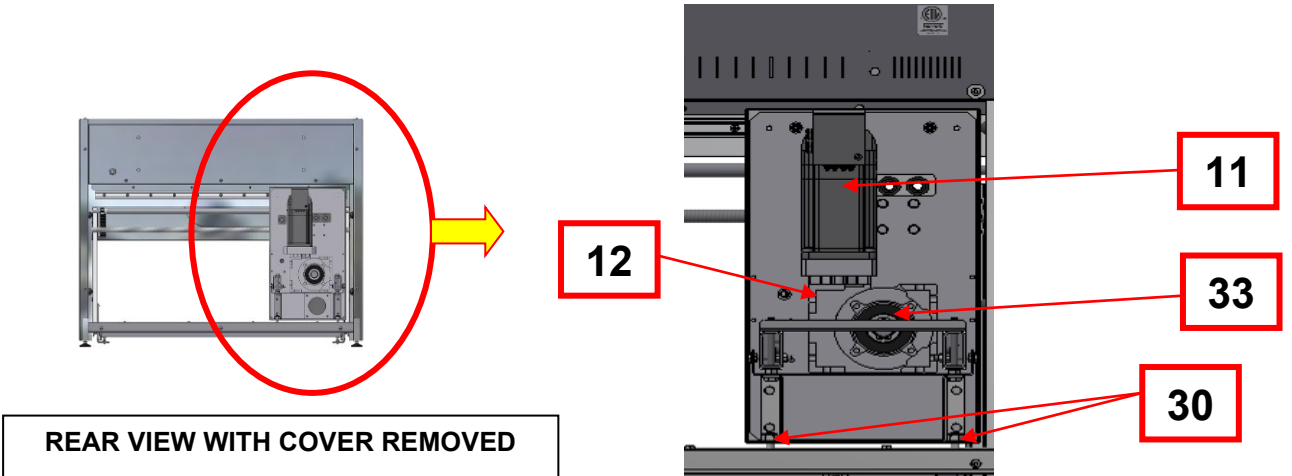
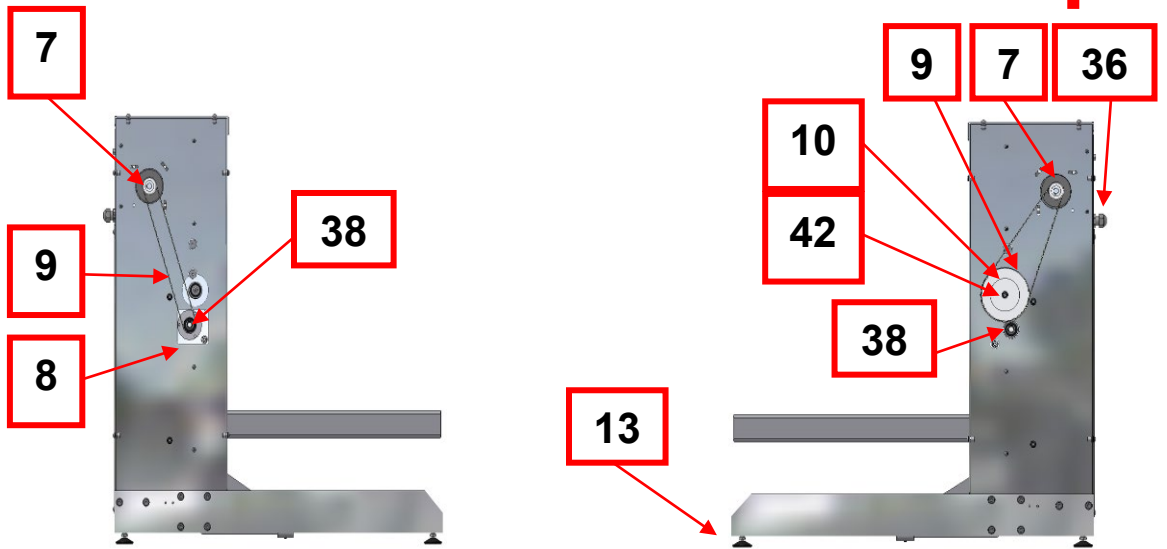
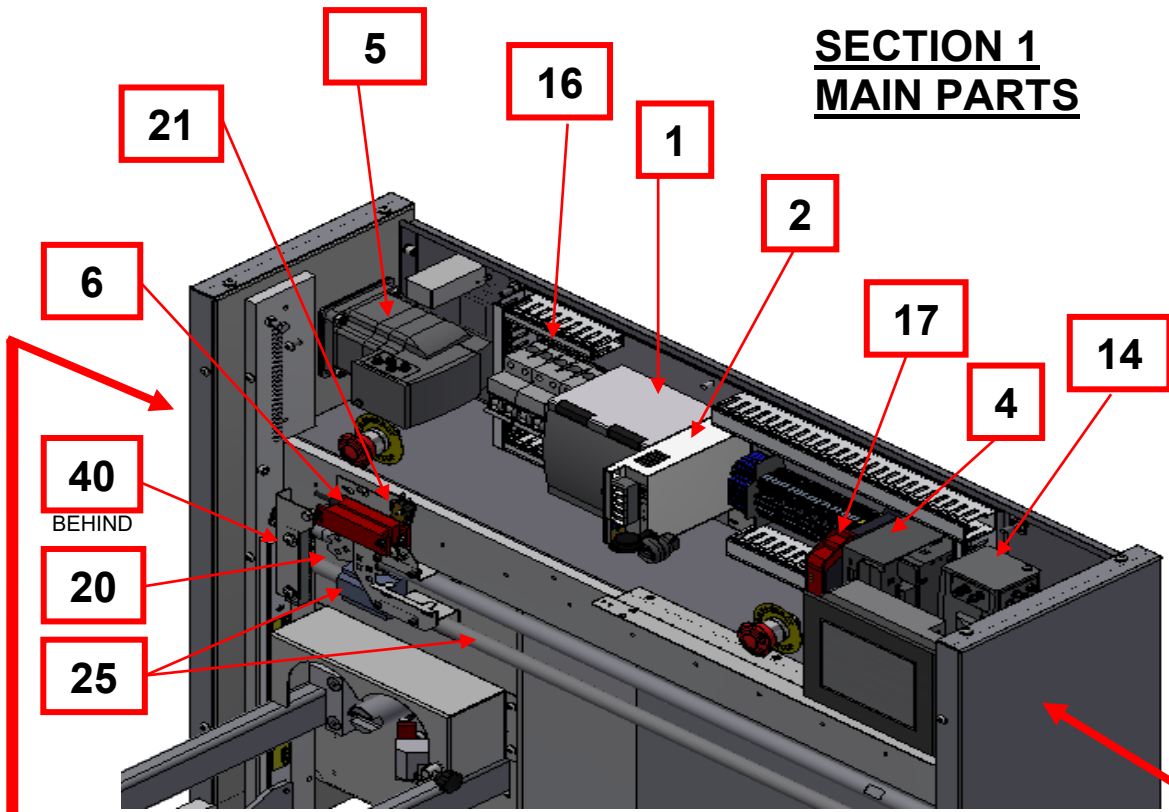
EPSILON



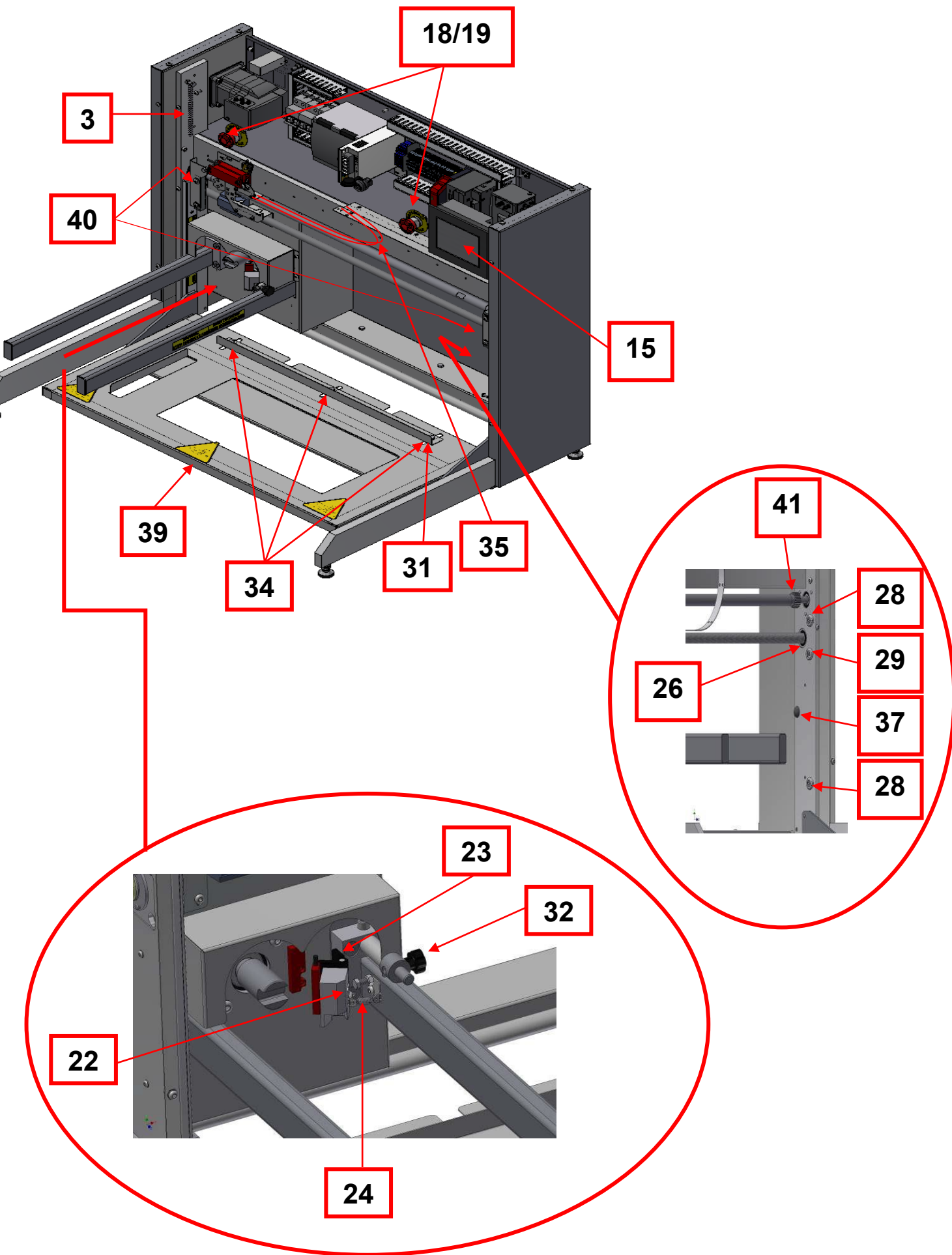
# 13.0 SPARES

# EPSILON

# SECTION 1 MAIN PARTS





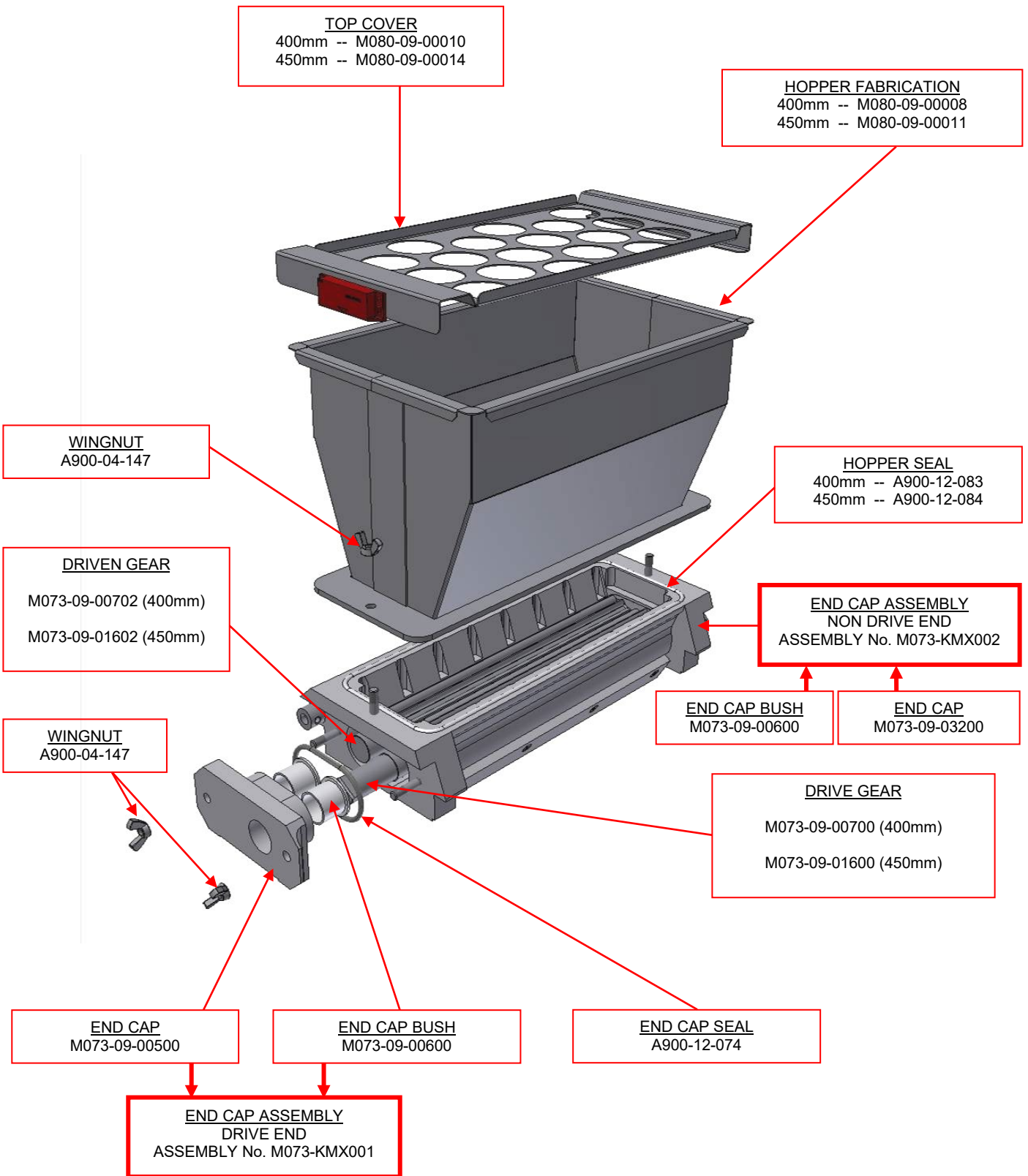


PARTS LIST FOR ITEMS ON PREVIOUS PAGES

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PART NUMBER</u>
1.	POWER SUPPLY	B801-93-019
2.	POWER SUPPLY	B801-93-005
3.	TRAY SPRING	A900-19-097
4.	TM251	B801-80-057
5.	TRAY MOTOR	B781-74-007
6.	SAFETY SWITCH	B801-07-005
7.	TIMING PULLEY	080-02-00026
8.	TIMING PULLEY	080-02-00020
9.	TIMING BELT	A900-21-107
10.	TIMING PULLEY	080-02-00021
11.	DEPOSIT MOTOR	B781-74-008
12.	GEARBOX	A900-11-095
13.	ADJUSTABLE FOOT	A900-27-227
14.	JOG MOTOR	B781-74-006
15.	HMI	B801-94-014
16.	CIRCUIT BREAKER	B872-22-003
17.	E-STOP RELAY	B801-11-019
18.	STOP BUTTON	B801-12-043
19.	CONTACT BLOCK	B801-14-008 (N/C), B801-14-004 (N/O)
20.	JOG SWITCH	B842-07-029
21.	TRAY SWITCH	B842-07-030

<b>22.</b>	TEMPLATE SAFETY SWITCH/MAGNET	B801-07-006
<b>23.</b>	HINGE FOR TEMPLATE SAFETY MAGNET	A900-27-217
<b>24.</b>	RETURN SPRING	A900-19-094
<b>25.</b>	BALLSCREW + NUT	080-02-00025 (400 model) 080-02-00048 (450 model)
<b>26.</b>	BEARING FOR BALLSCREW	A900-06-009
<b>27.</b>	VERTICAL SLIDES	A900-31-054
<b>28.</b>	V-ROLLER – CONCENTRIC	A900-06-297
<b>29.</b>	V-ROLLER – ECCENTRIC	A900-06-298
<b>30.</b>	TRACK ROLLER	A900-06-136
<b>31.</b>	TRAY BACK STOP	080-08-00015(450 model) 080-08-00016 (450 model)
<b>32.</b>	HOPPER LOCKING THUMSCREW	A900-27-213
<b>33.</b>	CIRCLIP – HOPPER DRIVESHAFT	A900-01-193
<b>34.</b>	WINGNUT FOR TRAY GUIDE	A900-04-043
<b>35.</b>	CABLE GUIDE STRAP	080-25-00006
<b>36.</b>	MAINS CABLE GLANDS	B900-17-002
<b>37.</b>	BUMP STOPS	A900-18-006
<b>38.</b>	CIRCLIPS – BALLSCREW	A900-01-112
<b>39.</b>	PLATFORM FABRICATION	080-08-00001(400 model) 080-08-00011(450 model)
<b>40.</b>	RACK	080-02-00032
<b>41.</b>	PINION	080-02-00032
<b>42.</b>	TRANS-TORQUE BUSH	A900-10-01

## SECTION 2 DOUGH HOPPER PARTS

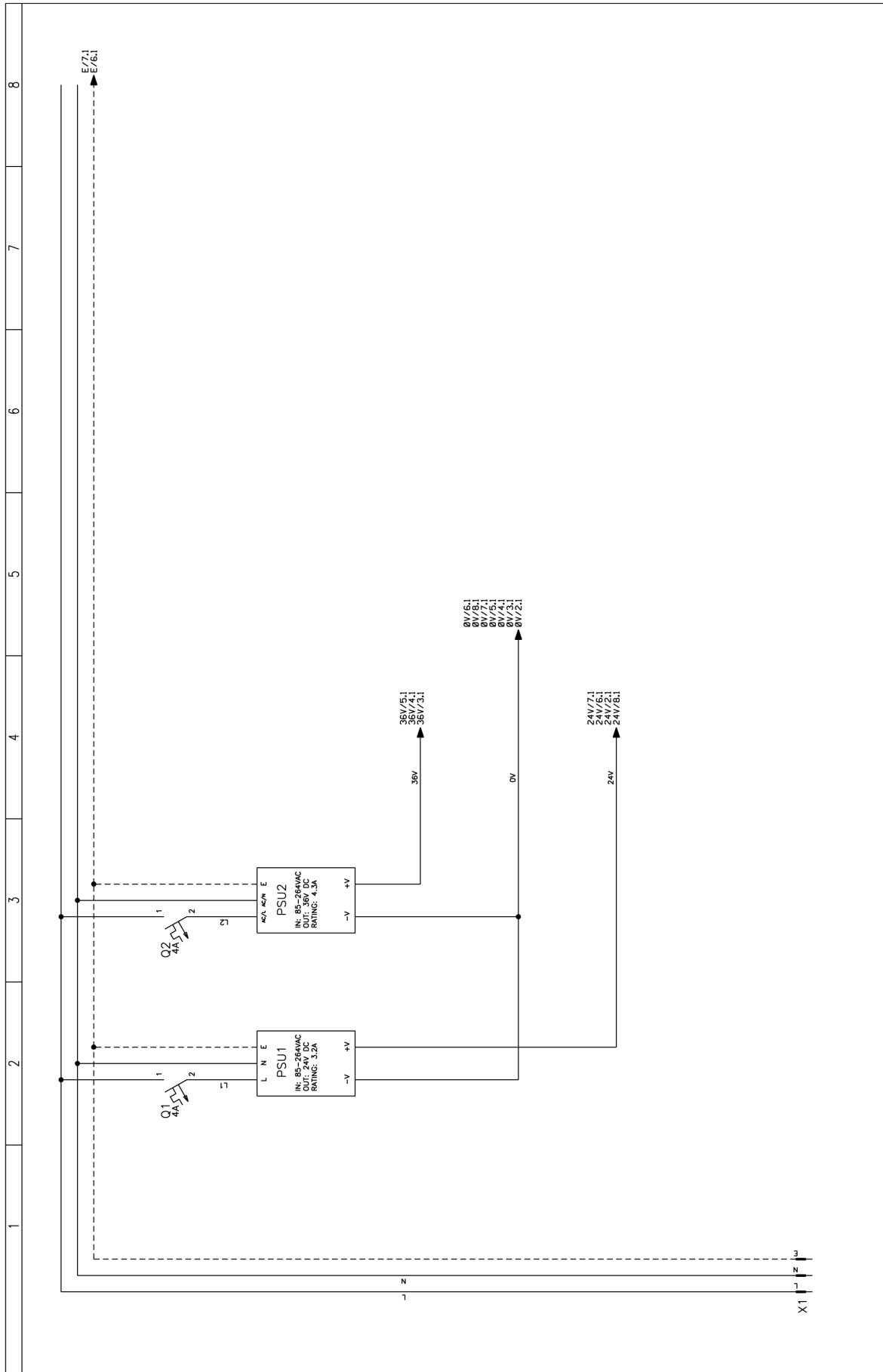




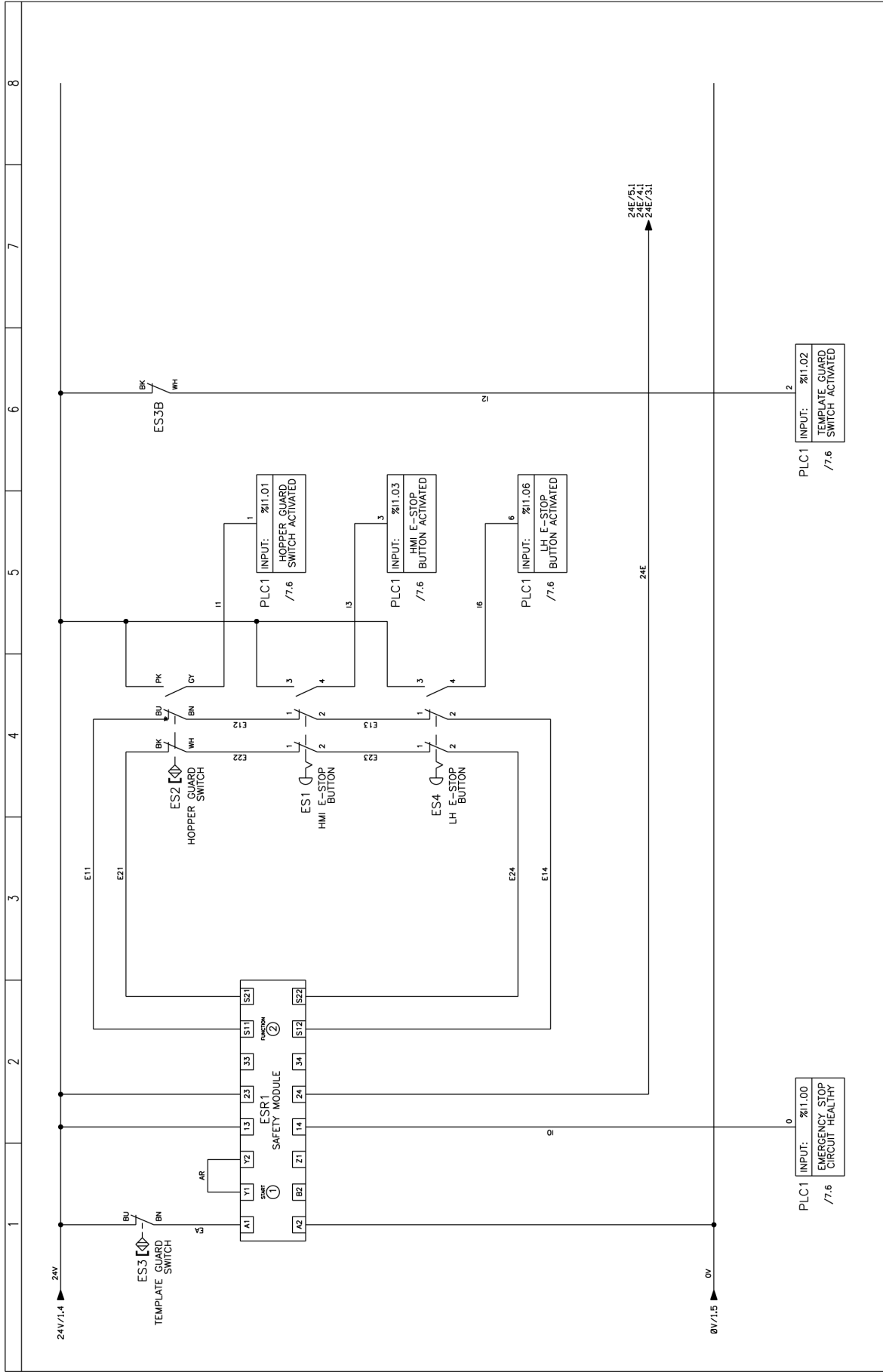
# 14.0 ELECTRICAL INFORMATION

# EPSILON

**PLEASE CONTACT MONO FOR THE LATEST ELECTRICAL INFORMATION**



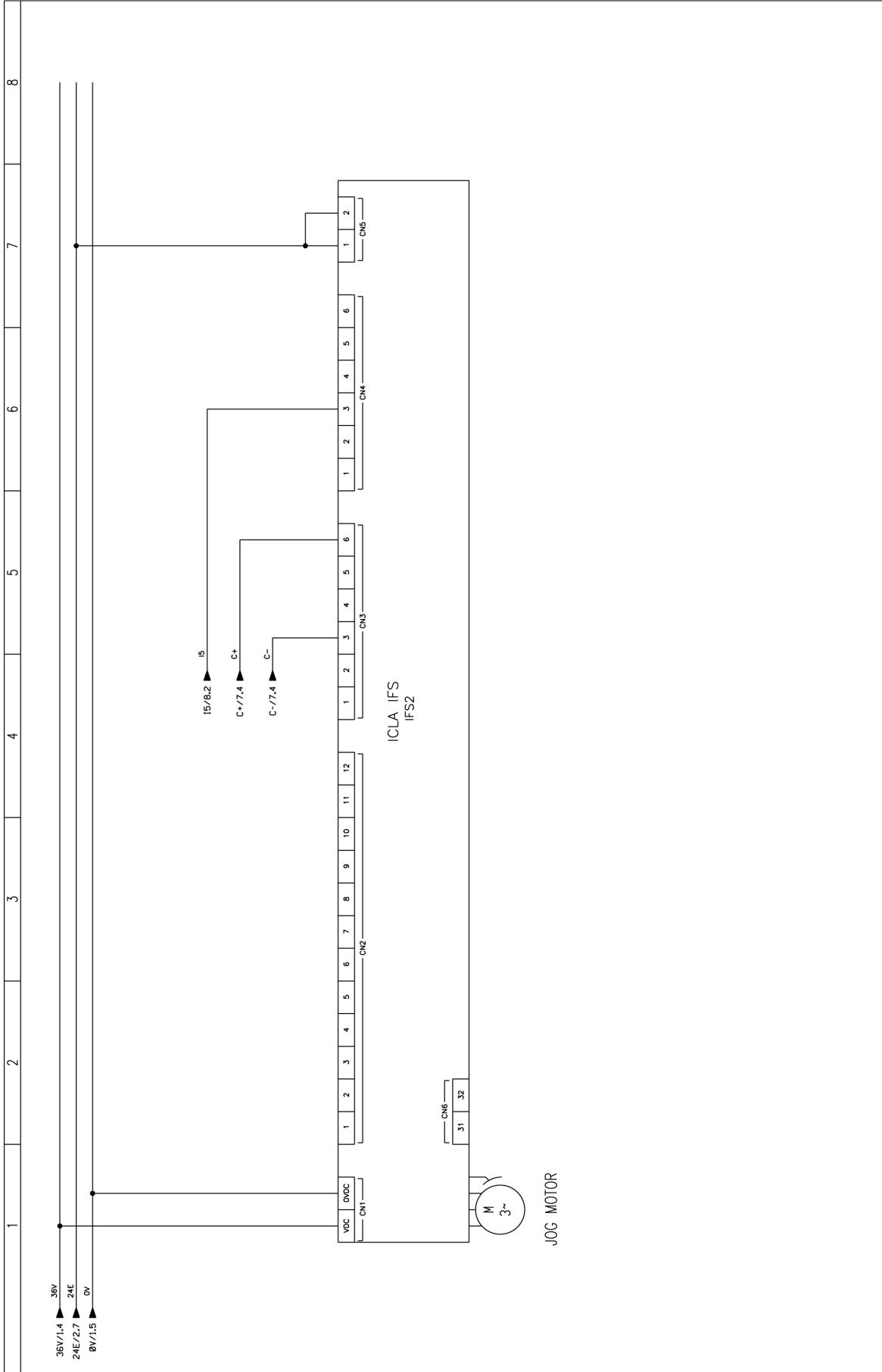
MONO EQUIPMENT QUEENSLAND SWANSEA WEST IND PARK 4 WILSON STREET SWANSEA SA 5 1 AEB TEL: (07) 921 551234 FAX: (07) 921 551016 www.monoequip.com		ELECTRICAL DISTRIBUTION		ELECTRICAL SPECIFICATIONS		ELECTRICALLY APPROVED BY:		ECON NO	
PROJECT DESCRIPTION EPSILON DEPOSITOR		PROJECT EPSILON_MK2C		PANEL		ANGELA THOMAS		PAGE	
DRAWN		APPROVED		INSTALLATION		DRAWING NUMBER		REV	
BY RO		DATE		REV		DATE		BY	
RO		08/07/21		A		08/07/21		RO	
AS BUILT								AS BUILT	
NOTES		24V/7.1 24V/6.1 24V/6.1		24VAC		1PH+N+E		50HZ	
DRAWING NUMBER		080E25-00063		PAGE		1		OF	
REV		8		A					



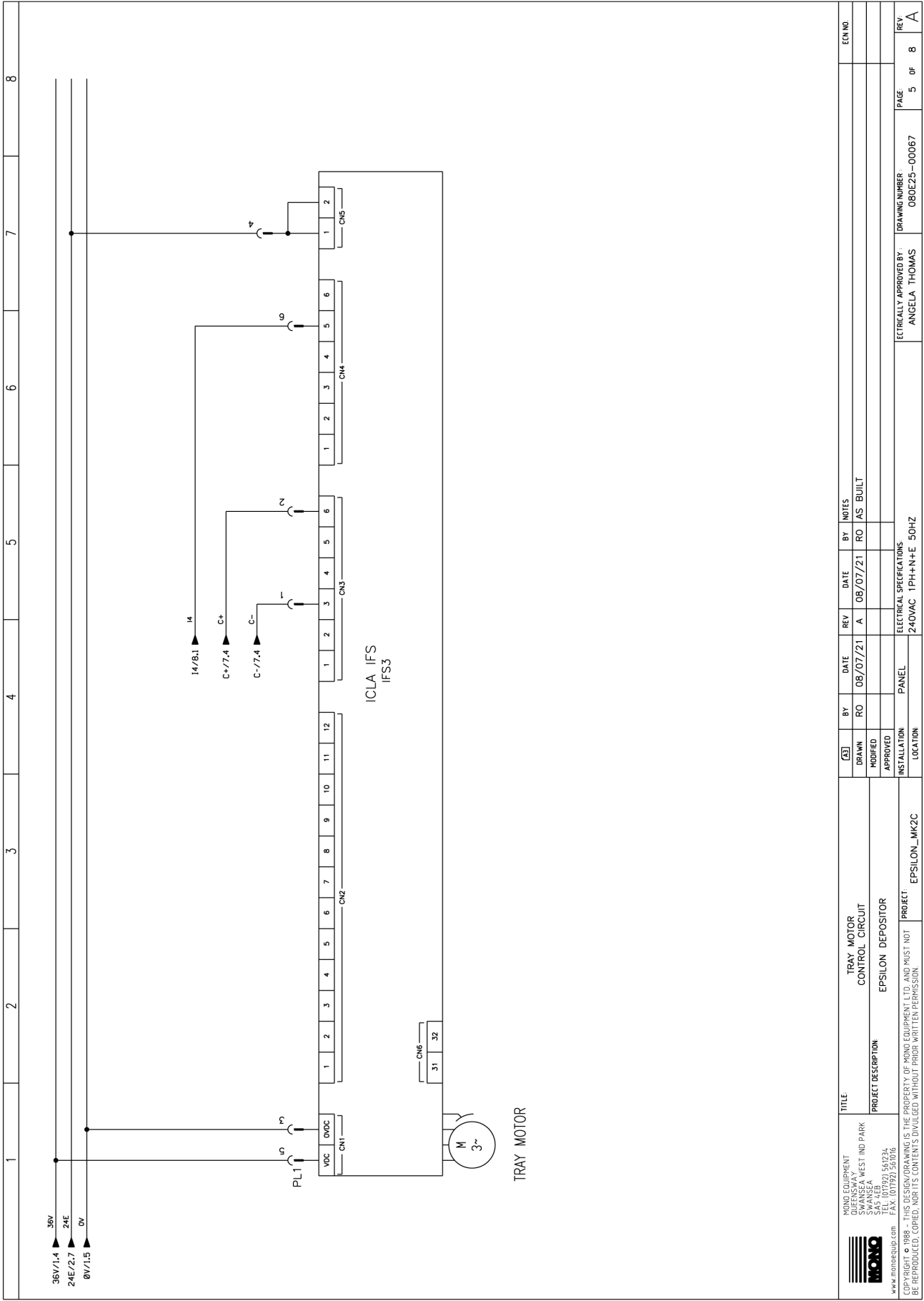
MONO EQUIPMENT SWANSEA WEST IND PARK SWANSEA SAS (01992) 547234 FAX (01992) 547016 www.monoequip.com		PROJECT DESCRIPTION: EPSILON DEPOSITOR		TITLE: SAFETY CIRCUIT		ECON NO	
PROJECT: EPSILON_MK2C		INSTALLATION LOCATION: ELECTRICAL SPECIFICATIONS 240VAC 1PH+N+E 50HZ		DATE: 08/07/21		BY NOTES: RO AS BUILT	
DRAWN: APPROVED:		DATE: 08/07/21		REV: A		PAGE: 2 OF 8	
DRAWING NUMBER: 080E25-00064		ELECTRICALLY APPROVED BY: ANGELA THOMAS		REV: 2		REV: A	



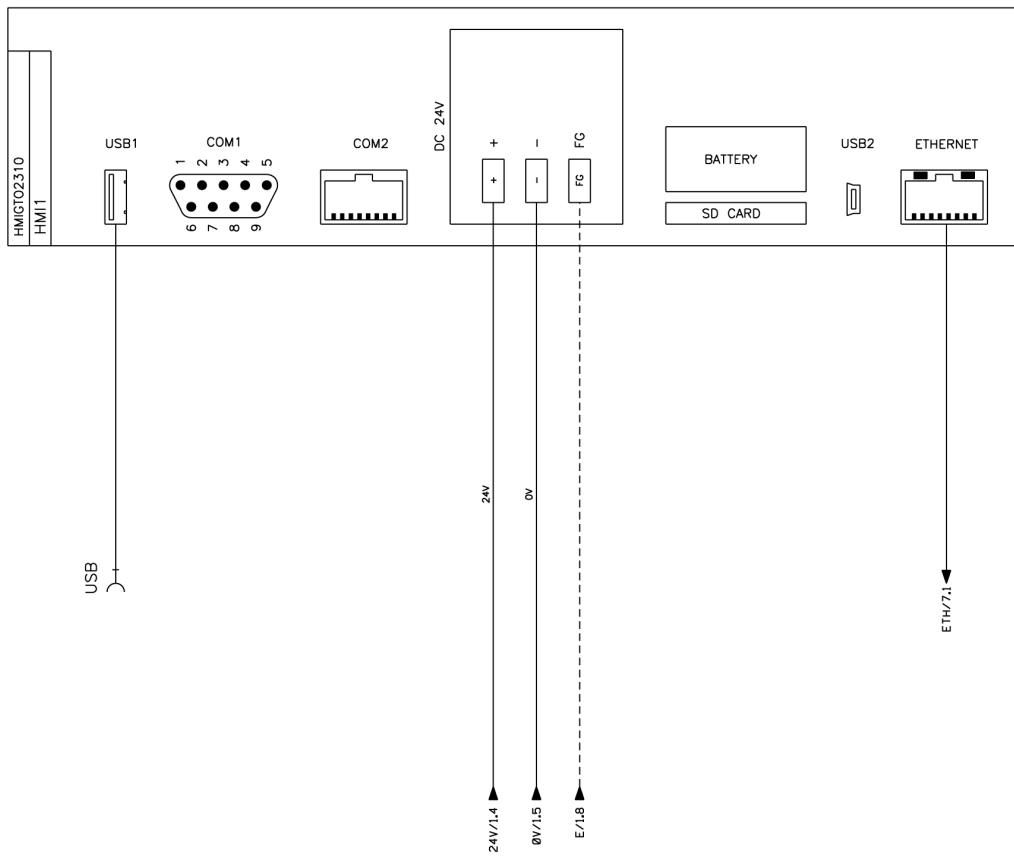




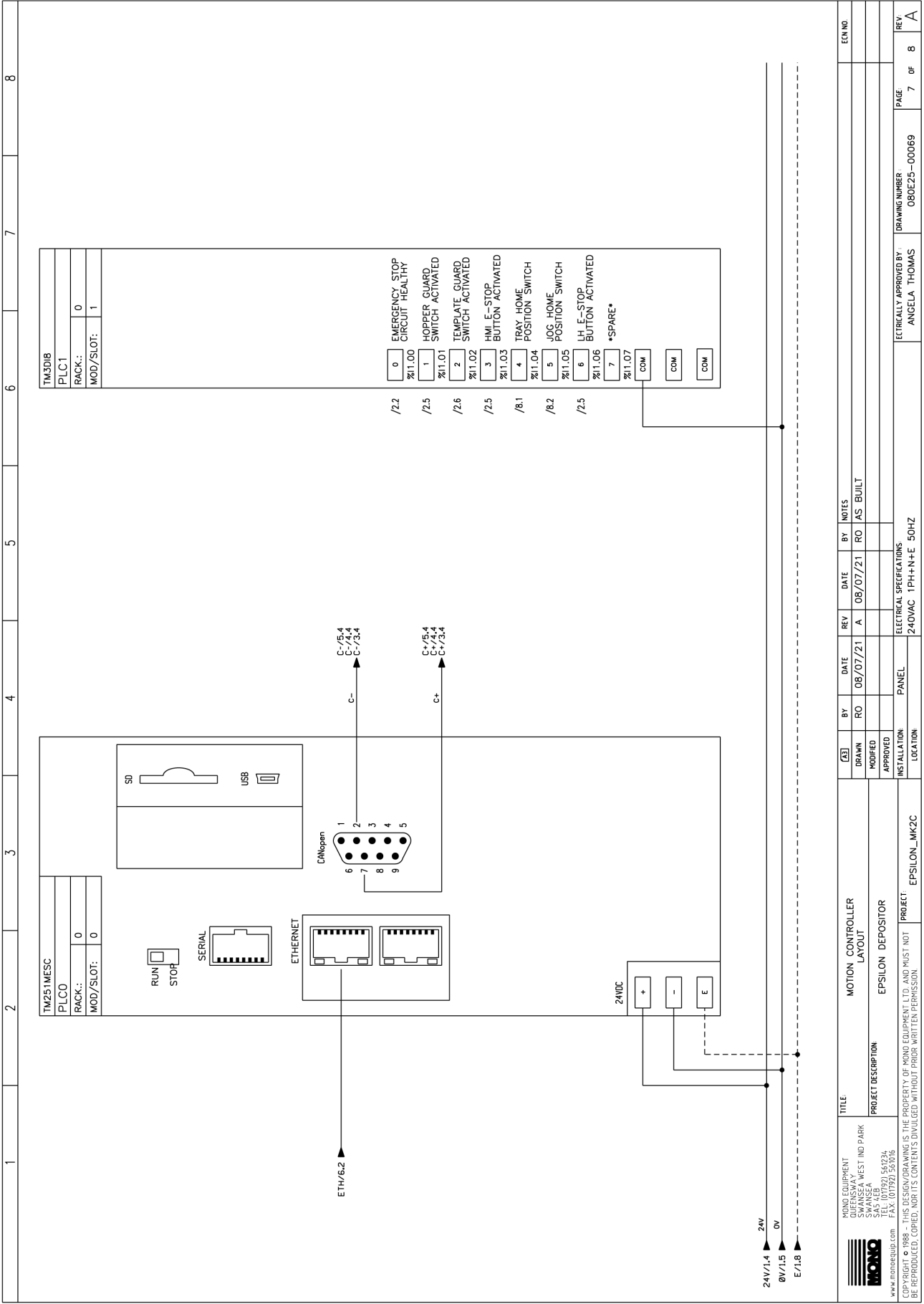
MONO EQUIPMENT QUEENSWAY WEST IND PARK SWANSEA SA5 4EB TEL: 01792 550791 FAX: 01792 550706 www.monoequip.com		TITLE JOG MOTOR CONTROL CIRCUIT		BY RO		DATE 08/07/21		REV A		DATE 08/07/21		BY RO		NOTES AS BUILT		ECN NO	
PROJECT DESCRIPTION EPSILON DEPOSITOR		INSTALLATION PANEL		APPROVED		ELECTRICAL SPECIFICATIONS 240VAC 1PH+N+E 50HZ		DRAWING NUMBER O80E25-00066		PAGE 4		OF 8		REV. A			
ELECTRICALLY APPROVED BY ANGELA THOMAS		DRAWING NUMBER O80E25-00066		PAGE 4		OF 8		REV. A									



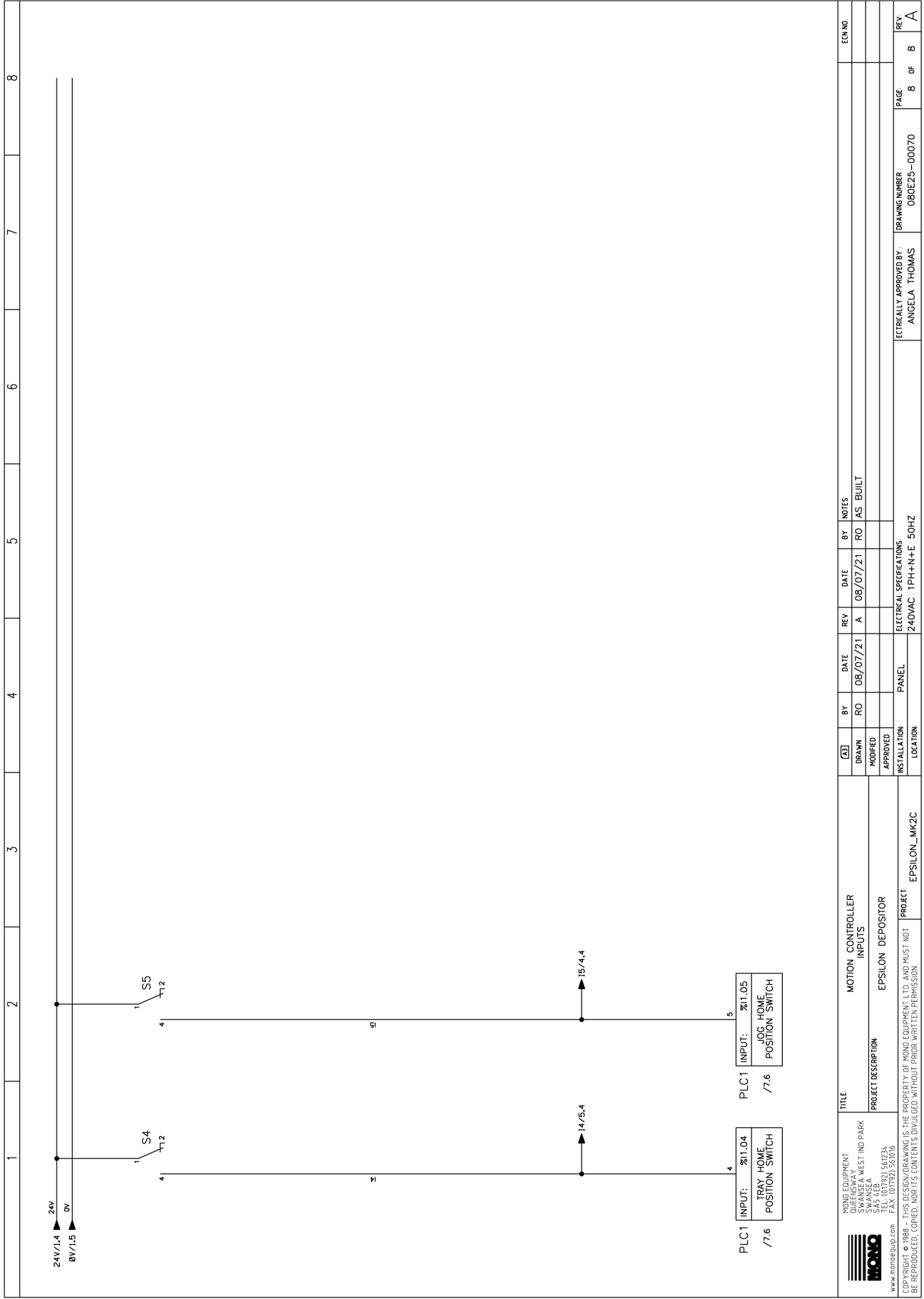
MONO EQUIPMENT QUENSWAY WEST IND PARK SWANSEA		TITLE: TRAY MOTOR CONTROL CIRCUIT		BY: RO		DATE: 08/07/21		REV: A		DATE: 08/07/21		BY: RO		NOTES: AS BUILT		ECN NO.	
www.monoequip.com		PROJECT DESCRIPTION: EPSILON DEPOSITOR		MODIFIED:		APPROVED:		INSTALLATION: PANEL		ELECTRICAL SPECIFICATIONS: 240VAC 1PH+N+E 50HZ		DRAWING NUMBER: O8OE25-00067		PAGE: 5 of 8		REV. A	
COPYRIGHT © 1989 - THIS DESIGN/DRAWING IS THE PROPERTY OF MONO EQUIPMENT LTD. AND MUST NOT BE REPRODUCED, COPIED, NOR ITS CONTENTS DIVULGED WITHOUT PRIOR WRITTEN PERMISSION.		PROJECT: EPSILON_MK2C		LOCATION:		ELECTRICALLY APPROVED BY: ANGELA THOMAS											



<p>MONO EQUIPMENT QUEENSWAY WEST IND PARK WARRINGTON SWANSEA SA5 4EB (01) 563924 FAX: (01792) 561016 www.monoequip.com</p>	TITLE		OPERATOR INTERFACE LAYOUT	BY	DATE	REV	DATE	BY	NOTES	ECN NO.						
	PROJECT DESCRIPTION		EPSILON DEPOSITOR	RO	08/07/21	A	08/07/21	RO	AS BUILT							
	PROJECT		EPSILON_MK2C	APPROVED												
	COPYRIGHT © 1988. THIS DESIGN/DRAWING IS THE PROPERTY OF MONO EQUIPMENT LTD. AND MUST NOT BE REPRODUCED, COPIED, NOR ITS CONTENTS DIVULGED WITHOUT PRIOR WRITTEN PERMISSION.		INSTALLATION	PANEL	LOCATION	ELECTRICAL SPECIFICATIONS	240VAC 1PH+N+E 50HZ	ETRICALLY APPROVED BY -	ANGELA THOMAS	DRAWING NUMBER	080E25-00068	PAGE	6	OF	8	REV



MONO EQUIPMENT QUEENSWAY WEST IND PARK SWANSEA S45 4LEB FAX: 01792 503076 www.monoequip.com		MOTION CONTROLLER LAYOUT		BY DATE REV		BY DATE REV		ECN NO	
PROJECT DESCRIPTION EPSILON DEPOSITOR		DRAWN RO 08/07/21		A 08/07/21		RO AS BUILT			
PROJECT EPSILON_MK2C		MODIFIED		APPROVED		ELECTRICAL SPECIFICATIONS 240VAC 1PH+N+E 50HZ		PAGE 7 OF 8	
TITLE MONO EPSILON Colour FG080		INSTALLATION LOCATION PANEL		ELECTRICALLY APPROVED BY ANGELA THOMAS		DRAWING NUMBER OBOE25-00069		REV. A	



		<b>TITLE:</b> MOTION CONTROLLER INPUTS		<b>REV</b>		<b>DATE</b>		<b>BY</b>		<b>NOTES</b>		<b>ECN NO</b>	
MONO EQUIPMENT QUEENSWAY WEST IND PARK SWANSEA SA5 4ER www.monoequip.com TEL: (01792) 561234 FAX: (01792) 561016		<b>PROJECT DESCRIPTION:</b> EPSILON DEPOSITOR		<b>APPROVED</b>		<b>DATE</b>		<b>RO</b>		<b>AS BUILT</b>			
COPYRIGHT © 1988 - THIS DESIGN/DRAWING IS THE PROPERTY OF MONO EQUIPMENT LTD. AND MUST NOT BE REPRODUCED, COPIED, NOR ITS CONTENTS DIVULGED WITHOUT PRIOR WRITTEN PERMISSION.		<b>PROJECT:</b> EPSILON_MK2C		<b>INSTALLATION:</b> PANEL		<b>DATE</b>		<b>RO</b>		<b>AS BUILT</b>			
				<b>ELECTRICAL SPECIFICATIONS</b> 240VAC 1PH+N+E 50HZ		<b>ETRICALLY APPROVED BY:</b> ANGELA THOMAS		<b>DRAWING NUMBER</b> 080E25-00070		<b>PAGE</b> 8 of 8		<b>REV.</b> A	

The equipment mentioned in this manual has CE accreditation.

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



## Epsilon

### 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 recycling or other means as the law permits at the time.



MONO Equipment is the leading designer and manufacturer of bakery equipment in the United Kingdom. This proud heritage of British craftsmanship, combined with a reputation for creating high-quality, innovative products, can be traced back to its origins in 1947.

All our bakery equipment is manufactured to the most stringent NQA ISO9001:2015 & NQA ISO14001:2015 standards and is crafted using the very latest, cutting-edge technology combined with the time-honoured skills of the master craftsman.

MONO Equipment truly excels in providing tailor-made solutions to a diverse range of clients, from the small independent artisan baker to the large retail chains found on every high street and in every out-of-town shopping centre. We can supply everything from a simple Food-2-Go cafe oven to the entire list of bakery equipment needed to set up a full scratch bakery.



**MONO Equipment Limited**

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Swansea West Industrial Park Swansea  
SA5 4EB

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Tel: +44 (0)1792 564 000 (UK Sales)  
Tel: +44 (0)1792 564 004 (International Sales)  
Tel: +44 (0)1792 564 048 / +44 (0)1792 564 049 (Spares)  
Fax: +44 (0)1792 561 016

Email: [sales@monoequip.com](mailto:sales@monoequip.com)  
Web: [www.monoequip.com](http://www.monoequip.com)



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