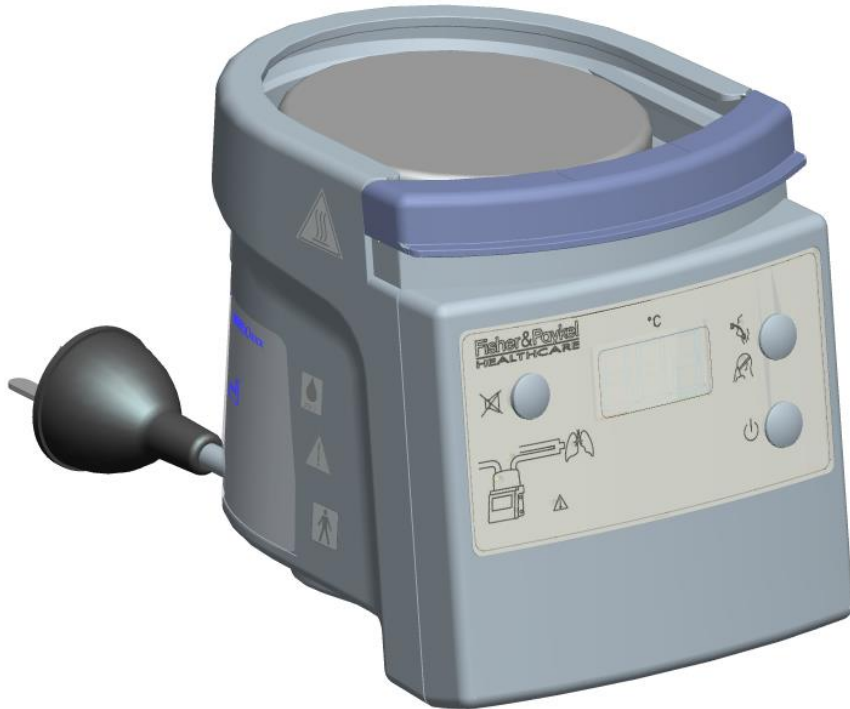


**NOTES: UNLESS OTHERWISE SPECIFIED:**

1. APPLICABLE STANDARDS/SPECIFICATIONS
  - (A) ASME Y14.5-1994, DIMENSIONS AND TOLERANCES
  - (B) AS/NZS 1100.101:1992, DRAWING INTERPRETATION
2. SPECIFICATION SOP-138 AND 125 (LATEST REVISIONS) ARE INTEGRAL PARTS OF THIS DOCUMENT.



**REVISIONS**

REV	DESCRIPTION	INC BY	ECN	DATE
X	IS/WAS	X.X.	XXXXX	XX/XX/XX

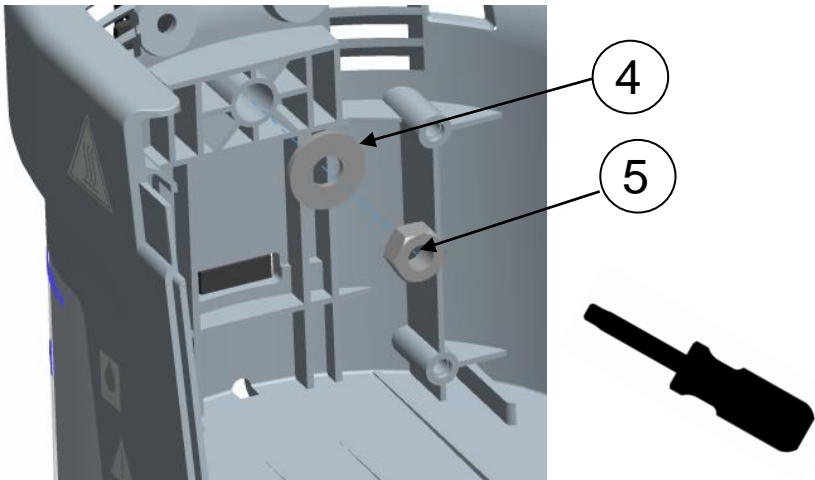
**MR850 HEATER BASE FAMILY ASSY**

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<b>TITLE</b> <b>CHASSIS</b> <b>LABEL</b> <b>PLACEMENT</b>	<b>Fisher &amp; Paykel</b> <b>HEALTHCARE</b>		15 MAURICE PAYKEL PLACE, EAST TAMAKI, P.O. BOX 14-348 PANMURE, AUCKLAND, NEW ZEALAND	
	APPROVAL	<b>PART NO</b> <b>041042108</b>		<b>REV</b> <b>A</b>
<b>METRIC</b>	DATE 14/05/07	Page 1 of 18		

## Process Steps

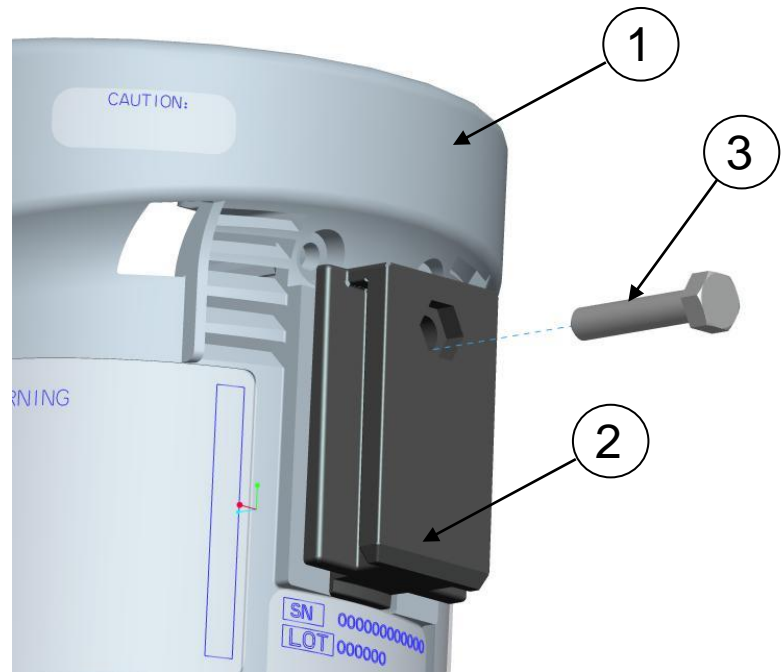
STEP	ITEM NUMBER	DESCRIPTION	QTY
1	2	Insert Item (2) into item (1)	1
2	3	Insert Item (3) into item (2) and (1)	1
3	4-5	Insert Item(s) 4 and 5 onto Item 3. Use (P/N 500134). Position the case to mount rack on pallet.	1



(P/N 500134)  
Torque:  $1.8 \pm 1.2$  N-M



Pallet



1	614063026	NUT M6 NYLOC ZPS	5
1	614063026	WASHER M6 x 16 X 1.6 FLAT ZN	4
1	614063026	BOLT HEX M6 X 30 S/S T304	3
1	693041482	BRACKET MOUNTING MR850	2
1	MR850XXX	CASE REAR MR850	1
QTY	PART NUMBER	DESCRIPTION	ITEM
PART LIST			

PART NO

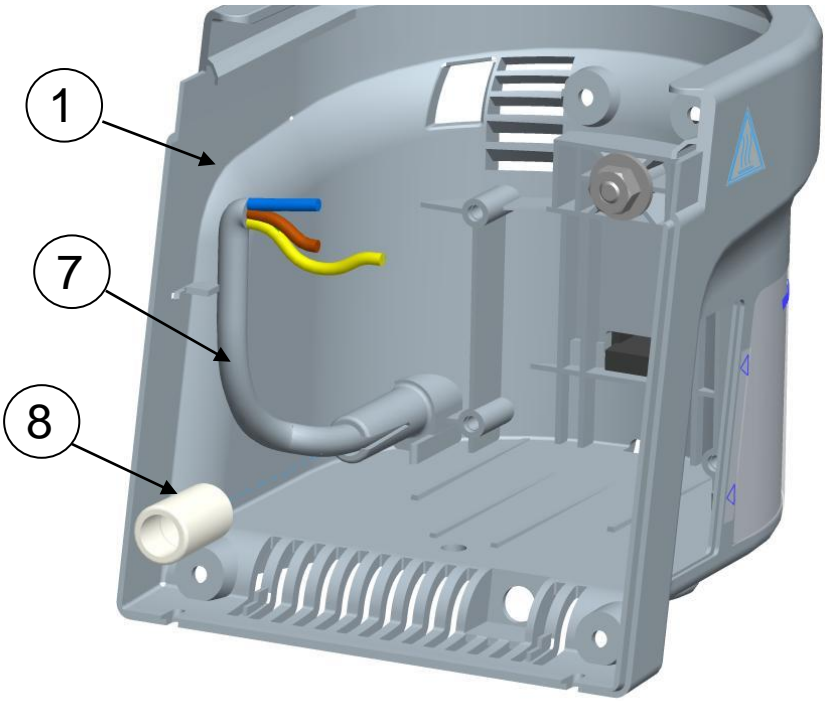
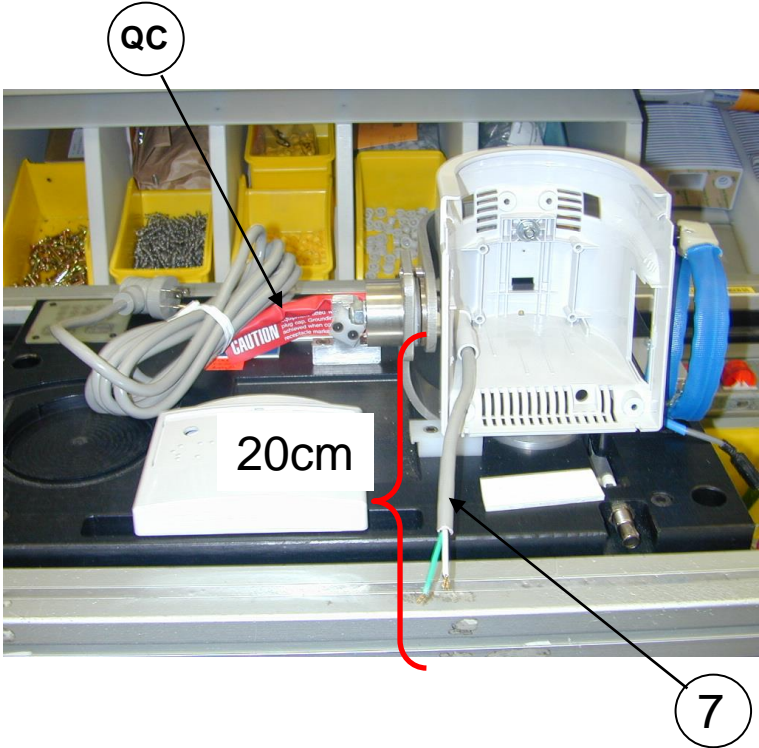
**041042108**

REV

**A**

Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
4	1	Feed Item 7 mains cord through from the rear of the Case (item 1 from previous assembly).	1
5	7	Pull through 20 cm of cord as shown in photo below. Clamp mains cord by with Item 8 using the hand tools Provided (P/N XXXXXX).	ea
QC	1	NOTE: If the Model is a <b>JHU</b> a "CAUTION" label is required	A/R
QC	7	Give the cord a gentle tug to ensure it is secure Attach the run card on the cable with a cable tie Turn the mounting rack on the pallet so the case rear is facing the case front.	1



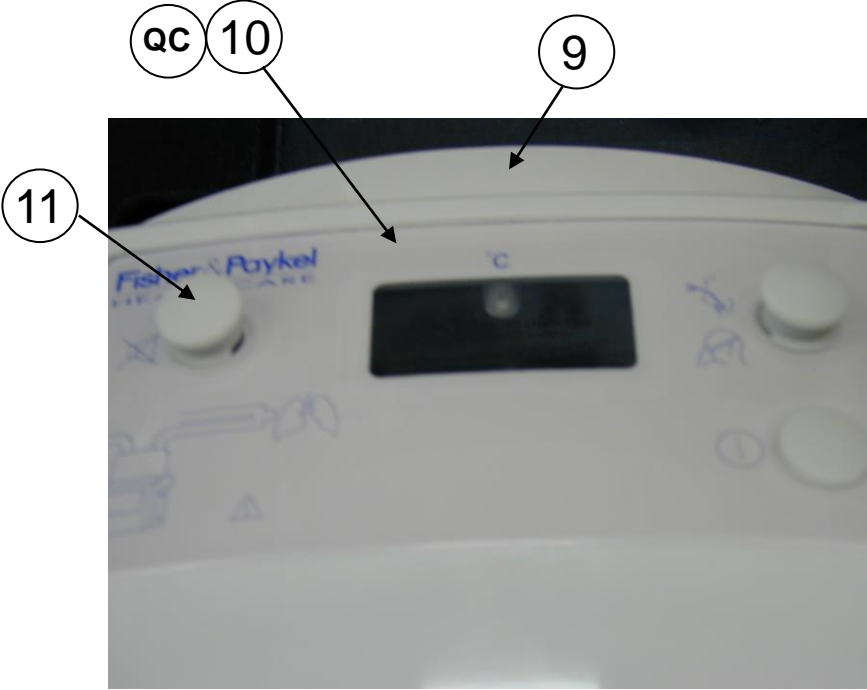
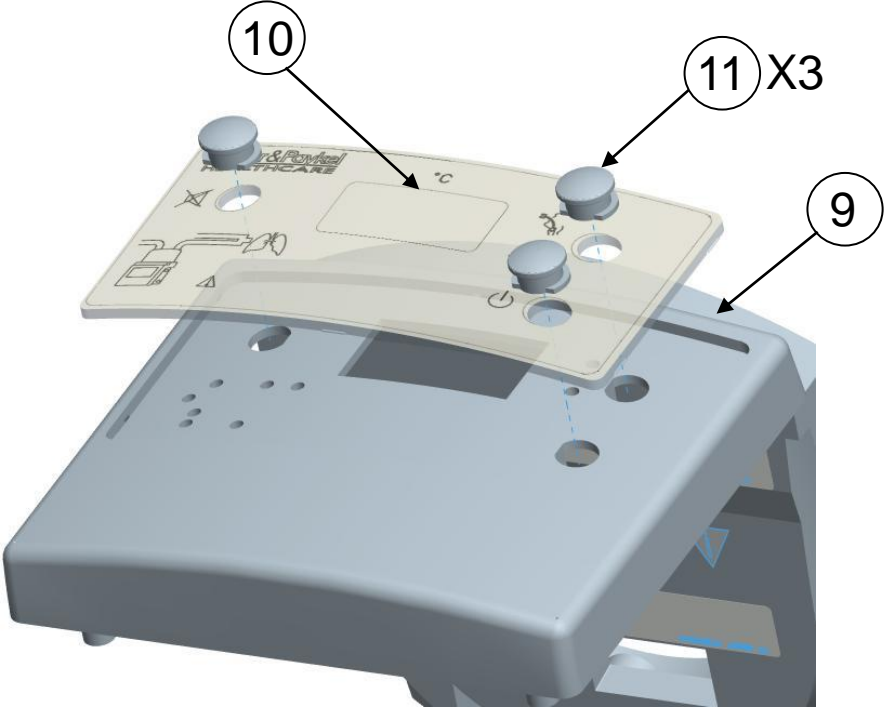
2	693041483	CLAMP CORD MAINS POWER MR850	8
1	095428317	CORD MAINS MR850 NZ/AUS 3.3M	7
1	MR850XXX	CASE REAR MR850	1
QTY	PART NUMBER	DESCRIPTION	ITEM

PART LIST

PART NO	REV
041042108	A

Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
QC	10	Inspect lens as per online display board per (KP-688).	ea
9	10	<b>NOTE:</b> Clip in the 4 corners first then apply downward pressure using the thumbs (refer to the O.J.T for a demonstration).	1
10	11	Insert buttons. Check that the buttons are sitting flush inside and outside. This will avoid jamming the buttons when PCB fitted to the case front	1



1	693041486	MR850 BUTTON	11
1	693041859	LENS MR850 PRINTED	10
1	693041484	CASE FRONT MR850	9
QTY	PART NUMBER	DESCRIPTION	ITEM

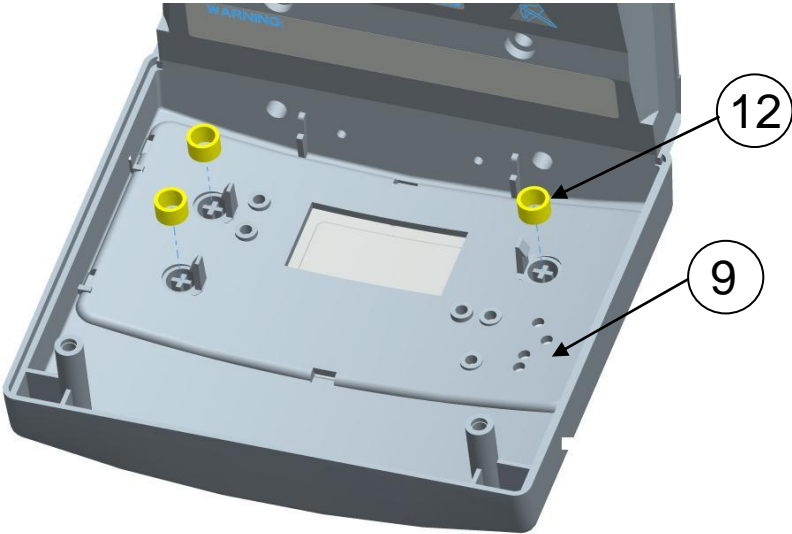
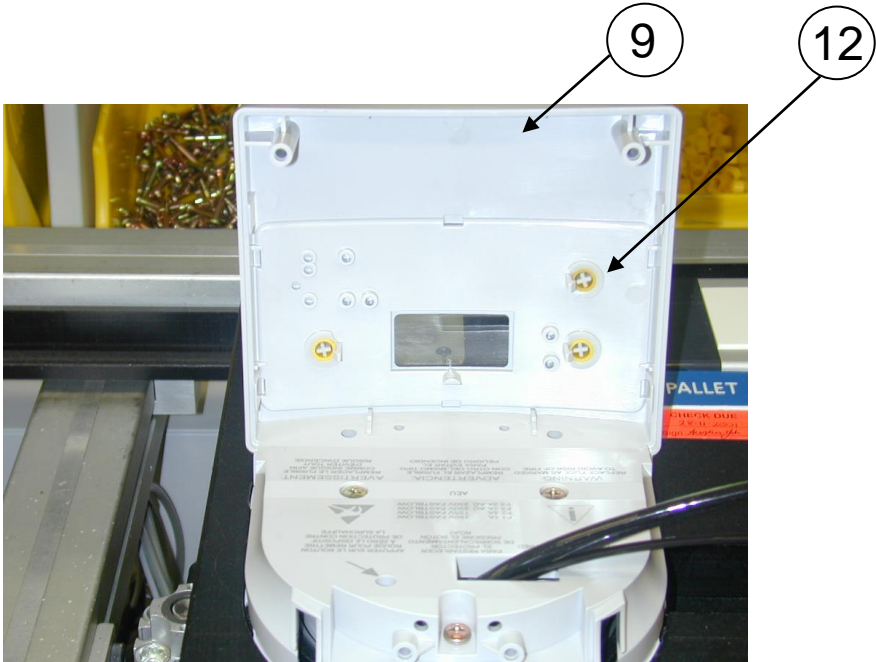
PART LIST

PART NO	REV
041042108	A

Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
11	9,12	Insert button retainer with the rounded edge inside. Use hand tool provided. (p/n XXXXXX)	1
QC		Ensure the button retainer and the buttons are sitting flush inside and outside to avoid jamming the LED during the test procedure.	

NOTE: SOME COMPONENTS NOT SHOWN FOR CLARITY



1	653040124	RETAINER RING - MR850 BUTTONS	12
1	693041484	CASE FRONT MR850	9
QTY	PART NUMBER	DESCRIPTION	ITEM

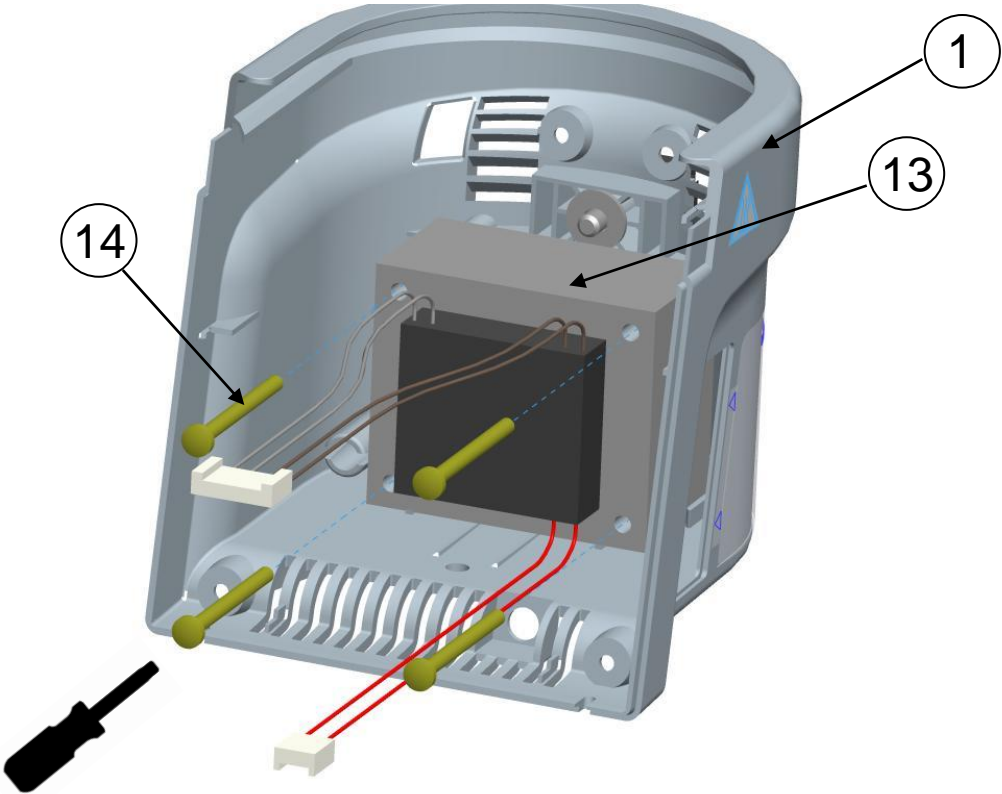
PART LIST

PART NO	REV
041042108	A

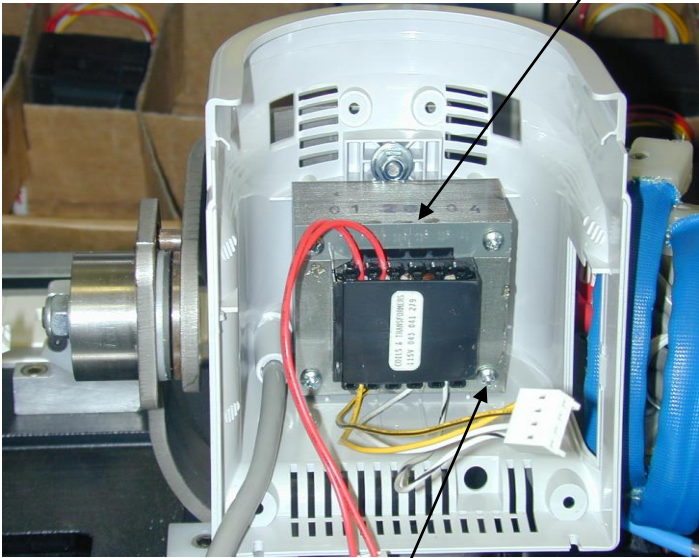


Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
QC	13	Check Transformer voltage (as per BOM)	1
14	17b	Position transformer as shown on photo	1
15	3	Screw transformer to case rear using pneumatic driver provided (P/N xxxxxx)	ea



(P/N xxxxxx)  
Torque: 1.6± 0.9 N-M

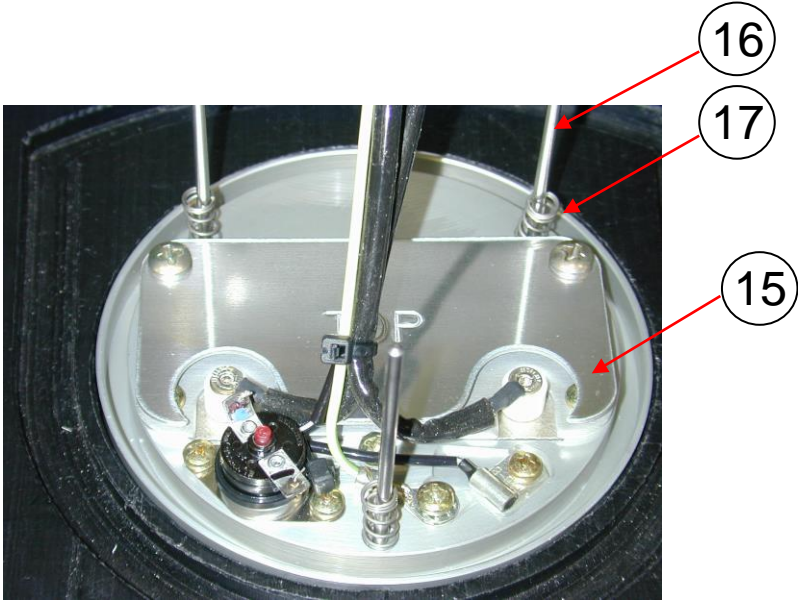


4	614061141	SCREW M4X12 PAN ZPS TAP	14
1	043041278	TRANS MR850 230V	13
1	MR850XXX	CASE FRONT MR850	1
QTY	PART NUMBER	DESCRIPTION	ITEM
PART LIST			

PART NO	REV
041042108	A

Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
QC	15	Visual inspect Heaterplate (refer to SOP-123):	
QC	15	Ensure correct thermal cut-out (118°C), date and sign on the run card	
QC	15	Ensure the cable tie holds the wires tightly, date and sign on the run card	
QC	15	Ensure the thermal cut-out terminal is bent, date and sign on the run card	
20	15	Position heater plate as shown in photo	
21	16	Position guide pins as shown in photo	
22	17	Drop heater plate springs onto the guide pins, single coil facing down.	



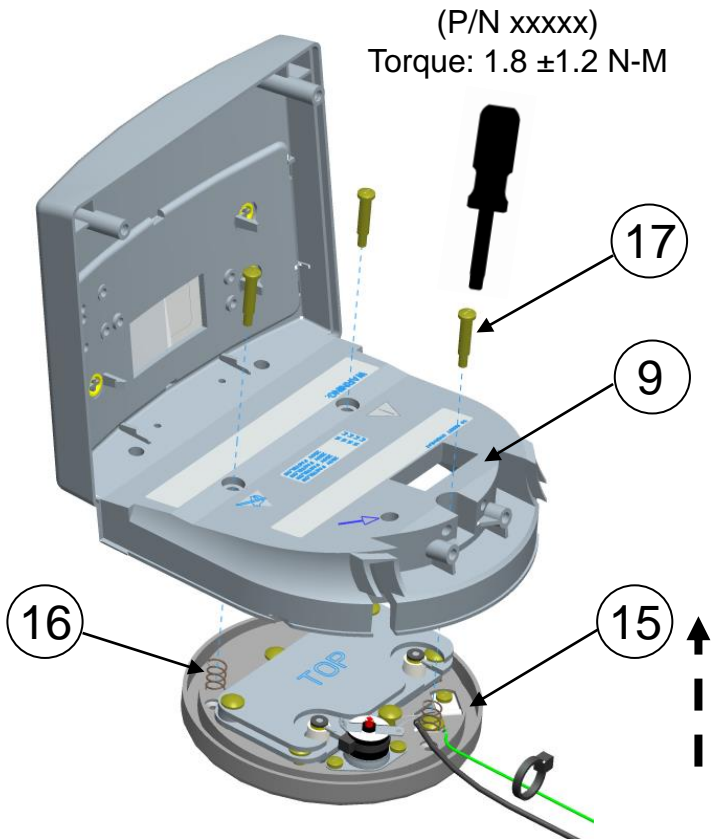
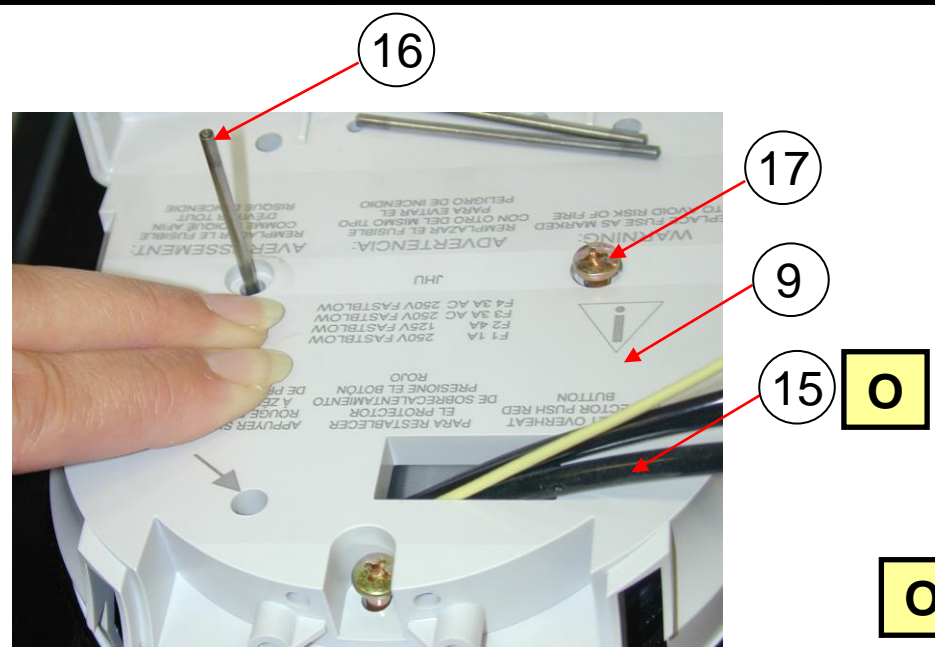
3	662040058	SPRING HEATERPLATE NON STAND	17
3	XXXXXX	GUIDE PIN	16
1	840HP230V	HEATERPLATE FOR MR850 230V	15
QTY	PART NUMBER	DESCRIPTION	ITEM

PART LIST

PART NO	REV
041042108	A

## Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
<b>QC</b>	9,15	Position front/top case above the heater plate and feed through heater plate wires as shown in photo.	1
24	9	Lower the case top/front down over the guide pins.	1
<b>O</b>	15	Ensure heater plate wires are pulled all the way Through as shown.	1
26	3	Apply downward pressure into the case top and hold. Remove the guide pins and insert screws. Tighten with pneumatic driver provided.(P/N xxxxxxx)	1
<b>QC</b>	15	Ensure heater plate springs compress and return freely. Ensure heater plate is squeak free .	1
28	9,15	Place heater plate back on pallet bed for next assembly	1



3	336060143	SCREW M3X6 PAN PHIL TAPTITLE YL	17
3	XXXXXXX	GUIDE PIN	16
1	840HP230V	HEATERPLATE FOR MR850 230V	15
1	693041484	CASE FRONT MR850	9
QTY	PART NUMBER	DESCRIPTION	ITEM

### PART LIST

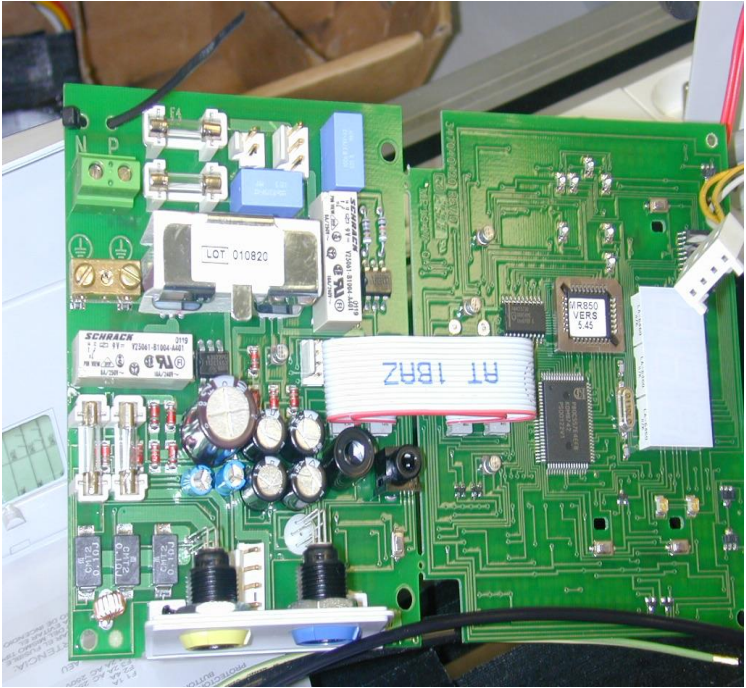
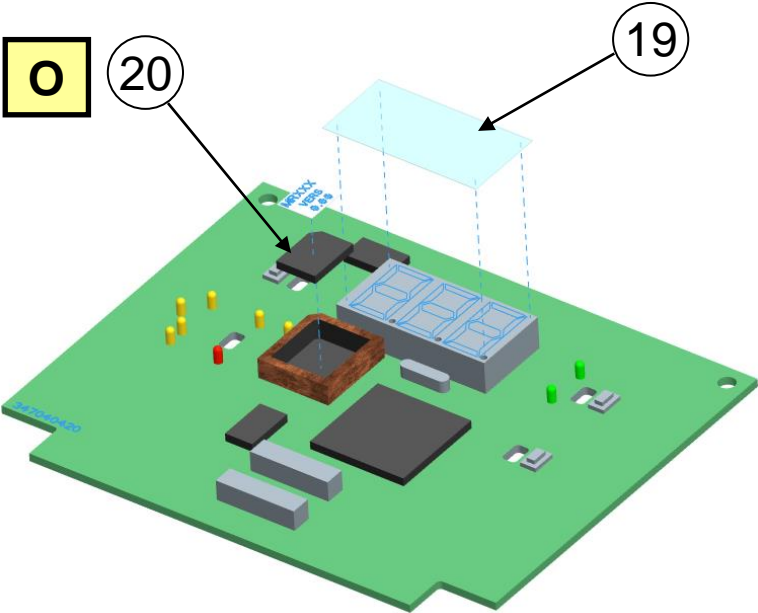
PART NO	REV
<b>041042108</b>	<b>A</b>

**O** ORIEANTATION



Process Steps





STEP	ITEM NUMBER	DESCRIPTION	QTY
QC	19	Diffuser is fitted correctly.	
QC	20	Check the ROM for correct version (as per BOM)	
O	20	Insert the ROM. Ensure that the notches between the socket and the ROM IC are aligned	



1	367030029	IC OTP ROM AT27C512R-70JI PL	20
1	183041947	DIFFUSER MR850 FRONT PANEL	19
1	850PCBCOM	MR850 COMPLETE SSL PCB ASSY	18
QTY	PART NUMBER	DESCRIPTION	ITEM

PART LIST

PART NO	REV
041042108	A

MR850PEU	127	HUMIDIFIER MR850 127V EN				
MR850JSU	115	HUMIDIFIER MR850 115V S/P/E US				
MR850JHU		HUMIDIFIER MR850 115V E/S/F US				
MR850GJU	100	HUMIDIFIER MR850 100V JAPAN				
MR850ARU	230	HUMIDIFIER MR850 230V RU/PO/HU				
MR850ANU		HUMIDIFIER MR850 230V NO/SW/FI				
MR850ALU		HUMIDIFIER MR850 230V I/S/P EU				
MR850AGU		HUMIDIFIER MR850 230V GE/FR EU				
MR850AGC		HUMIDIFIER MR850 230V GE/FR CH				
MR850AFU		HUMIDIFIER MR850 230V F/D/G/ EU				
MR850AEU		HUMIDIFIER MR850 230V EN/SP/FR				
MR850AEK		HUMIDIFIER MR850 230V ENG UK				
MR850AEA		HUMIDIFIER MR850 230V AUST/NZ				
MR850ADU		HUMIDIFIER MR850 230V DAN DK				
MODEL NUMBER	VOLTAGE	DESCRIPTION	FUSE 1 ITEM 21	FUSE 2 ITEM 22	FUSE 3 ITEM 23	FUSE 4 ITEM 24
MR850 PCB FUSE CHART						

## MODEL BASED FUSE CHART

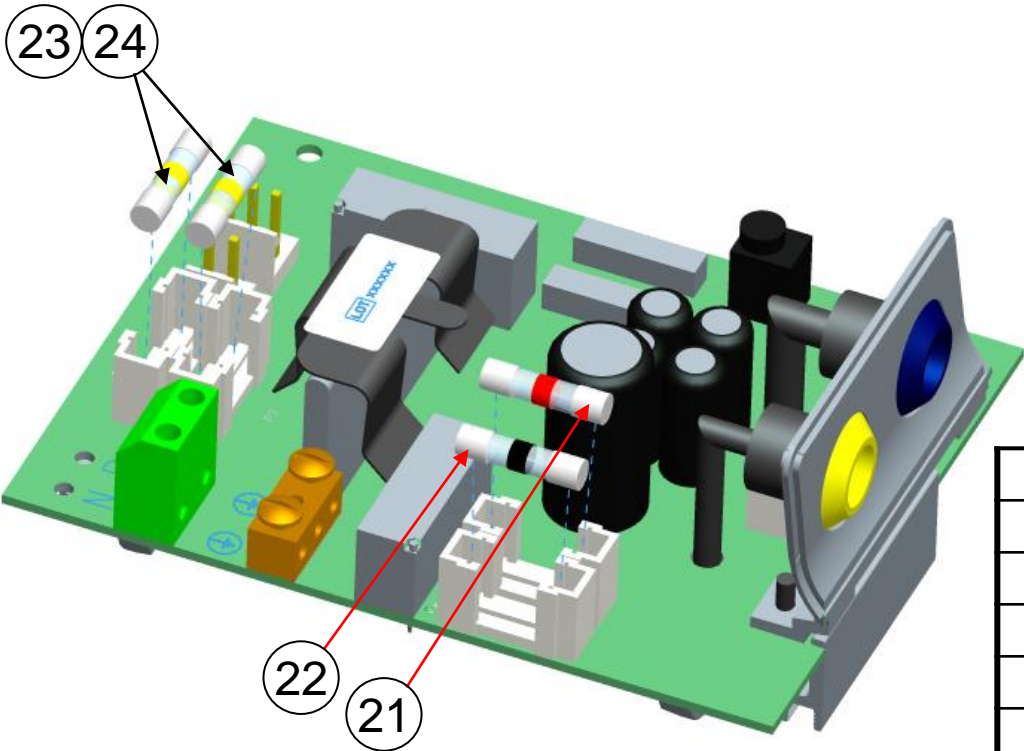
PART NO <b>041042108</b>	REV <b>A</b>
Page 10 of 19	

Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
30	21	Attach unique fuse F1	1
31	22	Attach unique fuse F2	1
32	23	See Fuse Chart per model requirement	A/R
33	24	See Fuse Chart per model requirement	A/R



Ensure fuses are correct  
as per MR850 PCB  
FUSE CHART.



	999830012	FUSE 3A 250V FAST UL 50X20MM GL	24
	999830009	FUSE 2A 250V FAST UL 50X20MM GL	23
	999830017	FUSE 4A 125V FAST UL 50X20MM GL	22
	999830001	FUSE 1A 125V FAST UL 50X20MM GL	21
1	850PCBCOM	MR850 COMPLETE SSL PCB ASSY	18
QTY	PART NUMBER	DESCRIPTION	ITEM

PART LIST

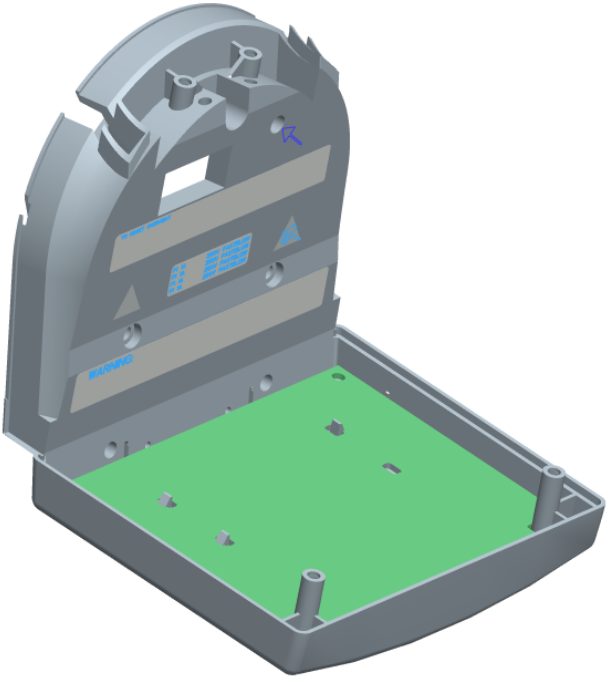
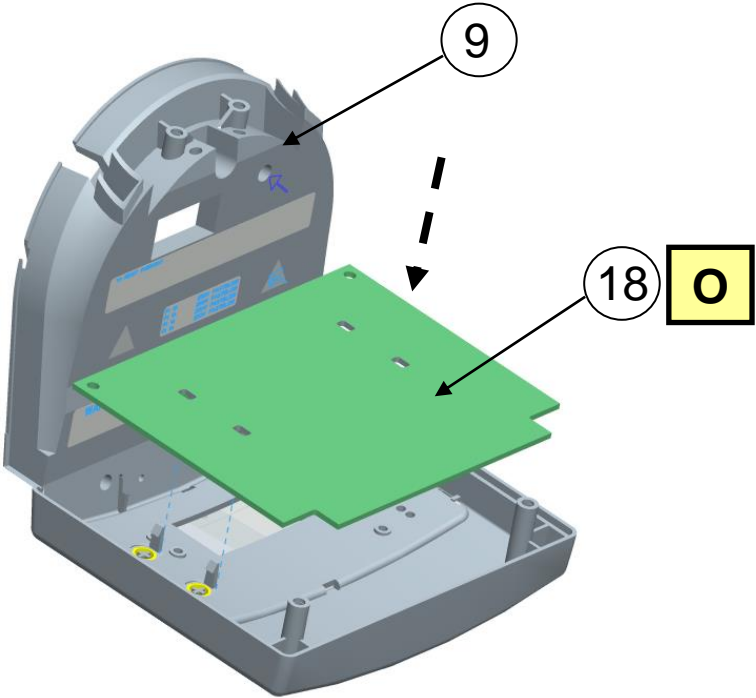
PART NO	REV
041042108	A

FUSE PLACEMENT

Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
34	18,9	Place Front of PCB into Item (9)	N/A
<b>O</b>	18	Check that all "snap legs" are have seated Check the diffuser has not lifted or moved. Check Display alignment	

NOTE: SOME COMPONENTS NOT SHOWN FOR CLARITY



FRONT PCB INSTALLED

1	850PCBCOM	MR850 COMPLETE SSL PCB ASSY	18
1	693041484	CASE FRONT MR850	9
QTY	PART NUMBER	DESCRIPTION	ITEM
PART LIST			

PART NO	REV
041042108	A

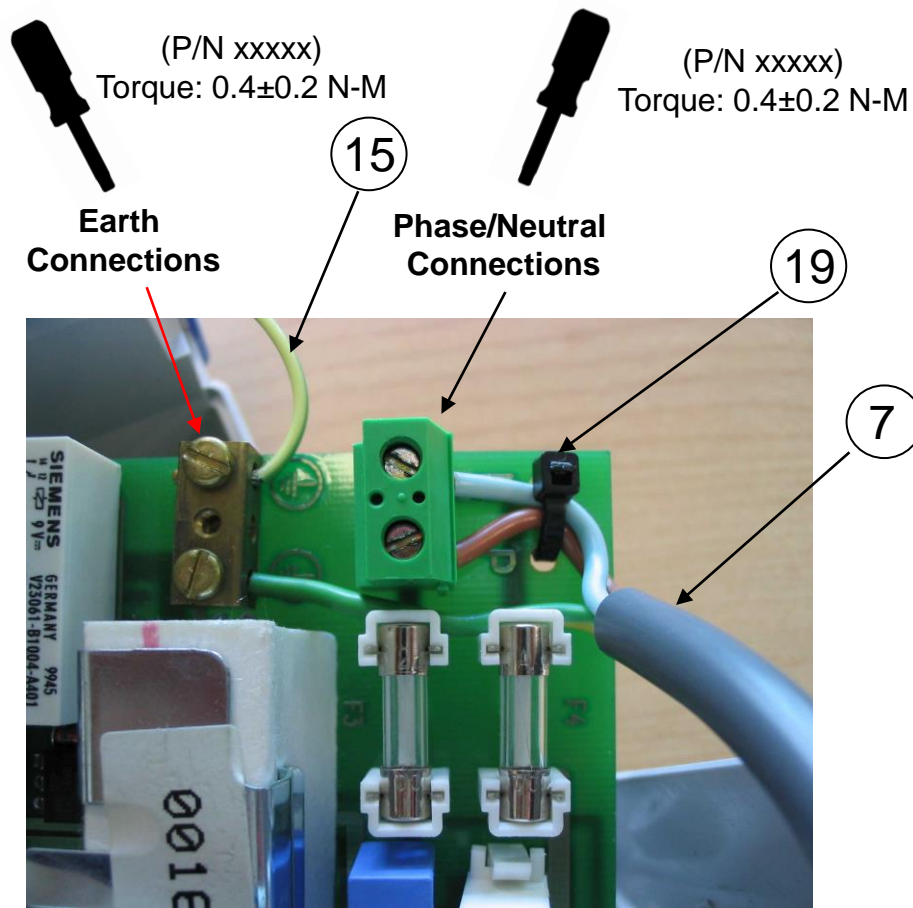
## Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
35	7,	Connect the Phase and Neutral power wires to the Terminal Block with cordless screwdriver only. (p/n xxxxxx)	
36	18-19	Connect earth and tighten the cable tie Item (19).	
37	15	Connect heater plate earth wire	
QC		Give each wire a gentle tug to ensure it is secure, Ensure no excess wires are visible outside the terminal connections	

## NOTES:

Black or Brown = (P) Phase

Light Blue or White = (N) Neutral



1	840HP230V	HEATERPLATE FOR MR850 230V	15
1	188040023	TIE PLASTIC 2.5MM BLK	19
1	095428317	CORD MAINS MR850 NZ/AUS 3.3M	7
1	850PCBCOM	MR850 COMPLETE SSL PCB ASSY	18
QTY	PART NUMBER	DESCRIPTION	ITEM

## PART LIST

PART NO

**041042108**

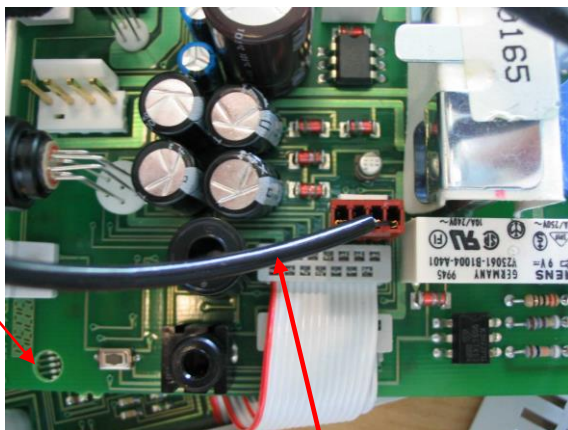
REV

**A**



## Process Steps

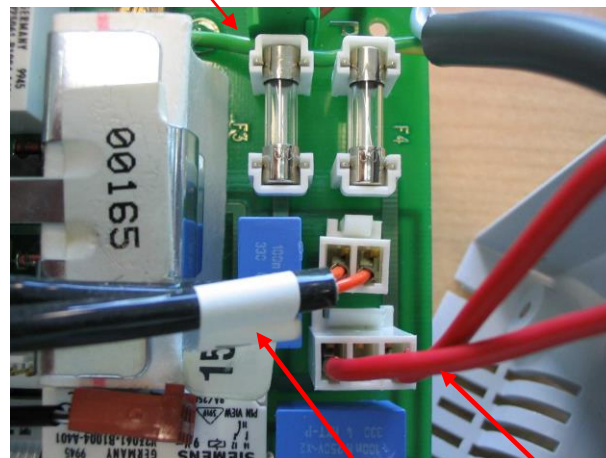
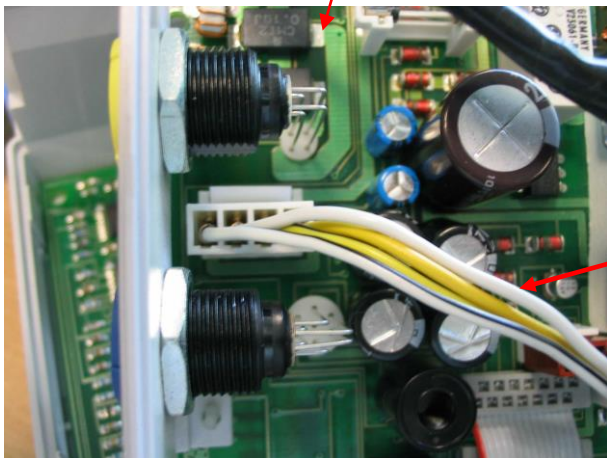
STEP	ITEM NUMBER	DESCRIPTION	QTY
38	15	Connect Heater plate plug	N/A
39	13	Connect Transformer primary plug	N/A
40	15	Connect thermal Cut out plug	N/A
41	13	Connect Transformer secondary plug	N/A
QC	13,15	Ensure all connections are plugged in right down to make a good contact	ea



18

15

13



15

13

1	043041278	TRANS MR850 230V	13
1	840HP230V	HEATERPLATE FOR MR850 230V	15
1	850PCBCOM	MR850 COMPLETE SSL PCB ASSY	18
QTY	PART NUMBER	DESCRIPTION	ITEM
PART LIST			

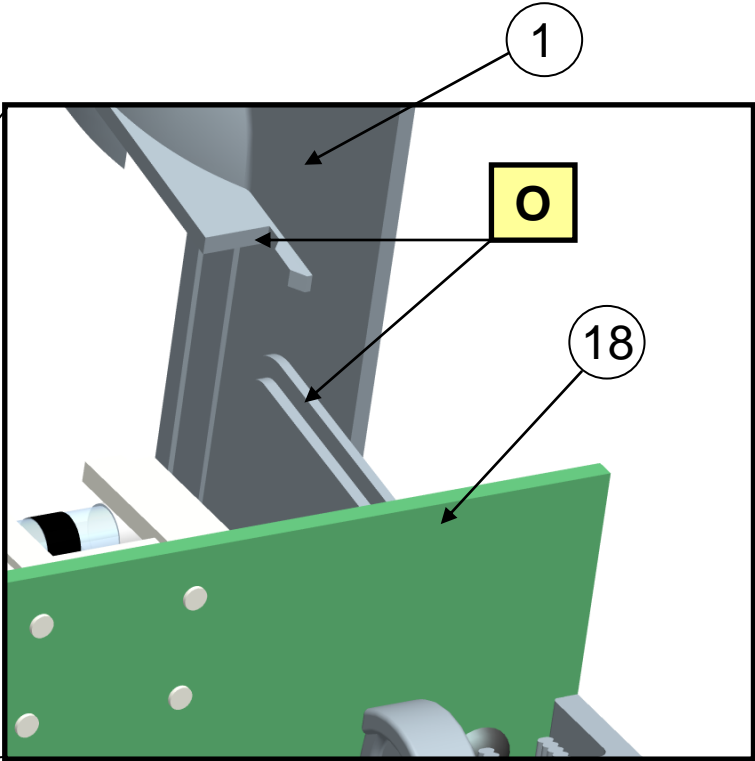
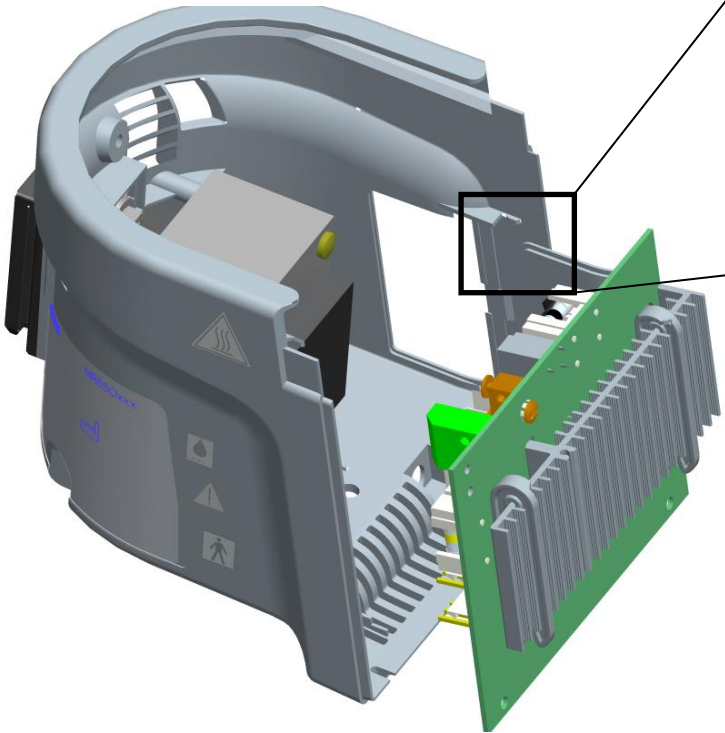
## PCB CABLE INSTALLATION

PART NO	REV
<b>041042108</b>	<b>A</b>

Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
42	18	Slide rear PCB assembly into rear case.	
<b>O</b>		Ensure proper orientation by aligning the Side Panel into the rear case (Item 1) Panel slot.	

NOTE: SOME COMPONENTS NOT SHOWN FOR CLARITY



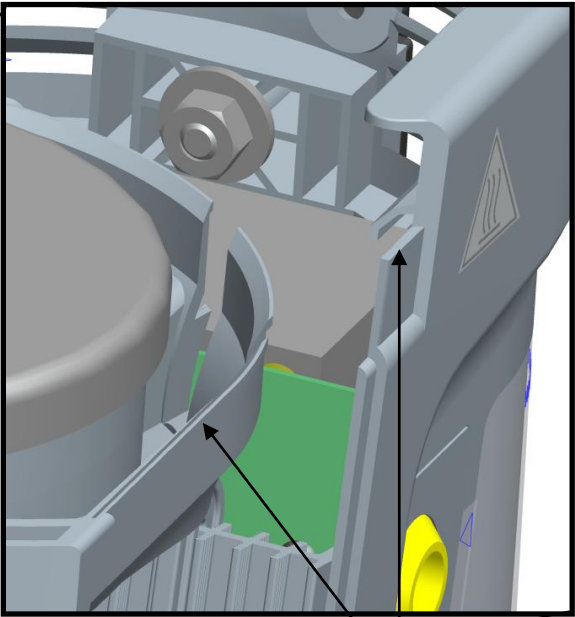
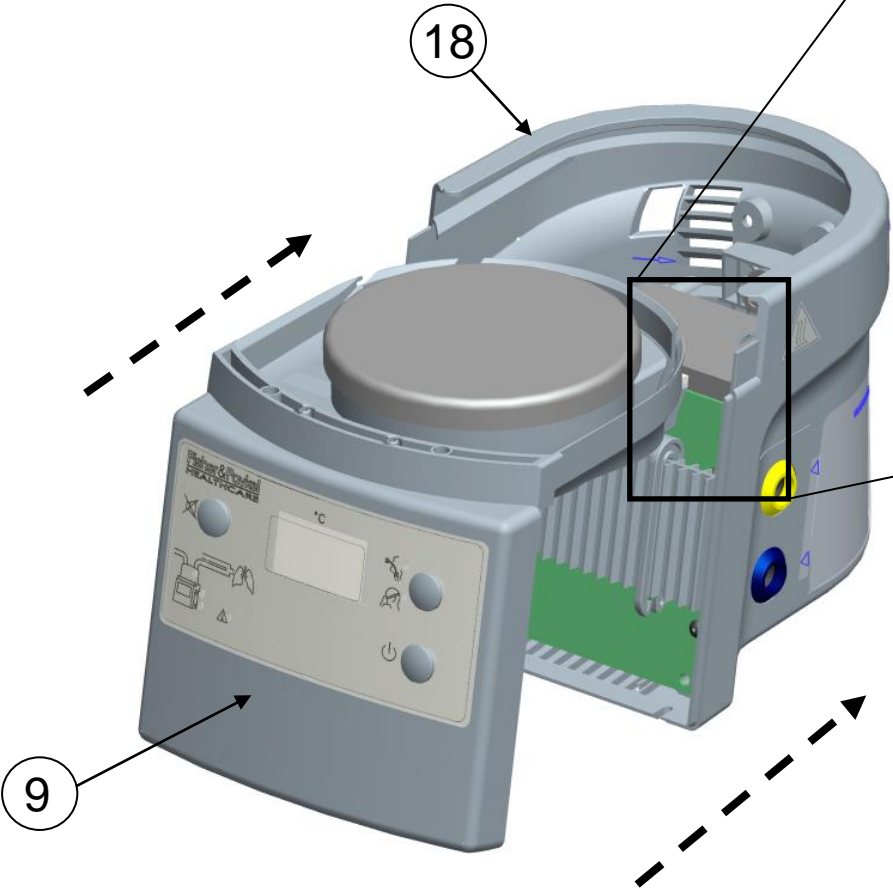
1	850PCBCOM	MR850 COMPLETE SSL PCB ASSY	18
1	MR850XXX	CASE REAR MR850	1
QTY	PART NUMBER	DESCRIPTION	ITEM

PART LIST

PART NO	REV
041042108	A

Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
43	18	Previous Assembly	1
<b>O</b>	9,18	Ensure proper orientation by aligning the Side Panel into the rear case (Item 1) Panel slot.	



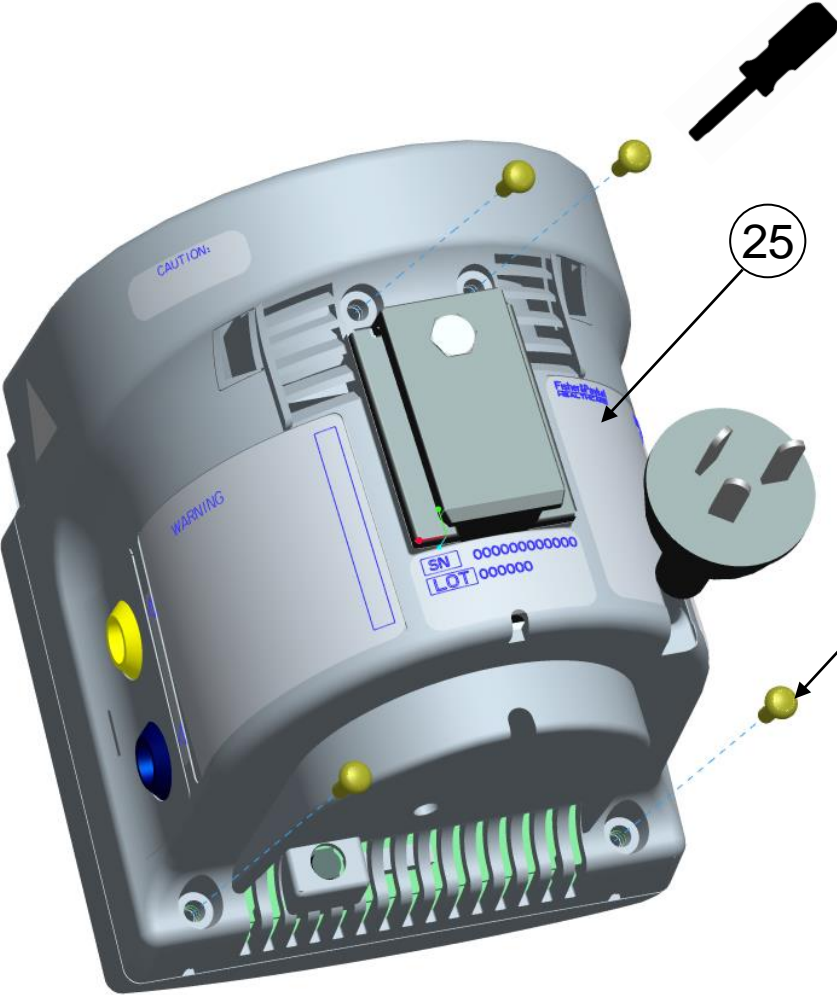
**O**

PART NO  
**041042108**

REV  
**A**

Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
43	18	Previous Assembly	1
44	1,25	Tighten Housing assembly with pneumatic driver provided.(P/N xxxxxxx)	



(P/N xxxxx)  
Torque: XX N-M

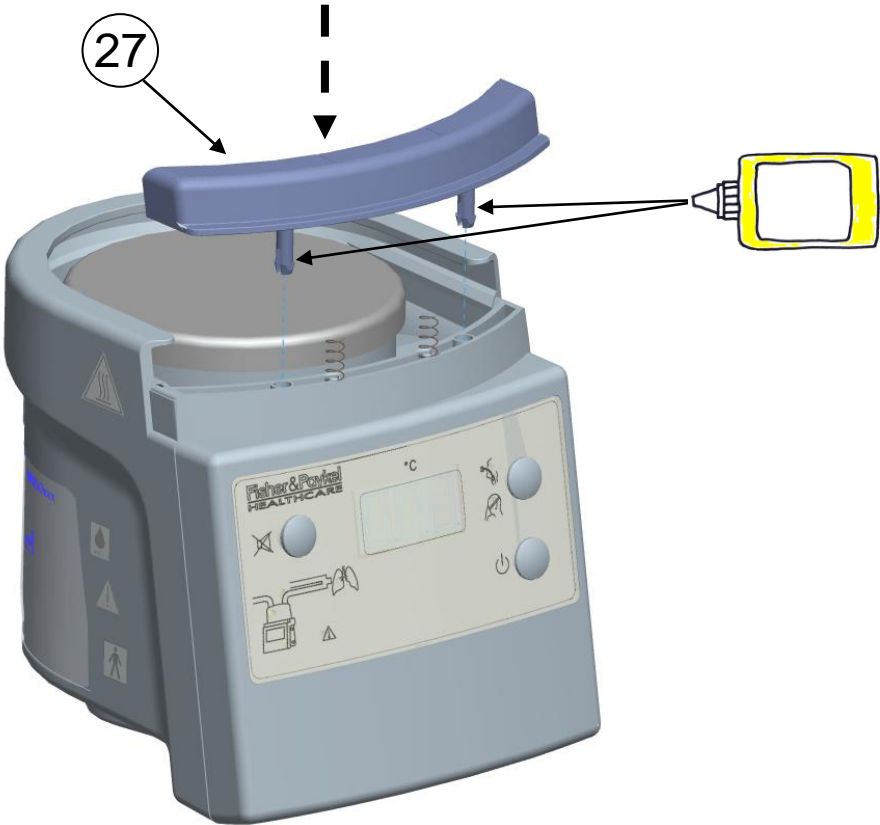
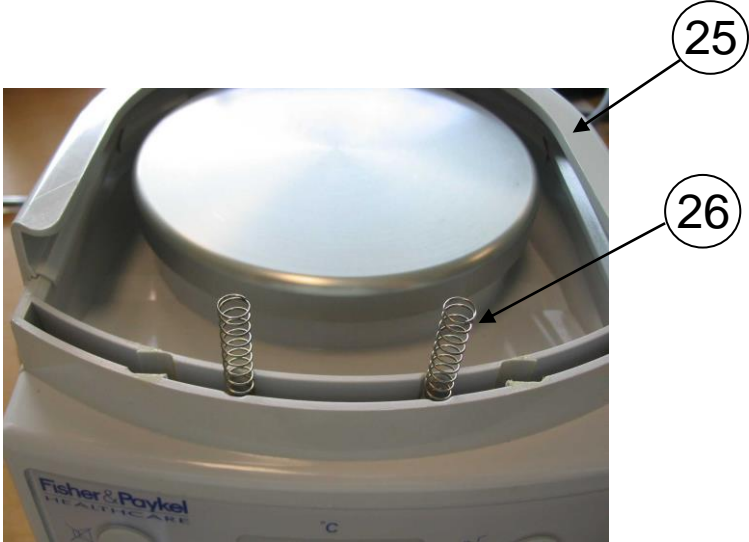
4	614042338	SCREW M4X12 PAN ZPS TAP	25
1	MR850XXX	CASE REAR MR850	18
QTY	PART NUMBER	DESCRIPTION	ITEM

PART LIST

PART NO	REV
041042108	A

Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
45	26	Previous Assembly	1
46	27	Insert springs into the smaller holes on top of case front.	2
47	28	Lubricate the two post of the finger guard with lubricant provided.	A/R
48	28	Attach finger guard.	1
QC	28	Check that the finger guard compresses and returns freely	




1	693041487	FINGER GUARD MR850 (BLUE)	28
2	662040058	SPRING FINGER GUARD MR850	27
1	MR850XXX	HUMIDIFIER MR850 ASSY	26
QTY	PART NUMBER	DESCRIPTION	ITEM

PART LIST

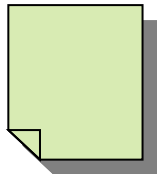
PART NO	REV
041042108	A



## Process Steps

STEP	ITEM NUMBER	DESCRIPTION	QTY
50	TESTING	Ensure Batch ID is attached to relevant section of the run card.	1
		Attach the run card, near to the top of the power cord.	1
	TESTING	Plug in serial plug ensuring that it is fully inserted at the rear of the unit.	
	TESTING	Plug in the color-coded temp probes and hose heater.	
	TESTING	Plug the mains cord into the power box on pallet.	

Run Test per SOP-125 (LATEST REVISION)  
Document the Results.



PART NO  
**041042108**

REV  
**A**