

VELOPEX[®]

Automatic X-Ray Film Processor

MK6
EXTRA-XE
EXTRA-X
XTENDER



TECHNICAL MANUAL

FOR TRAINED TECHNICAL PERSONNEL

WARNING:

Do not plug into the electrical mains power supply before reading this manual - or before filling the machine with liquids



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MAKERS OF DENTAL, VETERINARY AND MEDICAL EQUIPMENT



I/LIT0151P Extra-X Technical Manual Iss.2
Issued: 24/11/10

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OVERVIEW

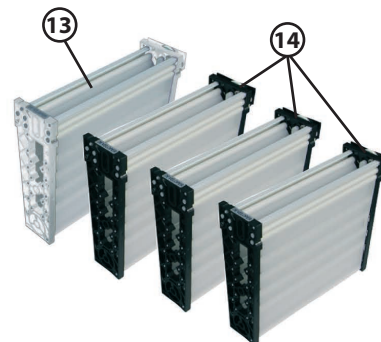
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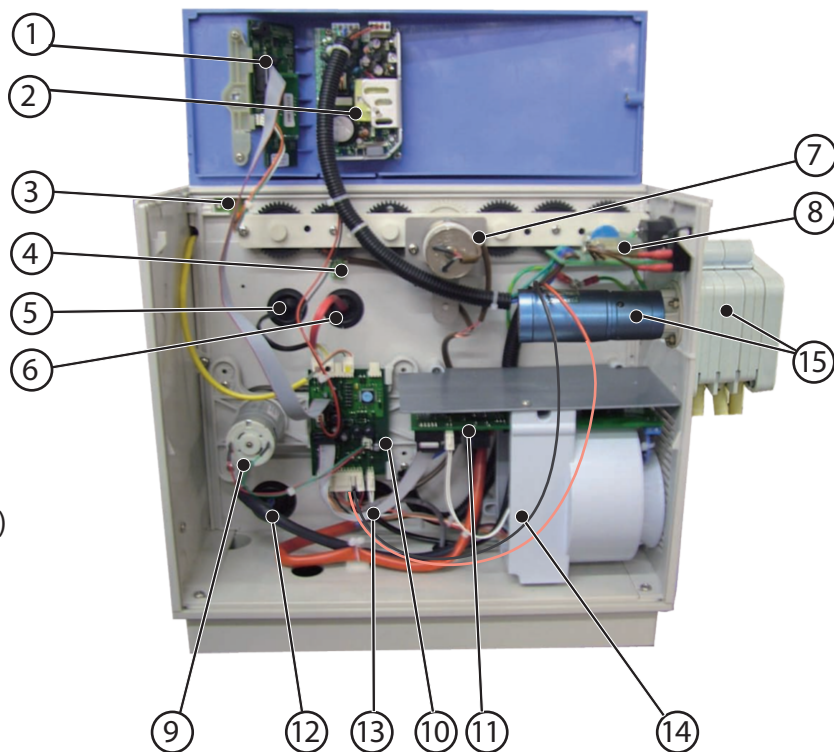
Machine Exterior



- ① Velopex X-Ray Film Processor - Left Side
- ② Lid Lock
- ③ Film Collector
- ④ Endo Slide
- ⑤ On/Off Power Switch
- ⑥ Viewer Cover
- ⑦ Daylight Loader viewing Window
- ⑧ Hand entry port/Glove
- ⑨ Daylight Loader Lid
- ⑩ Daylight Loader - Left Side
- ⑪ Daylight Loader Coupling Points/Studs
- ⑫ Film Entry Guide
- ⑬ Dryer Transport Module
- ⑭ Water, Fixer & Developer Module
- ⑮ Display

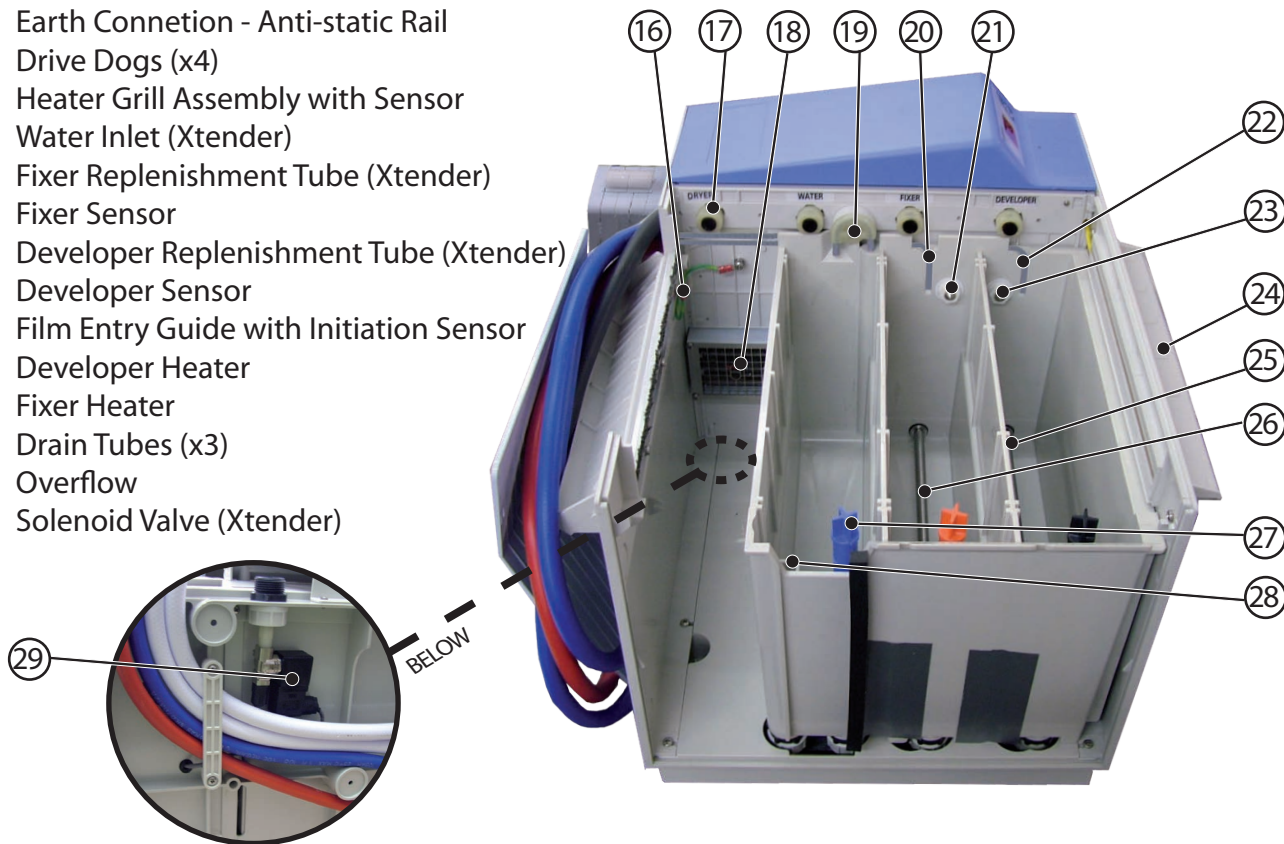
Machine Interior

- 1 Display Board
- 2 Power Supply
- 3 Lid Sensor
- 4 Drive Speed Sensor
- 5 Developer Tank Sensor
- 6 Fixer Tank Sensor
- 7 Drive Motor
- 8 IEC Board
- 9 Stirrer Motor
- 10 Control Board
- 11 Power Board
- 12 Developer Tank Heater
- 13 Fixer Tank Heater
- 14 Dryer Motor
- 15 Peristaltic Pump Unit (Xtender)



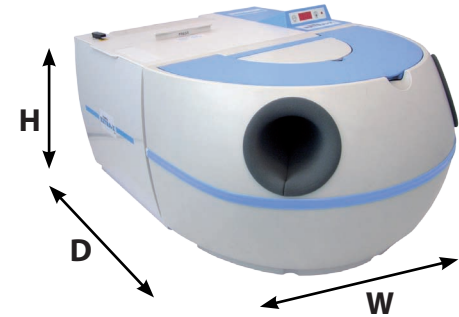
Machine Interior

- 16 Earth Connection - Anti-static Rail
- 17 Drive Dogs (x4)
- 18 Heater Grill Assembly with Sensor
- 19 Water Inlet (Xtender)
- 20 Fixer Replenishment Tube (Xtender)
- 21 Fixer Sensor
- 22 Developer Replenishment Tube (Xtender)
- 23 Developer Sensor
- 24 Film Entry Guide with Initiation Sensor
- 25 Developer Heater
- 26 Fixer Heater
- 27 Drain Tubes (x3)
- 28 Overflow
- 29 Solenoid Valve (Xtender)



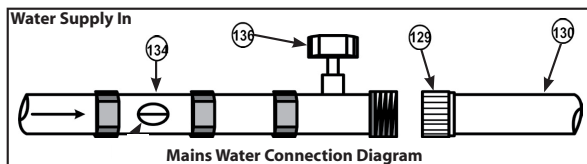
Machine Specification

Width (W)		510mm / 20"
Depth (D)		470mm / 18½"
	Inc. Loader	740mm / 29"
Height (H)		340mm / 13½"
Weight:	Empty	21Kg / 46¼lb
	Full Tanks	27Kg / 59½lb
Tank Capacity		3.8litres / 6¾Imp Pints each
Operating Temperatures:		<i>Water- should not exceed 28°C (82.4°F)</i>
	Developer	25.5°C (77°F) / 30°C (86°F)
	Fixer	27°C (80.6°F) / 33°C (91.4°F)
Electric Supply		100-120V, 200-240V, 50/60Hz
Warm-up Time		10 min. approx.
Film Feed Speed		470mm / 18½" per min.
Max. Film Width		260mm / 10¼"
Processing time*: Dry		4 min. approx.
	Wet-Endodontic	2 min. approx.
Input Power		1150W
Environmental Conditions:		Indoor use Only. Well ventilated
Environment Temperature		5°C-26°C (41°F-78.8°F)
Maximum Relative Humidity		80%



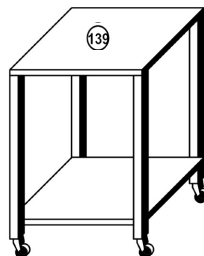
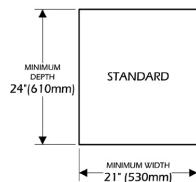
* in the unit's first few cycles, processing time can vary between four and five minutes. Then the process time will stabilise around four and a half minutes.

Pre-Installation Instructions



MACHINE STAND (OPTIONAL) USA

WORKTOP DIMENSIONS



DEPTH - 15.5" (394 mm)
WIDTH - 23.5" (597 mm)
HEIGHT - 31.0" (787 mm)

- ⑫⑨ Cold Water Hose Union
- ⑬⑩ Flexible Hose - Cold Water Supply
- ⑬④ Isolator valve
- ⑬⑥ Domestic Appliance Service Valve / Faucet
- ⑬⑨ Machine Stand (Optional)

MACHINE STAND (OPTIONAL) - WORLDWIDE

DEPTH - 19½" (495mm)
WIDTH - 20½" (517mm)
HEIGHT - 31¾" (810mm)



Pre-Installation Instructions

• Siting of the VELOPEX

When using the machine in daylight or a darkroom, avoid sources of intense light. Do not mount the unit under a window, fluorescent light or flood lamp.



IMPORTANT NOTE: A well ventilated position is mandatory.

The ambient temperature must be below 26°C (78.8°F) and above 5°C (41°F) to prevent lengthy temperature warm-up times. Prevent siting the machine above or near other electrical or mechanical equipment. Surfaces susceptible to water or chemical damage should be avoided, such as carpeted areas.

1. COUNTER PLAN

- a) Use a counter that will support a minimum of 91Kg (200lbs).
- b) With a minimum height of 79cm (31in).
- c) With a minimum width of 53cm (21in).
- d) With a minimum depth of 61cm (24in).

2. ELECTRICAL SUPPLY

- a) Refer to specification table, page 5
- b) The power source must be within one metre (3 feet) of the machine above the counter and well separated from the water supply. It should be easily accessible for operation and maintenance.

Pre-Installation Instructions

3. COMMERCIAL WATER SUPPLY

ATTENTION! Use only the hoses supplied with this machine.

- a) Water temperature no higher than 26° (78.8°F).
- b) The supply should be fitted with an Isolating Valve just prior to the main On/Off faucet/valve which should be adjusted before installation to limit water flow to delivery rate of 1.0ltr/min (0.27gal/min).
- c) The output side of the Mains On/Off faucet/valve must have a 3/4" male thread (see diagram on page 6). The faucet/valve should be situated in such a position that it can be easily turned off each day.

IMPORTANT NOTE: *The water inlet hose supplied with this machine is not a standard Domestic Appliance Hose. It is suitable for all installations where the mains water supply is rated between 0.2 & 10.0 Bar. However, for installations without mains water supply, e.g.: where a header tank is employed (min. height 1.83m (6ft.) above machine) a standard hose without restrictor must be used and the flow regulated to 1.0ltr/min (0.27gal/min) with the separate Control Valve.*

4. DRAIN

- a) A corrosion resistant PVC drainpipe 38mm (1.5 in) diameter with a length of 56-61cm (22-24 inches).

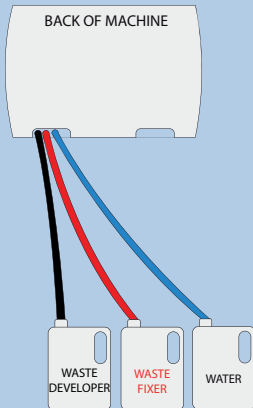
NOTE: *The Drains Pipe should not rise higher than 102mm (4.0 in.) below the bottom of the machine.*

WARNING: *X-ray radiation can be harmful to patient, technician and dentist. Inadequate lead shielding of the darkroom or film storage area will also cause fogging from exposure of films to stray x-ray radiation. Consult your local codes, Health Department or Dental Equipment Dealer for proper construction of darkroom or placement of film processing equipment in the vicinity of x-ray radiation sources.*

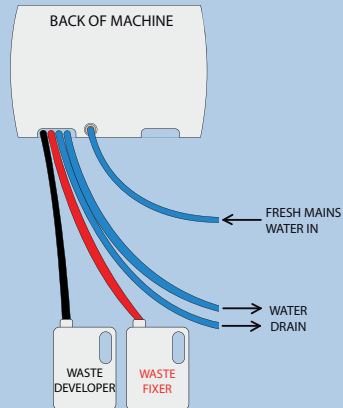


European and Worldwide Plumbing Arrangements

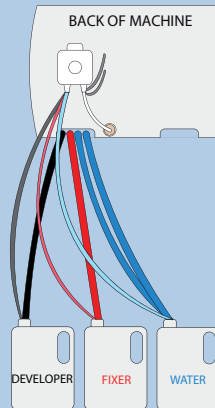
1. EXTRA-XE



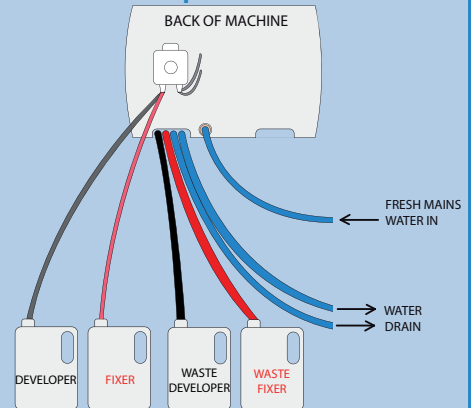
2. EXTRA-X



3A. XTENDER Recirculated



3B. XTENDER Replenished

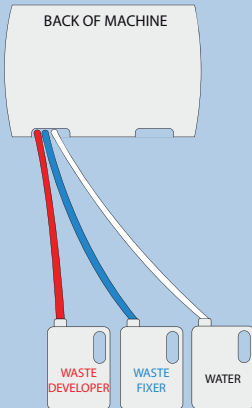


Plumbing USA

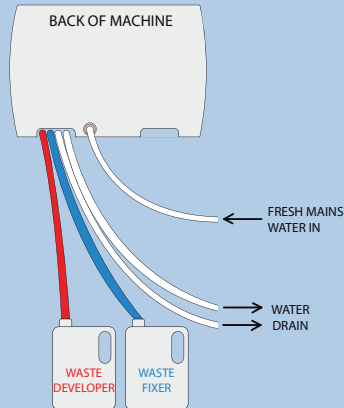


USA Plumbing Arrangements

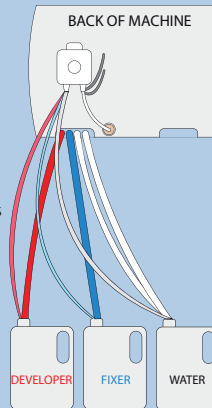
1. EXTRA-XE



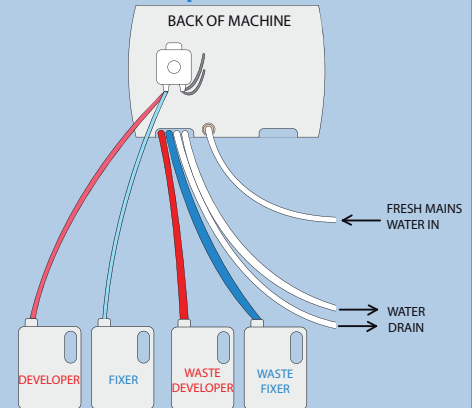
2. EXTRA-X



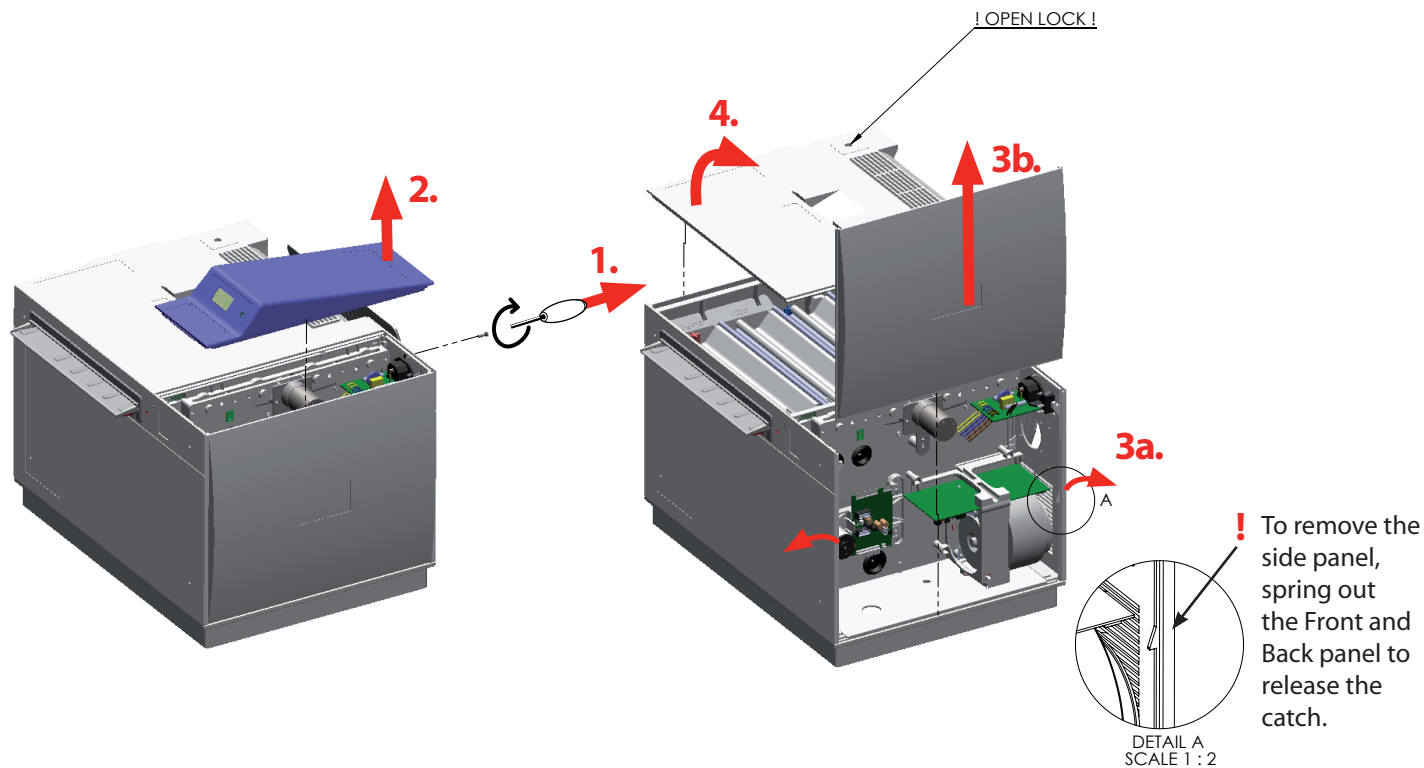
3A. XTENDER Recirculated



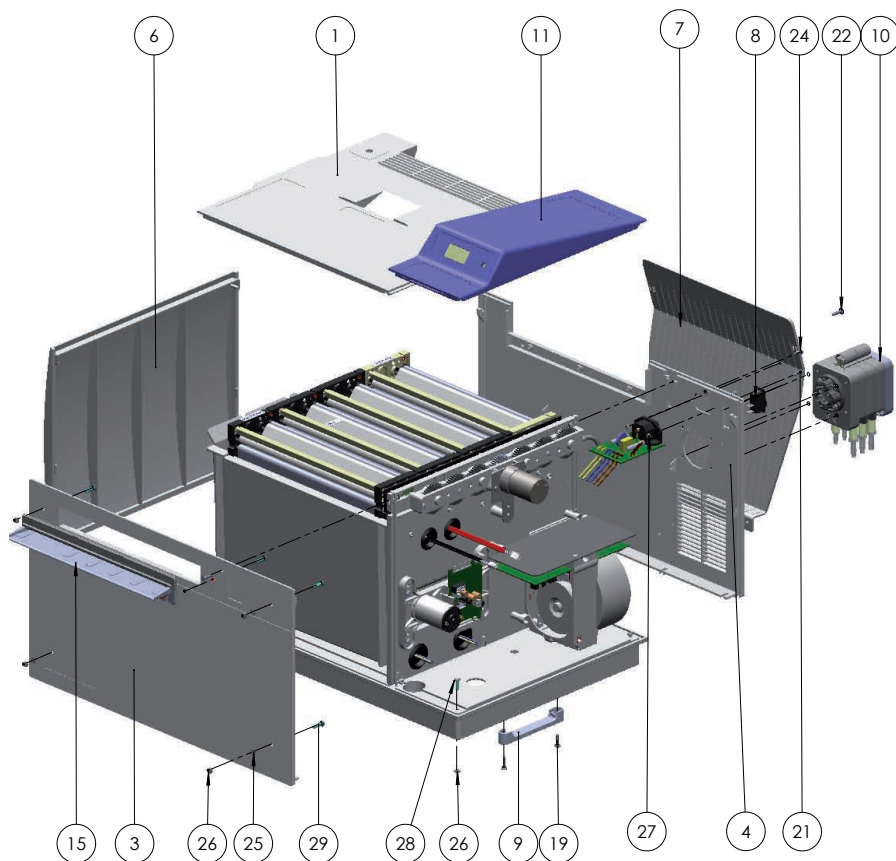
3B. XTENDER Replenished



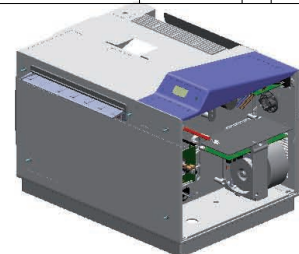
Opening Machine



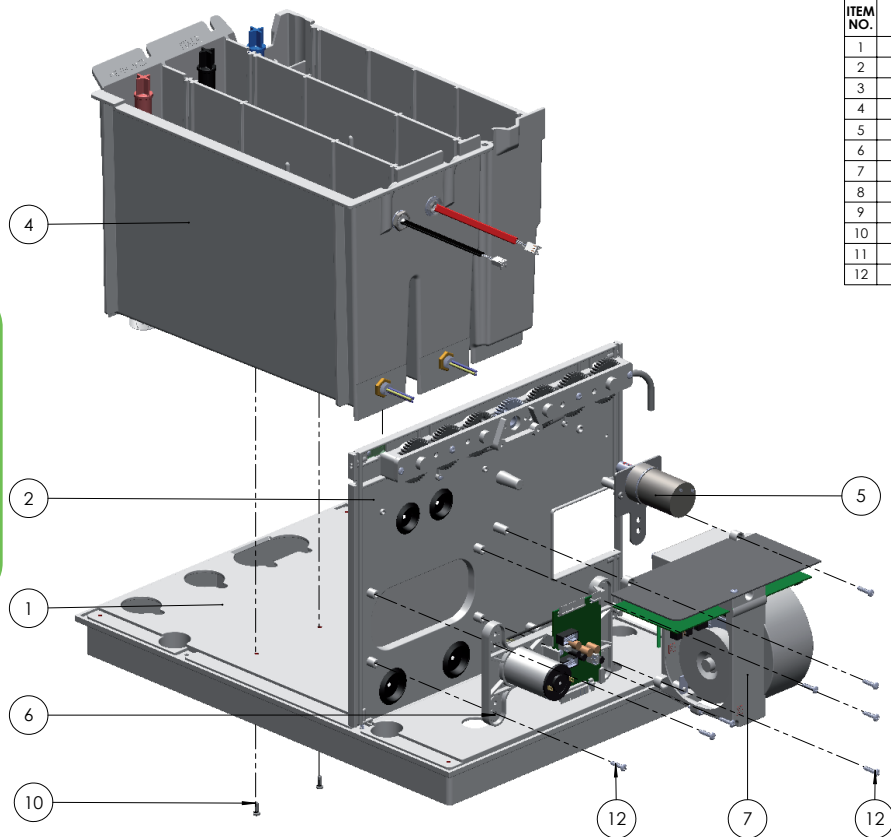
Main Assembly



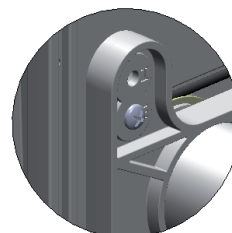
ITEM NO.	DRAWING NO. & DESCRIPTION	PART NO.	QTY	SPARES PART NO.
1	11-006-A1 TOP PANEL		1	I/ASS0248F
2	11-268-A2 Extra Base Panel Iss7	IMDG2186P	1	I/MDG2186F
3	11-259-A1 FRONT PANEL Dev Iss2		1	I/MDG0004F
4	11-257-A1 EXTRA BACK PANEL MK6		1	I/MDG2032F
5	10-228-A3 IEC Board	I/ELC7206P	1	I/ELC7206F
6	11-149-A1 SIDE PANEL Iss3		2	I/MDG2064F
7	11-287-A1 FILM CATCHER	I/MDG0039P	1	I/MDG0039F
8	Rocker Switch - 15amp, 250vac	I/ELC7201	1	I/ELC7210F
9	11-292-A3 Extra Base Pipe Strap Iss2	I/MDG0061P	1	I/MDG0061F
10	38-001-A3 REPLENISHER ASSEMBLY ISS 7		1	
11	10-223-A1 CONTROL PANEL ASSEMBLY Iss3	I/ASS0223A	1	SEE ASSEMBLY DRAWING
12	11-300-A3 Extra Tank Assembly ISS4	I/ASS1300	1	
13	MODULE		4	
15	11-290-A3 EXTRA BEAK ASSEMBLY Iss1		1	I/ASS7215F
19	No8 x 0.750 SELF TAPPING SCREW	I/FIX7008P	2	SCREW PACK I/ASS0004F
20	4x1.75x8mm PLASFIX POZI SCREW	I/FIX8912P	3	
21	M3 x 12 POZI PAN	I/FIX 2028P	2	
22	4x1.75x16mm PLASFIX COUNTERSUNK SCREW	I/FIX8913P	3	
23	4x1.75x16mm PLASFIX POZI SCREW	I/FIX8109P	11	
24	M4 x 14 POZI CSK	I/FIX2066P	1	
25	M4 SHAKEPROOF WASHER	I/FIX2130P	4	
26	M4 FULL NUT	I/FIX 2100P	10	
27	M3 NYLOC	I/FI X 8104P	2	
28	M4 x 14 POZI PAN	I/FIX 2060P	6	
29	M4 x 16 POZI PAN	I/FIX 2070P	5	
30	No6 x 0.375 SELF TAPPING SCREW_Blunt end	I/FIX0009P	3	



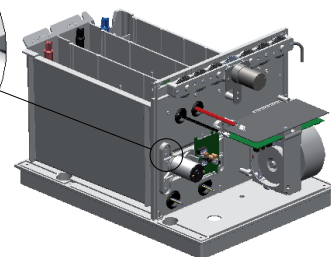
Sub Assembly



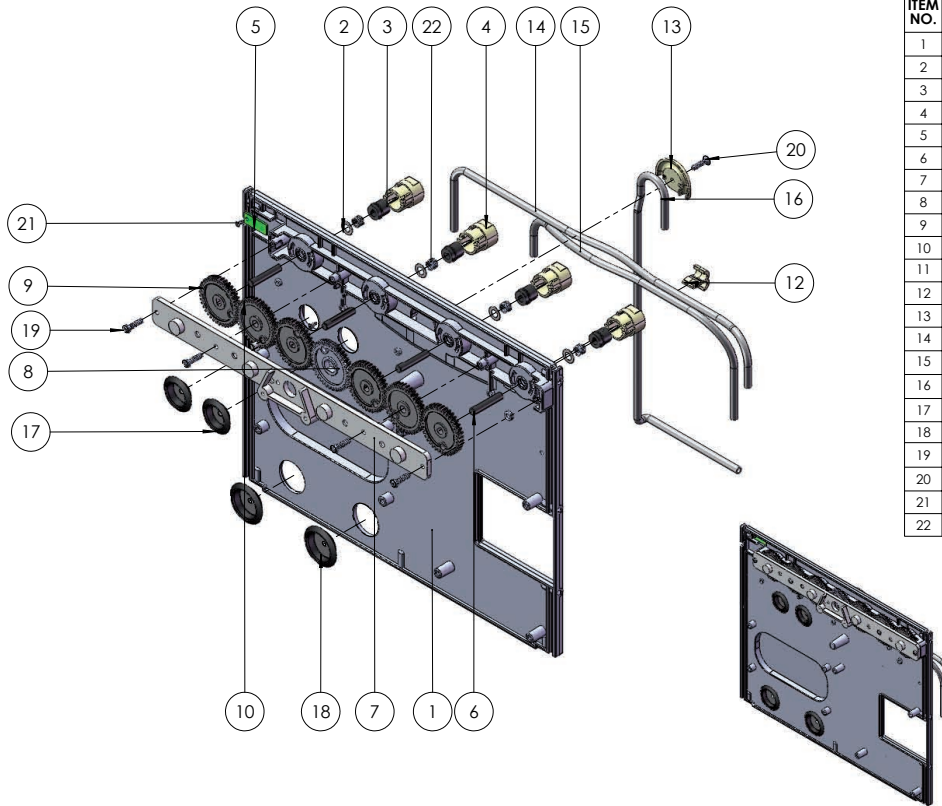
ITEM NO.	DRAWING NO. & DESCRIPTION	PART NO.	QTY	SPARES PART NO.
1	11-268-A2 Extra Base Panel Iss7	IMDG2186P	1	I/MDG2186F
2	11-253-A3 EXTRA MOTOR BOARD ASSEMBLY	I/ASS0253A	1	SEE ASSEMBLY DRAWING
3	10-223-A1 CONTROL PANEL ASSEMBLY Iss3	I/ASS0223A	1	
4	11-300-A3 Extra Tank Assembly ISS4	I/ASS1300	1	
5	10-252-A1 DRIVE MOTOR ASSEMBLY Iss2		1	
6	10-251-A3 STIRRER MOTOR ASSEMBLY Iss5	I/ASS0251A	1	
7	10-250-A1 CASSETTE ASSEMBLY Iss3	I/ASS0250A	1	SCREW PACK: I/ASS0004F
8	4x1.75x16mm PLASFIX COUNTERSUNK SCREW	I/FIX8913P	3	
9	M4 x 14 POZI CSK	I/FIX2066P	1	
10	No6 x 0.375 SELF TAPPING SCREW_Blunt end	I/FIX0009P	3	
11	No8 x 0.750 SELF TAPPING SCREW	I/FIX7008P	2	
12	4x1.75x16mm PLASFIX POZI SCREW	I/FIX8109P	11	



MOUNTING
E = EXTRA
I = INTRA

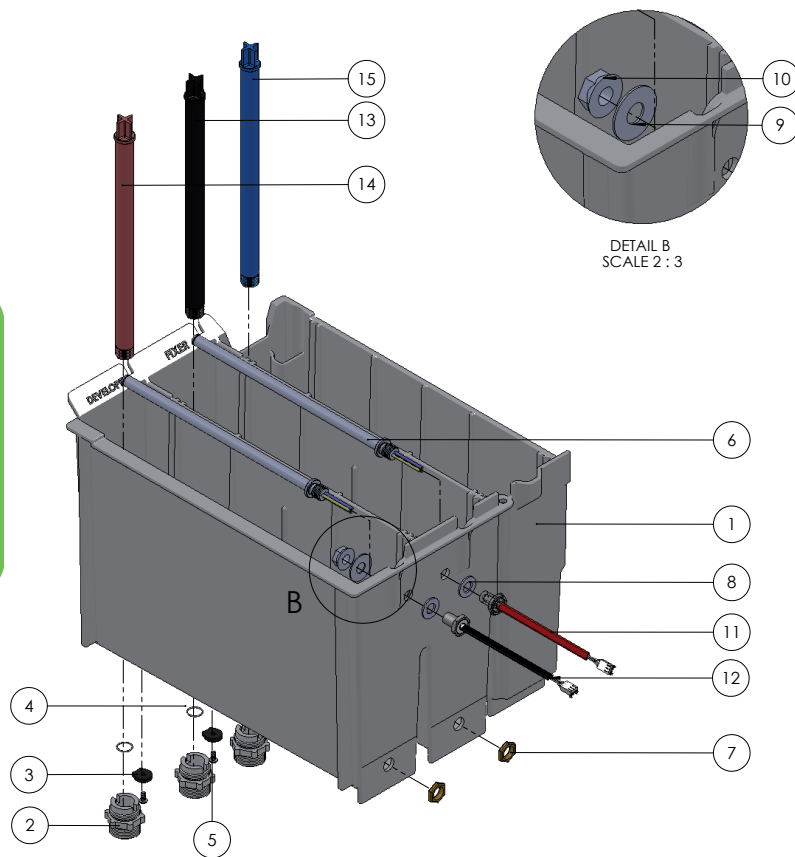


Motor Board Assembly

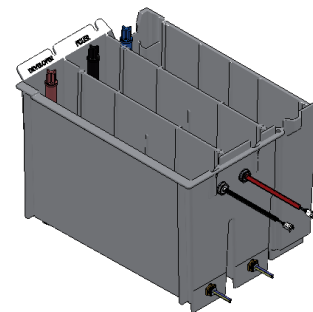


ITEM NO.	DRAWING NO. & DESCRIPTION	PART NO.	QTY	SPARES PART NO.
1	11-272-A1 EXTRA MOTOR BOARD	I/MDG0007P	1	I/MDG0007F
2	M6 Plain Washer - ID 6.3 x OD 12 x .75	I/FIX2120P	4	I/ASS5206F
3	10-060-A3 DRIVE DOG Iss6	I/MDG2200P	4	
4	11-277-A3 BAYONET DRIVE BUSH	I/MDG0014P	4	I/ASS0007F
5	10-229-PC8 Hall Effect	I/ELC1022P	1	
6	10-079-A4 DRIVE PIN Iss5	I/MDG2130P	4	
7	10-016-A3 MOTOR BOARD GEAR STRIP	I/MDG2137P	1	
8	11-274-A3 DRIVE GEAR 39T Iss1	I/MDG0010P	1	
9	10-027-A3 MODULE GEAR 39T Iss4	I/MDG2125P	4	I/MDG0019F
10	11-276-A3 IDLE GEAR 39T Iss2	I/MDG2115P	2	
11	5x5 magnet	I/FIT9900P	1	I/MDG0041F
12	11-280-A3 PIPE CLIP	I/MDG0019P	1	
13	11-288-A3 PIPE RETAINER Iss2	I/MDG0041P	1	
14	Tank pipe 01	I/ROL0015P	1	
15	Tank pipe 02	I/ROL0015P	1	
16	Tank pipe 03	I/ROL0015P	1	
17	TEMP SENSOR GROMMET	I/FIT0094P	2	I/FIT0094F
18	HEATER GROMMET	I/FIT0095P	2	I/FIT0095F
19	4x1.75x16mm PLASFIX POZI SCREW	I/FIX8109P	4	SCREW PACK I/ASS0004F
20	4x1.75x16mm PLASFIX COUNTERSUNK SCREW	I/FIX8913P	1	
21	2.5x1.4x6mm Plasfix Pozi Screw	I/FIX8914P	2	
22	11.2x7mm DIA COMPRESSION SPRING	I/SPR2000P	4	
COMPLETE ASSEMBLY				I/ASS0254F

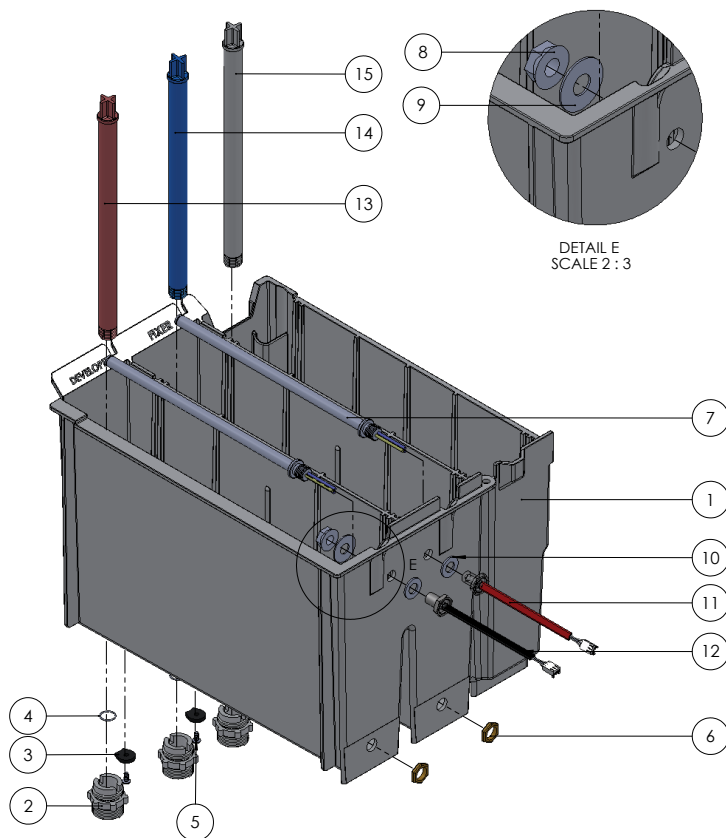
Tank EU & Worldwide



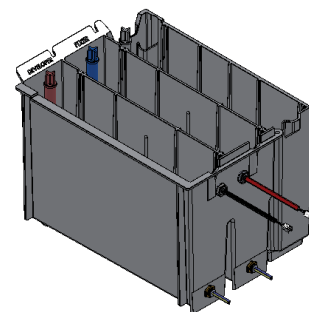
ITEM NO.	DRAWING NO & DESCRIPTION	PART NO.	QTY	SPARE PART NO.
1	11-267-A2_Extra Tank_ Iss5	IMDG 2185P	1	
2	11-301-A4 HOSE CONNECTOR SLIT THREAD	I/MDG2086P	4	
3	11-301-A4 Retainer Iss1	I/MDG0062	4	
4	12 ID x 1mm SECTION ORING	I/FIX2094P	3	
5	4x1.75x8mm PLASFIX POZI SCREW	I/FIX8912P	4	
6	MAIN CARTRIDGE HEATER 120W 120V	I/ELC2093P	2	BLACK:I/MDG2093F RED: I/MDG2100F
7	M12 x 1.0 HEX NUT	I/FIX2104P	2	
8	EPDM WASHER 3_4	I/FIT 5554P	2	
9	PTFE WASHER 25x10x1	I/FIT 2051P	2	
10	MAIN NUT TEMP_SENSOR EXTRAX MK5	I/MDG1002P	2	BLACK:I/ELC2252F RED: I/ELC2251F
11	10-241-A4 EXTRA FIXER TEMP SENSOR IELC1105P	I/ELC1105P	1	
12	10-240-A4 EXTRA DEVELOPER TEMP SENSOR IELC1104P	I/ELC1104P	1	
13	11-227-A3 DRAIN PIPE BLACK	I/MDG5025P	1	I/MDG5025F
14	11-228-A3 DRAIN PIPE RED	I/MDG5020P	1	I/MDG5020F
15	11-229-A3 DRAIN TUBE BLUE	I/MDG5035P	1	I/MDG5037F
COMPLETE ASSEMBLY EU/Worldwide				I/ASS2192F



Tank USA

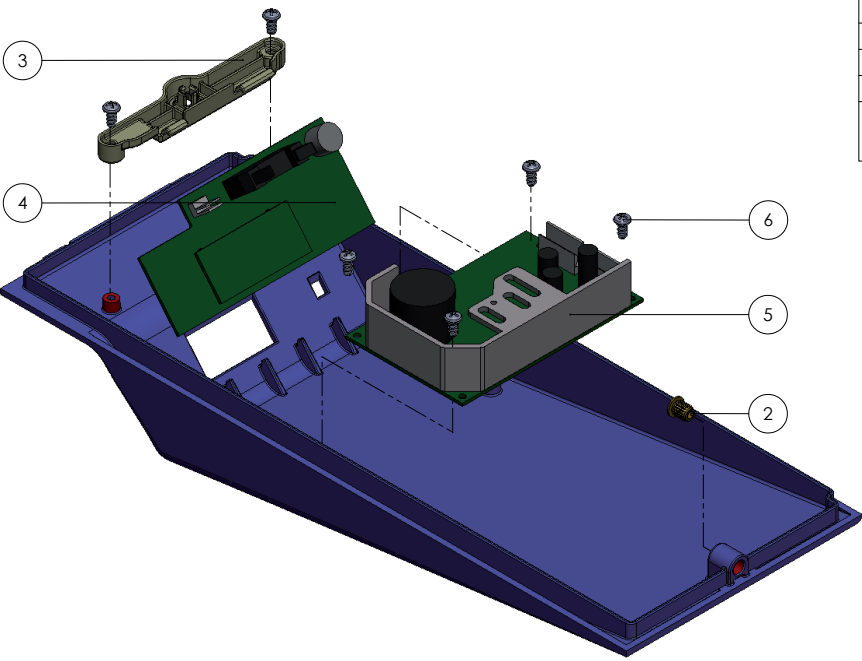


ITEM NO.	DRAWING NO & DESCRIPTION	PART NO.	QTY	SPARES PART NO.
1	11-267-A2 Extra Tank_ Iss5	I/MDG 2185P	1	
2	11-301-A4 HOSE CONNECTOR SLIT THREAD	I/MDG2086P	4	
3	11-301-A4 Retainer Iss1	I/MDG0062	4	
4	12 ID x 1mm SECTION ORING	I/FIX2094P	3	
5	4x1.75x8mm PLASFIX POZI SCREW	I/FIX8912P	4	
6	M12 x 1.0 HEX NUT	I/FIX2104P	2	
7	MAIN CARTRIDGE HEATER 120W 120V	I/ELC2093P	2	BLACK:I/MDG2093F RED: I/MDG2100F
8	MAIN NUT TEMP_SENSOR EXTRAX MK5	I/MDG1002P	2	
9	PTFE WASHER 25x10x1	I/FIT 2051P	2	
10	EPDM WASHER 3_4	I/FIT 5554P	2	BLACK:I/ELC2252F RED: I/ELC2251F
11	10-241-A4 EXTRA FIXER TEMP SENSOR IELC1 105P	I/ELC1 105P	1	
12	10-240-A4 EXTRA DEVELOPER TEMP SENSOR IELC1 104P	I/ELC1 104P	1	
13	11-228-A3 DRAIN PIPE RED	I/MDG5020P	1	I/MDG5020F
14	11-229-A3 DRAIN TUBE BLUE	I/MDG5035P	1	I/MDG5036F
15	11-xxx-A3 DRAIN PIPE WHITE	I/MDG5040P	1	I/MDG5040F
COMPLETE ASSEMBLY USA				I/ASS2193F

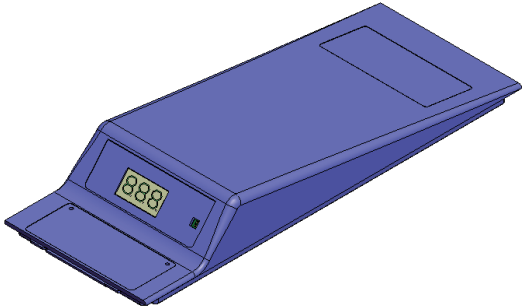


Control Panel Assembly

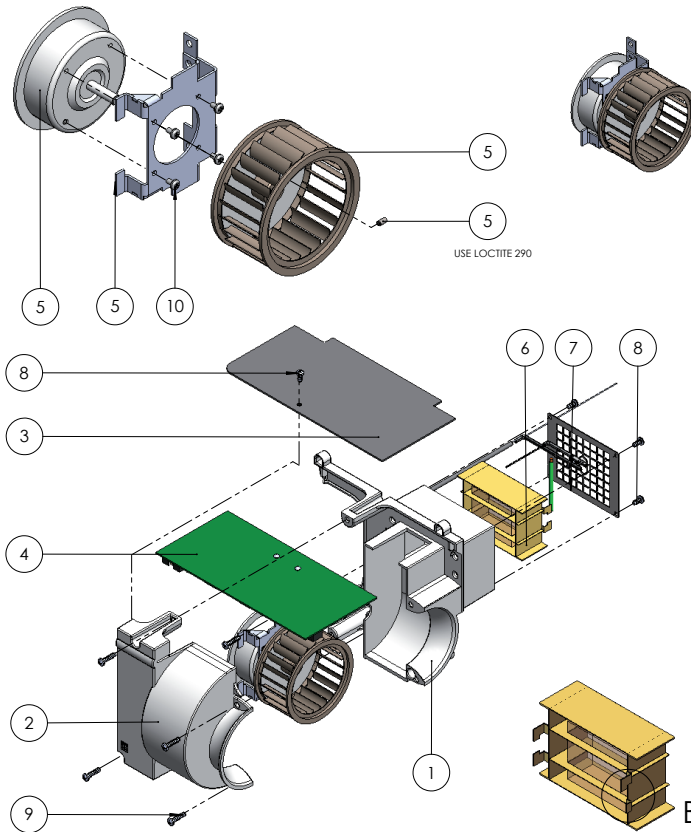
DIAGRAMS



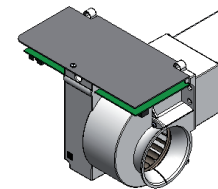
ITEM NO.	DRAWING NO. & DESCRIPTION	PART NO.	QTY	SPARES PART NO.
1	11-284-A1 CONTROL PANEL Iss6	I/MDG0028P	1	
2	M4 Multisert Single Head	I/FIX0024P	1	I/MDG0028F
3	11-286-A3 DISPLAY BOARD CLAMP Iss4	I/MDG0031P	1	I/MDG0031F
4	10-221-PCB MK5 INTRA-EXTRA DISPLAY BOARD	I/ELC7226P	1	I/ELC7226F
5	MK5 IN-EX POWER SUPPLY 6-AMP-12v-240v	I/ELC7211P	1	I/ELC7211F
6	4x1.75x8mm PLASFIX POZI SCREW	I/FIX8912P	6	SCREW PACK : I/ASS0004F
			COMPLETE ASSEMBLY	
			I/ASS0223F	



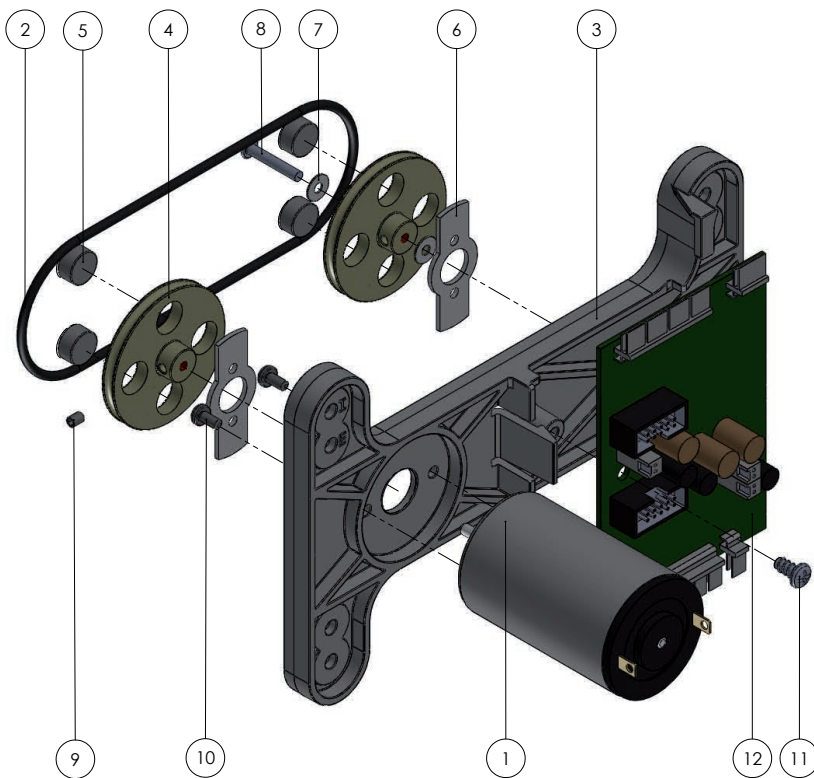
Dryer Module Assembly



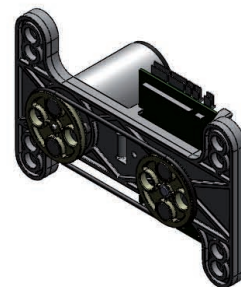
ITEM NO.	DRAWING NO. & DESCRIPTION	PART NO.	QTY	SPARES PART NO.
1	11-282-A1 DRYER CASSETTE UPPER Iss5	I/MDG0021P	1	
2	11-281-A1 DRYER CASSETTE LOWER Iss5	I/MDG0020P	1	I/ASS0005F
3	10-263-A4 Power PCB Guard ISS3	I/FIT9913P	1	
4	10-219-PCB MK6 POWER BOARD	I/ELC7225P	1	I/ELC7225F
5	10-249-A3 FAN MOTOR ASSEMBLY	I/ASS0249A	1	I/ASS0249F
6	Dryer Element 2X115V	I/ELC2700P	1	I/ELC2700F
7	11-293-A3 DRYER GRILL ASSEMBLY Iss6	I/ASS1293A	1	I/ASS1293F
8	4x1.75x8mm PLASFIX POZI SCREW	I/FIX8912P	5	
9	4x1.75x16mm PLASFIX POZI SCREW	I/FIX8109P	6	SCREW PACK I/ASS0004F
10	M3 x 5 POZI PAN	I/FIX8116P	4	
COMPLETE ASSEMBLY				I/ASS0250F



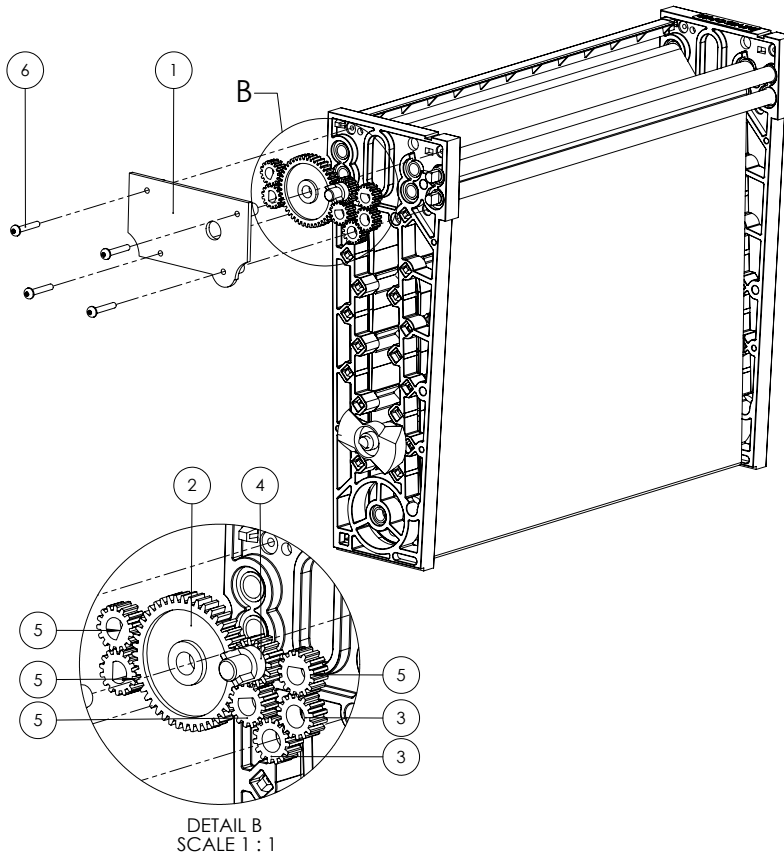
Stirrer Motor Assembly



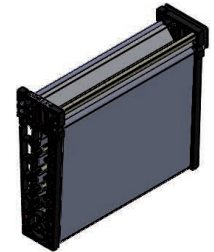
ITEM NO.	DRAWING NO & DESCRIPTION	PART NO.	QTY	SPARE PART NO
1	24V DC UNGEARED	I/ELC7223P	1	I/ELC7223F
2	STIRRER DRIVE BELT	I/FIT0006P	1	I/FIT0251F
3	10-259-A3 Stirrer Motor Mount_Iss4	I/MDG 0062P	1	
4	11-283-A3 STIRRER MAGNET CARRIER_Iss5	I/MDG0023P	2	
5	10x5 magnet	I/FIT0091P	4	
6	10-210-A4 STIRRER PADDLE PLATE	I/FIT 0090P	2	
7	PTFE Washer - ID 3 x OD 8	I/FIX1025P	2	
8	3mm Flat Head Rivet	I/FIX0025P	1	
9	M3 x 4 Socket Set Screw	I/FIX2038P	1	SCREW PACK I/ASS0004F
10	M3 x 6 POZI PAN	I/FIX 2029P	2	
11	4x1.75x8mm PLASFIX POZI SCREW	I/FIX8912P	1	
12	10-220-PCB MK6 INTRA-EXTRA CONTROL BOARD	I/ELC7231P	1	I/ELC7231F
COMPLETE ASSEMBLY EXC CONTROL BOARD				I/ASS0251F



Transport Module



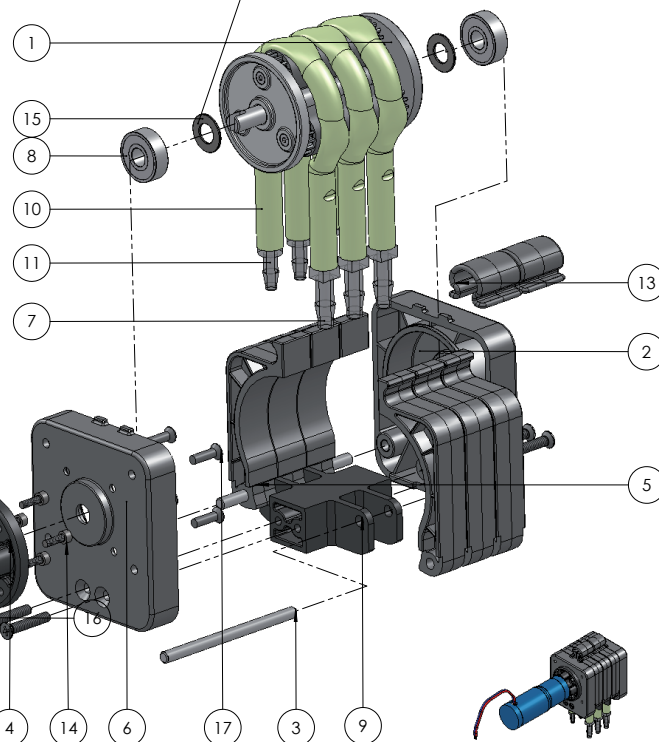
ITEM NO.	PART NUMBER	DESCRIPTION	QTY	SPARE PARTS
1	10-012-A2 GEAR PLATE	I/MDG0077P	1	I/MOD 0100F
2	10-029-A4 SPUR GEAR 45T	I/MDG0050P	1	
3	10-025-A4 SPUR GEAR 15T	I/MDG0045P	2	
4	10-023-A3 EXTENDED SPUR GEAR 'D' 15T	I/MDG0035P	1	
5	10-024-A4 SPUR GEAR 'D' 15T	I/MDG0040P	4	
6	M3 x 18 POZI PAN	I/FIX2036P	4	
COMPLETE MODULE				
DEVLOPER			I/MOD0084F	
FIXER			I/MOD0085F	
WATER			I/MOD0086F	
DRYER			I/MOD0087F	



Replenisher Pump Assembly

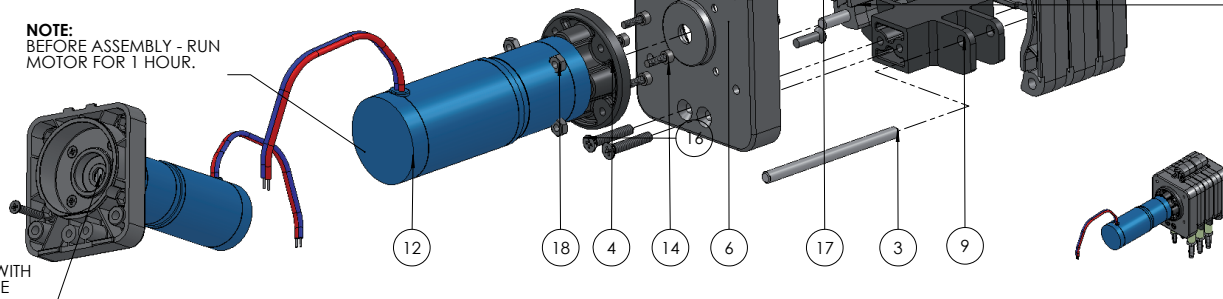
ITEM NO.	DESCRIPTION	PART NO	QTY	SPARES PART NO.
1	38-013-A4 REPLENISHER ROTOR ASSY Iss1	I/ASS2144P	1	I/ASS2144F
2	38-003-A3 REAR PLATE iss 6	I/MDG 5601P	1	
3	38-006-A4 SUPPORT RODS iss4	I/FIT 5604P	2	
4	38-027-A4 PUMP COUPLING Iss4	I/MDG 5609P	1	
5	38-004-A3 DOOR HOUSING	I/MDG 5608P	6	
6	38-002-A3 FRONT PLATE iss 6	I/MDG 5600P	1	
7	4MM BARBED CONNECTOR	I/FIT6019P	3	
8	shielded bearing 608-2z	I/FIT 5605P	2	
9	38-005-A3 BASE	I/MDG 5603P	1	
10	PINCH TUBE -1	I/FIT 5501P	3	
11	4MM REDUCING BARBED CONNECTOR	I/FIT4035P	3	I/ASS0006F
12	38-028-A3 - PARVALUX 12V DC PG3863 MOTOR	I/ELC 9010P	1	I/ELC6002F
13	38-014-A4 SPRING CLIP iss5	I/MDG 5607P	2	I/MDG5607F
14	M3 x 10 CAP HEAD	I/FIX2303P	4	
15	32-029-A4 M8 WASHER	I/FIX9010P	2	
16	No8 x 1.0 SELF TAPPING SCREW	I/FIT7009P	4	SCREW PACK I/ASS0004F
17	M4 x 14 POZI CSK	I/FIX2066P	4	
18	M4 FULL NUT	I/FIX 2100P	4	
COMPLETE ASSEMBLY EXC MOTOR				I/ASS5002F
COMPLETE ASSEMBLY INC MOTOR				I/ASS5000F

NOTE:
ADD BEARING GREASE TO WASHER.

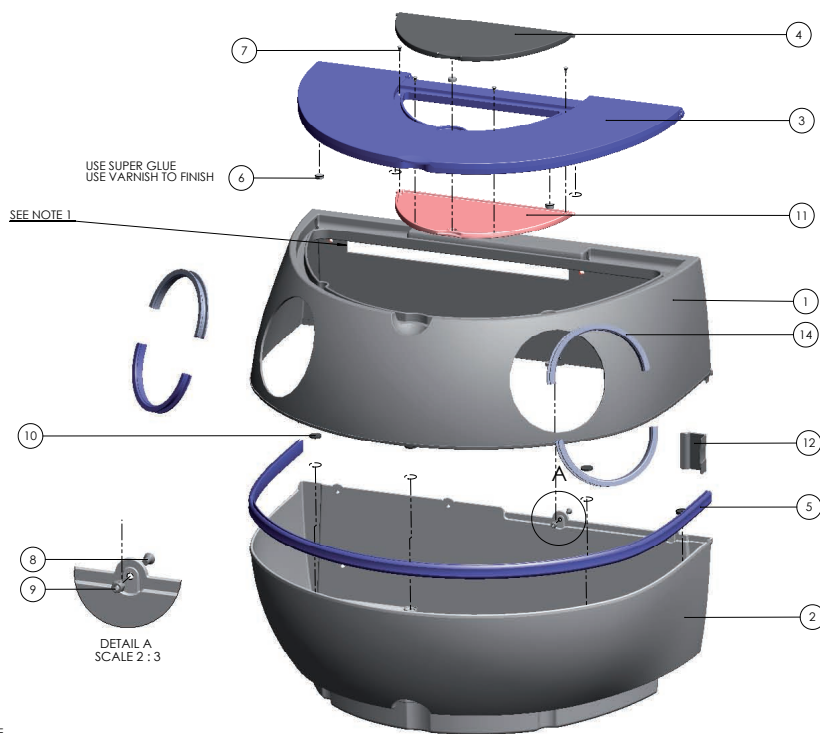


NOTE:
BEFORE ASSEMBLY - RUN
MOTOR FOR 1 HOUR.

PACK TONGUE WITH
BEARING GREASE

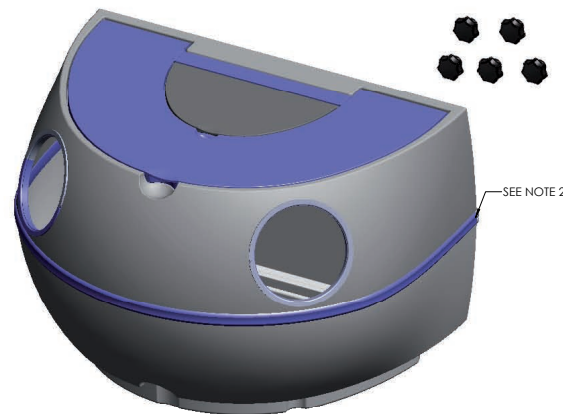


Daylight Loader

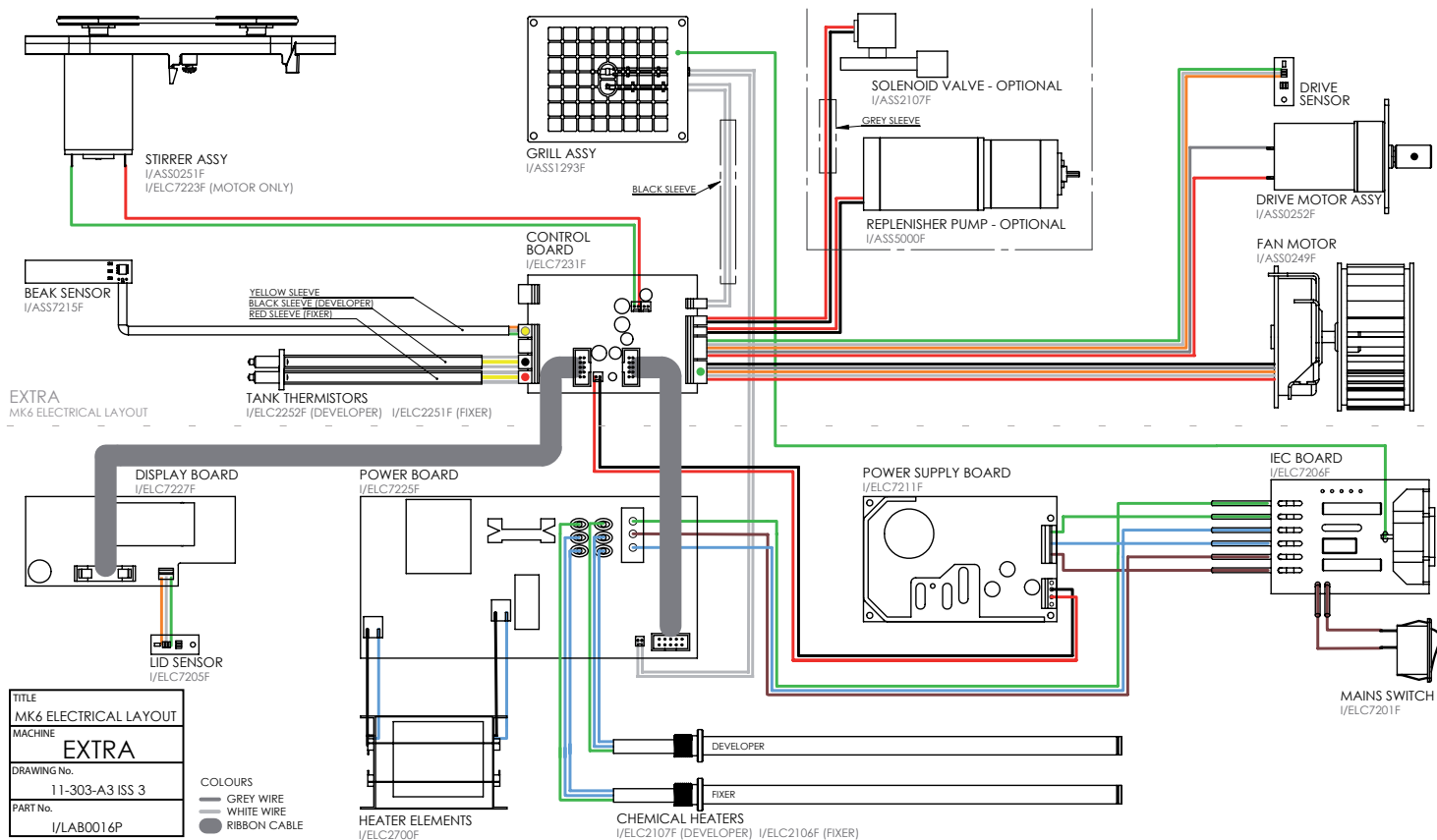


NOTE
 1. USE DOUBLE SIDED FOAM ON THE BACK OF THE LOADER, AROUND THE BEAK WINDOW.
 2. CHECK WITH TORCH TO ENSURE LOADER IS LIGHT TIGHT.
 3. LOADER PACK MUST INCLUDE:
 5 X TURN KNOBS
 1 X LOADER INSTRUCTION SHEET

ITEM NO.	DRAWING NO. & DESCRIPTION	PART NO.	QTY	SPARES PART NUMBER
1	20-033-A1 LOADER UPPER COVER Iss6	I/MDG2033P	1	
2	20-034-A1 LOADER LOWER COVER Iss4	I/MDG2034P	1	
3	20-035-A1 LOADER LID ISSUE2	I/MDG3035P	1	
4	20-036-A2 LOADER DAYLIGHT TRAP COVER Iss3	I/MDG2036P	1	
5	20-038-A3 LOADER STRIP ISSUE2	I/MDG2038P	1	
6	10x4 magnet	I/FIT7102P	6	
7	No4 x 0.375 SELF TAPPING SCREW	I/FIX2011P	4	
8	M4 x 8 POZI CSK	I/FIX 2045P	4	
9	M4 NYLOC	I/FI X 3010P	4	
10	20-039-A4 LOADER PLUG ISSUE5	I/MDG2039P	8	
11	20-036-A2 LOADER DAYLIGHT TRAP COVER RED	I/MDG2036P	1	
12	20-042-A3 LOADER LIGHT COVER SEAL Iss 2	I/FIT8132P	2	
13	GLOVES	I/FIT3000P	2	I/FIT3000F (PAIR)
14	20-037-A2 LOADER IRIS COLLAR ISSUE4	I/MDG3037P	4	I/FIT2036F
15	TURN KNOBS	I/FIT2036P	5	
COMPLETE DAYLIGHT LOADER				I/MAC6005F



Electrical Layout



Error Codes

Once a fault has been corrected an Engineers Reset must be carried out.

EXTRA MK6

ERROR CODE	DESCRIPTION	TECHNICAL ENGINEER				
		ACTION 1	ACTION 2	ACTION 3	ACTION 4	ACTION 5
E02	Cassette temperature sensor o/c					
E03	Dryer temperature sensor s/c	Disconnect, clean contacts and reconnect Dryer sensor	Does Sensor Resistance = 50kΩ (at 25 °C). If not Replace Grille	Replace Control Board		
E04	Dryer temperature sensor o/c or Connection to Main PCB	Disconnect, clean contacts and reconnect Dryer sensor	Does Sensor Resistance = 50kΩ (at 25 °C). If not Replace Grille	Replace Control Board		
E05	Fixer temperature sensor s/c	Disconnect, clean contacts and reconnect Fixer sensor	Does Sensor Resistance = 50kΩ (at 25 °C). If not Replace Sensor	Replace Control Board		
E06	Fixer temperature sensor o/c	Disconnect, clean contacts and reconnect Fixer sensor	Does Sensor Resistance = 50kΩ (at 25 °C). If not Replace Sensor	Replace Control Board		
E07	Developer temperature sensor s/c	Disconnect, clean contacts and reconnect Developer sensor	Does Sensor Resistance = 50kΩ (at 25 °C). If not Replace Sensor	Replace Control Board		
E08	Developer temperature sensor o/c	Disconnect, clean contacts and reconnect Developer sensor	Does Sensor Resistance = 50kΩ (at 25 °C). If not Replace Sensor	Replace Control Board		
E10	Fan Sensor Inactive	Disconnect, clean contacts and reconnect Fan Motor	Check Fan unit is not jammed or rubbing with cassette	Replace Fan unit	Replace Control Board	

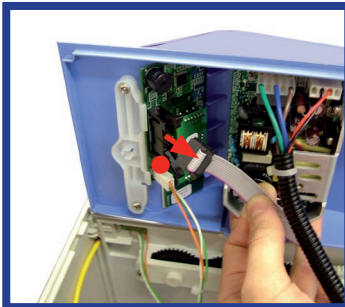
Error Codes

EXTRA MK6

ERROR CODE	DESCRIPTION	TECHNICAL ENGINEER				
		ACTION 1	ACTION 2	ACTION 3	ACTION 4	ACTION 5
E11	Transport turns count not zero	Switch off and on	Check gear train is not jammed or overloaded	Check Drive Speed Sensor	Replace Control Board	
E12	Transport motor overloaded	Check that modules are clean: gears and belts	Check gear train is not overloaded			
E13	Transport motor not running when required	Check that modules are clean: gears and belts	Disconnect, clean contacts and reconnect Drive Motor	Check gear train is not jammed or overloaded	Replace Drive Motor Assy	Replace Control Board
E14	Excessive Fixer & Developer temperature	Check that fresh chemical is not over 44 °C	Check Temperature sensors are not the wrong way round.	Does Sensor Resistance = 50kΩ (at 25 °C). If not Replace Sensor	Replace Control Board	Replace Power Board
E15	Dryer temperature too high	Check Fan is turning	Disconnect, clean contacts and reconnect Dryer sensor	Does Sensor Resistance = 50kΩ (at 25 °C). If not Replace Sensor	Replace Power Board	
E18	Dryer power duty cycle too low	Replace Power Board				
E21	Developer level low	Re-fill with chemical				
E22	Fixer level low	Re-fill with chemical				
E33	Watchdog relay test failure (Low)	Replace Power Board				
E34	Watchdog relay test failure (High)	Replace Power Board				
tLO	Either Developer or Fixer tank temperature is low	Wait for correct temperature	Does Sensor Resistance = 50kΩ (at 25 °C). If not Replace Sensor	Replace Control Board	Replace Chemical Heater	
tOF	Turn Off	Turn machine off and then on				
LId	Lid switch open	Check Lid is closed properly	Check lid sensor alignment	Disconnect and reconnect Lid sensor	Replace Lid sensor	Replace Display Board

Machine Reset

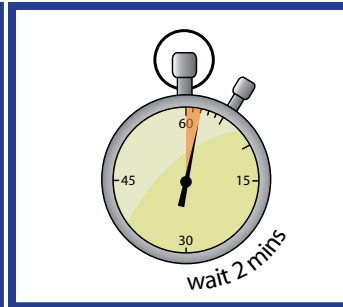
ENGINEERS RESET - Once a fault has been corrected an Engineers Reset must be carried out.



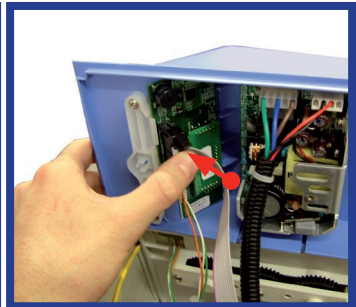
1. Make sure machine is switched off and the power cable removed. Disconnect the ribbon cable.



2. Replace the Control Panel & Side Panel. Switch the machine on.



3. Wait 2 minutes and then switch the machine off.



4. Reconnect the ribbon cable. Switch on the machine to ensure everything is functioning correctly.

USER RESET -



If an error code locks a User can be instructed over the phone to hold both 'globes' on the display, which will reset the machine. If this does not correct the error a Machine Service will be required.

The machine can be reset using the User Reset a maximum of 5 times. At this point a Technical Engineer will need to assess and correct the fault. An Engineers Reset will be required to provide the user with another 5 User Resets.



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**ETL LISTED/ENREGISTRÉ ETL
CONFORMS TO/CONFORME À
UL 61010-1**



**THIS PRODUCT HAS BEEN TESTED
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CAN/CSA-C22.2 No. 61010-1
SECOND EDITION INCLUDING AMENDMENT 1
OR A LATER VERSION OF THE SAME STANDARD
INCORPORATING THE SAME LEVEL OF TESTING
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