

# PHOEBE

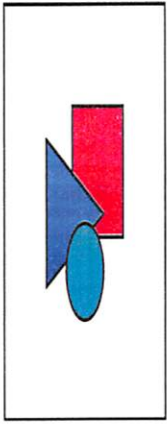
Risc Pc 2

## ASSEMBLY INSTRUCTION SHEET

PAGE	ISS. LEVEL
1	A
2	A
3	A
4	A
5	A
6	A
7	A
8	A
9	A
10	A
11	A
12	A
13	A
14	A
15	A
16	A
17	A
18	A
19	A
20	A



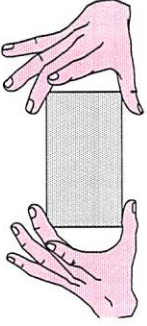
ISSUE	A																		
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**KEY**



**FIT LABEL**



**PUSH ON TO ASSEMBLY**



**CORRECTLY FITTED CHECK**



**SCREW AS DIRECTED**



ISSUE										
A										

TO BE ASSEMBLED.

Approved Vendor List  
1309,110/VL  
PHOEBE FINAL ASSEMBLY

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645 Newmarket Road  
Cambridge  
CB5 8PB

Issue	Date	AMR / ECO	Drawn
1		never issued	
2	20/8/98	ECO 4096	BJ
3	27/8/98	ECO 4101	BJ

Item	Part Number	Description	Allow Substitute	Rank	Supplier	Supplier Part Number
1	1109,110	Phoebe Main PCB assembled ✓	N	1)	BoM	BoM
2	1109,112	Phoebe CPU PCB assembled ✓	N	1)	BoM	BoM
3	1109,114	Phoebe Headphone PCB assembled ✓	N	1)	BoM	BoM
4	1109,116	Phoebe IRDA PCB assembled ✓	N	1)	BoM	BoM
5	0882,132	SCW M3x8 S'TAP TLOBE PLST ✓	N	1)	Buckinghamshire Fastener	LN1441-K30x08 PT SCREW (Zinc plated)
6	1109,118	Phoebe Backplane PCB assembled ✓	N	1)	BoM	BoM
7						
8	1209,200	Case with PSU and riser	N	1)	Enlight	to spec
9	0895,096	Grommet Strip	N			<b>Awaiting final information</b>
10						
11	0704,214	IC SDRAM DIMM 32MByte	N	1)	Micron	MT16LSDT464AG-662
12						
13	0912,052	Hard Drive 6.4Gb IDE ✓	N	1)	Fujitsu	MPB3064AT PB11E-4010 Drive model and Firmware MUST NOT change without prior approval from Acorn
14	1209,228	Phoebe IDE Ribbon cable assembly	N	1)	Celestica to source	
15						
16	0912,053	CD ROM drive 32x Slot ✓	N	1)	Sony	CDU 771 10/10 (May become AC10 if firmware becomes unique to Acorn)
17	1209,229	Ribbon cable assembly for CD ROM	N	1)	Celestica to source	
18	0960,000	ATAPI CD ROM CABLE ASSY	N	1)	Sony	ZA 36.
19	1209,235	Phoebe OS Boot system CD	N	1)	Sonopress (UK) Ltd	To Acorn part number
20	1209,256	Phoebe Video Clips CD	N	1)	Sonopress	To Acorn spec
21	1209,257	Phoebe Map of the World CD	N	1)	Sonopress	To Acorn spec
22	1209,258	Phoebe Games CD	N	1)	Sonopress	To Acorn spec
23	1209,259	Phoebe Pictures CD	N	1)	Sonopress	To Acorn spec
24	0895,095	CD Wallet for 5 CDs	N			<b>Awaiting final information</b>
25						
26	0912,054	Floppy drive 2Mb	N	1)	Sony	MPF920-H/IJ44
27	1209,255	Floppy drive button extender cap	N	1)	Lyne Developments 01908	To Acorn spec
28	1209,227	Phoebe Floppy drive cable assembly	N	1)	Celestica to source	To Acorn spec

29						
30	0914,033	Keyboard PS/2	N	1)	Acer Peripherals	52Q plus palmrest
31	0914,034	Mouse PS/2	N	1)	Logitech	Mouseman 811316-0001
32						
33	1209,250	Phoebe Welcome guide	N	1)	St Ives Multimedia	to spec
34	0493,961	Warranty card	N	1)	Ad Valorem	0493,961
35						
36	1209,237	Phoebe Carton	N	1)	Covpak	To Acorn spec
37	0895,219	Polythene bag	N	1)	Any source	to spec
38	1409,241	Ident label	N	1)	Ad Valorem	To Acorn Spec
39	1417,010	Serial number label 40*10	N	1)	Ad Valorem	1417,010
40	1417,005	Serial number/barcode label 52*15	N	1)	Ad Valorem	1417,005
41	1409,240	Approval / Base label	N	1)	Memtech	To Spec
41	1409,240	Approval / Base label	N	2)	Donprint	To Spec

**Bill of Materials**  
**1109,118/BM**  
**PHOEBE BACKPLANE PCB**

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Iss	Date	Change	Drawn	Comments
1	17/4/98	AMR 4932	BJ	
2	19/8/98	ECO 4096	BJ	
3	28/8/98	ECO 4101	BJ	
4	4/9/98	ECO 4106	BJ	

Item	Part No.	Description	Qty	Designation	Notes
1	0502,473	RES 47K C/MF 5% 0W25	1	R10	
2	0502,680	RES 68R C/MF 5% 0W25	9	R1, R2, R3, R4, R5, R6, R7, R8, R9	
3	0622,470	CPCTR 47u ALEC 16V AX	3	C5,C6,C7	
4	0680,002	CPCTR 47n DCPLR 0.2"P	2	C1,C2	
5	0680,102	CPCTR 100n DCPLR AXA 25V	2	C3,C4	
6	0750,138	IC 74AC138 CMOS 16/0.3"	1	IC1	
7	0750,139	IC 74AC139 CMOS 16/0.3"	1	IC2	
8	0779,002	VOLT REG 7905 -5V/1.5A	1	Q1	
9	0794,148	DIODE 1N4148 SI	1	D1	
10	0800,408	CONR 96W SKT ST ABC PCB	3	SKT1, SKT2, SKT3	
11	1209,118	Phoebe Podule backplane Blank PCB	1		
12	0884,037	Rivet PLST Snap 2.4 thick	6	on Item 10	

**Bill of Materials**  
**1109,114/BM**  
**PHOEBE HEADPHONE PCB**

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**Cambridge**  
**CB5 8PB**

<b>Iss</b>	<b>Date</b>	<b>Change</b>	<b>Drawn</b>	<b>Comments</b>
1	1/4/98	AMR 4932	BJ	
2	17/8/98	ECO 4096	BJ	

<b>Item</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Designation</b>	<b>Notes</b>
1	1209,114	Phoebe Headphone Blank PCB	1		
2	0800,653	CONR 3w 3.5mm jck skt vert PCB	2	SK1, SK2	
3	0800,875	CONR 10W WAFR 2ROW 0.1"	1	PL1	
4	0629,001	CPCTR 1n CPLT 30V 80%	2	C1,C2	

**Bill of Materials**  
**1109,116/BM**  
**PHOEBE IRDA PCB**

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Cambridge  
CB5 8PB

<b>Iss</b>	<b>Date</b>	<b>Change</b>	<b>Drawn</b>	<b>Comments</b>
1	17/4/98	AMR 4932	BJ	
2	17/8/98	ECO 4096	BJ	
3	27/8/98	ECO 4100	BJ	

<b>Item</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Designation</b>	<b>Notes</b>
1					
2					
3	0739,015	IC IRDA TRANSCVR	1	IC1	
4					
5	1209,116	Phoebe IRDA Blank PCB	1		
6	0529,919	RES 9R1 0W425 1210 SMD	1	R1	
7	0800,856	CONR 5W 0.1" RA Strip SMD	1	PL1	
8	0523,472	RES 4K7 SMD 5% 0W1 0805	1	R2	
9	0681,101	CPCTR 10u TANT 10% 16V SMD	1	C2	
10	0693,107	CPCTR 100n DCPLR SMD 0805	1	C1	
11	0691,102	CPCTR 1n CML 10% 0805	2	C3,C4	

**Bill of Materials**  
**1109,112/BM**  
**PHOEBE CPU PCB**

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 Cambridge  
 CB5 8PB

Iss	Date	Change	Drawn	Comments
1	1/4/98	AMR 4932	BJ	
2	20/8/98	ECO 4096	BJ	
3	4/9/98	ECO 4108	BJ	

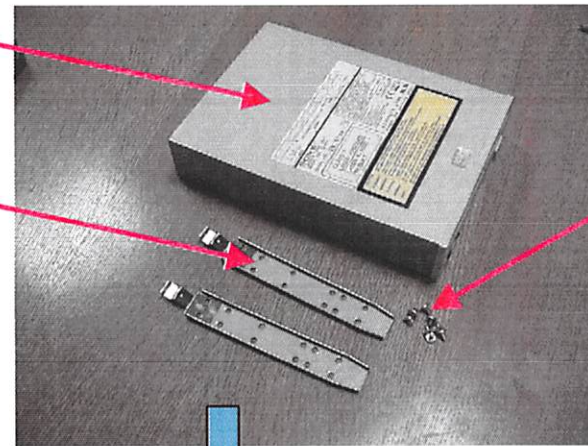
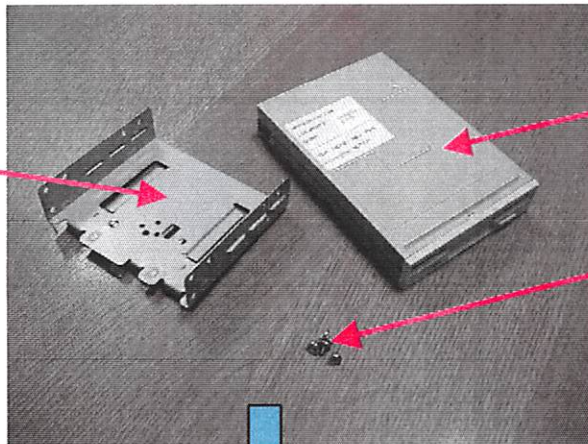
Item	Part No.	Description	Qty	Designation	Notes
1	0523,000	RES ZERO-R SMD 0W1 0805	4	R19,R20,R21,R39	
2	0523,162	RES 1K6 SMD 5% 0W1 0805	1	R34	
3	0523,302	RES 3K0 SMD 5% 0W1 0805	1	R35	
4	0523,332	RES 3K3 SMD 5% 0W1 0805	1	R10	
5	0523,472	RES 4K7 SMD 5% 0W1 0805	3	R15,R13,R36	
6	0526,925	RESNET 4K7x4 5% 8P 1206	3	RP3,RP4,RP6	
7	0530,121	RES 120R SMD 1% 0W1 0805	1	R27	
8	0530,201	RES 200R SMD 1% 0W1 0805	1	R23	
9					
10	0681,207	CPCTR 47u ALEC 10V SMD Low ESR	2	C49,C50	
11					
12	0681,101	CPCTR 10u TANT 16V SMD 10%	1	C51	
13	0691,102	CPCTR 1n CML 10% 0805	2	C46,C48	
14	0692,104	CPCTR 100n CML 20% 0805	24	C23-44,C52,C53	
15	0700,123	IC STRONGARM 233MHz 144P Rev T	1	IC7	
16	0739,019	IC PI5C3126 Qick Switch 16 pin QSOP	1	IC5	
17	1209,125	IC GAL 16V8 3.5nS 3.3V 20 pin PLCC {TB	1	IC4	
18	0778,221	IC VOLT REG ADJ 800mA SOT223	1	Q2	
19	0820,038	XTAL OSC 3.579545 MHz 8P 3 state	1	XOT1	
20	1209,112	Phoebe CPU Blank PCB	1		



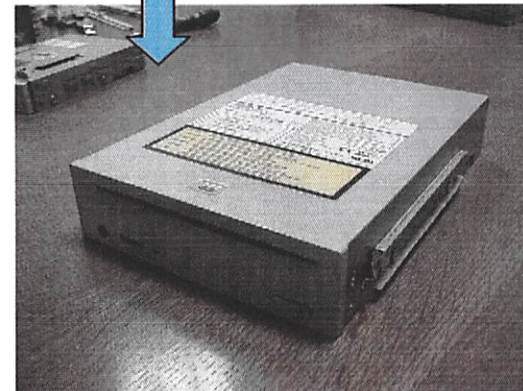
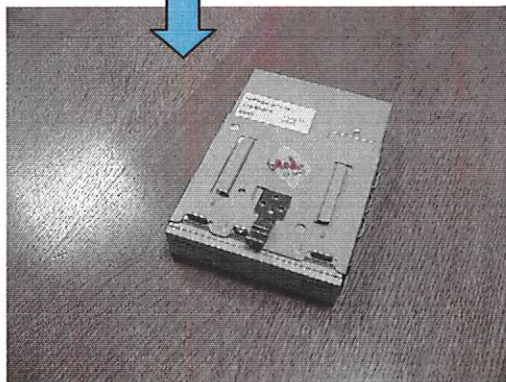
Parts Ref	Description	Part No.	Qty
	CD ROM drive 32x Slot	0912,053	1
	Floppy drive 2Mb	0912,054	1
	Bracket (CDRom)	TBA ?	2
<i>in case</i> →	Bracket (Floppy)	TBA ?	1
	Screws (CDRom)	TBA ?	4
	Screws (Floppy)	TBA ?	4

*in Accessory Pack (white box)*

*Show which Fixing holes CD fits onto.*

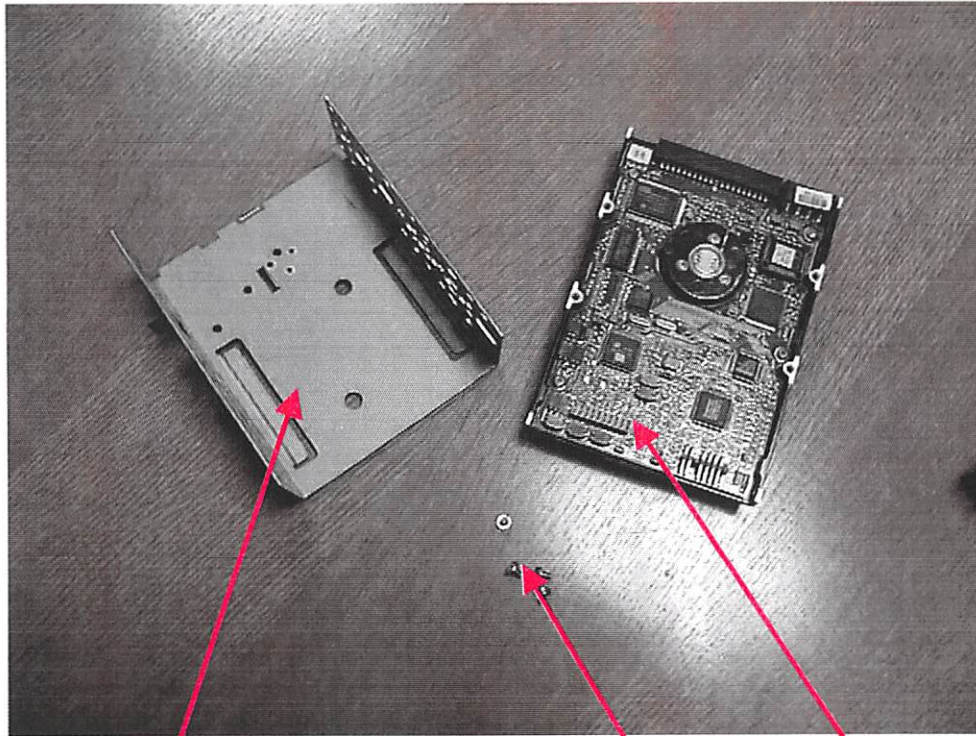


*Modified 4 extra fixing holes Show what fixings to be used*



Parts Ref	Description	Part No.	Qty
	Hard Drive 6.4Gb IDE	0912,052	1
	HDD Bracket	5208103	1
	Screws	TBA ?	4

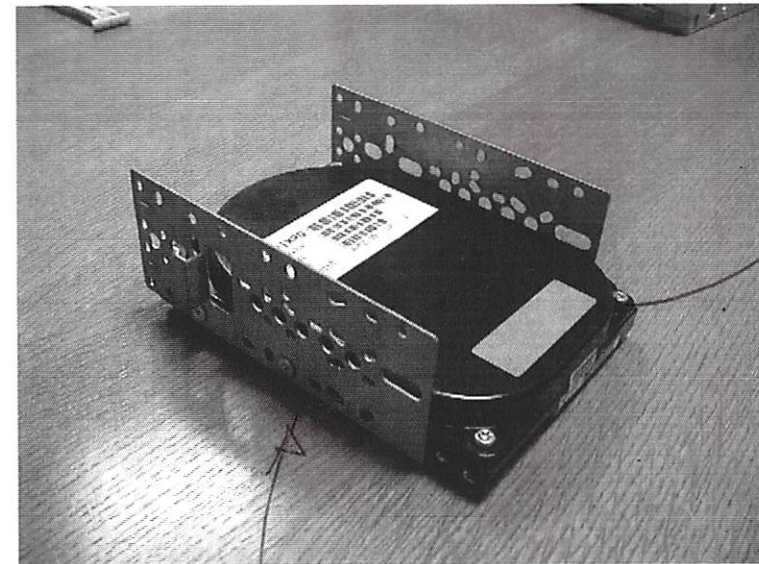
*This is an Enlight number*



HDD Bracket

Screws

Hard Drive



*less holes in final production version -*

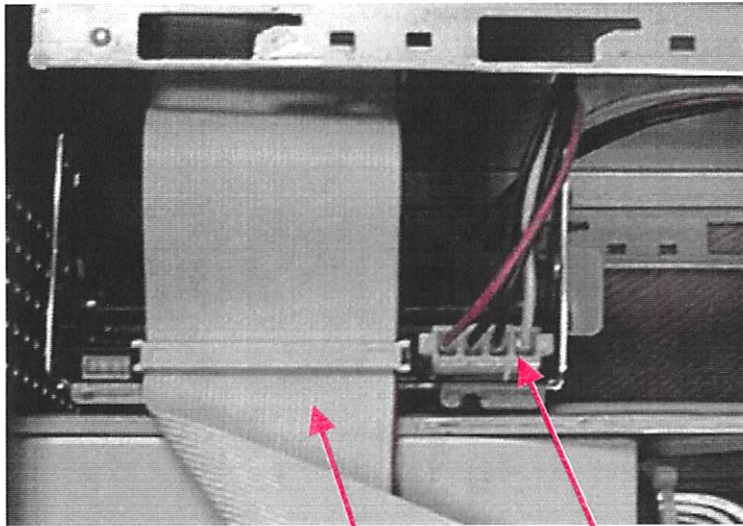
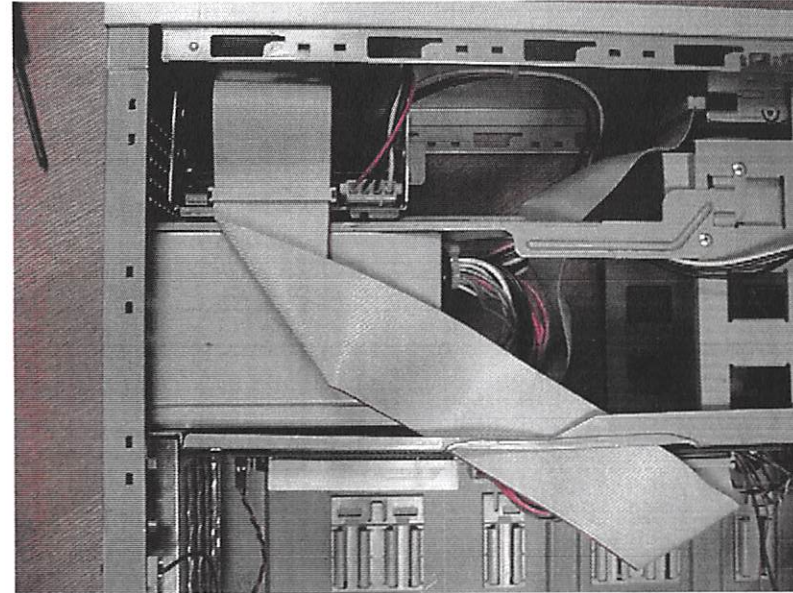




Parts Ref	Description	Part No.	Qty
	Cable (HDD)	<del>TBA</del> 1209,228	1
	Cable (Floppy/CD)	<del>TBA</del> 1209,227	1
	Cable ??? CD	<del>TBA</del> 1209,229	1

CD CABLE  
 FITTING  
 RIBBON + AUDIO  
 CABLE (0960,000)

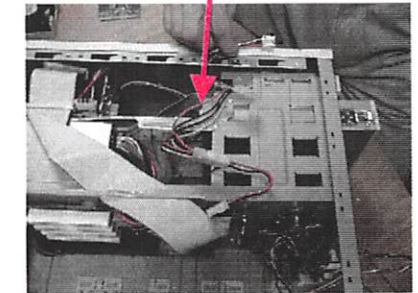
Feed cables through cut out from the riser PCB.  
 Fold HDD cable neatly using the mid connector to  
 connect the HDD to the PCB. Connect PSU cable  
 to the HDD power pins as shown.



Serial Cable

PSU Cable

HD Ribbon Cable Part no 1209,228



Power  
Cable

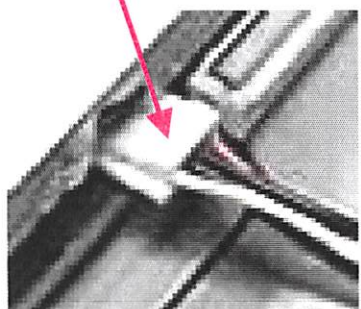


Parts Ref	Description <u>Cable</u>	Part No. <u>TBA</u>	Qty 1
-----------	-----------------------------	------------------------	----------

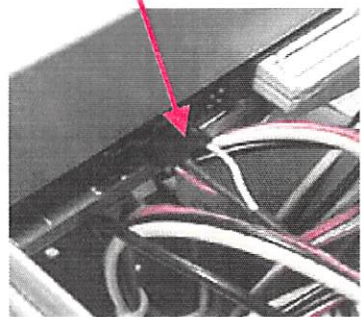
*these power cables are part of the PSU.*

Connect cables to Floppy drive and CD Rom drive in the orientations as shown

*Power Cable FDD*

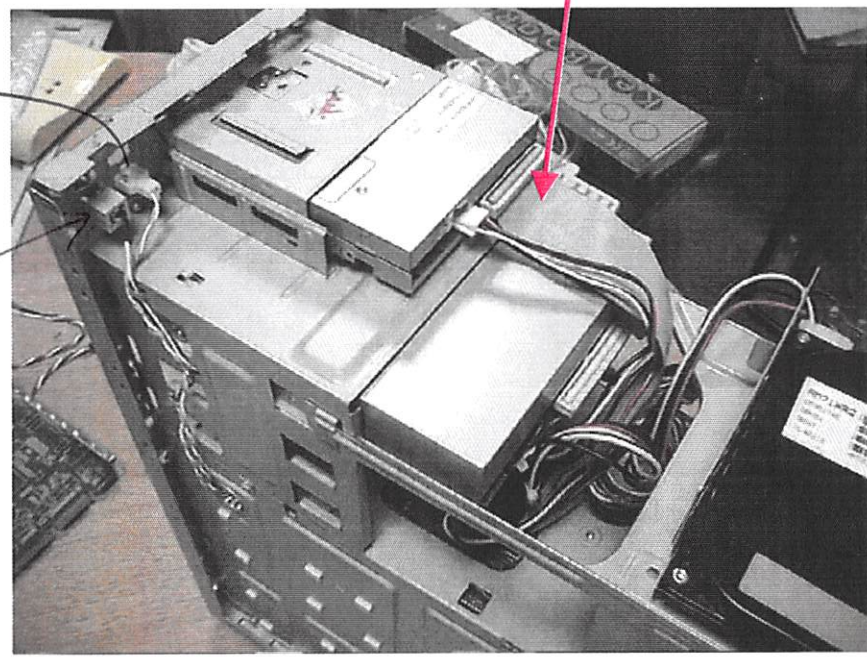


*Power Cable CD Rom*



*Floppy Ribbon - Serial Cable (1209, 227)*

*Power on/off led*  
*Power on Switch Cable Assy 1209, 232*



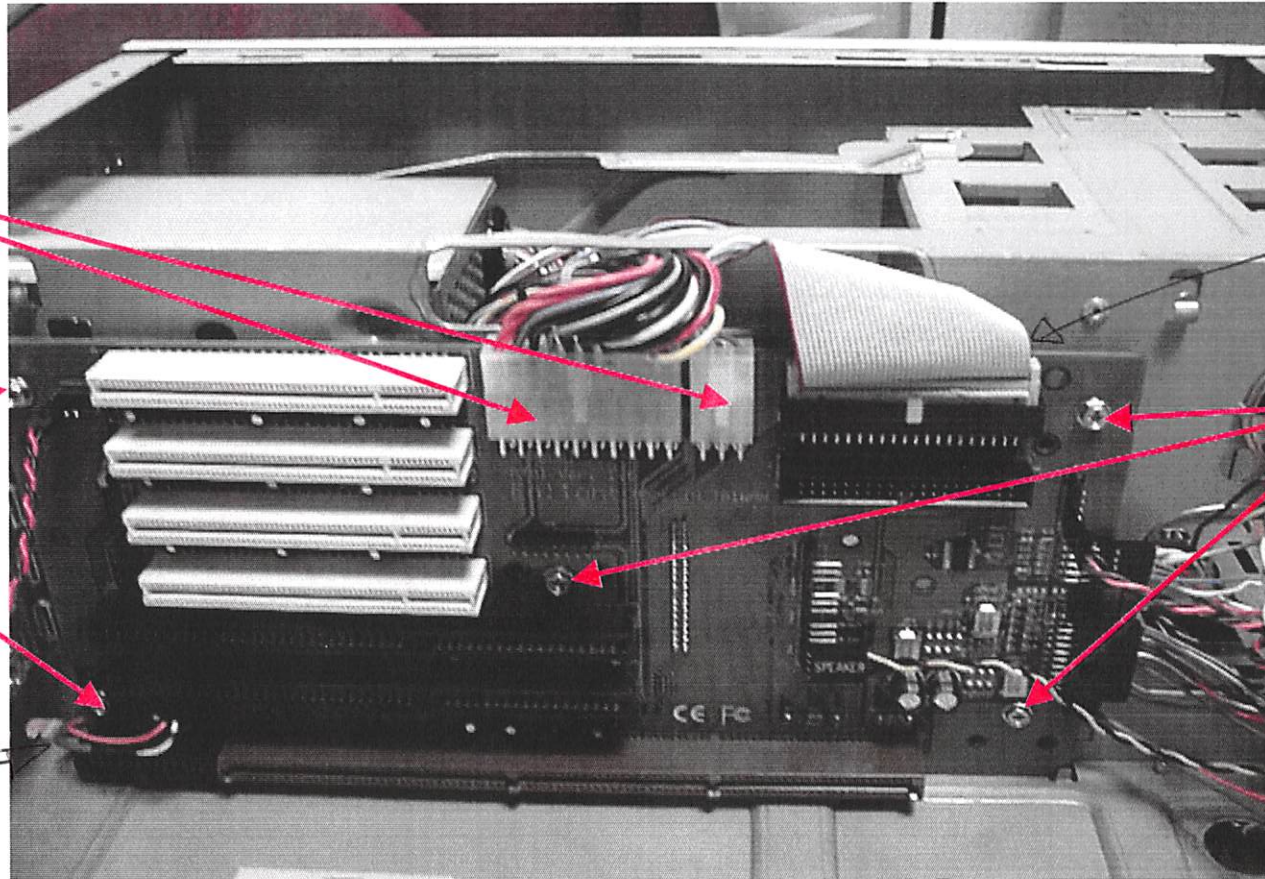
Parts Ref	Description	Part No.	Qty
	Screws	TBA	5

Locate the five screw positions and tighten screws. Connect the PSU cables as shown.

*for 1st 100 only as Enlight fit Riser card into chassis*

PSU Cables

Screws



*HD or CD?  
cable attached  
is this needed  
now?*

Screws

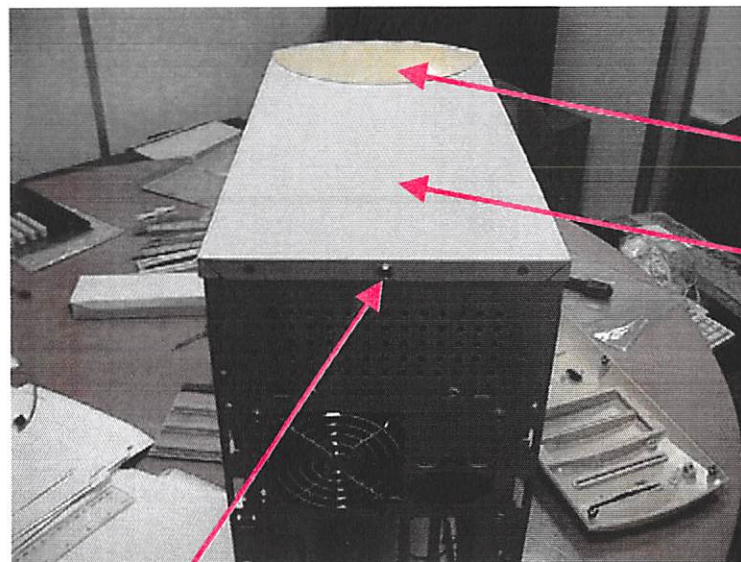
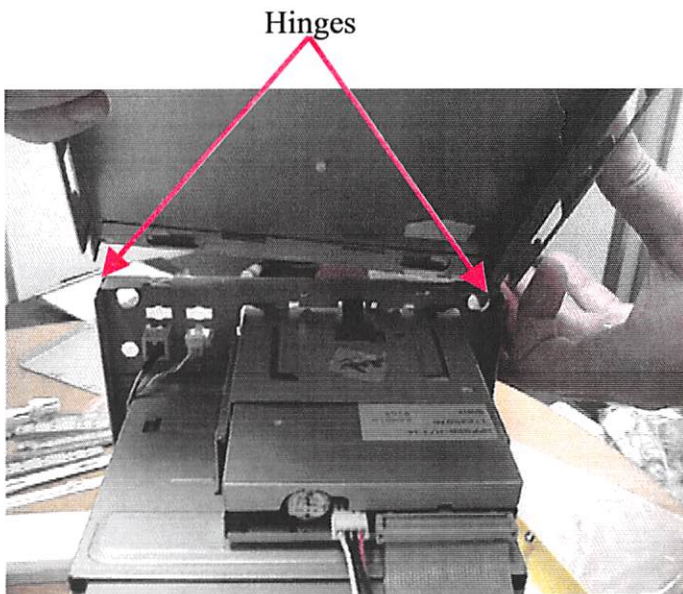
*Attach  
Fan Assembly  
to Power Supply.*

*note cable behind  
riser card*



Parts Ref	Description	Part No.	Qty
	Top Metal Cover	TBA	1
	Top Plastic Cover	<del>TBA</del> 1209	1
	Screw	TBA	1

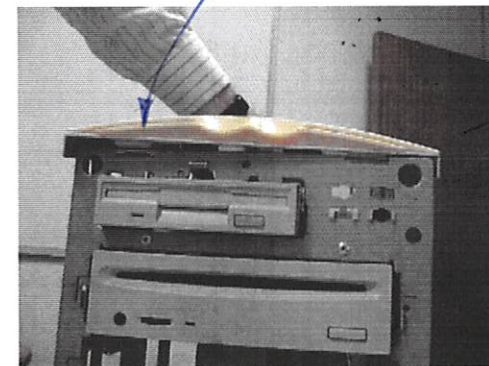
To fit top cover locate the front of the cover over the front of the unit and fix in hinges. Now lower the cover over the unit and secure at rear with screws. The front of the unit and top cover should look flush as shown.



Top Plastic Cover  
1209, 213  
Top Metal Cover

Screw

*Clip not fitted!*



*What not to do.  
LHS not under clip + rhs is !!*

Product Name: Phoebe

List No. (N/A)

Date 27/08/98 Planned By : A. Sullivan

Parts Ref

Description

Part No.

Qty

Complete Assembly

~~1004~~ ?

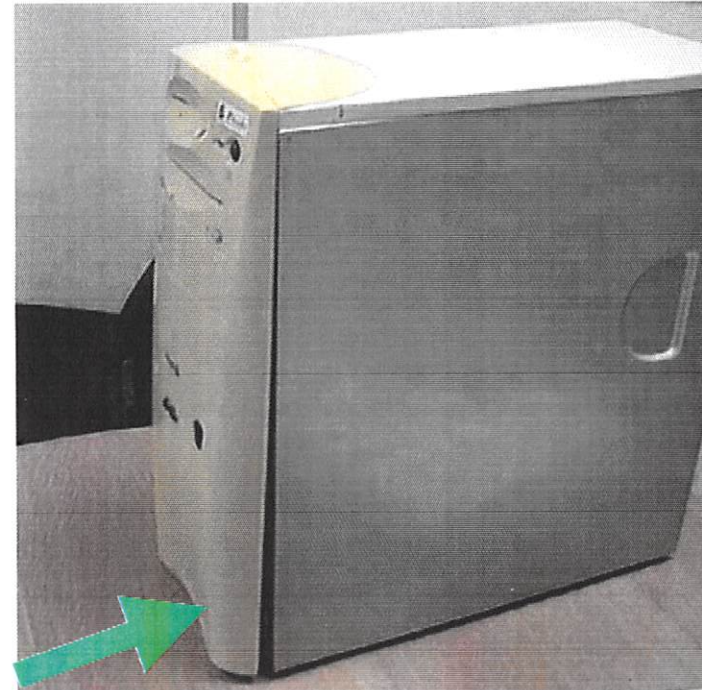
To attach fascia locate clips as shown and click into position at the top end first and then the bottom, ensure that all cables are neatly formed and do not protrude from the front fascia.

Dotten first or top - will find out what's best in assembly -

maybe better bottom first



Clip



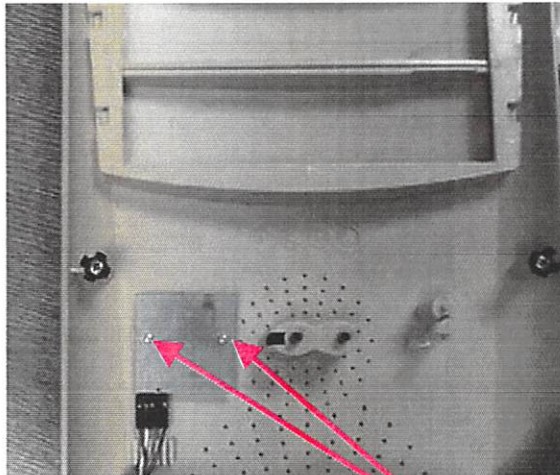


Parts Ref	Description	Part No.	Qty
	Phoebe front fascia	TBA - To be advised	1
	Phoebe Headphone PCB assembled	1109,114	1
	<del>PCB-XXXXX</del> IrDA PCB Assy.	<del>TBA</del> 1109,116	1
	Screws	<del>TBA</del> 0882,132	2
	Screws	<del>TBA</del> 0882,132	3

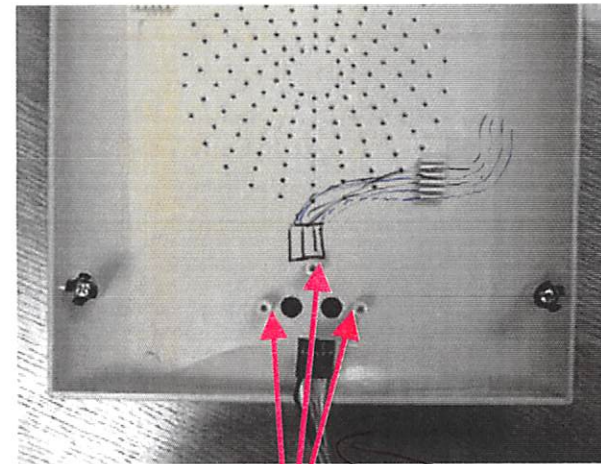
Fit the headphone assembly PCB to its position in the front fascia using the <sup>2</sup> screws as shown

Fit the <sup>IrDA</sup> ~~XXXXX~~ PCB to its position in the front fascia using the <sup>3</sup> screws as shown.

Connect the cables as shown using the moulded cable ties on fascia.



Screws

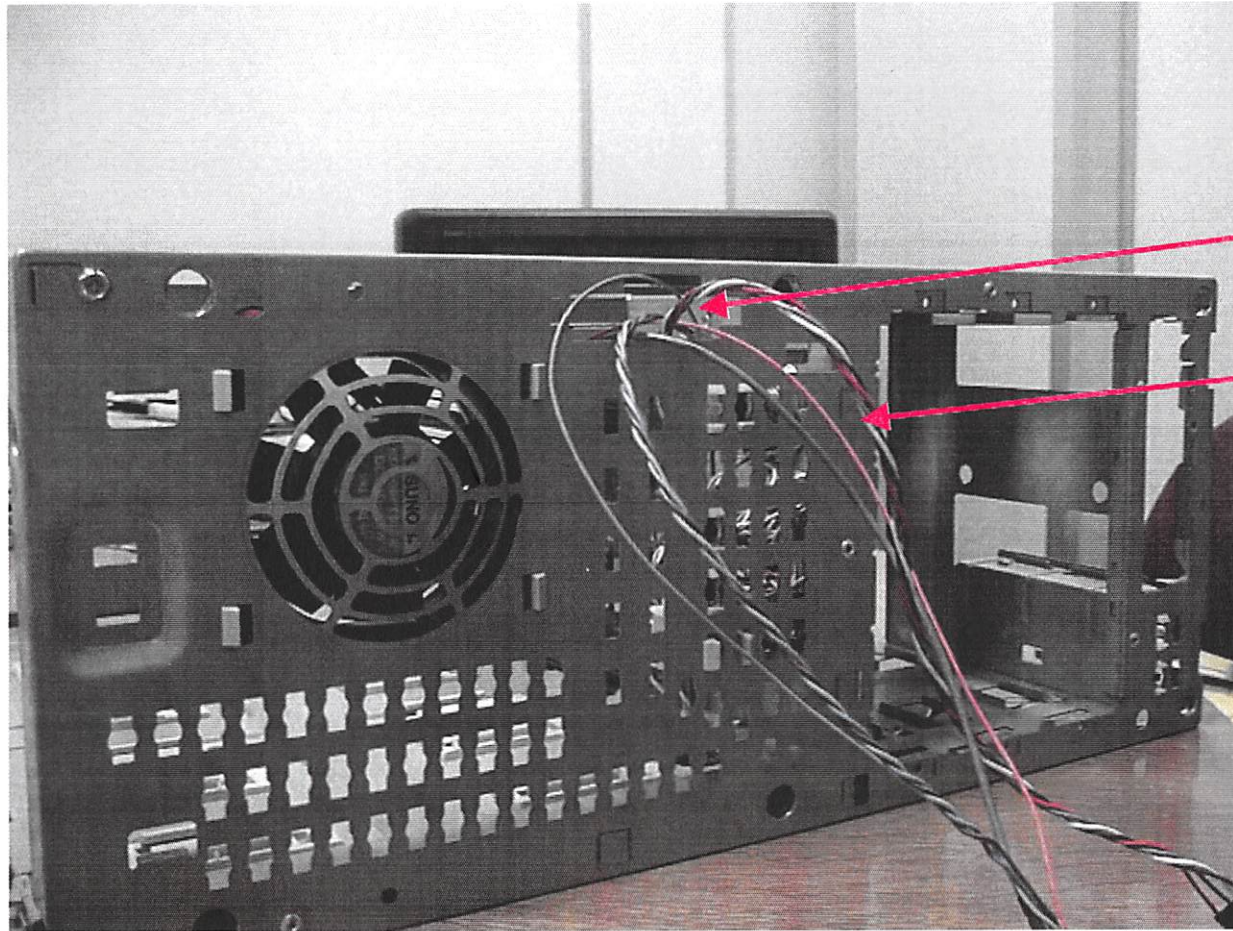


Screws

Cable should be shown from above using strain relief.

Parts Ref	Description	Part No.	Qty
	Grommet Strip	0895,096	1

Pull cables through the cut out in the front of the chassis.



Cut out + Grommet Strip added  
0895,096

Cables ? Number to headphone

Headphone Board  
Cable no. 1209,230

Irda Board  
Cable no. 1209,230.

↑ Headphone  
↑ Irda



Product Name: Phoebe

List No. (N/A)

Date 27/08/98

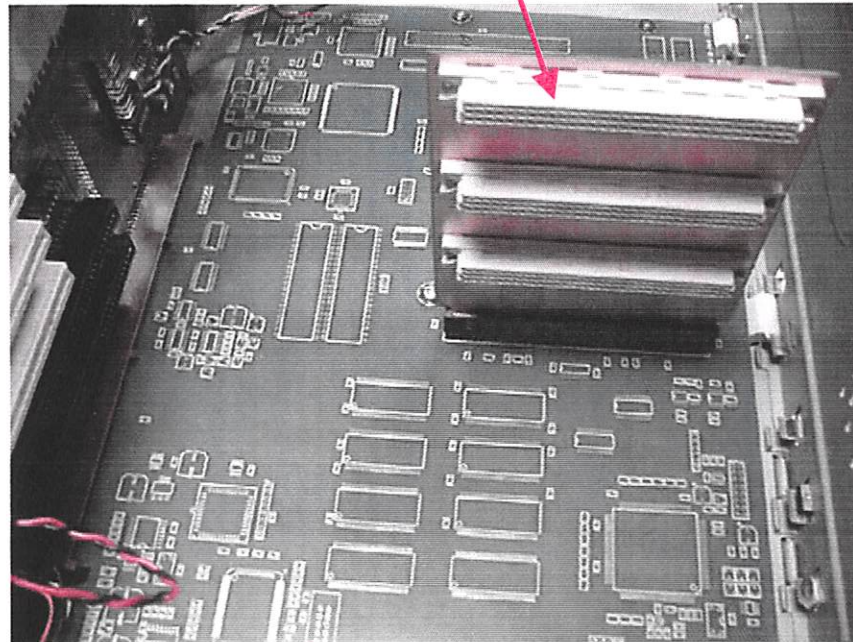
Planned By : A. Sullivan

Parts Ref	Description	Part No.	Qty
	<del>Riser Card</del> 3 way Backplane	<del>TBA</del> 1109, 118	1

Insert ~~Riser Card~~ as shown.

3 way Backplane pcb

3 way Backplane  
~~Riser Card~~ pcb

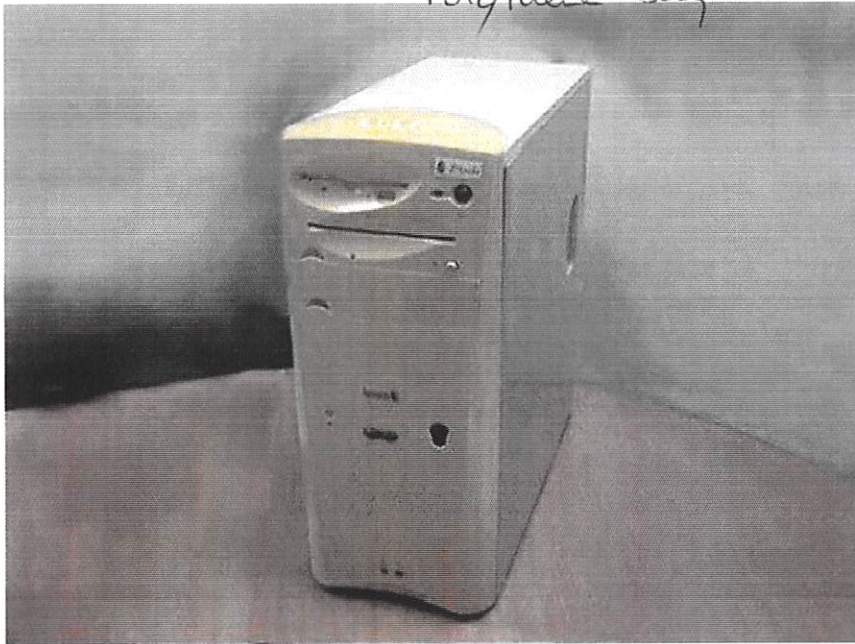


Need to insert  
Processor card 1109, 112  
+  
SDRAM DIMM 0704, 214  
as well.

Parts Ref	Description	Part No.	Qty
	Keyboard PS/2	0914033	1
	Mouse PS/2	0914,034	1

Accessory ~~box~~ Box  
 Packaging -x2 -top + bottom.  
 Cheeks x 2  
 Polythene Bag x 1

Slugs fitted into ~~carton~~ Carton.



8x corners.  
 Mains cable  
 labels.  
 welcome guide  
 CD's.  
 warranty card

Blank carton in production.



Total unit + All packaging 1309,110. = ~~PHB01~~ PHB01.

RECEIVED

Phoebe Case and Riser set Bill of Materials  
1209,200/BM

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Cambridge  
CB5 8PB

Iss	Date	Change	Drawn	Comments
1		AMR xxxx		

Item	Part No.	Description	Qty	Designation
<b>Front plastics sub assembly:</b>				
1	1209,210	Phoebe front moulding	1	
2	1209,211	Phoebe Top bay door	1	
3	1209,212	Phoebe Bottom bay door	1	
4	1209,214	Phoebe On/Off button	1	
5	0883,204	Spring on/off switch return	1	
6	1209,215	Phoebe Reset button	1	
7	0883,203	Spring reset switch return	1	
8	1209,232	Cable assy front panel switches + LEB	1	
9	1209,216	Phoebe Left hand volume button	1	
10	1209,217	Phoebe Right hand volume button	1	
11	0883,205	Spring volume	2	
12	1209,254	Cable assy - volume control to Riser	1	
13	1209,220	Phoebe IR window	1	
14	1209,221	Phoebe Light pipe #1	1	
15	1209,222	Phoebe Light pipe #2	1	
16	1209,242	Phoebe Light pipe #3	1	
17	1209,243	Phoebe Light pipe #4	1	
18	1209,219	Phoebe CD ROM eject button	1	
19	0883,201	Mounting clip	6	
20	0883,202	Self tap screw (coarse)	6	

**Chassis sub assembly:**

new number	Chassis	1	
new	Side cover L	1	3216209
new	Side cover R	1	3216197
new	Top metal cover	1	3215376 modified
1209,213	Top plastic cover	1	
1209,224	PSU	1	
1209,225	IO Shield	1	
1209,226	Riser card	1	
1209,223	Fan (with attached cable)	1	
new	Fan cover	1	
	HD mounting bracket	1	
	FD mounting bracket	1	
1209,251	Tamper switch and cable assembly	1	
	PCI card plastic clips	1	3134957
1209,252	Speaker assy	1	

**Accessories pack**

new	5.25 inch drive mounting rails	6	
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5.25 inch mounting screws	12
HD mounting screws	4
FD mounting screws	4
PCB mounting rails	2
PCB mounting screws	4

**Other**

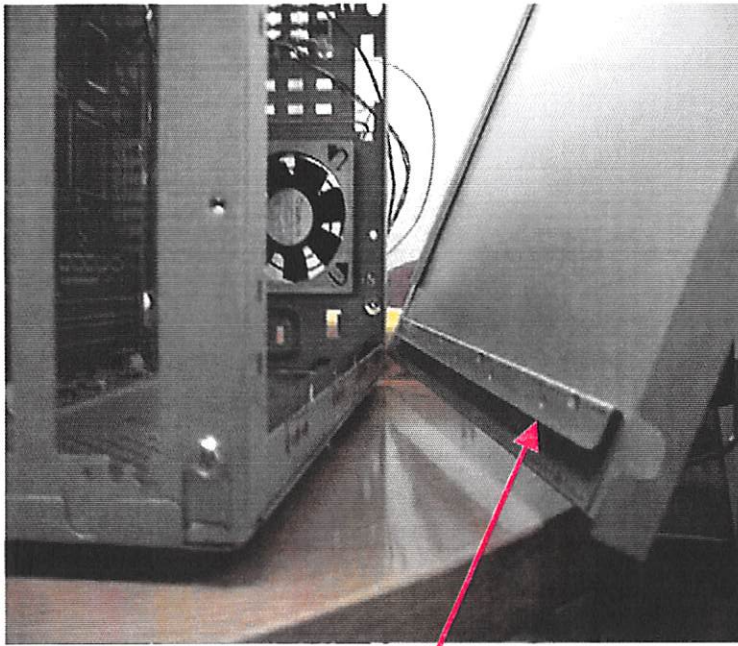
0870,350	PSU mains cable (UK)	1
1209,230	Audio and IRDA cable assy	1
	EMC clips	?



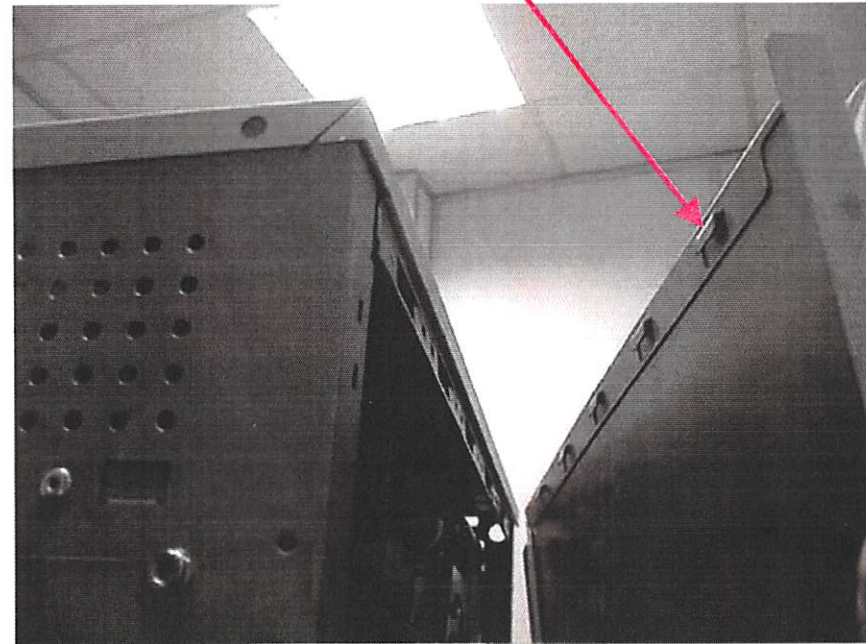
Parts Ref	Description	Part No.	Qty
	Side Panel (Right)	TBA	1
	Side Panel (Left)	TBA	1

To fit side panels locate lip on the bottom of the panel and the bottom of the chassis then locate hooks at the top of the panel and place in holes at the top of the chassis as shown.

*Need to have similar instructions to remove these at beginning - the case comes ~~off~~ with these attached.*

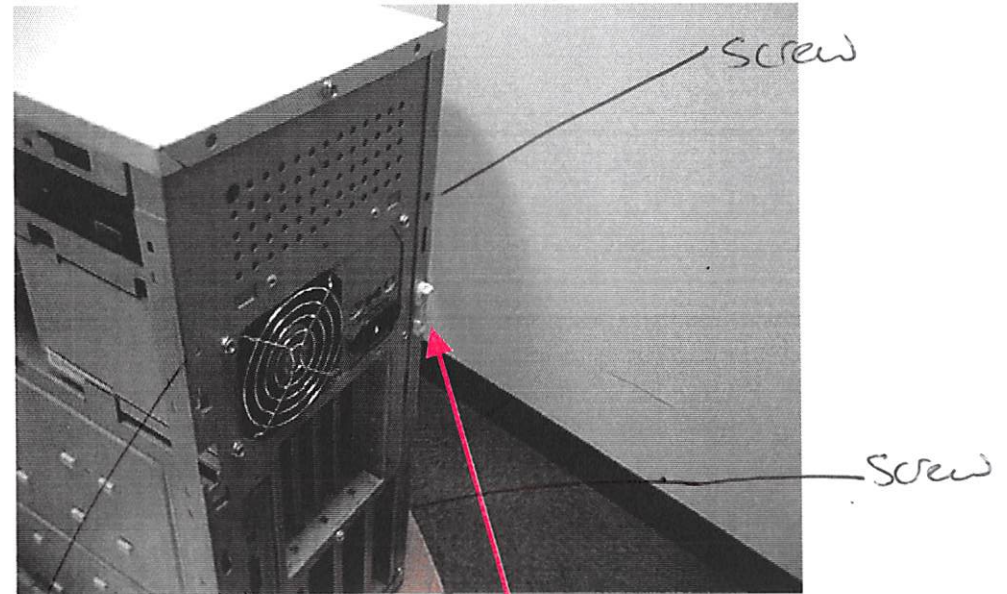
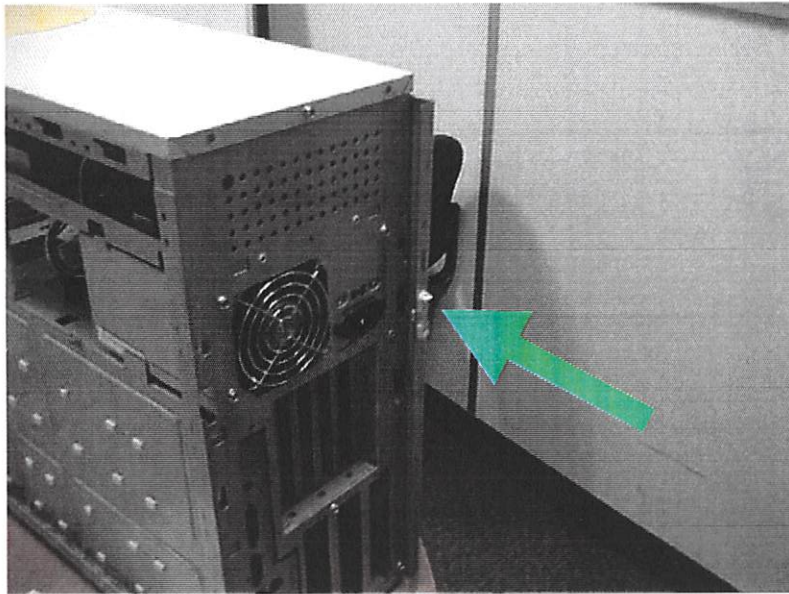


Lip



Hooks

Now slide the panel towards the front of the chassis and lock into position using the cover fixture as shown.



Screw  
Screw

Cover Fixture

Also need  
Screws x 2  
per panel

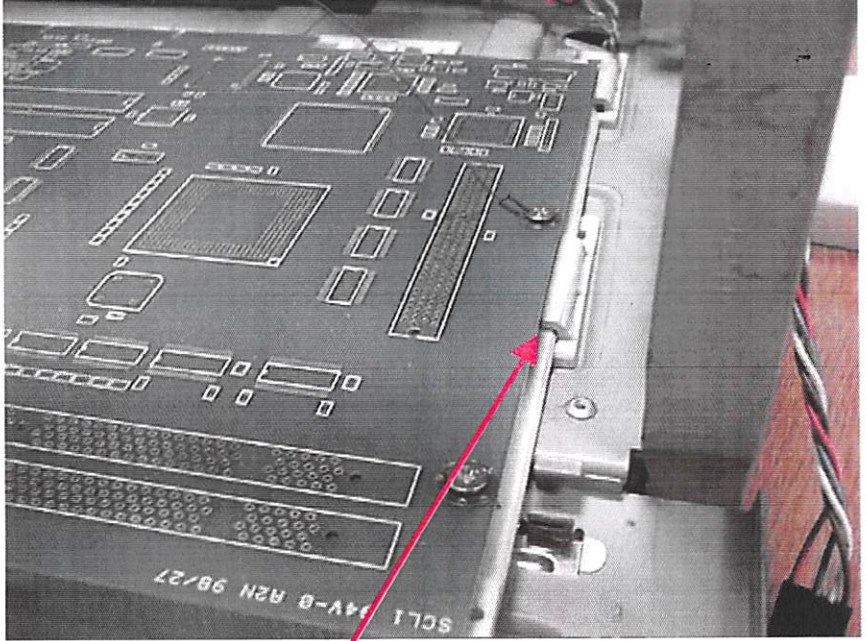
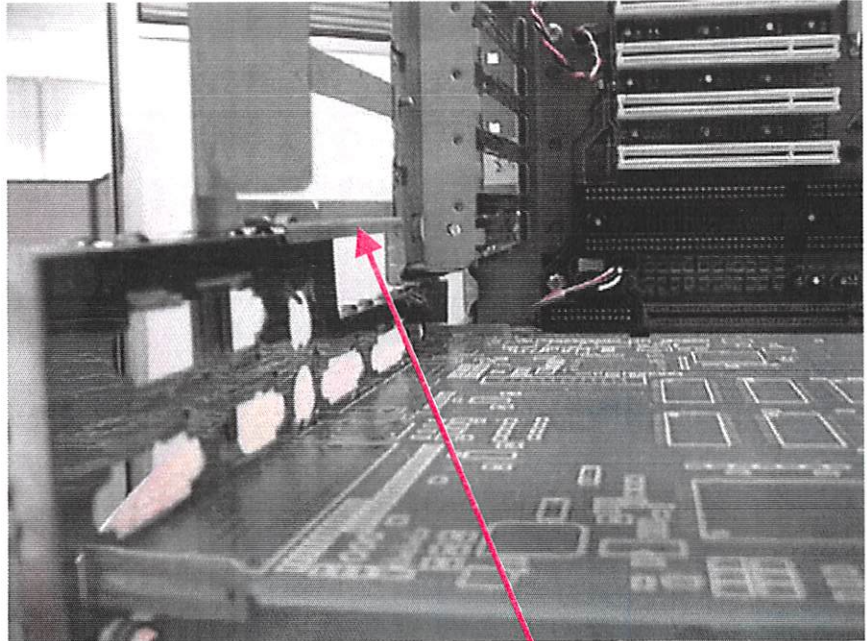


Parts Ref	Description	Part No.	Qty
	Main PCB	1109110	1

Slide Main PCB into chassis making sure that the card follows the guides and is firmly in place.

*Need to have PCB assy showing plastic card guides fitting and I/O shield fitting with ~~seal~~ on line I/P connector*

*Screws from accessory pack*



*Show ~~step~~ Bottom of case ~~box~~ fitting into slides ends on PCB + pushing home into edge connector*

*110 line guides (as) Guides (I/O Shield + EMC cover needs to be fitted)*

*Slide Guides*

*ENSURE CORRECT SLIDE GUIDES ARE USED, THERE ARE A LOT OF OPTIONS HERE.*



Product Name: Phoebe

List No. (N/A)

Date 27/08/98

Planned By : A. Sullivan

Parts Ref

Description  
Speaker Assy

Part No.  
1209252

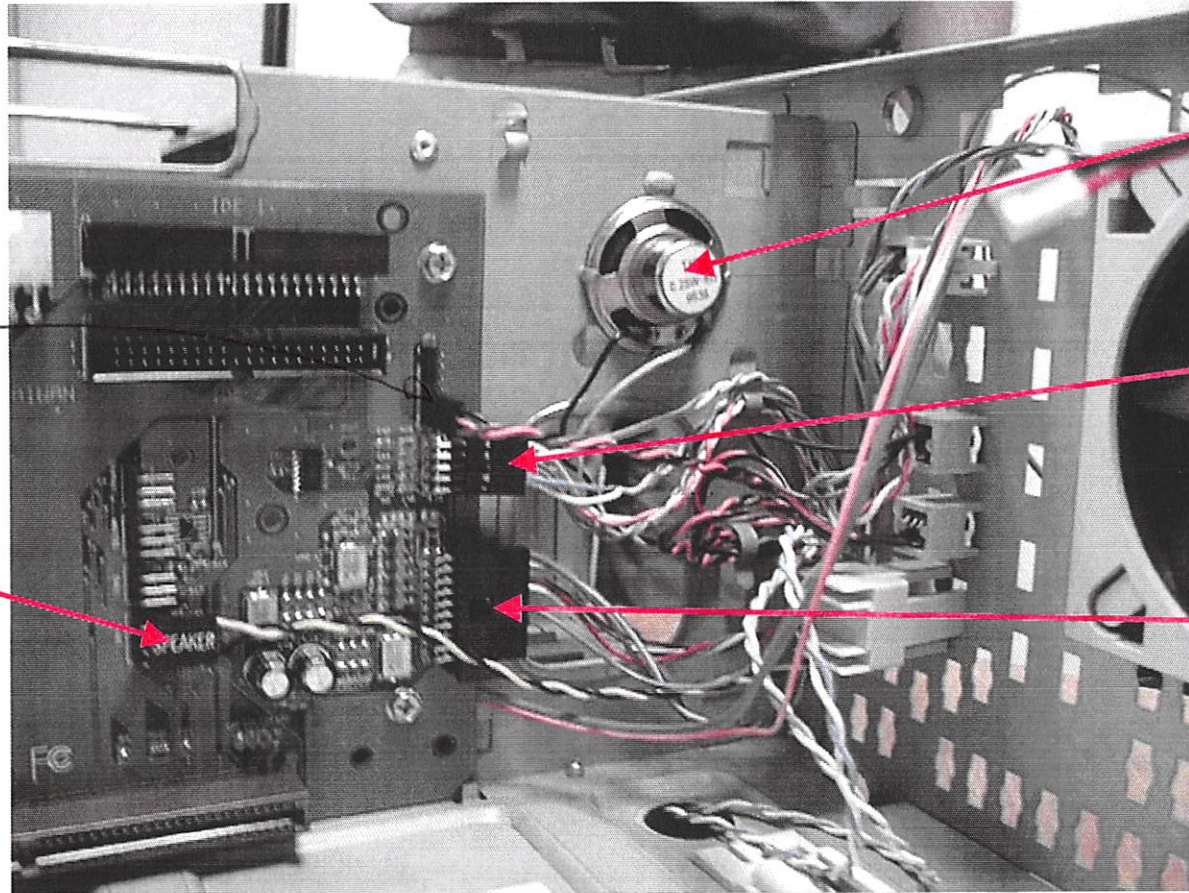
Qty  
1

Fit speaker to chassis as shown, connect leads to PCB as shown.

TAMPER  
DETECT  
+ MIC IN  
CABLES TO  
SHOWN

1209,234

Speaker  
lead



Speaker (1209,252)  
Assy

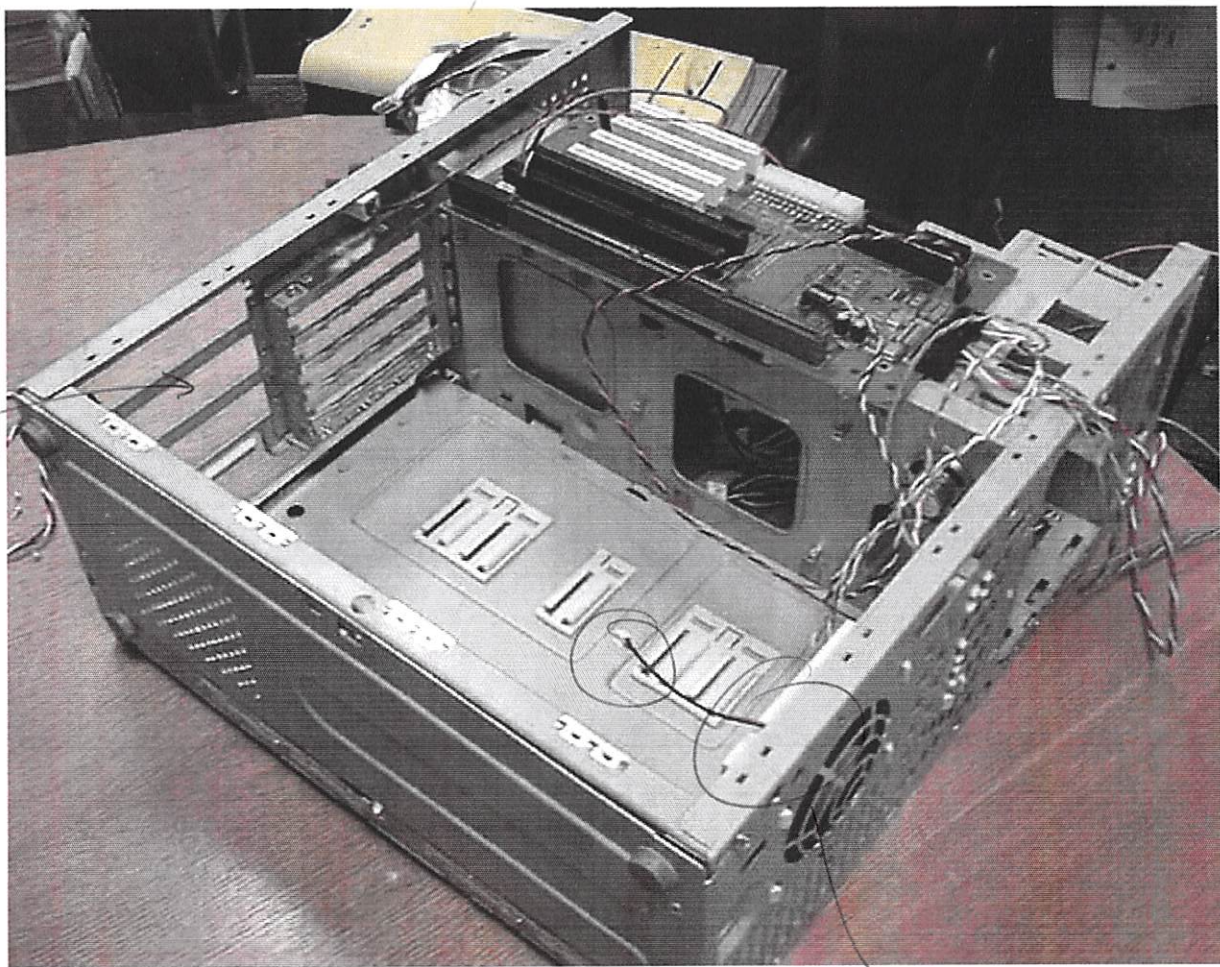
as per (50mm Drawing

XXXXX ?  
Cable Assy  
no. 1209,232

XXXXX ?  
Cable Assy  
no. 1209,230



Parts Ref	Description	Part No.	Qty
	Case with PSU and riser	1209,200	1



Normally filled on product (ie pushout panels for module cards)

What to do?  
ie assembly actions  
riser cables need to be fitted as per cable loom drawing

DISMANTLING DIAGRAM TO GET TO THIS STAGE

Wrong  $\$$  fan Assy: -changed later, cable direct to PSU cable