Service Manual

UC6 (Revision 1.2)

Contents

IMPORTANT SAFETY NOTICES

PREVENTION OF PHYSICAL INJURY

1. Before disassembling or assembling parts of the printer and peripherals, make sure that the power cord is unplugged.

2. The wall outlet should be near the controller and easily accessible.

3. If any adjustment or operation check has to be made with exterior covers off or open while the main switch is turned on, keep hands away from electrified or mechanically   driven components.

OBSERVANCE OF ELECTRICAL SAFETY STANDARDS

The controller must be installed and maintained by a customer service representative who has completed the training course on those models.

SAFETY AND ECOLOGICAL NOTES FOR DISPOSAL

Dispose of replaced parts in accordance with local regulations.

General Remarks

The following table shows the conversion of the model names for each manufacturer:

Model Code	Company	Model Name
C229/C233	Ricoh	JP5000
	Gestetner	5450
	RexRotary	1560
	Nashuatec	CP450
	Savin	3350DNP
C231	Ricoh	JP1010/1030/1045/1050
	Gestetner	5306(L/b)/5000/5001
	RexRotary	1224(B)
	Nashuatec	CP306(b)
	Savin	3150DNP
C217	Ricoh	VT1730
	Gestetner	5303
	RexRotary	1220
	Nashuatec	CP303
C225	Ricoh	VT1800
	Gestetner	5304
	RexRotary	1222
	Nashuatec	CP304
	Savin	3100DNP
C226	Ricoh	VT2250/VT2240
	Gestetner	5329(L)
	RexRotary	1254(L)
	Nashuatec	CP329(L)
	Savin	3250DNP

Model Code	Company	Model Name
C224	Ricoh	VT2200
	Gestetner	5327
	RexRotary	1252
	Nashuatec	CP327
	Savin	3200DNP
C216	Ricoh	VT2105
	Gestetner	5325
	RexRotary	1250
	Nashuatec	CP32
C211	Ricoh	VT2100/VT2130/VT2150
	Gestetner	5310/5315/5320
	RexRotary	1240/1241/1242
	Nashuatec	CP310/CP315
C212	Ricoh	VT2300
	Gestetner	5330
	RexRotary	1260
	Nashuatec	CP330
C210	Ricoh	VT3500
	Gestetner	5375
	RexRotary	1280
	Nashuatec	CP375
C218	Ricoh	VT3600
	Gestetner	5380
	RexRotary	1285
	Nashuatec	CP380

C223	Ricoh	VT3800
	Gestetner	5385
	RexRotary	1290
	Nashuatec	CP385
	Savin	3300DNP
C219	Ricoh	VT2600/VT2630
	Gestetner	5360
	RexRotary	1270
	Nashuatec	CP360
C222	Ricoh	VT2400
	Gestetner	5340
	RexRotary	1255
	Nashuatec	CP340
C228	Ricoh	VT6000
	Gestetner	5390
	RexRotary	1295
	Nashuatec	CP390
	Savin	3400DNP
C214	Gestetner	5305/5330
	RexRotary	1230
	Nashuatec	CP305
C237	Ricoh	JP1210/1230/1250
	Gestetner	5308/5308L/5308B
	RexRotary	1225/1225B
	Nashuatec	CP308/CP308B
	Savin	3150eDNP
	Standard	SD330

Model Code	Company	Model Name
C235	Ricoh	JP8000
	Gestetner	5490
	RexRotary	1395
	Nashuatec	CP490
	Savin	3450DNP
	Standard	SD630

1. OVERALL INFORMATION

1.1 RIP SERVER

The ZipRIP UC6 is an external Postscript image processor for Digital Duplicators. This RIP server connects to a network with client computers of the folllowing specification:-

Client Computer Systems
• IBM PC/AT compatible PC with Windows 95, 98, ME, 2000 and NT4.
  Apple Macintosh with operating system 8 and up.

Systems Hardware Requirements
• Functioning network using UTP network cable. PC network protocols required are either Netbui, IPX/SPX and TCP/IP running on a DHCP Server. Apple network protocols required Apple Talk.

1.2 BASIC SPECIFICATION

Contents	Description
Configuration	External RIP Server
Digital Duplicator Models	All duplicators that have interface capability.
I/O Ports	10/100 MBit Ethernet
Language	PostScript® P LEVEL 2
Interpreter	ZIPRIP Postcript
Network Protocols	Netbui, IPX/SPX, TCP/IP on a DHCP Server and Apple Talk.
Fonts	Postscript Fonts
Image Resolution	300 dpi, 400 dpi, 600 dpi
RAM	64MB
On Board Spooler	15 GB
Processor	500mHz Intel Celeron
Paper Size	A3, A4, B4, B5, A5, Custom size A3 duplicators only, US Letter, US Legal, US Tabloid

Table 1.2. Basic Specifications.

1.3 FONTS

Below is a list of the fonts installed on the UC6.

Arial	Arial-Bold	Arial-BoldItalic
Arial-Italic	ArialNarrow	ArialNarrow-Bold
ArialNarrow-BoldItalic	ArialNarrow-Italic	
AvantGarde-Book	AvantGarde-BookOblique	AvantGarde-Demi
AvantGarde-DemiOblique		
BookAntiqua	BookAntiqua-Bold	BookAntiqua-BoldItalic
BookAntiqua-Italic	Bookman-Demi	Bookman-DemiItalic
Bookman-Light	Bookman-LightItalic	BookmanOldStyle
BookmanOldStyle-Bold	BookmanOldStyle-BoldItalic	BookmanOldStyle-Italic
CenturyGothic	CenturyGothic-Bold	CenturyGothic-BoldItalic
CenturyGothic-Italic	CenturySchoolbook	
CenturySchoolbook-Bold	CenturySchoolbook-BoldItalic	CenturySchoolbook-Italic
Courier: Standard	Courier-Bold	Courier-BoldItalic
Courier-BoldOblique	Courier-Italic	Courier-Oblique
Helvetica	Helvetica-Bold	Helvetica-BoldOblique
Helvetica-Narrow	Helvetica-Narrow-Bold	Helvetica-Narrow-BoldOblique
Helvetica-Narrow-Oblique	Helvetica-Oblique	
MonotypeCorsiva	MonotypeSorts	
NewCenturySchlbk-Bold	NewCenturySchlbk-BoldItalic	NewCenturySchlbk-Italic
NewCenturySchlbk-Roman		
Palatino-Bold	Palatino-BoldItalic	Palatino-Italic
Palatino-Roman		
Symbol		
Times-Bold	Times-BoldItalic	Times-Italic
Times-Roman	TimesNewRoman	TimesNewRoman-Bold
TimesNewRoman-BoldItalic	TimesNewRoman-Italic	
ZapfChancery-MediumItalic		
ZapfDingbats		

1.4 VIDEO INTERFACE KITS

Description	Contents
PC Controller I/F Kit Type-600	For the connection to all VT Series
PC Controller I/F Kit Type-10	For the connection to Models C231, C237 and C229. * The interface kit is originally installed for C229, except for the Asian version machines. * For Model C235 the Interface harness is the only part of the kits required.

Table 1.4. Interface Kits for use with the UC6.

2. BASIC FUNCTION

2.1 BASIC CONFIGURATION

2.1.1. SYSTEM SPECIFICATIONS

Motherboard .... DFI CM33-EC

Processor .... Intel Celeron 500

Fan/Convertor .... NENG P326 Copper Fan

Systems Memory 64MB PC133

On Board VGA Device .... Trident graphics

Floppy Drive .... Standard 1.44 FDD

Hard Disk Drive .... 15MB Maxtor HDD

Network Card .... SMC 1211 TX 10/100 MBit

Sound Cards .... On Board AC97 Audio

Operating System .... Windows 98 Second Edition

I/O Port .... Mega Power MP9715P-2 I/O Card

Other Device 1 .... PC Guardioan 2K Card

Other Device 2 .... ZipRIP Interface PCB

2.1.2. SYSTEM LAYOUT

Figure 2.1.2. Main Board Layout

3. VIDEO I/F INSTALLATION PROCEDURES

3.1 VIDEO I/F KIT TYPE-600 PARTS LIST (NOT SUPPLIED WITH UC6)

3.1.1 COMMON ASSEMBLIES

No.	Description	Qty.
1	IC – Interface	1
2	Interface Board	1
3	Insulating sheet – 145 x 200	1
4	Interface Cable – Interface Board	1

Table 3.1.1. Common Assemblies.

3.1.2 SET FOR PART 1A

No.	Description	Qty.
5	Stud – 50mm	2
6	Spacer – 10mm	2
7	PCB Stud – 64mm	2
8	Harness Support Bracket	1
9	Philips Pan Head Screw – M3 x 35	1
10	Philips Flange Screw – M3 x 8	3
11	Philips Flange Screw – M4 x 8	3
12	Flat Cable – N810/NA33/NA3/NB2/RN925/N850	1
13	Wire Band	1
14	PCB Collar	1

Table 3.1.2. Set for Part 1A.

3.1.3 SET FOR PART 1B

No.	Description	Qty.
15	Flat Cable – NA2	1
16	Main Board Spacer	1
17	Stud – Bracket – Interface	2
18	Interface Board Bracket	1
19	Philips Screw with Flat Washer – M3 x 25	1
20	Stud – Main Board	1
21	Philips Screw with Flat Washer – M4 x 6	1
22	Philips Screw – M4 x 8	2
23	Philips Screw with Flat Washer – M3 x 6	2

Table 3.1.3.   Set for Part 1B.

3.1.4 SET FOR PART 1C

No.	Description	Qty.
24	Interface Board Stud	2
25	Main Board Stud – Long	4
26	Philips Screw – M4 x 8	2
27	Philips Screw with Flat Washer – M3 x 6	4
28	Flat Cable – N865	1

Table 3.1.4.   Set for Part 1C.

3.1.5 PARTS FOR 1D

No.	Description	Qty.
29	Stud – 35mm	3
30	Philips Screw with flat Washer – M3 x 6	3
31	Philips Screw – M4 x 8	2

Table 3.1.5.   Set for Part 1D.

3.2   VIDEO I/F KIT TYPE-10 PARTS LIST

No.	Description	Qty.
32	Interface Board	1
33	Relay Harness	1
34	Stepped Screw – M2.6	2
35	Tapping Screw – M3 x 6	2

Table 3.2.1. Video I/F kit Type-10.

3.3 INSTALLATION PROCEDURES FOR INTERFACE KITS

NOTE: 1) The UC6 RIP Server is designed for all models of Digital Duplicators.

2) Numbers in parentheses ( ) in the installation procedures correspond to the part numbers in Tables 3.1 through 3.2.

3.3.1 MODEL C229 AND C232

NOTE:
The interface kit is originally installed for the Model C229, except for the Asian version machines. You must perform step 4 only to connect the controller if the kit is installed.

1. Remove the rear cover and right side panel of the Digital Duplicator.

2. Mount Printed Circuit Board (32) on connector CN102 of the MPU board using two M3x6 screws (35). Mount the cable (33) on the Connector Bracket using two stepped screws (34). Connect the other end to CN101 on PCB

3. Reinstall the right side panel and rear cover.

4. Remove the blinding cover in the right side panel.

   NOTE: Select A3 for paper size in initial setting (the default setting is Auto).

   The On-line key is enabled automatically when the controller and interface kit are installed.

CN102

Printed Circuit Board

Harness

Connector Bracket

Blinding Cover
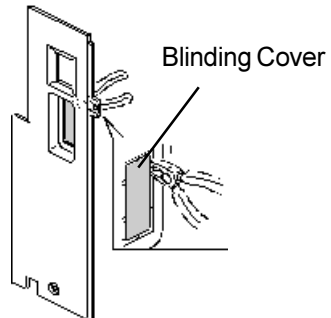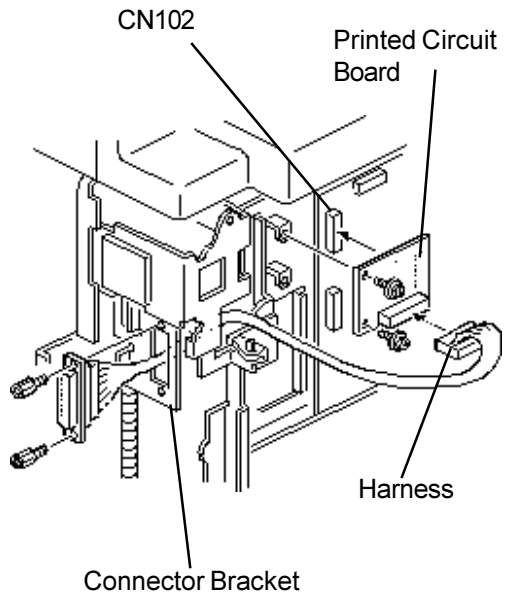
3.3.2 MODEL C231 AND C237
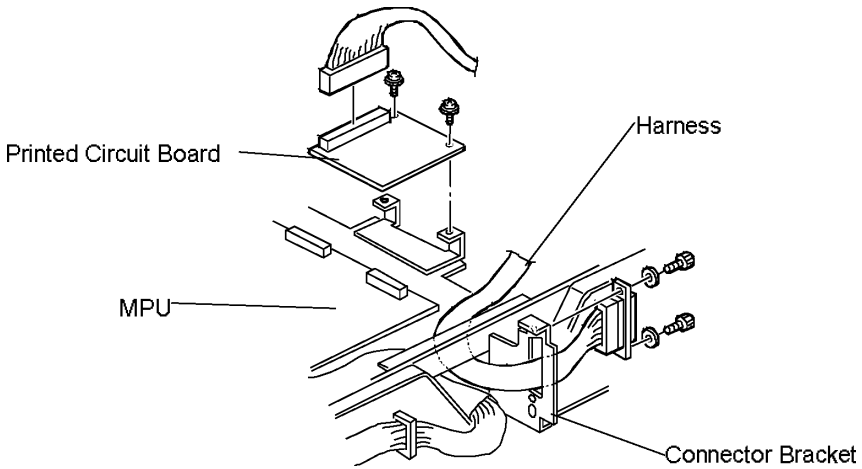
1. Turn off the main switch and unplug the power cord.

2. Remove the upper rear cover.

3. Remove the MPU cover.

4. Connect CN102 of the printed circuit board (32) to CN110 of the MPU board and secure it using two screws (35).

5. Connect the harness (33) to CN101 of the printed circuit Board, and secure it to the connector bracket using two stepped screws (34).

6. Remove the communications port cover plate (blinding cover) from the upper rear cover.

7. Reinstall the MPU cover.

8. Reinstall the upper rear cover.

NOTE: The On-line key on the operation panel is enabled automatically when the controller and interface kit are installed.

3.3.3 MODELS C228/C223/C218/C210/C219

1. Remove the rear cover and front side panel of the Priport.

2. Mount the Shielded Cable Interface (2).

a) Mount a Stud (17) on the rear chassis of the Priport.

b) Thread the Shielded Cable (4) from rear chassis to the front chassis under the Priport body.
   Note for the VT3600/3500/2600: first remove the bottom plate, then reattach it.

c) Attach the Shielded Cable (4) on the Stud (17) using two M4x8 Screws (26).

> **NOTE:**
>
> Before mounting Printed Circuit Board Interface (2), attach one end of the Ribbon Cable (12) to the IPU board ribbon cable connector.

3. Mount the Printed Circuit Board Interface (2).
   a) Mount a Stud (20) on the Priport.
   b) Mount the Bracket (18) on the chassis using a M4x6 screw and washer (21).
   c) Attach the Printed Circuit Board (2) using 2, M3x6 screws (27). Attach the bottom of the right hand side of the Printed Circuit Board to the Spacer (16) using a M3x25 screw (19).
   d) Attach the connector of the Printed Circuit Board (2) to the Shielded Cable (4).
   e) Attach free end of the Ribbon Cable (21) to the Printed Circuit
   f) Board Interface (2).
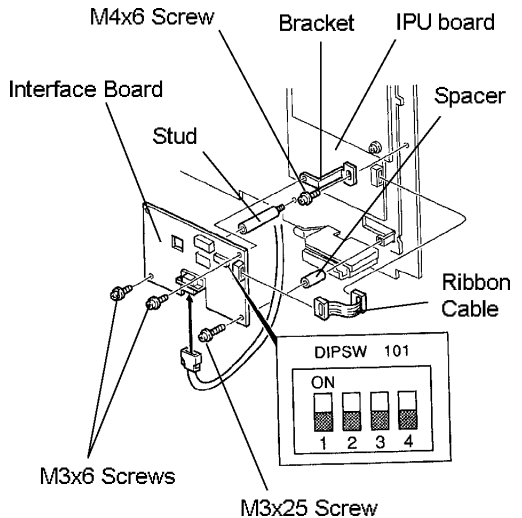
4. Set the Printed Circuit Board interface switches.
   a) Set all switches on DIPSW 101 to OFF
5. Reattach the side cover panels of the Priport.
   a) Pop out the communication port cover plate from the lower center of the rear cover panel.
   b) Reinstall the rear and front cover panels.
6. Connect the Priport and AC power to the Controller.
   a) Connect a Video Cable between the Priport and the Controller.

Communication port cover
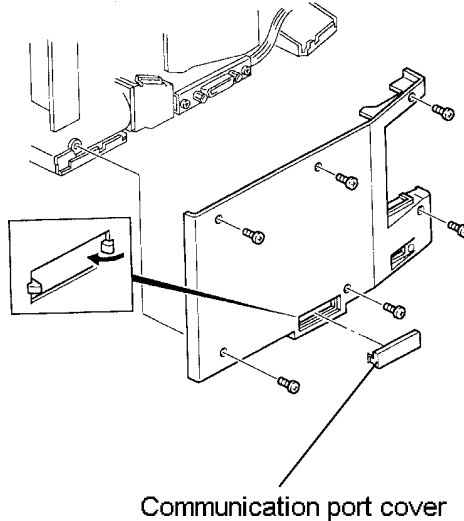
   b) Connect an AC cable to the Controller.
7. Set SP Mode 1 (for the Online Key On/Off) to ON.

3.3.4 MODEL C222

1. Remove the rear cover and front side panel of the Priport.
2. Mount Shielded Cable Interface (4).
3. Mount Printed Circuit Board Interface (2).

   a) Remove the three screws attaching the mainframe MPU Board to the chassis (two screws upper and lower side of CN109, and one screw lower side of the CN111).

   b) Replace the screws removed in a) above with Studs (29).

   c) Connect one side of the Ribbon Cable (12) to the connector of Mainframe MPU Board.

   d) Attach the Printed Circuit Board Inter face (2) to the Studs (29) using M3x6 Screws (27).

   e) Connect the free end of the Ribbon Cable (12) to the CN102 connector of Printed Circuit Board Interface (2).

   f) Set all switches of DIPSW 101 on the Printed Circuit Board Interface (2) to OFF.

4. Pop out the communication port cover plate from the lower center of the rear cover panel. Reinstall the rear and front cover panels.
5. Set SP Mode 2-1 (Online Key On/Off) to ON

Studs

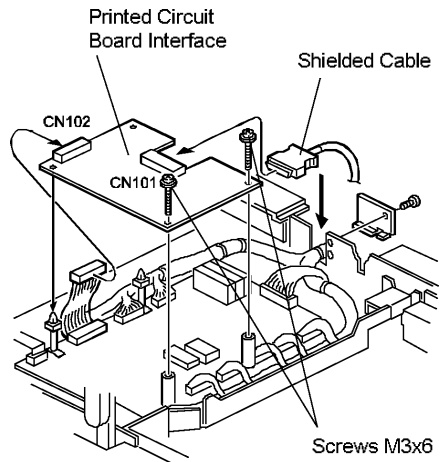Shielded Cable

Printed Circuit Board Interface
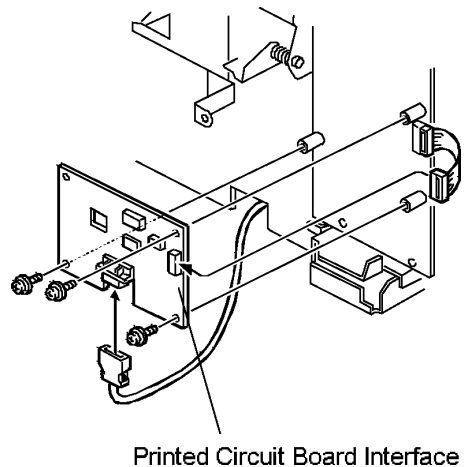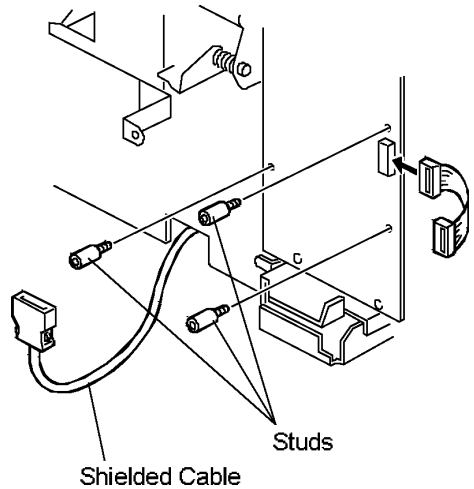
3.3.5 MODEL C226

1. Remove the top cover of the Mainframe MPU Board.

2. Remove screws attached to the two studs on the top of MPU Control Board.

3. Connect the free end of the Ribbon Cable (12) to the connector marked CN110 located at the left edge of the MPU Control Board.

4. Position the MPU Control Board and Printed Circuit Board Interface (2) on the Studs.

5. Attach the Printed Circuit Board Interface (2) to the MPU Control Board, taking care to align the left edge with the locking spacers.
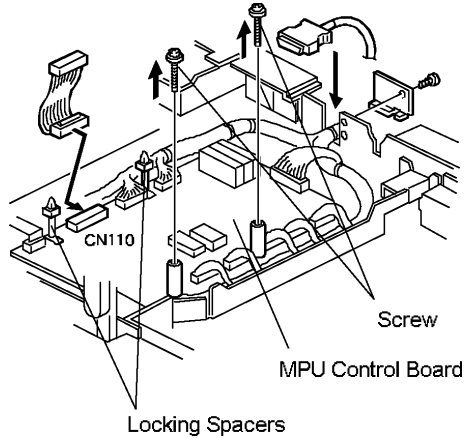
6. Attach the right side edge of the Printed Circuit Board (2) to the mounting Studs on the MPU Control Board using three M3x6 screws.

7. Connect the free end of the Ribbon Cable (12) to the connector marked CN102 on the Printed Circuit Board Interface (2).

8. Attach the Shielded Cable to the Printed Circuit Board Interface (2).

9. Remove the rear cover panel of the Priport.

10. Remove the Plate attached to the channel for the Main Harness in the rear upper of   the Chassis.

11. Route the Shielded Cable (4) along side the Main Harness.

12. Reattach the Plate.

13. Mount the Studs (24) on the rear chassis of the Priport.

14. Mount the Bracket end of the Shielded Cable (4) onto the Studs (24) using two M4x8 screws (26).

15. Tie the Shielded Cable (4) to Main Harness using the Tie Band (13).

16. Pop out the communication port cover plate from the lower center of the rear cover   panel.

17. Reinstall the rear cover panel of the Priport.

18. Set all switches on DIPSW 101 of the Printed Circuit Board Interface (2) to OFF.

19. Reinstall the top cover of the Priport.

20. Set SP Mode 1 (Online Key On/Off) to ON.

Plate

Tie Band

Studs

Bracket
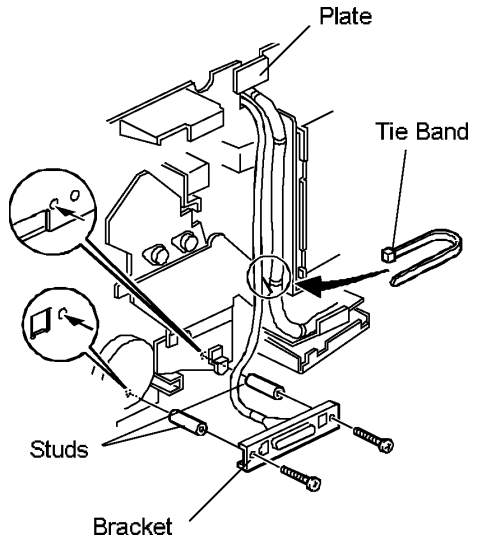
3.3.6 MODEL C224

1. Remove the rear and front covers of the Priport.
2. Mount Shielded Cable Interface (4).
   a) Mount two Studs (24) on the rear chassis of the Priport.
   b) Remove bottom plate of the Priport.
   c) Thread the Shielded Cable (4) from the rear chassis to the front chassis under the Priport body.
   d) Reinstall the bottom plate.
   e) Mount the Bracket of the Shielded Cable (4) on the Studs (8) using two Phillips Screws M4x8 (26).
3. Mount Printed Circuit Board Interface(2).
   a) Mount four Studs (25) on the front chassis of the Priport.
   b) Connect the Ribbon Cable (12) to the MPU board of the Priport.
   c) Attach the Printed Circuit Board Interface (2) to the Studs (25) using four M3x25 Screws(20).
   b) Connect the free end of the Ribbon Cable (27) to CN102 of the Printed Circuit Board Interface (2).
   e) Connect the Shielded Cable (4) to CN101 of the Printed Circuit Board Interface (2).
   f) Set all switches on DIPSW 101 of the Printed Circuit Board Interface (2) to OFF.
   g) Set DIPSW 103-8 of the Mainframe MPU Board (Online On/Off) to ON.

Stud

Flat Cable

Shield Cable

Printed Circuit Board
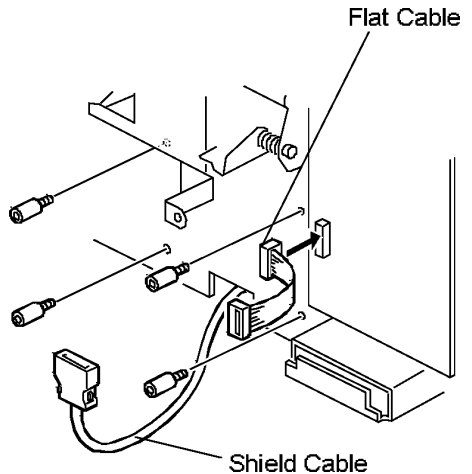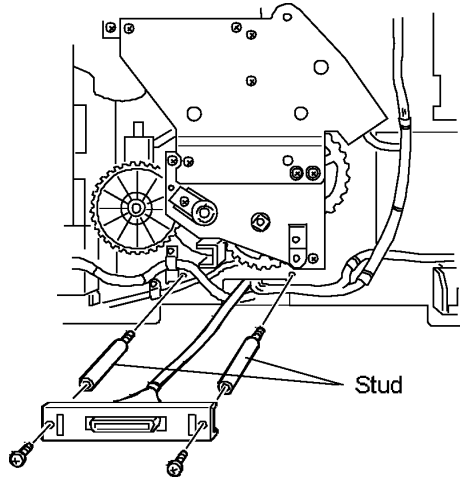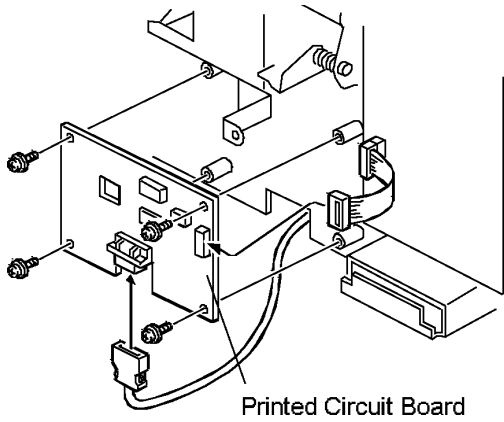
4. Pop out the communication port cover plate from the lower center of the rear cover panel.

5. Reinstall the rear and front cover panels of the Priport.

4. TROUBLESHOOTING

4.1 BASIC STEPS FOR TROUBLESHOOTING

When it has been established that the UC6 has a problem, the following items and information are necessary to beginning the troubleshooting section.

4.1.1 EQUIPMENT

The following items are needed, as well as a working Digital Duplicator.

1) Cables for operational verification of the UC6.
2) 1, Digital Duplicator-to-UC6 data cable.
3) 1, ethernet cable connected to a computer or hub of a network.
4) 1, Monitor, Keyboard and Mouse.

4.1.2 INFORMATION

The following information should be collected before troubleshooting begins:

- Serial number of the UC6.
- The name and version of the UC6 PPD,
- A print sample showing the problem,
- The printer settings of the computer, and
- The name and version of the application software that generated the page.

4.1.3 POWERING UP THE UC6

Connect a monitor, keyboard and a mouse to the UC6 in addition to the ethernet cable, data cable and power cable before booting up.   The boot up sequence can be viewed for any obvious errors occurring on the UC6 and the print process can be viewed for easier troubleshooting.

4.2 TROUBLESHOOTING FLOW CHART

Use the following flow charts to help troubleshoot the UC6 RIP Server.

FLOW CHART

1. Does the UC6 print.　Yes ➡ 2.　No ➡ 11.

2. Image is wrongly positioned ➡ 3.

   Image is printing garbled ➡ 4.

   Image is blank ➡ 8.

3. a. Ensure the correct paper tray is selected. ➡ 9.
   b. Check LCD of Duplicator is displaying correct paper size and not *. ➡ 10.

4. Has a postscript message displayed. Yes ➡ 5.　No　➡ 7.

5. Ensure that you have selected "Binary" in the output options of the printer driver. Depending on the operating system the Binary setting is either located in the output options or under the advanced section of the postscript tab.　No ➡ 6.　Yes ➡ 7.

6. Change setting and reprint.　If image is still garbled ➡ 20.

7. Delete the driver from the computer you are printing from.　Ensure that the PPD file has been deleted from the system folder.　Re installed printer driver and try again. Does the UC6 print? Yes.　No ➡ 20.

8. Ensure the correct paper tray is selected. ➡ 9.

9. Paper tray selection described as follows:-

- Auto Select　　　　　This tray selection prints from the duplicators default tray or from the last tray that was selected.

- Paper Table Auto　　This tray selection ignores the paper size that is sent by the printer driver and uses whatever paper is in its paper table.

  e.g. If the paper in the paper table is A3 and the print image that is sent is A4 the image will cut at the top left of the A3.　If the image sent is A3 it will print correctly.

- Paper Table Manual　This tray selection will use the paper size that is sent by the printer driver and position the image according to the size sent.

  e.g. If the paper in the paper table is A3 and the image sent is A4 the image will be positioned at the top of the A3 in the middle so that when you put A4 paper in it will print correctly.

  THIS TRAY IS SELECTED WHEN PRINTING ON CUSTOM SIZE PAPER.

- Upper Tray   This tray is selected when you have front loading options on the Duplicator and it feeds paper from the top front loading tray.

- Lower Tray   This tray is selected when you have front loading options on the Duplicator and it feeds from the bottom front loading tray.

- Paper Table Auto PT   This tray selection ignores the paper size that is sent by the printer driver and uses paper size detected on the paper table.

     THIS TRAY CAN ONLY BE USED IF YOU HAVE FRONT LOADING PAPER TRAY OPTIONS.

- Paper Table Manual PT   This tray selection will use the paper size that is sent by the printer driver and position the image according to the size sent.

     THIS TRAY IS SELECTED WHEN PRINTING ON CUSTOM SIZE PAPER ONLY ON A DUPLICATOR THAT HAS FRONT LOADING PAPER TRAY OPTIONS.

     Does the UC6 print. Yes. No ➠20.

10. Adjust the paper wings on the paper table of the duplicator or select the correct paper tray in the driver for custom size paper. ➠ 9.

11. Are all the cables connected correctly. Yes ➠ 12. No ➠ 15.

12. Is the green LED near the ethernet cable connection on the UC6 ON? Yes ➠ 13. No ➠ 16.

13. Are the LED's on the network hub on showing good connections. Yes ➠14. No ➠20.

14. Reset the UC6 and the computer you are printing from. Does the UC6 print? Yes. No ➠18.

15. Connect correctly and reprint.

16. Switch UC6 off and disconnect from the mains. Remove cover. Is the network card correctly inserted into its PCI slot on the motherboard? Yes ➠18. No ➠17.

17. Reinsert network card and reboot UC6. Does the UC6 print? Yes. No ➠20.

18. Swop and check the network cables. Does the UC6 print. Yes. No ➠19.

19. Insert new network cables or refer to the hub manufacturer.

20. CONTACT YOUR SUPPLIER WITH ALL RELEVENT INFORMATION DETAILED IN SECTION 4.4

4.3 COMPONENT TROUBLESHOOTING

Once you have positively identified a problem with the UC6, it will be necessary to troubleshoot the problem to the component level by checking correct insertion of components and cables.

4.3.1 IDENTIFYING THESE COMPONENTS

A problem or fault can be traced to one of the components of the UC6 being dislodged from its mounting. As a general rule, it is best to check the components in the following order:

1)   The Network Card

2)   The I/O Parallel Card

3)   The PC Guardian Card

4)   The Video Interface and 16MB SIMM

5)   The Ribbon Cables

IMPORTANT: If operation of any particular component cannot be verified – do not attempt component-level repair send entire UC6 back to your supplier.

4.4 COLLECTING INFORMATION FOR A PROBLEM REPORT

The Problem Report should include the following items:

- A Diagnostic Test Page printed by the UC6.

- The name of client computer manufacturer, and the model.

- The model name and number of the Digital Duplicator.

- The serial number and network name of the UC6.

- The name and version of the PPD being used.

- The name and version of the application software (i.e., Microsoft Word 97, Adobe PageMaker, etc.).

- The paper size and orientation selected in the application software's Print menu and the paper tray selected.

- A sample printout showing the problem

5. DISASSEMBLY / ASSEMBLY

5.1 REQUIRED TOOLS AND PRECAUTIONS

- Antistatic wrist strap.

- #1 Phillips screwdriver.

DANGER

The UC6's power supply becomes hazardous with the chassis opened. It exposes you to severe electrical shock if you do not disconnect the power cord before opening.

CAUTION

The electronic components in this unit can be damaged by static discharge. Please ensure that you are properly grounded before touching any portion of the electronics. Also, touch the chassis with your finger before connecting test cables, setting switches or reattaching components.

5.2 DISASSEMBLY / ASSEMBLY PROCEDURES

5.2.1 PREPARATION

1. Identify a static-safe area for storage of the electronic components to be removed.

2. Disconnect the power cable.

5.2.2 REMOVING THE CASE COVER

1. Disconnect all the cables plugged into the back of the UC6.

2. Use the #1 Phillips screwdriver to remove the 4 self tapping screws located on the back panel of the UC6. Shown in Figures 1a and Figure 1b.

    Set the screws and feet aside for later re-assembly.

3. Slide the outer cover away from the front and off the UC6.

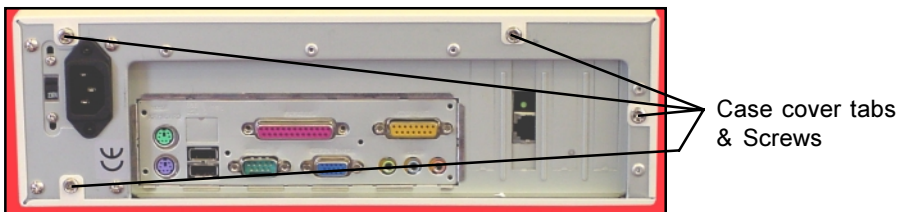4. Set cover and screws aside for reassembly later.
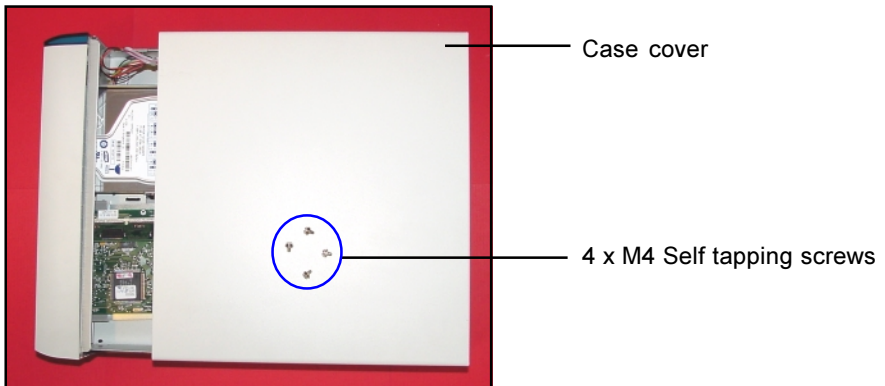
Figure 1a

Figure 1b

5.2.3 REMOVING THE INTERNAL INTERFACE CABLES

1. Remove the outer cover (see Section 5.2.2)

2. Unplug the ribbon cable connected to the parallel connector on the interface board and unplug the opposite end from the PCI Parallel Card. Note: When reassembling, ensure that the ribbon cables pin 1 (marked by the red stripe on the cable is connected to pin 1 on the parallel card (marked on the opposite side of the card by a square soldering point.)   See blue circles drawn on figures 2a and b.
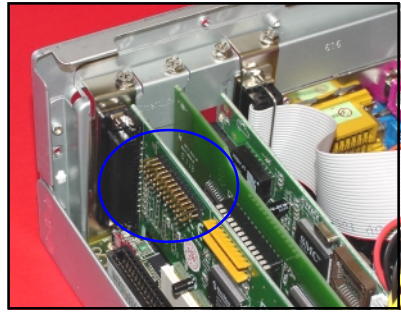

Figure 2a

Figure 2b

3. Set cable aside for reassembly later. See figure 2c.

4. Unplug the other ribbon cable connected to the interface board.

5. The opposite end of this ribbon cable (DB25 connector) is mounted on a bracket to the chassis of the UC6. Using a #1 Phillips screwdriver unscrew the self tapping screw holding the bracket on and remove the cable. See blue circles in figures 3a and b.
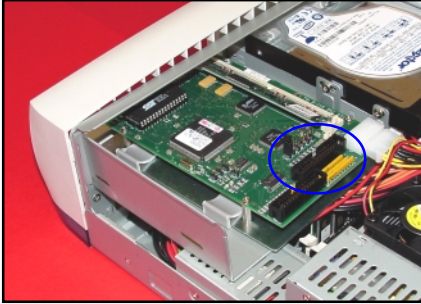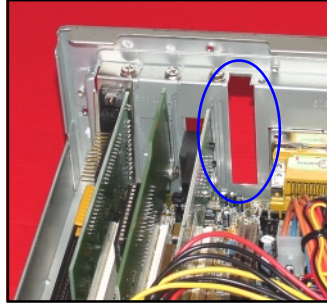

Figure 3a

Figure 3b

6. Set cable with bracket and screw aside for reassembly later. See figure 3c.

Figure 3c.

5.2.4 REMOVING THE INTERFACE PCB.

1. Remove the case cover (see Section 5.2.2)

2. Remove the interface cables (see Section 5.3.2)

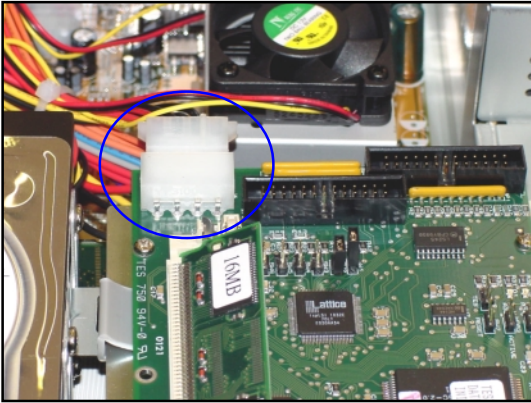3. Unplug the power supply to the interface board. See blue circle on figure 4a.

Figure 4a

4. Locate the 5 nuts on the sides of the interface board. Use a pair of pliers to unscrew the nuts. Set nuts aside for reassembly later.

5. Lift the interface board off the standoffs and set aside on a antistatic surface for reassembly later.

5.3 UPDATING THE UC6

5.3.1 UPDATE INSTRUCTIONS

This procedure details updating of, PPD files, Postscript Interpreter and firmware.

NOTE: All three items are updated as one update.

5.3.1.2   PREPARE THE UC6.

<div align="center">

DANGER
</div>

The UC6's power supply becomes hazardous with the chassis opened. It exposes you to severe electrical shock if you do not disconnect the power cord before opening.

<div align="center">

CAUTION
</div>

The electronic components in this unit can be damaged by static discharge. Please ensure that you are properly grounded before touching any portion of the electronics. Also, touch the chassis with your finger before connecting test cables, setting switches or reattaching components.

5.3.1.3   UPDATING PROCEDURE

1. Obtain latest update from your supplier. This is supplied as a bootable floppy disk. NOTE: It is important to read the readme text document included with the update as this will contain any specific instructions regarding the particular update version.
   If you download the update files from the internet you will be required to make a bootable floppy disk to copy the files onto.

   Making a Bootable Floopy disk:-
   a. Insert a NEW floppy disk into the floppy drive of a Windows 98 computer.
   b. Double click on "My Computer".
   c. Click ONCE on the "3½ Floopy (A:)" then right click.
   d. Select "Format" from the menu options.
   e. Under the "Format Type" select "Full".
   f. Under "Other Options" select "Display Summary when finished" and "Copy system files".
   g. Click "Start"
   h. Once complete it is important to check there are no bad sectors on the disk. This information is in the "Display Summary".

   The update files will be zipped. It is VERY IMPORTANT that when the file is unzipped the directory structure of the files is maintained. This option will be selectable in the zip program.

2. Remove the case cover of the rip as shown in Section 5.2.2. The firmware section of the update is located on the flash eeprom on the interface PCB. The interface PCB is circled in blue on figure 5a.

Figure 5a

3. Reconnect all the cables to the back of the UC6. Ensure the UC6 and Digital Duplicator are in good functioning order. Print a windows test page from a client PC and ensure it has printed correctly.

4. Power down the UC6 and the Digital Duplicator.

5. Locate the flash jumper. This is located next to the flash eeprom on the interface PCB. Put the flash jumper on. Ensure you have an antistatic wristband on. See blue circle on figure 5b.

6. Put the jumper into the on position. NOTE: The interface PCB is mounted on a L-shaped metal bracket which blocks the view from the front. This is not shown in figure 5b. The flash jumper is accessed from the top of the UC6 unit.

7. Insert the updating floppy disk into the floppy disk drive of the UC6. See in figure 5c.

Figure 5b   Figure 5c

8. Switch on the Digital Duplicator and the UC6. Ensure the Duplicator has no errors.

9. The UC6 will boot from the floppy disk and copy the update files onto the UC6. After approximately 1 minute the floppy disk drive LED will stop flashing. Check that the interface RED LED is not flashing. NOTE: There are two LEDs. One LED is the power and this is on continuously when the UC6 has power and the other is the Activity LED which will flash when it is performing a function.

10.Eject the floppy disk and press the reset button. Wait for approximately 1 minute. At this stage the UC6 will automatically update the firmware. The Activity LED on the interface PCB will come on for approximately 30 seconds then go off and flash rapidly.

11.Turn off the UC6 by pressing the reset button wait 6 seconds and switch the power off.

12.Return the flash jumper to the off position. Note: Ensure you are adequately protected against static when touching the interface PCB.

13. Switch the UC6 back on.

14. Using #1 Phillips screwdriver and short the pins on the interface PCB labelled TEST, located near the LEDs.

15. A test page should print out showing the version of firmware that has been loaded.

16. Switch off the UC6 and reassembly the case cover and connect the cables.

NOTE: The update procedure must be followed exactly. If anything happens other than what is stated in the steps above then the update has probably failed and will need to be repeated.

CLIENT COMPUTERS

After updating the UC6 all UC6 drivers installed on client computers will have to be updated.

On a PC delete the driver in the print manager. Run a search for the PPD on the PC to make sure it has been deleted. Reinstall the new printer driver located on the UC6.

On an Apple Mac copy the new PPD into the printer descriptions folder replacing the old one.

5.4 MEMORY REPLACEMENT

The UC6 interface PCB is fitted with 16mb RAM as standard. This is more than sufficient to image an A3 at 600 dpi. The only event that would lead to memory replacement would be if the factory supplied memory were to fail.

RAM Installed: 16mb 72 pin simm.

5.4.1 REPLACEMENT PROCEDURE

1) Turn the UC6 off and disconnect it from the mains.

2) Remove the case cover (see section 5.2.2).

3) Locate the interface RAM SIMM. Remove the existing RAM SIMM by easing apart the side clips on the SIMM socket.

4) Insert the new RAM SIMM. Ensure the correct orientation and make sure the SIMM is correctly held by the retaining clips.

5) Replace the Case Cover.

16 MB RAM SIMM

Slide clips secure SIMM
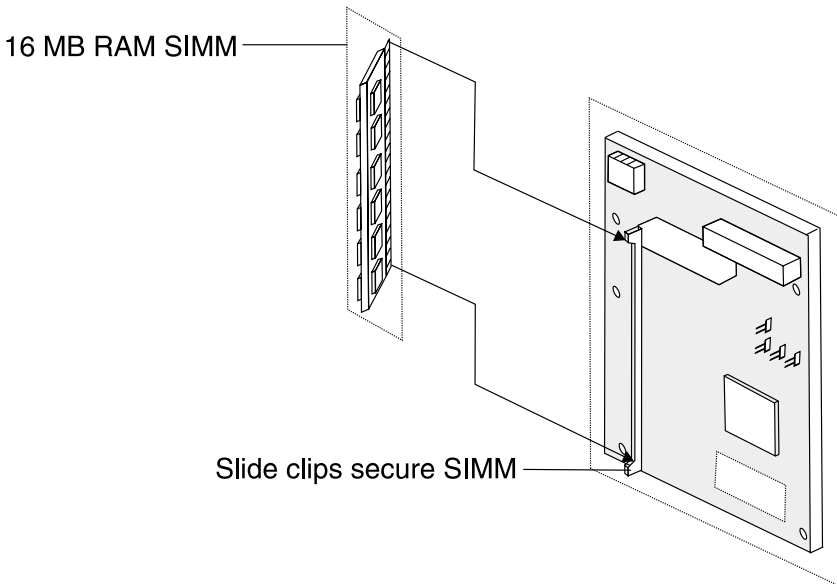
6. PARTS LIST

6.1 UC6 RIP SERVER
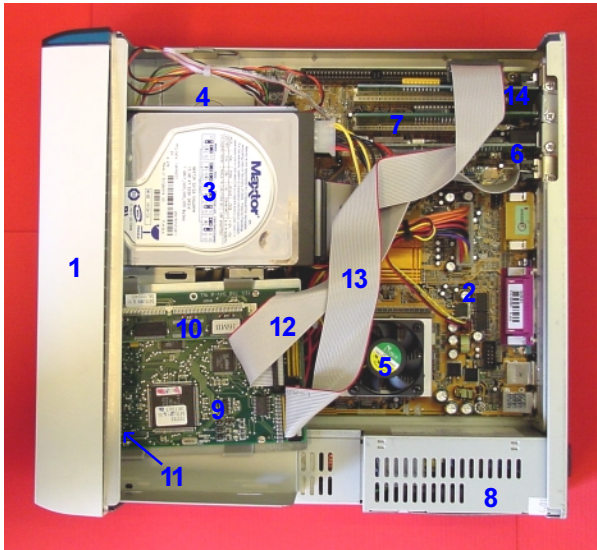
Item No.	Part No.	Description	Qty
1	VU8S 01 001	UC6 Outer Case	1
2	VU8S 01 020	DFI-CM33-EC Motherboard	1
3	VU8S 01 070	15 GB Maxtor Hard Drive	1
4	VU8S 01 060	1.44" Floppy Disk Drive	1
5	VU8S 01 030	500mHz processor	1
6	VU8S 01 085	10/100 mBit PCI network card	1
7	VU8S 01 090	PC Guardian 2000 Card	1
8	VU8S 01 017	220v/150v swtichabel power supply	1
9	VU5S 05 001	Interface PCB	1
10	VU5S 05 005	16MB RAM SIMM	1
11	VU5S 05 010	Flash Eeprom	1
12	VU8S 02 400	Internal ribbon to DB25 cable	1
13	VU8S 15 025	Ribbon interface to parallel card cable	1
14	VU8S 01 080	Parallel Card	1

6.2 PC CONTROLLER I/F KIT TYPE-10

Model C237
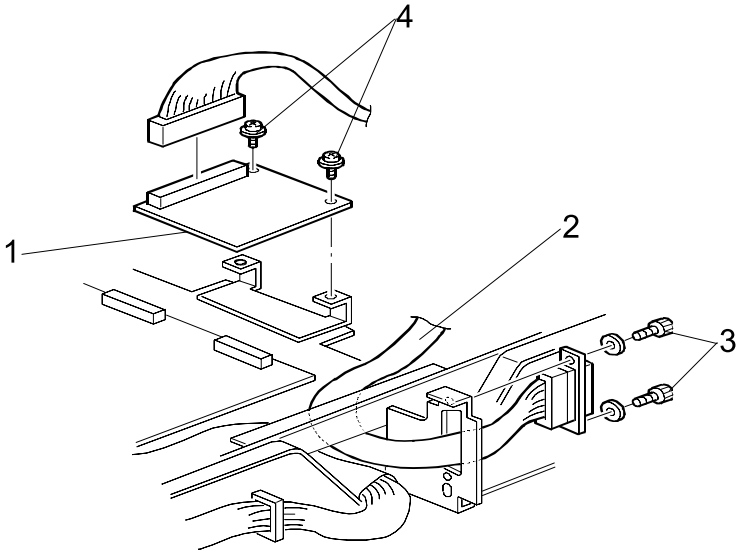
Index No.	Part No.	Description	Q'ty Per Assembly
1	C580 1011	Interface Board	1
2	C580 1500	Relay Harness	1
3	C580 1550	Stepped Screw – M2.6	2
4	0451 3006B	Tapping Screw – M3 x 6	2

NOTE: **For Model C235 the only part required is the Relay Harness Part number C580 1500**