



SYPP

Service Manual



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Machine Part Numbers

IRL/UK/EU/US	
1000910	SYPP Pump Box
1000915	SYPP 8 Syrup Font
1000920	SYPP Rack 4 Syrups

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1. Introduction

The information provided in this manual is intended to assist in the installation and maintenance of the SYPP System. Please read the instructions carefully to prevent accidents and ensure efficient installation.

This manual is not a substitute for any safety instructions or technical data affixed to the machine or its packaging. All information in this manual is current at the time of publication and is subject to change without notice.

Only technicians or service providers authorised by Marco should carry out installation and maintenance of these machines.

Marco accepts no responsibility for any damage or injury caused by incorrect or unreasonable installation and operation.

2. Safety Instructions

When using electrical appliances, basic safety precautions should always be followed to prevent the risk of fire, electric shock, burns, or other injuries or damages.

- Read all operating and safety instructions carefully.
- This appliance is suitable for indoor use only.
- This appliance must be placed/installed on a horizontal flat stable surface.
- The ambient temperatures this appliance should operate within are 5 °C - 35 °C.
- Do not store the appliance in ambient temperature lower than 5 °C.
- This appliance is designed for use in commercial or self-serve areas in which it can be attended to by trained personnel.
- The hose supplied with the machine is non-toxic food quality tested to 130kPa (190psi). However, a hose is not a permanent connection. It is, therefore, advisable to switch off machine and close the stopcock valve when machine is not in use, e.g. overnight etc.

- If a non-fixed water connection is implemented, use only the water hose provided with the appliance, alternatively, if a fixed water connection is used it must be implemented using a non-detachable water hose.
- The utmost care has been taken in the manufacture and testing of this machine. Failure to install, maintain and / or operate this machine according to the manufacturer's instructions may result in conditions that can cause injury or damage to property. If in any doubt about the serviceability of the machine always contact the manufacturer or your own supplier for advice.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved
- Children shall not play with the appliance.
- In the event where any wires are damaged, such wires can only be replaced by qualified service technicians.
- CAUTION - Risk of fire and electric shock. Only to be used with manufacturer's specified power cord set.
- This appliance should not be installed in an area where a water jet could be used to clean it.
- Access to the service area of the appliance is restricted to persons having knowledge and practical experience of the appliance and the relevant safety and hygiene requirements.
- The use of spares and accessories not recommended by Marco may cause damage and/or injuries.
- Do not use outdoors. Do not place on or near a hot gas or electric burner.
- Do not use the appliance for anything other than its intended use.
- Save these instructions.

CAUTION

SANITISATION

Before sanitising the equipment, carefully read the instructions given by the sanitisation product manufacturer and put on all the necessary personal protective equipment (gloves, masks, etc.). Ensure that the premises are well ventilated. The sanitisation operations should only be carried out by specialised technical assistance personnel.

DANGER

ELECTRICAL MAINS

Always disconnect the equipment from the electricity supply before doing any work on it, to prevent damage and health hazards.

CAUTION

ELECTRICAL REQUIREMENTS

The electrical circuit must be correctly earthed and connected by means of a suitable differential safety breaker.

CAUTION

ELECTRIC POWER SUPPLY

Do not connect or disconnect the machine from the socket with wet hands.

Insert the plug into the wall socket firmly.

Do not pull on the supply cable in order to remove the plug from the socket.

CAUTION

REPLACEMENT OF THE POWER CABLE

If the power cable is damaged, it must be replaced by the manufacturer or their assistance service or a similarly qualified person in order to prevent any possible risk.

WARNING

MALFUNCTION

If smoke, unusual smells or strange noises are emitted from the machine, disconnect it immediately from the socket and contact the local retailer or technical service assistance. Use of the machine in these conditions could cause fires or electric shocks.

WARNING**WATER SUPPLY**

Connect the water dispenser exclusively to a line of drinkable water supply.

WARNING**WATER SUPPLY**

In order to avoid accidental flooding due to losses that may occur on the water supply line, external or internal device it is necessary to install the appropriate anti-flooding valve “WATER BLOCK” (not included in the unit).

3. FRIIA Chiller & Mix Boiler Note

IMPORTANT!

This manual is not a replacement service manual for any accessories or machines sold with the SYPP Font, Pump Box or Rack. Please refer to part numbers listed on page 2 of this manual for machines covered. For service details for these machines please refer to specific machine service manuals

4. Installation Details

4.1. Positioning

The equipment must be placed on a surface capable of bearing the weight of the system complete with water/Syrups. Install the equipment following the schematics described in this user guide.

The chosen position must in any case allow satisfactory ventilation; in particular, there must be a gap of at least 10 cm (3.9 in) around the back and top of any chiller installed for ventilation.

The equipment must not be placed close to direct or indirect heat sources (ovens, stoves, radiators, etc.).

The electrical connection and water supply points must be close to the equipment and located in such a way the power cable and water hose do not form an obstruction.

The appliance must not be installed where water jets can be generated. Do not spray water on the devices; this could cause electric shock or fires.

4.2. Electrical Information

Electrical specification: 120 -230V 50/60Hz 150W

A moulded IEC C13 power cord is provided with the 1000910 pump box. This should be plugged into the IEC connection on the back of the pump box, then plugged into a suitable 13A power outlet.

When using a second 1000910 pump box this is powered via a IEC C13 – IEC C13 link cable to the first pump box, and not a power outlet.

4.3. Back Flow Prevention

This equipment must be installed with adequate backflow prevention to comply with all applicable federal, state and local codes.

4.4. Plumbing installation procedure

Mains water pressure not to exceed 3 Bar.

Ensure that the equipment is installed according to local plumbing & water regulations.

Fit a stop valve on the 3/8" cold water line.

Make sure the pipe is pushed fully into the fitting; Make sure that, when required, the pre attached sealing washer is fitted.

Turn on the water to flush any impurities, dust etc from the inlet hose and water pipe. Allow several litres through. Especially for new installations.

Connect water supply lines following the installation drawings.

If a filter is present and new, turn on water and flush at least 10 litres (2.5 gallon) through the filter before connecting it to the supply.

Ensure all pipes are pushed fully into the fitting.

Turn on water and check for leaks.

5. Specifications & Rating Plate Information

5.1. Specification

	1000910 - SYPP Pump Box	1000915 - SYPP 8 Syrup Font	1000920 - SYPP Rack 4 Syrups
Electrical Mains	BS1363 (IRL&UK), CEE7 (EU), NEMA 515P (US) plug to C13 IEC	N/A	N/A
Electrical Rating	1 Pump Box 120 - 230V (1.25-2.25A) 50/60Hz 150W Max 2 Pump Box 120 - 230V (2.25-5A) 50/60Hz 350W	N/A	N/A
Plumbing	N/A	Fit a stop valve on the 3/8" cold water line Mains water pressure not to exceed 3 Bar.	N/A
Water Inlet Pressure (Min-Max)	N/A	Water Inlet Pressure (Min-Max) - 0.1 – 1 MPa (14.5 – 145 psi)	N/A
Dimensions mm (WDH)	290 x 330 x 150	250 x 371 x 780 (overall size including tubing, brackets flow meter box etc)	340 x 355 x 340
Weight			

5.2. 1000910 SYPP Pump Box

MODEL: 1000910 SYPP Pump Box	  
SERIAL NO: 0123456789	
1 Pump Box 120 - 230V (1.25 - 2.5A) 50/60Hz 175W	
Max 2 Pump Box 120-230V (2.5 - 5A) 50/60Hz 350W	
WATER INLET PRESSURE MIN-MAX 0.1-1 Mpa (14.5-145psi)	
SYRUP INLET PRESSURE MIN-MAX 0.0-0.01 Mpa (0-1.45psi)	
MARCO BEVERAGE SYSTEMS LTD. www.marco.ie	

Power & Voltage

1 Pump Box 120 - 230V (1.25-2.25A) 50/60Hz 150W

Max 2 Pump Box 120 - 230V (2.25-5A) 50/60Hz 350W

Water Inlet Pressure (Min-Max) - 0.1 – 1 MPa (14.5 – 145 psi)

5.3. 1000915 SYPP Font

MODEL: 1000915 SYPP 8 Syrup Font	   
SERIAL NO: 0123456789	
WATER INLET PRESSURE MIN-MAX 0.1-1MPa (14.5-145psi)	
MARCO BEVERAGE SYSTEMS LTD. www.marco.ie	

6. Cleaning and Sanitising

CAUTION

Before carrying out the following operations, carefully read the instructions given by the sanitization product manufacturer and make sure all personal protective equipment (masks, gloves, etc) are worn correctly. The sanitization of the product lines must only be carried out by specialized technical service personnel. During the sanitization operations, attach a warning sign to the tower concerned, to inform any other personnel that this operation is in progress, and that it is forbidden to dispense beverages.

Never exceed the contact times and maximum dosage concentrations recommended by the manufacturer. Once the sanitizing fluid has flowed through and cleaned the lines, they must be thoroughly rinsed with mains water until all the sanitizer has been completely eliminated. Check the pH of the outlet water is the same as the pH of the inlet water (use litmus paper or a pH meter).

Use a suitable product that is both a detergent and a sanitizer, to be mixed with water in the proportions recommended by the manufacturer. Marco recommends Urnex Rinza Milk System cleaner for alternative milk and beverages or Urnex Cafiza 2 for coffee and Syrup based beverages. (follow manufacturer's instructions)

6.1.1. Cleaning Procedure Video QR Code

6.2. Font & Drip tray

Font

The exterior of this font may be cleaned with a damp cloth and a light detergent. The external surfaces of the appliance must not be cleaned by a water jet. Clean the font nozzle and remove any residual using warm water do not use solvents or abrasive detergents, remove all the limestone with a food descaling solution.

Drip tray

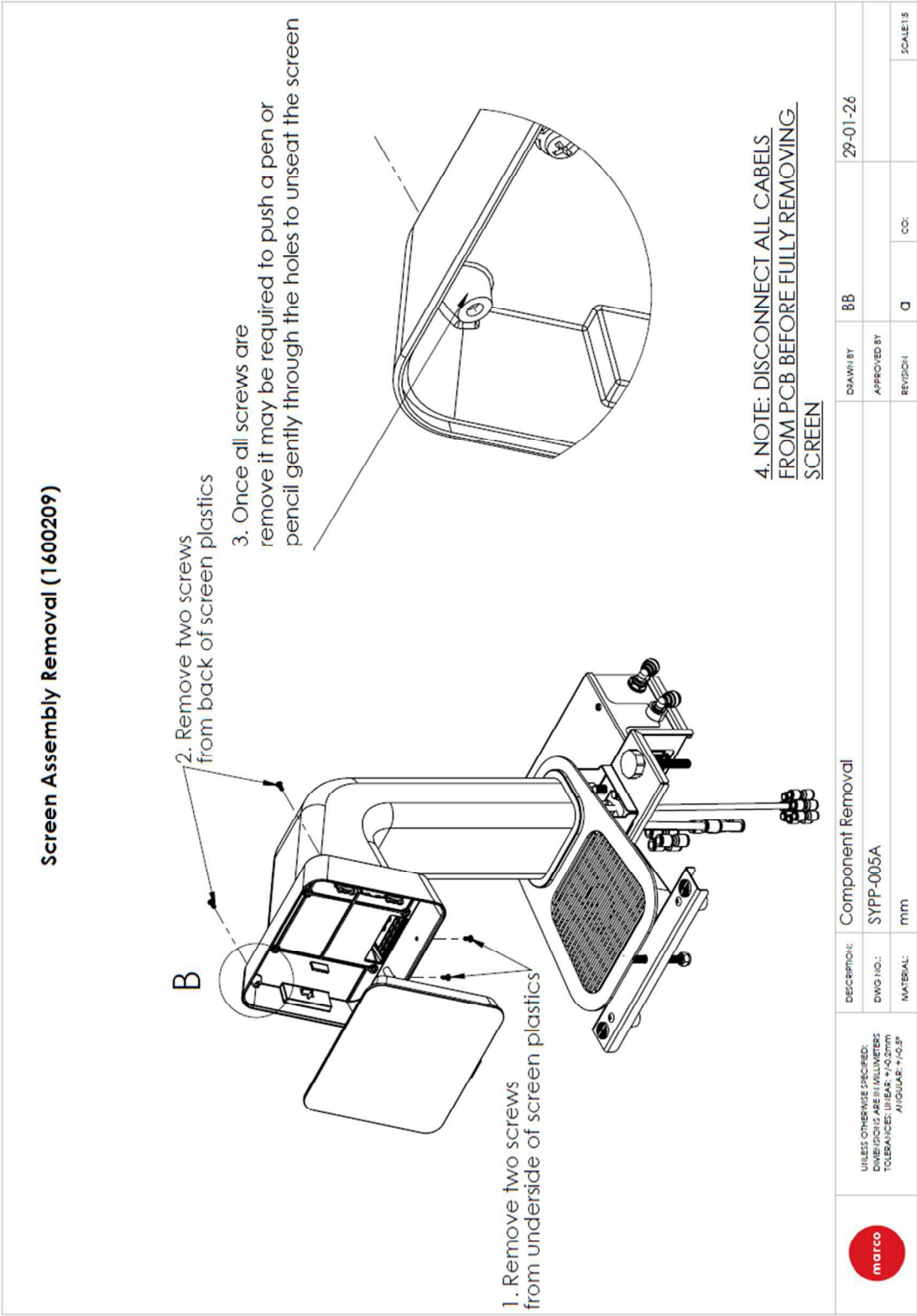
Clean the drip tray and remove any residual using warm water

7. Troubleshooting

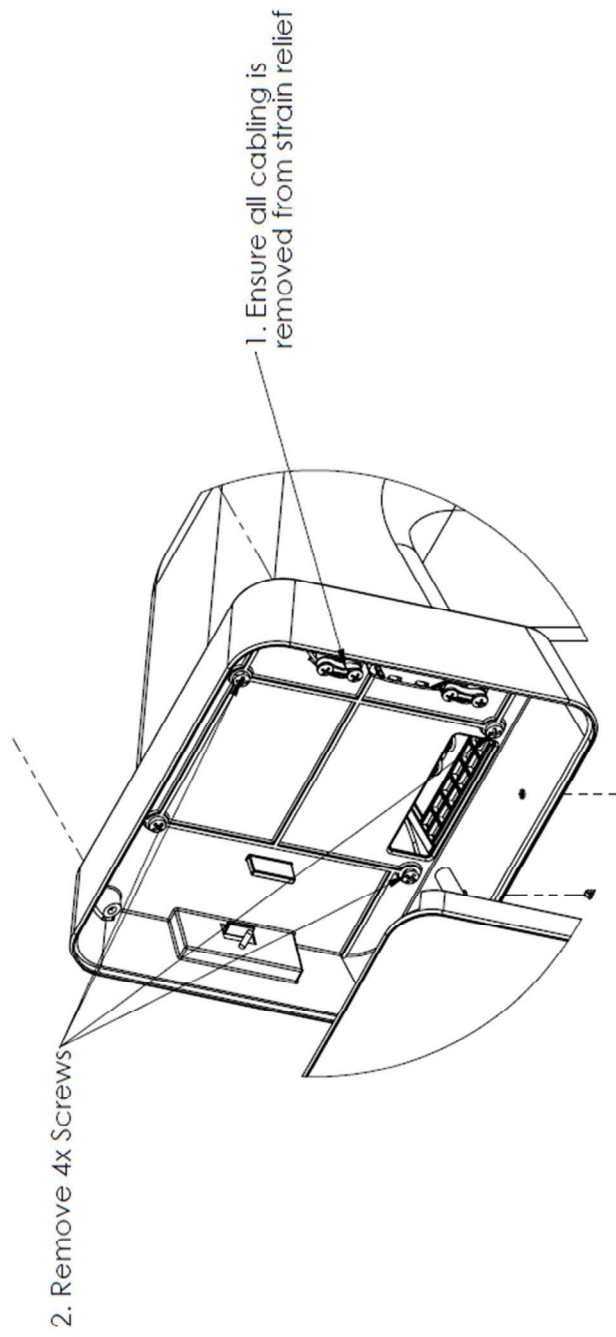
8. Error Codes

9. Internal Access Drawings & Parts Service Drawings

9.1. 1000915 SYPP Font

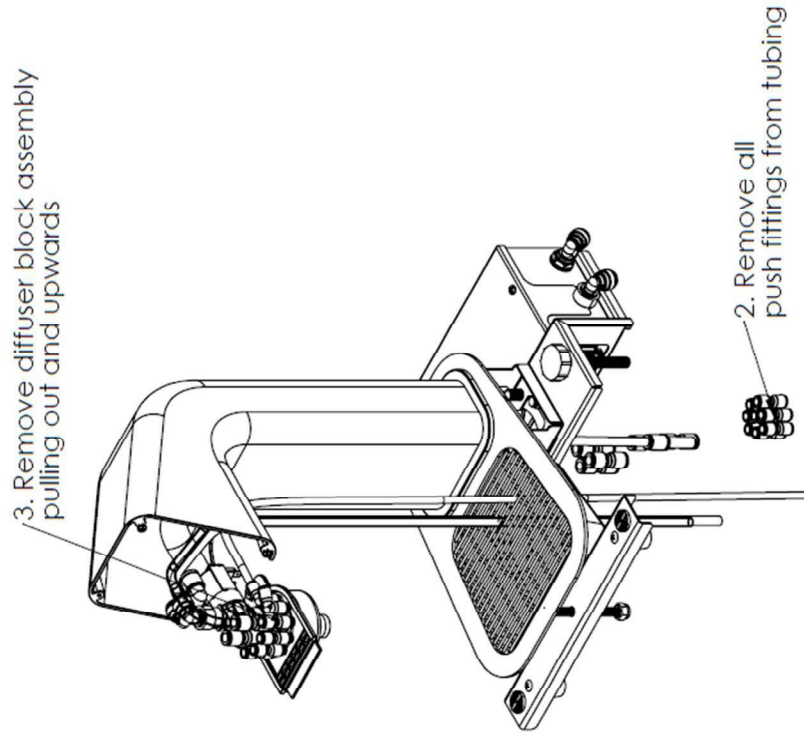
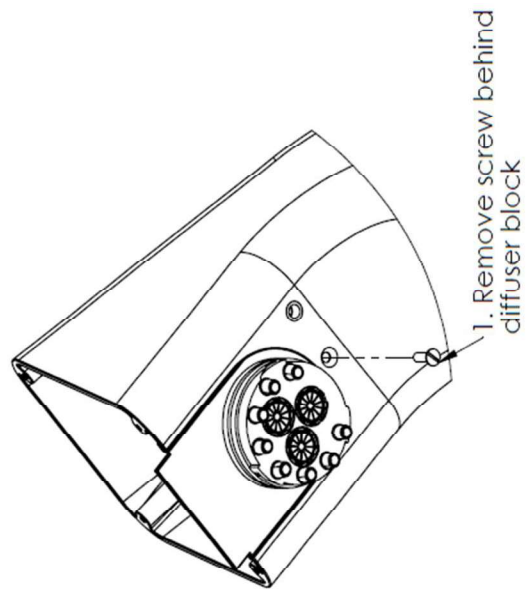


Screen Housing Removal



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	MATERIAL:		mm		REVISION	d	CO:
	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES: LINEAR: $\pm 0.2\text{mm}$ ANGULAR: $\pm 0.5^\circ$						SCALE: 1:1

Diffuser Block, Dispense Fittings & Carbonated Solenoid Removal



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TOLERANCES: LINEAR: $\pm 0.2\text{mm}$
ANGULAR: $\pm 0.5^\circ$

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DWG NO.: SYPP-005A

MATERIAL: mm

DRAWN BY: BB

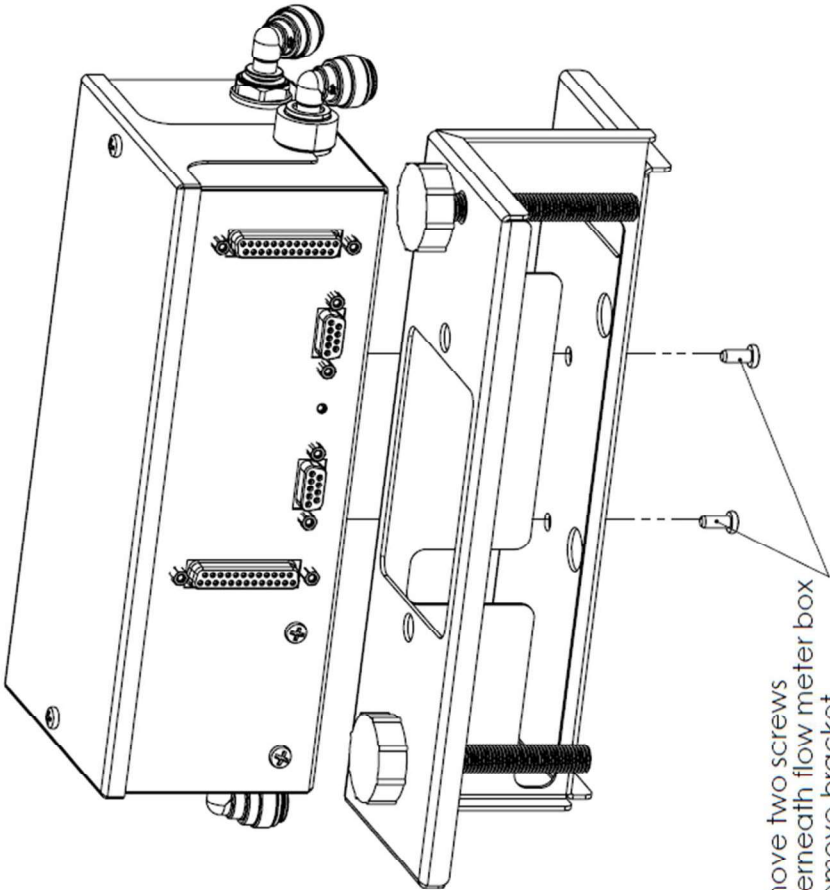
APPROVED BY:

REV/GON: a CO:

29-01-26

SCALE: 1:1

Flow Meter Box Bracket Removal



Remove two screws
underneath flow meter box
to remove bracket



UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES: LINEAR: $\pm 0.2\text{mm}$
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APPROVED BY: Q

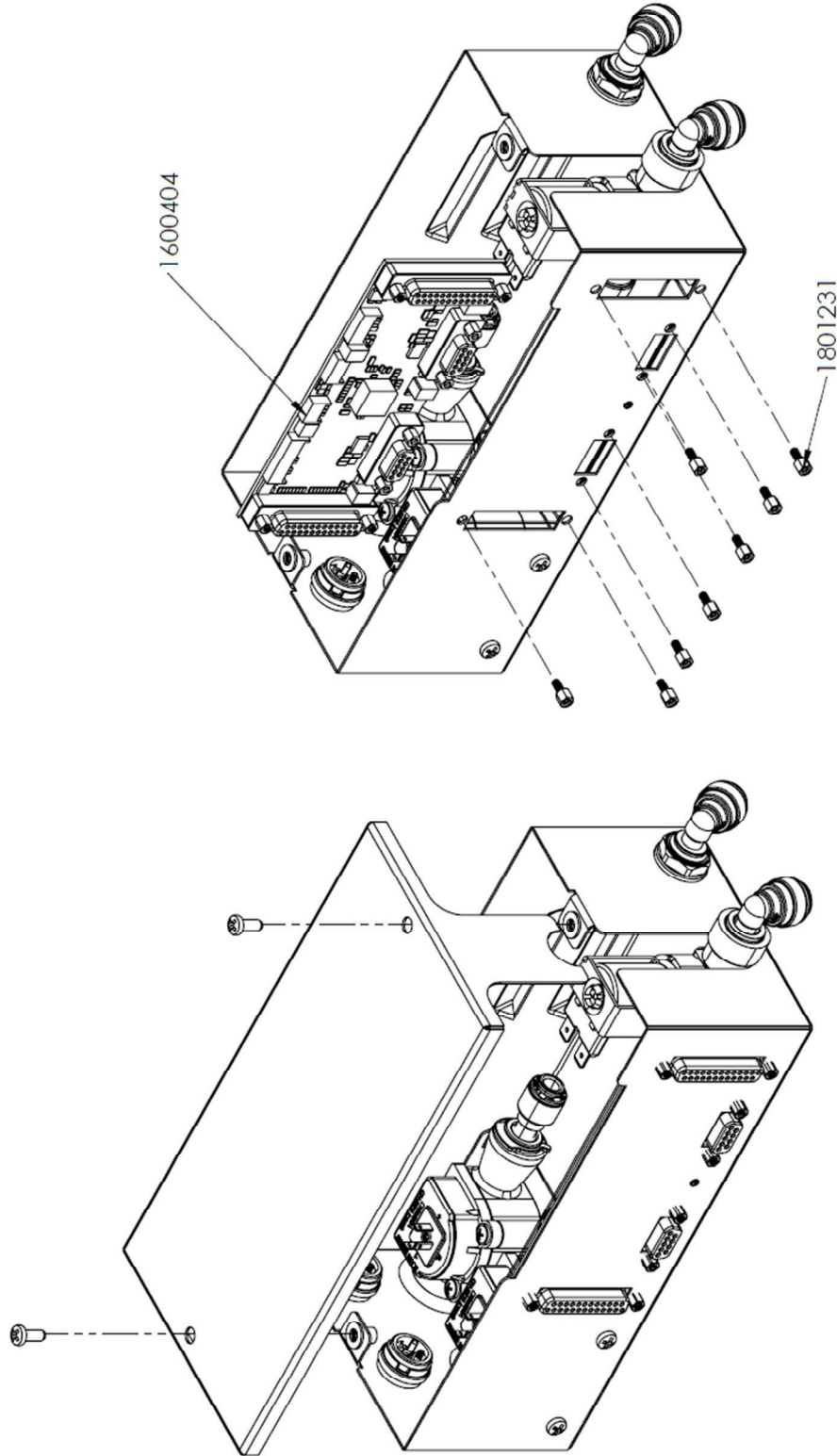
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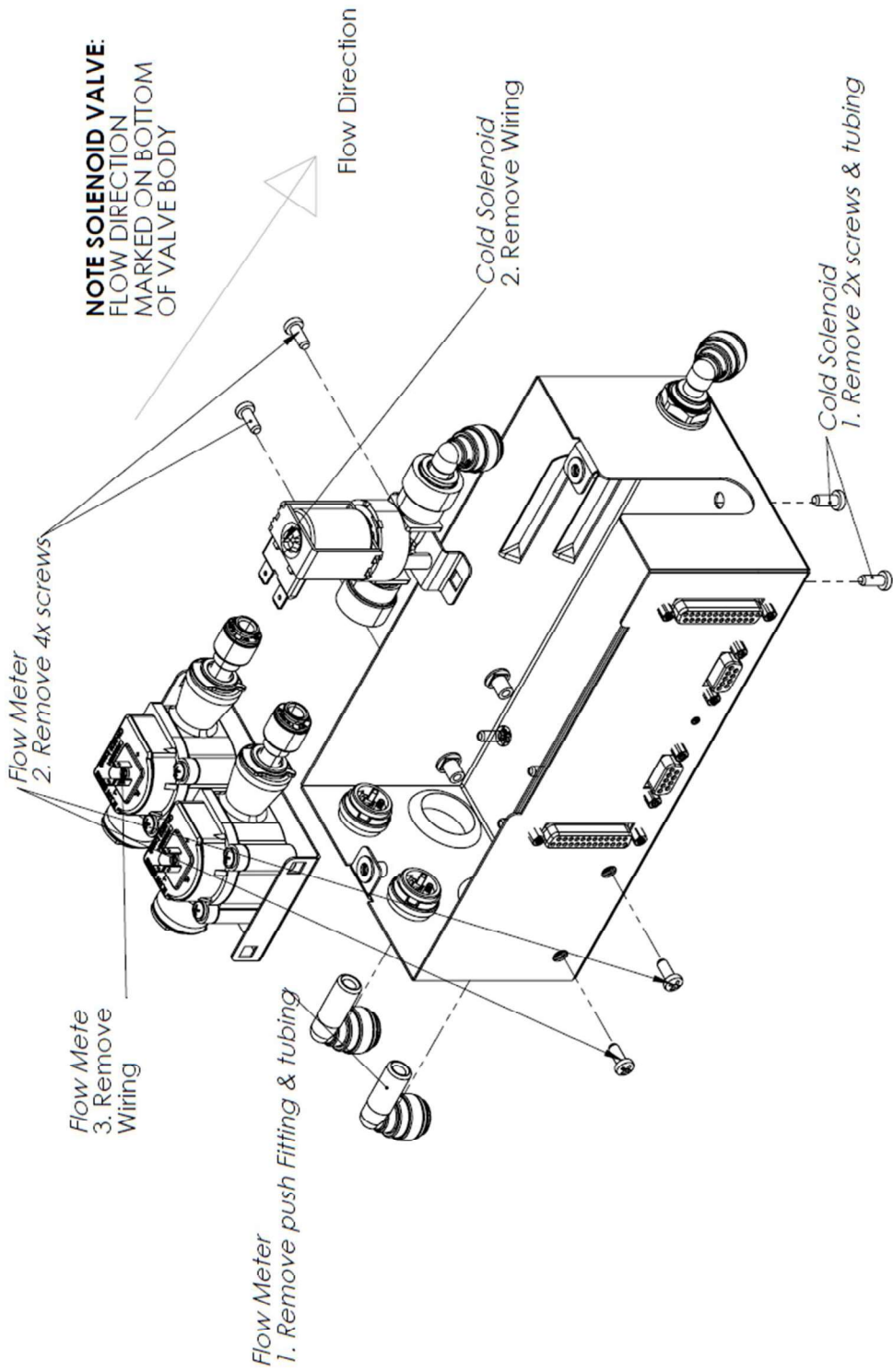
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Access Panel & PCB Removal



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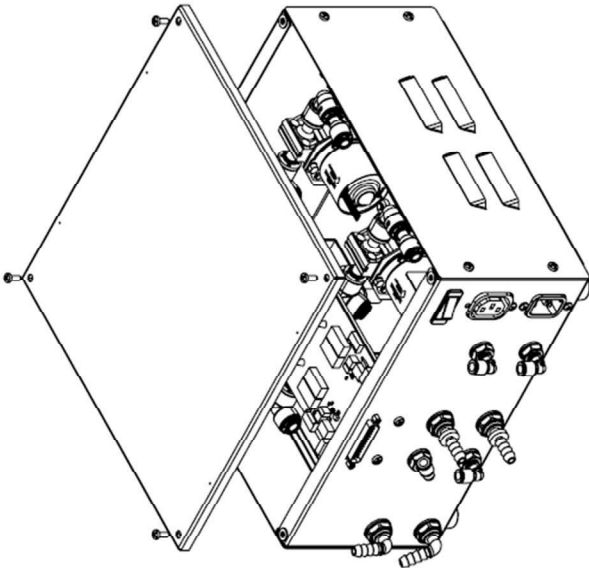
Flow Meter & Cold Water Solenoid Removal



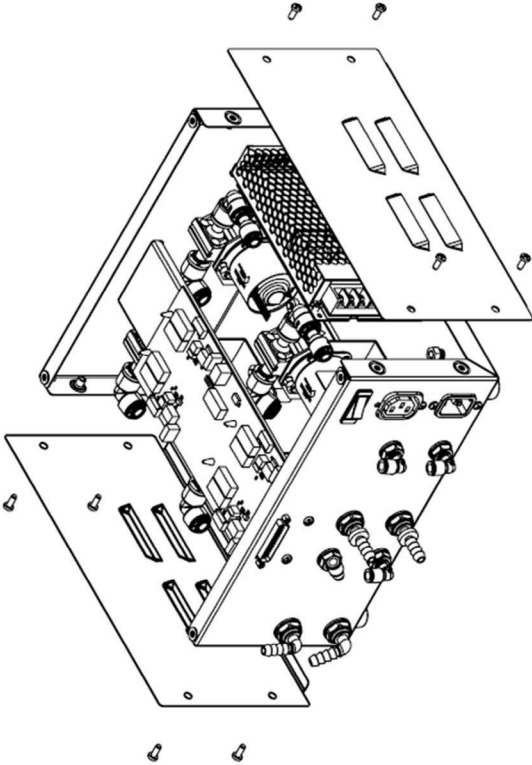
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9.2. 1000910 SYPP Pump Box

Top Panel Removal



Side Panel Removal

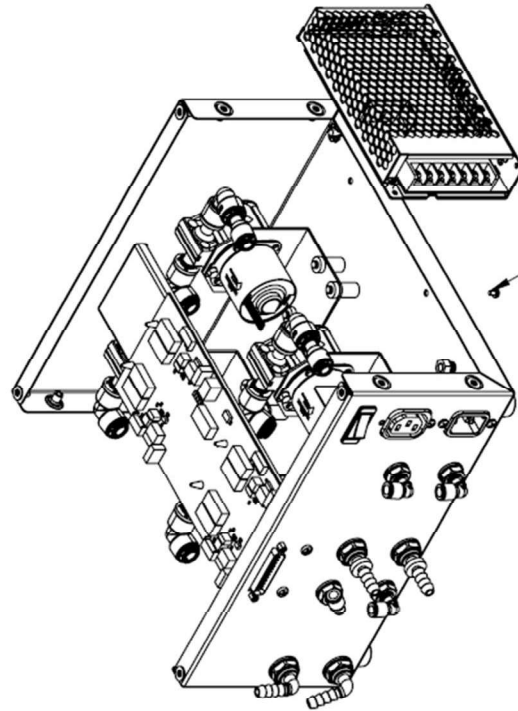
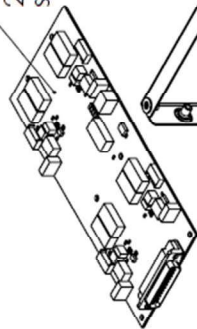


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		MATERIAL:	mm		
		DRAWN BY:	BB	29-01-26	
		APPROVED BY:			
		REVISION:		CO:	
					SCALE: 1:4

Power Supply Removal 1601003

PCB Removal 1600416 & 1600417

Main PCB - 1600416
2. Remove PCB from
stand-offs



1. Remove 2x screws
from machine underside

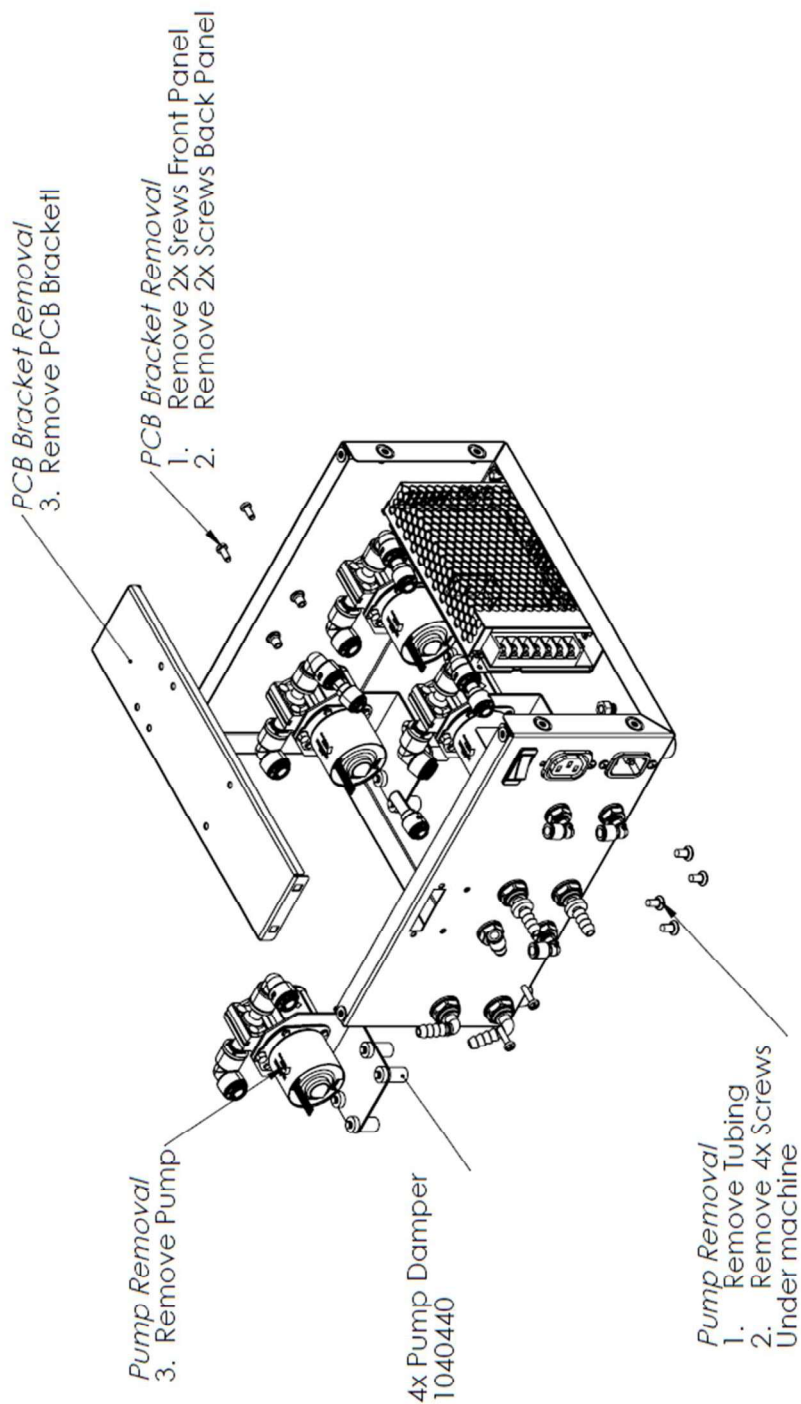
Power PCB - 1600417
1. Remove Earth screw
from machine underside

Power PCB - 1600417
2. Remove 4x front panel
screws

Main PCB - 1600416
1. Remove front
mounting screws

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	DWG NO.:		SYPP-004A		APPROVED BY							
	MATERIAL:		mm		REVISION							
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PCB Bracket & Pump (1501536) Removal



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ANGULAR: $\pm 0.5^\circ$

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DWG NO.: 1000910 SYPP Control Box
MATERIAL: mm

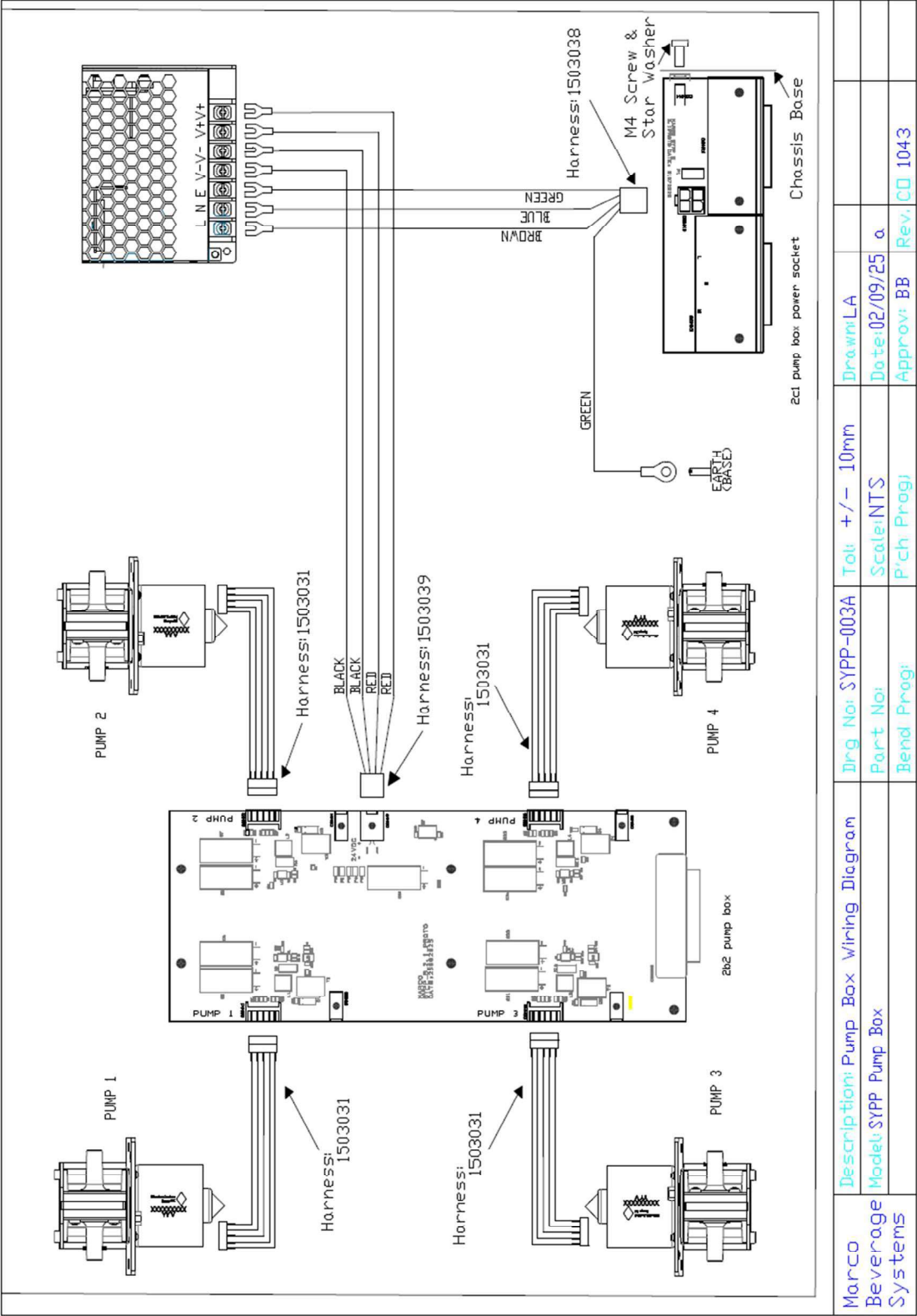
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REVISION

CO:

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9.3. 1000920 SYPP Rack 4 Syrups

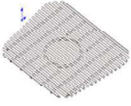
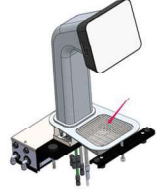
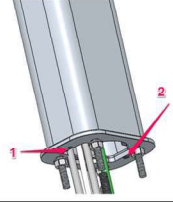
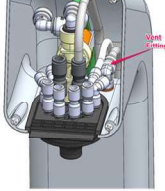
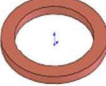
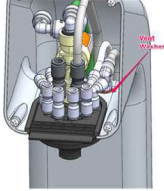
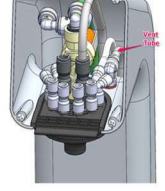
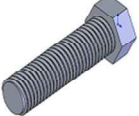
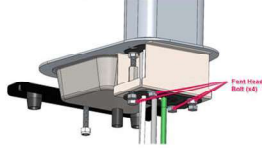
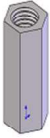
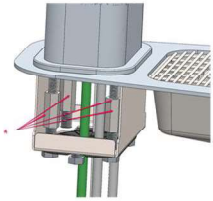
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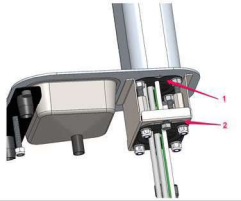
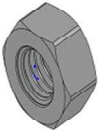
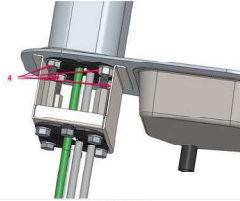
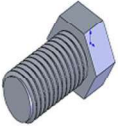
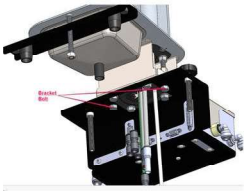
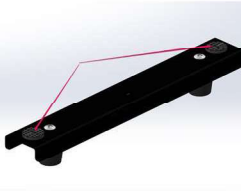
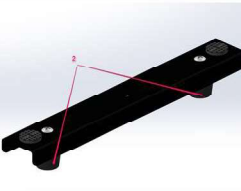
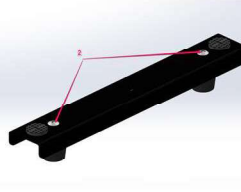


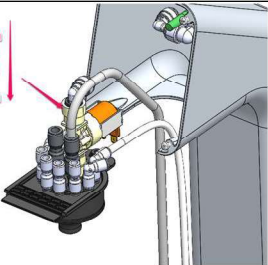
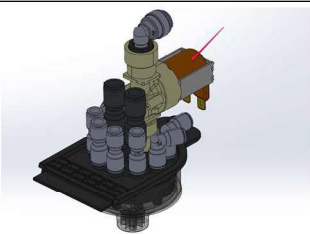
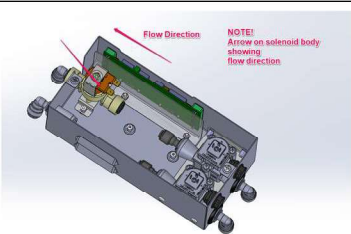
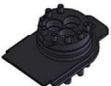
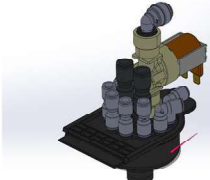
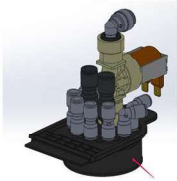
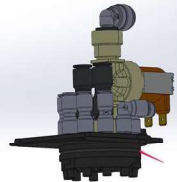
11. Install Kits

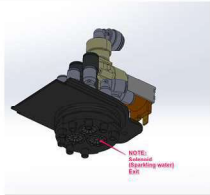
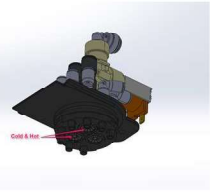
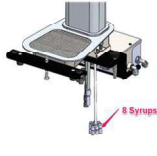
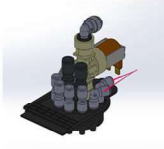
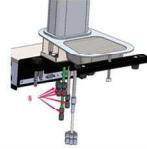
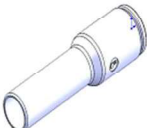
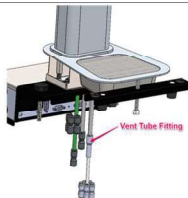
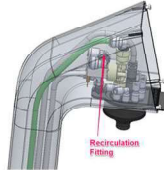
12. Spare Parts List

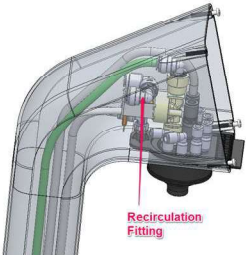
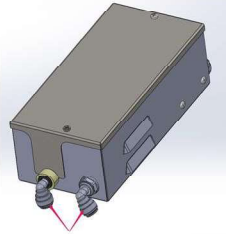
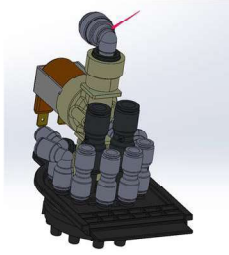
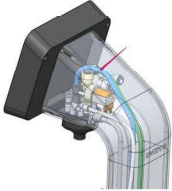
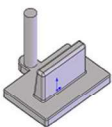
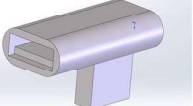
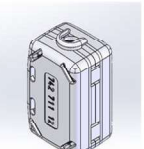
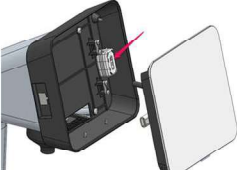
12.1. 1000915 SYPP Font Spares List

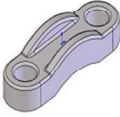
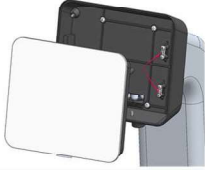
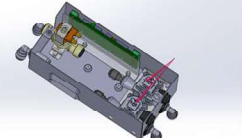
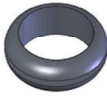
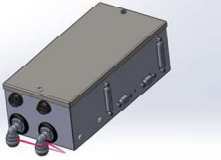
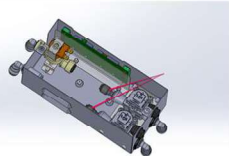
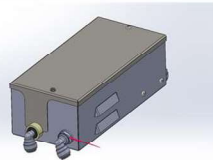
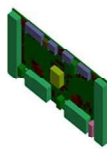
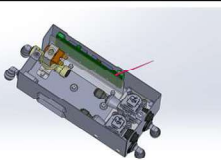
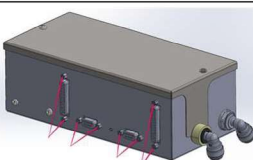
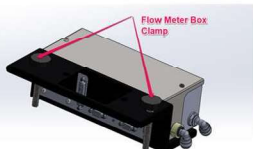
PREVIEW	PART NUMBER	DESCRIPTION	QTY Per Machine	Where Used Image
	2200004	Driptray insert SYPP Wireframe	1	
	1044033	Screw Countersunk M3x8	2	
	1400731	Elbow 1/8 BSP M x 8mm Push Fit Swivel	1	
	1402371	Washers, M10 Copper, ID 10.2mm OD 13.7 0.9mm	3	
	1860388	FRIIA Font Vent Pipe	1	
	1400420	Bolt M8 X 35 S/S	4	
	1401283	Coupling Nut M8X30 Hex Female/Female SS	4	

	2200009	SYPP Font NSF Gasket	2	
	1401260	Nut M8 SS	4	
	1400410	Bolt M8 X 16 S/S Hex	2	
	1800193	FEET RUBBER INSERT ECOBOILER	2	
	1800192	FEET NYLON ECOBOILER	2	
	1401725	Screw Aquacooler	2	

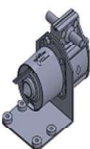
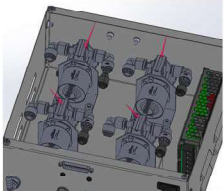
	1502209	Valve Dispense Solenoid 24V 180° (Straight Through) 5/16" JG x 5/16" JG	2	
				
	2200015	SYPP Diffuser Block	1	
	2200016	SYPP Diffuser Spout	1	
	2200017	SYPP Diffuser Cover	1	
	1800779	O-Ring 54mm OD X 2.2mm Cross Section	1	

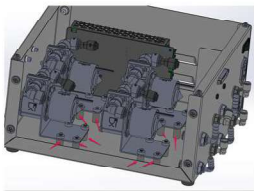
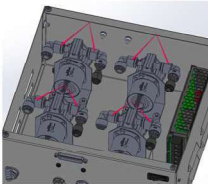
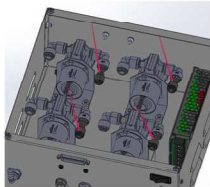
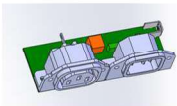
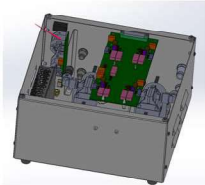
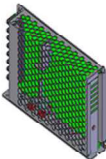
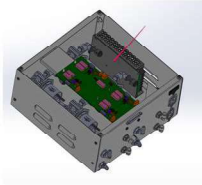
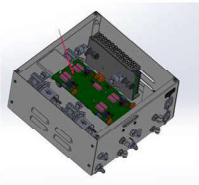
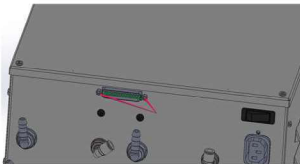
	2100017	Flow Aerator M16.5x1 1.5GPM (Sparkling)	1		
	2100016	Flow Straightener M16.5x1 01.5175.00001	2		
	1400818	Straight Union 1/4" - 1/4"	12		
	1400812	Parker Equal Elbow 1/4" 6302 56 00WP2	4		
	1400819	Straight Union 8mm - 8mm	7		
	1401659	Reducer Connector 8mm - 10mm	1		
	1400847	Equal Elbow 5/16" 8mm John Guest PM0308S	1		

	1400832	Elbow Stem 8mm (5/16") - 8mm (5/16") (John Guest)	4	
				
	1800639	Hose 5/16" (8mm) SYPP Hot	1	
	1600209	SYPP Screen Assembly	1	
	1501228	Enter Description	1	
	1501227	USB Adaptor 90 Deg	1	
	1500472	Split Core Ferrite 6mm	1	

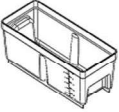
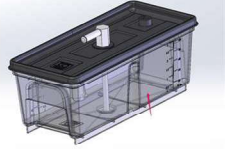
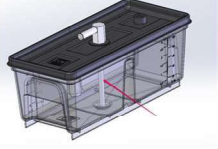
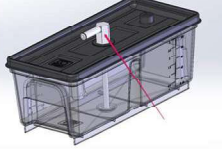
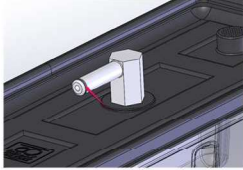
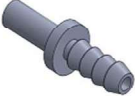
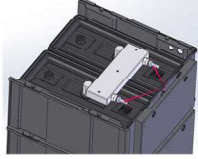
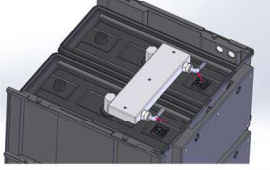
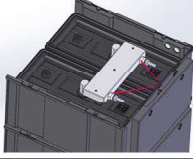
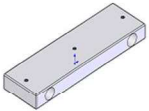
	1801206	Strain Relief - Plug Type CLT-2 UL 94V-0	2	
	2301183	Flow Meter Digmesa	2	
	1800370	GROMMET PVC 25 X 1.6 X 21mm	2	
	1400777	Elbow 3/8" Stem to 5/16" Pushfit (John Guest)	2	
	1400839	5/16"-1/4" Stem-Pushfit Reducer (John Guest)	2	
	1400437	Bulkhead Connector 8mm (Legris) 6316 08 00WP3	1	
	1600404		1	
	1801231	PCB Stand-off Male - Female 4-40 UNC 11.13 mm (Farnell - Farnell 2751561)	8	
	1800196	Feet Adjustable M8 x 70mm Galv Steel Rod	2	

12.2. 1000910 SYPP Pump Box Spares List

PREVIEW	PART NUMBER	DESCRIPTION	QTY Per Machine	Where Used Image
	1400769	Connector 5/16" Stem to 1/4" Barb	4	
	1400768	Connector 5/16" Stem Elbow to 1/4" Barb	4	
	1400816	Elbow Stem 1/4"x1/4" Pushfit	4	
	1400437	Bulkhead Connector 8mm (Legris) 63160800WP3	4	
	1400436	Bulkhead Connector 1/4" (Legris)	4	
	1501536	Pump Brushless 24V DC RD2 Thread Insert Mounting	4	

	1040440	Anti Vibration Mount, Male to Female M5	16	
	1400847	Equal Elbow 5/16" 8mm John Guest PM0308S	8	
	1400839	5/16"-1/4" Stem-Pushfit Reducer (John Guest)	4	
	1600417	PCB SYPP Power Supply	1	
	1601003	Power supply 24V dc, 4.5A, 150W	1	
	1600416	PCB SYPP Pump Control	1	
	1801231	Stand-Off D Sub Jack Screw 6.35 mm	2	
	1501216	SWITCH POWER ON/OFF	1	

12.3. 1000920 SYPP Rack 4 Syrups Spares List

PREVIEW	PART NUMBER	DESCRIPTION	QTY Per Machine	Where Used Image
	2200034	SYPP Syrup Container 3L	4	
	2200035	SYPP Syrup Container 3L Lid	4	
	2200036	SYPP Container Dip Tube	4	
	2200037	SYPP Container Docking Male	4	
	1800778	O-Ring 11mm OD X 1.5mm Cross Section	4	
	1400769	Connector 5/16" Stem to 1/4" Barb	4	
	1400768	Connector 5/16" Stem Elbow to 1/4" Barb	4	
	1400767	Straight Adaptor 5/16" Pushfit x 1/4" NPTF Male	4	
	2200038	SYPPP Container Docking Female	2	