

REFERENCE GUIDE

TABLE OF CONTENTS

Introduction.....page 1

SECTION 1 General description of internal components.....pages 3& 4

SECTION 2 Functional Description Portrait Studio Components

- HP-6 Printer Description.....pages 5 - 8
- HP-5 Printer Description.....pages 9 - 12
- RBA7 Bill Acceptor.....pages 13 - 15
- Camera Panner.....page 16
- Computer Description..... pages 16 & 17
- System Software.....pages 17

SECTION 3 User Reference Material

- Maintenance Menu Reference.....pages 18
- System Configuration.(SYSCFG)Editing.....page 19
- Accounting Picture Reference.....pages 20 - 22
- Collecting and Accounting.....page 23

SECTION 4 System Setup Procedures

- Adjusting the Image Quality.....page 24
- CP 454 Camera Setup Procedure.....pages 25 & 26
- Setting the On / Off Timer.....pages 27 & 28
- Sequence of Events During a Portrait Transaction.....page 29

SECTION 5 Troubleshooting Flowchart.....pages 30 - 34

Introduction to Troubleshooting and Tech Support

A. Introduction

The most useful troubleshooting aid that any service representative can possess is **symptom recognition**. In order to properly **interpret** and **diagnose** when a booth is not operating properly it is first necessary to understand how that booth behaves when it is operating correctly.

The purpose of this guide is to provide you with the necessary informational tools to recognize a problem and if not correct the situation, competently convey the symptoms to the Technical Support Department.

Remember that you are the support technicians **eyes and ears**. Therefore it is essential that all the information you relay must be done so in a clear and concise manner. The following steps will help us in minimizing the downtime of any problematic booth.

- 1) When you first arrive on site, before taking any corrective action document any **symptoms** you observe. No matter how insignificant they may appear at the time.
- 2) Reference the observed symptom to the **Troubleshooting Flowchart** in the users guide. Adhere to all the references and proceed in a step by step manner documenting each step as you go.
- 3) If it becomes necessary to contact the Technical Support Department please provide the following information
 - A) Booth number, type and location.
 - B) The initial reason for the service call and your initial observations.
 - C) Any actions you have taken up to the point of the call.
 - D) Any changes in the symptoms that may have resulted from any actions you have taken.

Introduction to Troubleshooting and Tech Support

B. Safety

You will at times be required to work on the booth while it is powered up. It is recommended that you remove any rings or bracelets when reaching into confined areas where cabling is present or when plugging in or unplugging any power connectors.

- ◆ Pay particular attention when working around the backs of the cameras or the bill acceptor. Also ensure to power the printer down when removing paper jams.
- ◆ Pay attention to power indicators on the monitors, bill acceptor, computer and the printer.
- ◆ Ensure to power off any equipment prior to unplugging it. This can help to prevent equipment damage.

Section 1

PORTRAIT STUDIO GENERAL
DESCRIPTION

Power requirements

120 Vac 60 Hz

15 amp. Dedicated Ckt.

Input circuit breaker: 120 Vac 15 AMP.

Printer : Hewlett Packard HP-6 (new booths)
HP-5 (existing booths)

Computer: Pentium Processor
Disk Drive 1.44 3.5"

Bill Acceptor: RBA-7 120 Vac input.
12 Vdc derived for motor control
5 Vdc derived for logic circuitry

Monitor: Color 14" Quantity 3

Cameras: Panasonic 24 Vac or 12 Vdc input power.
Quantity 2 1 for portrait
1 for scanner

Camera Panner 6 Vdc selected at the yellow switch on the panner transformer.
Outlet # 4 on the power panel.

LS600 Line conditioner: Provides a stable 120 Vac line voltage to the computer.

PORTRAIT STUDIO GENERAL
DESCRIPTION

Programmable ON/OFF timer: Allows the operator to set site specific daily on/off times for the booth. This timing must correspond to the "daily service hours" setting in the SYSCFG.

Video amplifier: Receives a video input from the P.C. and provides a video output to each monitor.

Time delay relay: Allows a sufficient warm up time for the laser printer prior to the P.C., lighting and system peripherals powering up.

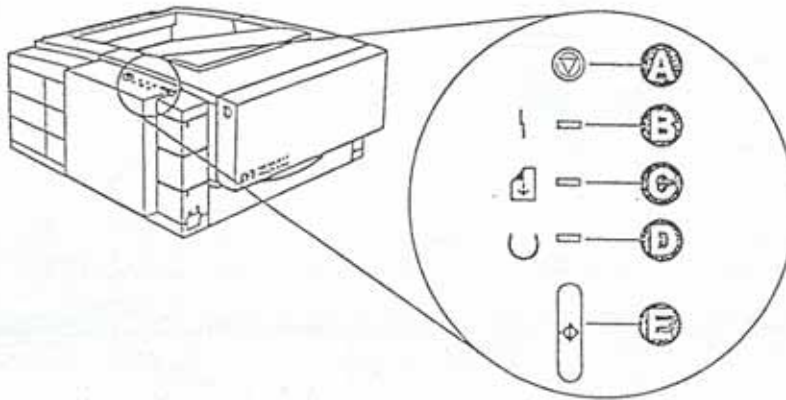
Audio Amplifier: Receives audio input from the P.C.. Provides up to 5 watts of volume controlled output to the speaker. The unit is also provided with an LED power indicator.

Multimedia amplifier / speaker: Booths shipped after 6/12/98 are installed with this upgrade as replacement for the Audio Amplifier. Volume control and a power indicator are provided onboard the speaker.

Hewlett Packard HP-6:

(Some booths may have an HP-5 printer. Both printers are labeled on the outside.)
Status lights and buttons. As viewed from the rear of the printer
(ref. fig. 1-1)

Fig. 1-1



A. Job Cancel Button. Cancels the job currently being printed. Clears the system memory and resets the printer to the "ready " state.

B. Error LED. Amber colored light. Check the following

- 1) Top cover is shut.
- 2) The toner cartridge is properly inserted.
- 3) There is no paper jammed in the printer.

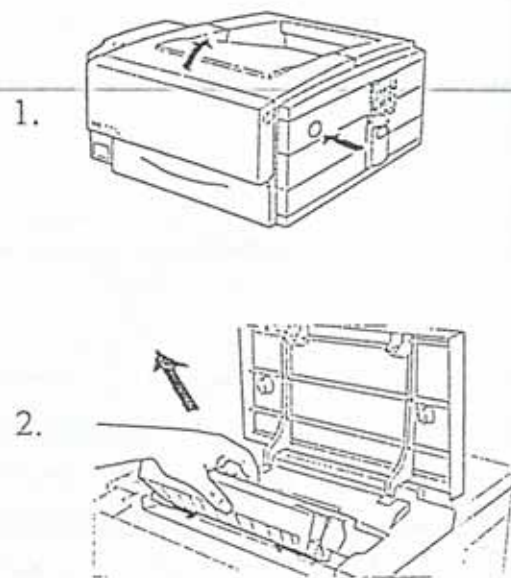
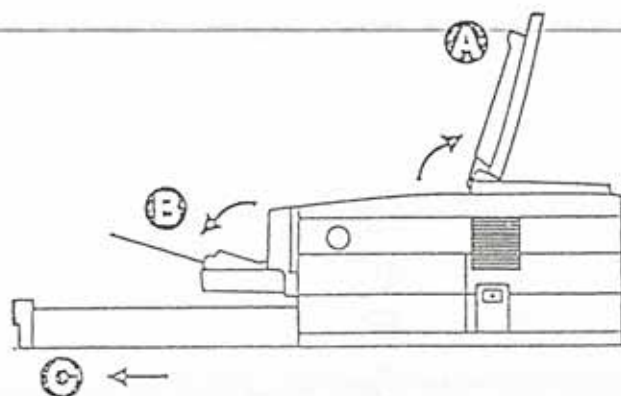
C. Data LED. Middle green light. When lit indicates the printer is receiving or processing a job.

D. Ready LED. The third green light. Indicates the system is on line and ready to process.

E. Go button. Press GO to resume printing after a printer pause or if unprinted data is still in the printer (ready and data lights will be illuminated). Go may also be used to print a demo page when the printer is in the ready state. Go may also clear certain errors.

PORTRAIT STUDIO FUNCTIONAL DESCRIPTION

Installing the Toner Cartridge. (see below figures)



1. From the rear of the printer open the top cover (A) the release push button is on the left side of the printer towards the front and near the top.
2. The toner cartridge is clearly labeled and can easily be removed by gently pushing it forward toward the booth.
3. Remove the toner from it's package and locate the protective sealing tape tab. Pull the tab until all the tape is removed. Approximately 15". Reinsert the cartridge by lining up the arrow on the cartridge with the arrow on the printer and slide it into place.

Installing Paper (ref. above)

1. From the front of the printer. Pull the paper tray (C) out.
2. Load the paper in ensuring the front left metal holder is over the edge of the paper. The tray holds 250 pages max.
3. Bordered paper must be inserted face down.

7

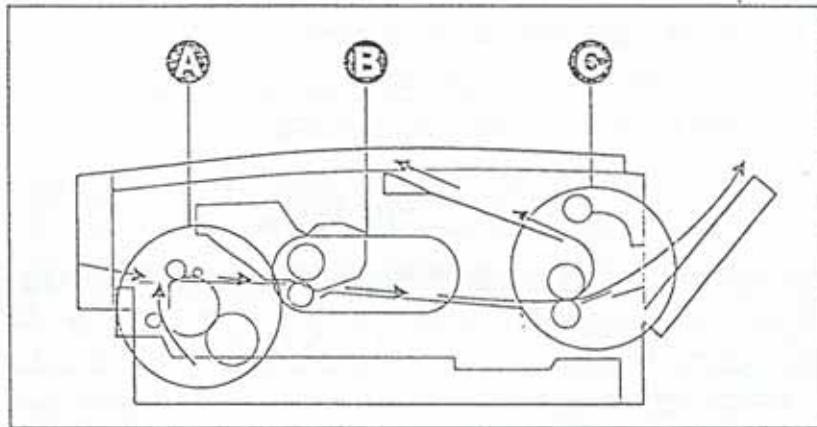
PORTRAIT STUDIO FUNCTIONAL
DESCRIPTION

Clearing a Paper Jam (fig. 1-2)

1. Paper jams occur in three places.

- 1) Tray 2 paper feed area. (A)
- 2) Toner cartridge area. (B)
- 3) Output area. (C)

Fig. 1-2



2. Paper feed area.

Slide the tray out. Remove any misfed paper. Make sure all the paper is under the metal tray clip. If the paper has entered the toner area it may be necessary to remove the cartridge. If the paper cannot be removed by way of the toner area carefully pull it to the right and then straight out.

3. In the toner area.

Open the top cover and remove any visible jams. If the paper has entered the output area locate the green release button at the rear of the printer. Push the button up and hold it as you pull the paper gently through the output roller.

4. Output Area

Follow the above procedure.

PORTRAIT STUDIO FUNCTIONAL DESCRIPTION

Clearing Paper Jams cont.'

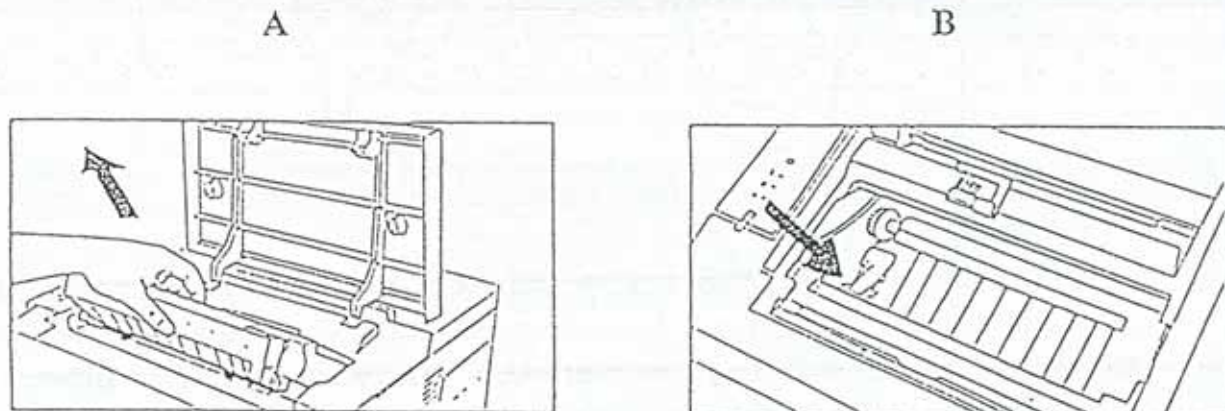
5. Removing pieces of paper (ref. fig. 1-3)

Ensure the toner cartridge is installed. Turn the printer on and off. This will work the pieces through the system. Open the top cover remove the toner cartridge and remove any visible pieces.

Many jams occur under the black plastic guide bar (see figure B). The arrow indicates the location of a single Philips head screw that holds this bar in place.

1. First you must remove the toner cartridge (A)
2. With the printer drawer out and the top cover open the location indicated in (B) will be on the right side of the printer.
3. Remove the screw and pull out the bar (it will snap out of place). Remove any visible paper and replace the bar and the screw.

Fig. 1-3



Bordered Paper VS Plain White Paper

Certain locations have encountered a problem with the bordered paper frequently jamming in the printers. There are several schools of thought on this subject. One being the bordered paper has a higher cotton content to it making it more susceptible to moisture. The other being the paper is curling while sitting in the package

While we have not determined the exact cause of the problem an apparent fix has been to replace the bordered paper with plain white.

9

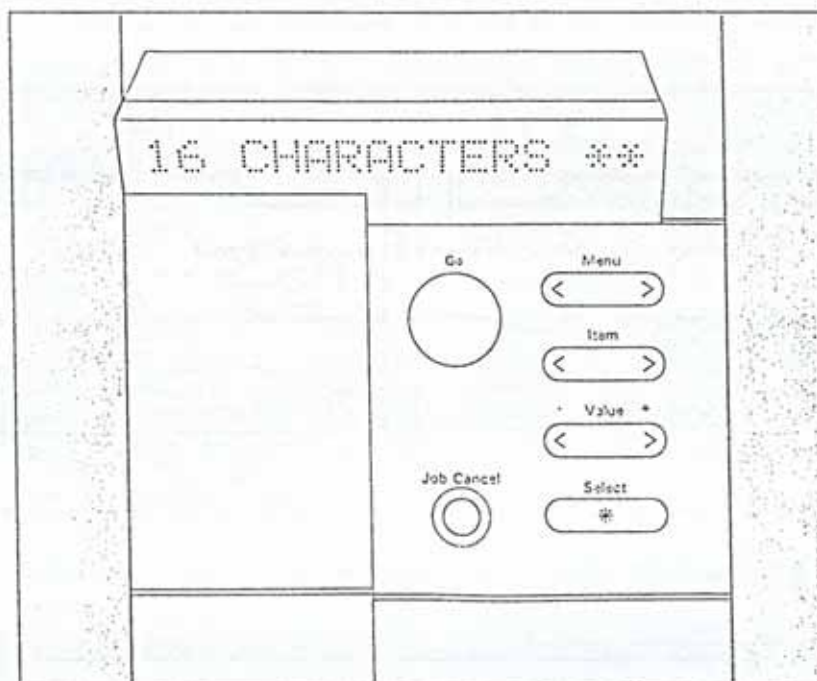
PORTRAIT STUDIO FUNCTIONAL
DESCRIPTION

Hewlett Packard HP-5 (ref. fig. 1-4)

Printer status Read out and buttons as viewed from the rear of the printer.

1. Go button. Controls the ON/OFF line function, prints data in the print buffer and clears print out messages.
2. Job Cancel button. Deletes a print job from the printer. A Job Cancel message will be displayed and the printer will be returned to a Ready state.
3. Menu. Cycles through the menu selections.
4. Item. Cycles through the selected menu's options.
5. -Value+ Will change the value of a selected menu option.
6. Select button. Saves a control panel setting selected. Also used when printing a test page.

Fig. 1-4

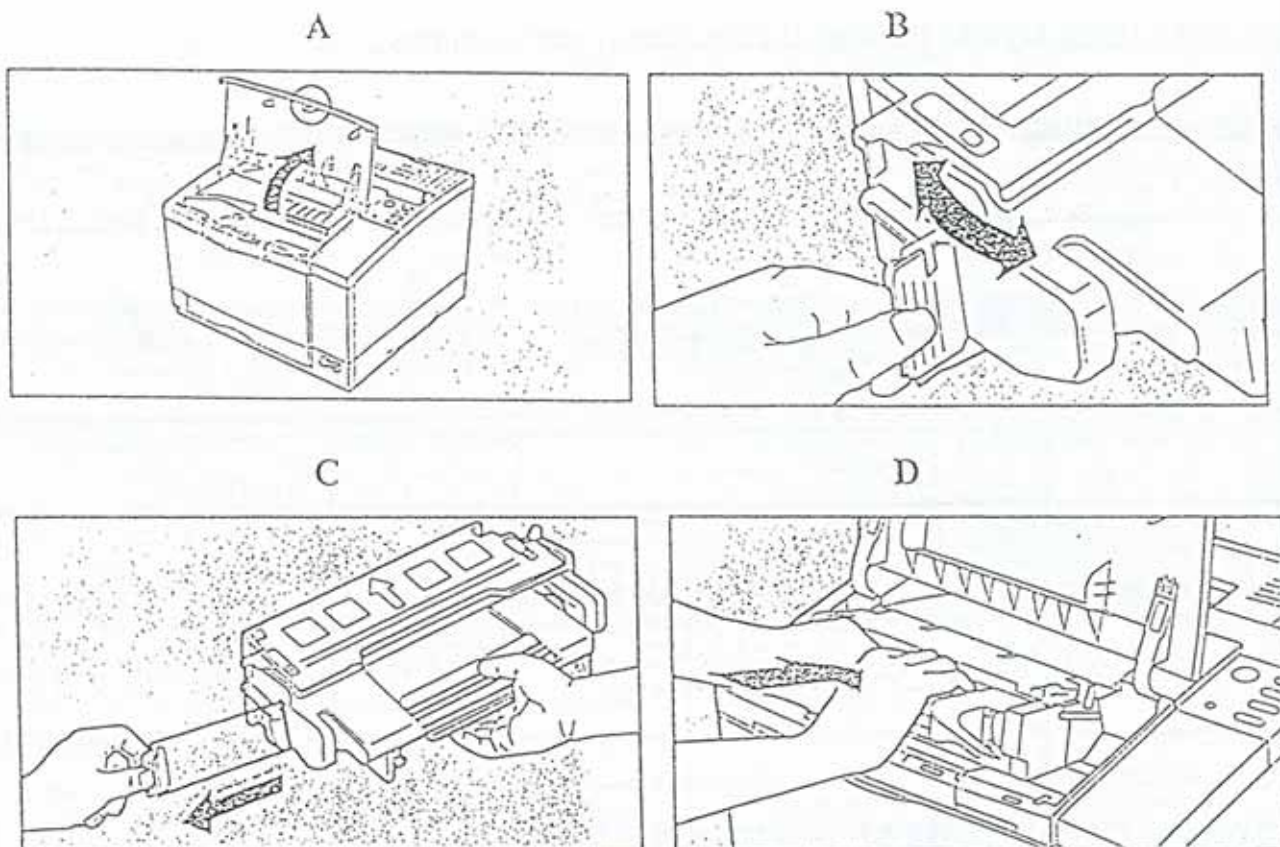


PORTRAIT STUDIO FUNCTIONAL DESCRIPTION

Installing toner cartridge. (ref. fig. 1-5)

1. From the rear of the printer open the top door (A) of the printer. Remove the cartridge by gently lifting up and pulling toward the booth.
2. Locate the sealing tape tab (B) on the cartridge and bend it back and forth until it breaks off. Pull the tab firmly until the entire length of tape (approximately 22") is removed.
3. Slide the cartridge in (C) place until it clicks in place.

Fig 1-5

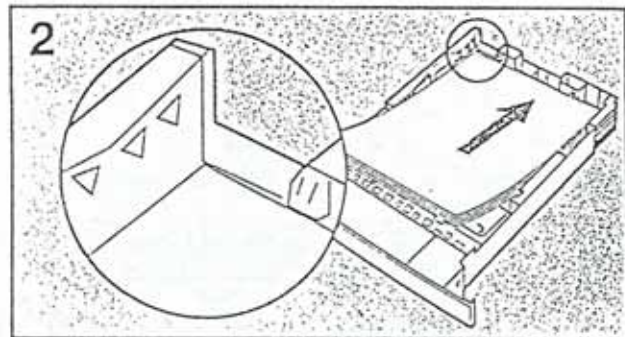
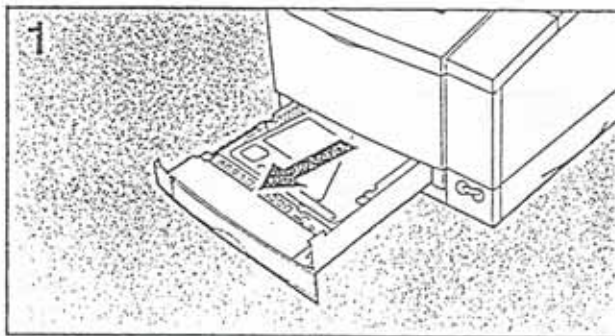


PORTRAIT STUDIO FUNCTIONAL DESCRIPTION

Installing Paper (ref. fig. 1-6)

1. From the front of the printer open tray 2.
2. Load in the paper ensuring that it is kept below the metal tab in the front left side of the tray
3. Slide the tray back in place.

Fig. 1-6

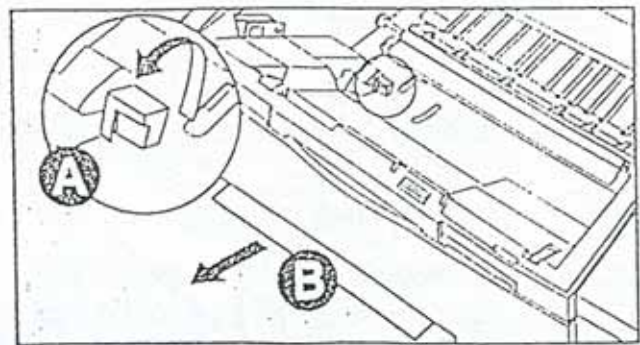
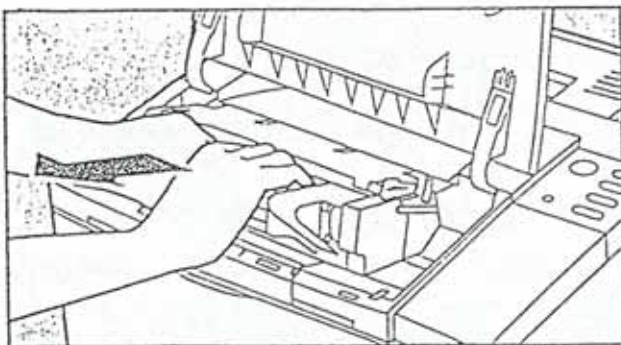


Removing Paper Jams. (ref. fig. 1-7)

1. Paper Pick up and Transfer Guide Paper Jams.

1. Remove Tray 2 (1) . Carefully pull the paper through the front of the printer.
2. If the paper is stuck in the tray opening open the top cover . Remove the toner cartridge and raise the green handle (A) on the inside right (if facing from the rear of the printer). Pull the paper through the front of the printer.

Fig. 1-7

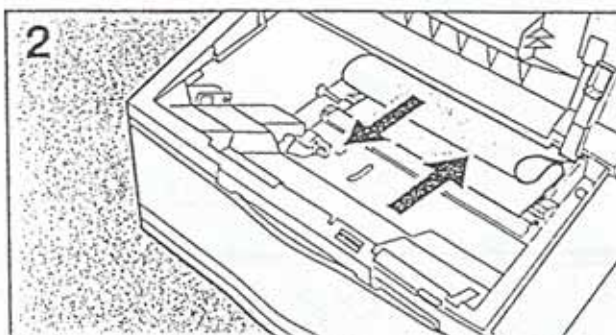
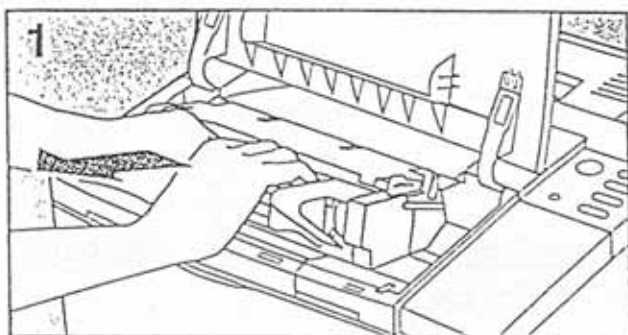


PORTRAIT STUDIO FUNCTIONAL DESCRIPTION

B. Fusing Assembly Paper Jams (ref. fig 1-8)

1. Open the top cover and remove the toner cartridge.
2. Remove the paper by pulling it back out of the fuser and into the printer body. Be aware that some toner may be loose on the paper.
3. Clean any toner that may have fallen into the printer.

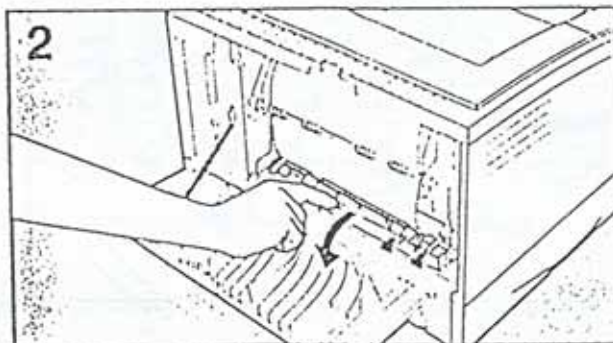
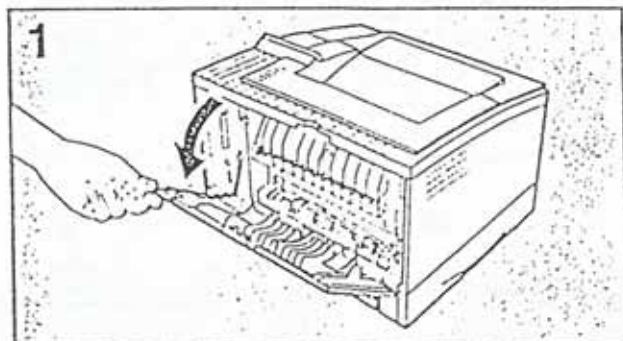
Fig. 1-8



C. Paper Exit Paper Jams (ref. fig. 1-9)

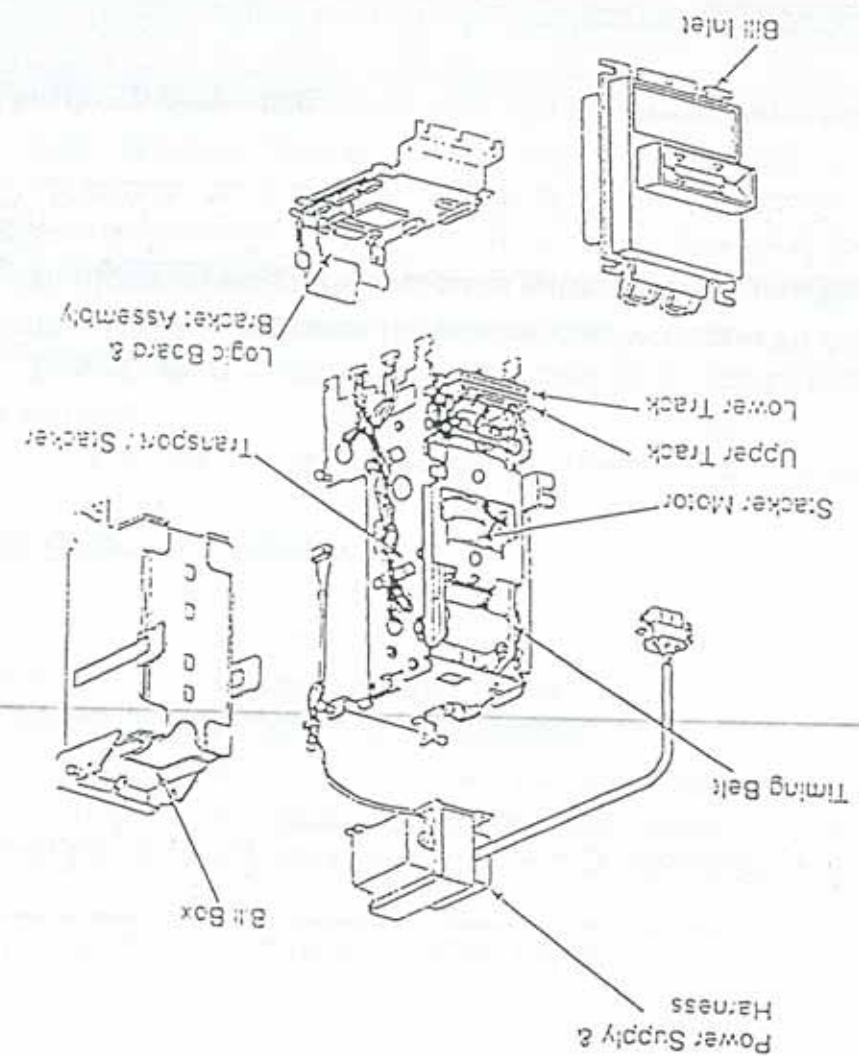
1. Open the rear cover carefully as certain parts of the fuser can get hot.
2. Pull the paper from the fuser assembly. Whenever the rear door is opened you must ensure that it is securely shut before returning to service.

Fig. 1-9



PORTRAIT STUDIO FUNCTIONAL DESCRIPTION

RBA-7 Bill Acceptor
(ref. fig. 1-10)



1. The RBA-7 consists of a bill acceptor transport / stacker mechanism, an electronic logic board and power supply.
2. The transport is a device that carries the bill past five test stations. Each of these stations contain optical and mechanical sensors for bill validation. Two VI sensors, two VR sensors, two magnetic heads and bill pressure rollers, an anti-cheat lever and a VF sensor.
3. The VI sensors senses that a bill has been inserted and senses the position of the bill.
4. The VR sensors make checks on the top and bottom of the bill.
5. The VF sensor works in conjunction with the anti-cheat lever. The anti-cheat lever prevents the bill from being pulled back through the transport once it has been accepted.
6. When the bill exits the transport the VF sensor and the anti-cheat lever provide a credit signal to the computer initializing the Portrait Session.
7. It is not essential to become technically familiar with the sensors. Only to understand that cleanliness is essential to their operation or the bill validation process can be effected.

PORTRAIT STUDIO FUNCTIONAL DESCRIPTION

Interconnecting signal and power cables.

Input power 120 Vac. 2 pin Molex connector supplied from non-computer outlet. 5 Vdc to blue box. Supplied from the 9 pin connector " A " at the PC backplane through a two wire connection. Ensure both the 9pin and the two wire Molex are connected when trouble shooting a bill acceptor failure.

Phone jack output from bill acceptor to blue box. Provides the validation signal to the blue box for conversion and connection to the PC.

Bill Rejection Sequence.

If any of the validation conditions are not met the bill is returned to the customer as follows:

1. The transport motor changes direction to return the bill to the transport opening.
3. The acceptor monitors the bills motion to ensure all the sensors are uncovered.
3. If all the sensors are not cleared within five seconds the acceptor initiates a shutdown sequence.

Shutdown Sequence.

If the acceptor is unable to clear the transport path it will initiate a self clearing sequence. This is merely a series of forward and reverse motions made in an attempt to dislodge any object that may be trapped in the transport.

If the transport does not clear after three cycles the acceptor begins a shutdown sequence. The bill acceptor turns everything off with the exception of the red status LED at the rear of the acceptor which will flash on and off indicating a fault.

To return the bill acceptor to normal status (after correcting the fault) it must be reset by removing power then reapplying.

PORTRAIT STUDIO FUNCTIONAL DESCRIPTION

Clearing a Blocked Transport Path

1. Remove the stacker and clear any visible object from transport path. If nothing is visible you must remove the bill acceptor.
2. Unplug the power and blue box connections. Remove the three 9/32" nuts that hold the stacker in place. Two can be found on the top left and right sides, and one on the side nearest you.
3. Next from the rear of the acceptor remove the black shield exposing the plastic anti-cheat lever. The lever can be easily identified by the spring attached to it.
4. From the rear of the acceptor locate the transport belts. The lower set of belts are doubled in order to carry the bills through the transport. Insert a credit card or something comparable in size in between each side of the two belts.
5. Rotate the lower large white plastic gear in the direction that carries the card toward the acceptor opening. It will be necessary to hold the anti-cheat lever up to allow the card to pass through. Continue to rotate the gearing until the card passes through the bill opening.
6. Reassemble the bill acceptor. Prior to re-installing plug in both the blue box and the power connector. Verify the plunger cycles and the status LED remains solidly lit. Run a bill through to verify that it passes validation.

Other Common Problems & Troubleshooting Aids

Prior to removing or replacing any parts on the bill acceptor a thorough physical inspection should be given. Pay particular attention that all plugs are firmly seated and no connector pins are broken or bent. Any of the above should be noticed and relayed to the support technicians.

The above routine should be applied to the entire system in general. When you first arrive on site and suspect a system problem your observations are our most useful troubleshooting aid. Document anything out of the ordinary no matter how insignificant it may seem at the time.

PORTRAIT STUDIO FUNCTIONAL DESCRIPTION

Camera Panner

1. The camera panner controls the up and down movement of the Portrait camera. This movement is controlled from the control panel via the Up & Down arrow buttons during the vend or HCS modes.
2. There is a green power indicator and two control switches.
 - a) **Auto pan angle selector switch.** This must be set to the lowest position (0).
 - b) **Main power switch.** This must be set to the middle position (M).

The Computer. Ref. Connection Drawing

- A. The computer is the primary controlling unit of the portrait booth.
- B. It functions as the primary interface between the user and the system peripheral devices . It also supplies, controls and monitors the following components and signals.
 1. 9 pin 5 Vdc output provided for the lighting outlets relay and blue box.
 2. After the Bill Acceptor validates a bill transaction a credit signal is sent to the 25 pin serial port connection letting the computer know to start the Portrait session.
 3. The parallel port LPT 1 connection to the laser printer.
 4. The 15 pin connection to the video amplifier providing video to the three monitors.
 5. 25 pin video input from both cameras.
 6. The 25 pin protection block on LPT 2 that maintains security for the software and the logic control for the lighting outlets.
 7. The audio output plug to the audio amplifier for the speaker control. As of booth 213 the amplifier control will be routed through a computer speaker.
 8. Joystick control port to the customer panel.
 9. Provides control to the keyboard as the primary user interface.

Power requirements

Receives conditioned 115 Vac 60 cycle input from the line conditioner. Internally the system derives +/- 12Vdc and +/- 5 Vdc for internal power and logic.

PORTRAIT STUDIO FUNCTIONAL DESCRIPTION

The internal hardware arrangement.

From the front of the PC with the cover removed from the left most circuit board.

BOARD 1 Watchdog timer. Provides a hardware reset in the event of a system failure. The watchdog monitors the printer (rev 1) and bill acceptor on power up and during system rotation. If a device fails to respond to a system command the watchdog begins a counting routine in order to give the device time to recover. If communication cannot be restored the watchdog resets the system.

BOARD 2 ESS sound card. Provides an audio output to the audio amplifier for volume control to the speaker. As of 6/12/98 all new booths will have a computer speaker with an onboard amplifier is utilized.

BOARD 3 25 pin parallel port (LPT 2) card used for protection block and logic signal used to close the 5 volt relay to turn on lighting outlets.

BOARD 4 VCI video output card. Provides 15 pin connector output to the video amplifier.

The 25 pin serial interface with the bill acceptor connect directly to the mother board.

The 25 pin printer port connection LPT 1 also connects to the mother board.

System software

The computer utilizes MS DOS 6.22 as the primary operating system. At times it may be necessary to enter the DOS environment for software upgrades or system trouble shooting. When the system is in the studio mode DOS is transparent to the user.

The system hard drive is partitioned into three operating drives. C (the primary DOS drive). C:\VEND directory contains the necessary program files and device drivers to run the portrait studio. The v4studio.exe is the primary system executable and is loaded on power up, when you exit the FOTO menu and return to Portrait Studio or by simply typing C:\VEND\V4STUDIO.

USER REFERENCE VERSION 1.2

- A. Return to Portrait Studio
- B. Run System Configuration (syscfg)
- C. Run Accounting
- D. Adjust Image Quality
- E. Run Bill Acceptor Test Utility
- F. View System Log
- G. Copy system Log to Floppy
- H. Copy Thumbnails to Floppy
- I. Go to DOS

- A) Returns the user to the Portrait mode of operation.
- B) Allows the user to set up site and system specific parameters. (See document SYSCFG.EXE)
- C) Prints the system accounting picture. Running totals of gross and picture count are recorded as well as system hardware profile and performance. (See Accounting Picture description)
- D) Adjusts the clarity of the portrait. See setting **Hue, Contrast and Saturation** procedure.
- E) Provides a loop back signal to the bill acceptor and monitors for a response. If there is an error in either the bill acceptor or the blue box a "No Response" message will be displayed. If the test passes an "Enable: \$1 & \$5 " will be displayed. See attached B_A document.
- F) Allows the user to view a historical record of system activity.
- G) Copies the above data to drive "A" divided into three files **Infohut.log, Syslog.txt, Timedate.dat.**
- H) If thumbnails are enabled in the SYSCFG.EXE images are downloaded to drive A.
- I) Exits to DOS.

Editing the SYSCFG.EXE

After entering the Run System Configuration option all highlighted selections may be edited by the user. However only certain options need ever be edited.

- ◆ **Location** in the instance where a booth has been relocated. Simply type in the booth location hit "ENTER" then type in the state.
- ◆ **Type of vend.** Highlight the selection and hit the "F2" key. A pull down menu will appear. Highlight the desired vend and press "ENTER".
- ◆ **Multiple Languages.** The space bar will toggle between YES or NO. The "TAB" key will select "WHICH". "F2" will bring a pull down menu. Use the space bar and the down arrow key to place a check next to the desired languages.
- ◆ Hit "ESCAPE" English will always default as the primary language.
- ◆ **Daily service hrs.** Type in the number of hours the booth will be in operation. Ensure this value matches the ON / OFF timer.

After setting in the correct parameters "F10" will exit and save changes.

Portrait Accounting Picture

Description

7) **L: Languages Enabled.** 0 = English, 1 = Spanish, 2 = French, 3 = Japanese
4 = Portuguese, 5. = German.

8) V: Type of Vend.	0 = \$1-3-5	1 = \$3	2 = \$4
	3 = \$5	4 = \$5-3	5 = \$5-4
	6 = \$6	7 = \$1-1	8 = \$2
	9 = \$2-4	10 = \$3-2	11 = \$3-3
	12 = \$5-5	13 = \$4-2	14 = \$4-3

9) **PIC COUNT:** Cumulative count of pictures taken from booth commissioning.

10) **G = Gross:** Cumulative money count used for accounting.

9) **EM = Efficiency for the month:** Calculated as follows:

Time in rotation / # of days multiplied by the daily service hours setting in the SYSCFG.

E.g.: If the "Daily Service Hours" setting in the SYSCFG is set for 8 hours and the booth is taken out of rotation for one hour of maintenance making a total of 7 hours of rotation. Assuming this is the first day of installation. $7 / 1 \text{ day} \times 8 = .88\%$ efficiency.

It is easy to see from this example how the efficiency can be effected if the On / Off timer and the "Daily Service Hours" do not match.

10) **EY = Efficiency year to date.**

11) **ON:** Number of hours the booth is set up for in "Daily Service Hours".

Portrait Accounting Picture
Description

- 12) Fault Report Profile .
- BIL = Bill Acceptor
 - FLM = Film
 - PRN = Printer
 - POW = Power
 - OTH = Other

The above is a 14 day history of reported down time and the responsible component.

The right most column represents the previous days date. The left most would 14 days prior to the current date.

Each time the booth is down a number will increment in the appropriate column. In the power column a 1 will be displayed each day to reflect the on / off timer.

13) Efficiency and Daily Picture Graphs

The efficiency graph is represented by the horizontal line graph proceeded by an "E". Used with the vertical scaling 0 - 100%.

The daily sales are represented by the vertical bar graphs with a total at the top of each. They also correspond to the vertical 0 - 100 scaling.

14) Represents the 14 day picture average.

15) Current system software revision.

16) Current date.

17) Last account taken.

18) Portrait sales profile: 1 - 4 Represent each artist.

Left to right represents Portrait, Landscape, Scan.

Service and Collection
and
Running Accounting

A. Collecting money

- 1) From rotation hit " Q " until you reach the C:\VEND prompt. Type FOTO hit selection " C ". Ensure to enter your initials when prompted. The accounting picture will print out automatically. (see Accounting Picture reference pg. 20)
- 2) Ensure to complete the Service and Collection Report form completing the following.
 - a) Date
 - b) A description of action taken under the **TESTING**.
 - c) If you use your own money enter it in the **TEST IN \$**. This amount must be subtracted from the **Actual Metered Cash**. So no accounting discrepancies will occur.
 - d) Add in the **Current Picture** and current **Gross \$**. Subtract these values from the **Last Readings** and log them in the **Meter Change** column.
 - e) Subtract the testing dollars from the actual metered cash. And total in the **Sub Total** column. (note if you register a shortage ensure you subtracted your testing dollars. If you register an overage ensure you removed your testing dollars from the collection.
 - f) After collecting the money wrap it in both white and yellow copies of the service report. This provides better concealment of the money. **COUNT THE MONEY AT HOME**.
 - g) Leave the collection book in the booth. Lock up and head out.
- 3) When the service report book is empty please return it to accounting. Deposits are to be made weekly.
- 4) Checks are mailed monthly and should be in hand by the 15th of each month.

Any questions concerning accounting should be directed to Lisa Larosa @
1800-933-2682

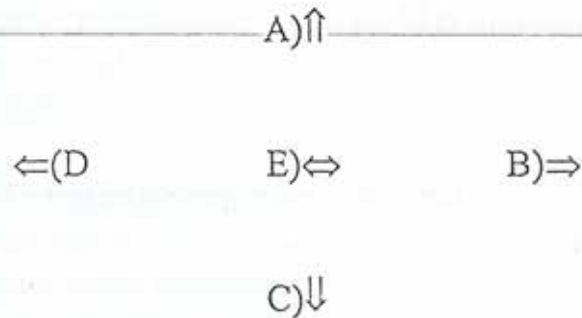
Adjusting The Image Quality HCS Mode

- 1) From rotation hit " Q " until the C:\VEND prompt appears on the monitor.
- 2) Type in FOTO and hit " ENTER " this will take you into the Maintenance Menu follow the below procedures.
 - ◆ After striking the "D" selection a menu will appear in the upper left corner of the display.
 - ◆ You will be prompted to "Hit Any Key" (The space bar will do)
 - ◆ Strike the "O" key on the keyboard or the "OK" button if you are sitting in the booth. Either action will display the HUE: CON: (contrast) SAT: (saturation) menu. Each will be followed by a number that corresponds to the intensity level setting.
 - ◆ From the keyboard "T" selects the CONTRAST setting, "H" selects the HUE setting, and "S" selects the SATURATION setting.
 - ◆ At the control panel the "SELECT" button will DECREASE the intensity level of the selected setting and the "OK" button will INCREASE the intensity level.
 - ◆ The recommended order of adjustment is as follows:
 - 1) Contrast
 - 2) Saturation
 - 3) Hue
 - ◆ Sitting in the booth adjust the picture quality to obtain a portrait that is pleasing to the eye.
 - ◆ To exit and save hit "3" on the keyboard.
 - ◆ To exit without saving hit "4".

Panasonic Camera model CP-454

CAMERA SETUP OPERATION

Under the Panasonic CP454 slide logo on the side of the camera you will find the five buttons necessary for setting up the operational menus.



- 1) Set up the booth to run in the HCS mode. From the **C:\VEND** prompt type **HCS**. hit "ENTER". When prompted to "hit any key" press the space bar. This will allow you to run the video camera continuously.
- 2) To initiate the **CAM SETUP** menu press "E" and hold down until the menu is displayed on the monitor.
- 3) Note the current settings prior to making any changes to the menu.

Factory defaults are as follows

CAMERA ID = OFF
***ALC/ELC = ALC**
SHUTTER = OFF
***AGC = ON**
SYNC = INT
WHITE BAL = ATW
LENS DRIVE = DC

END

SETUP DISABLE

- 4) Using the arrow keys position the cursor on setup disable and press "E." This changes the parameter setting to **SETUP ENABLE**.
- 5) Highlight "END" from here you can highlight additional parameters for editing.

CAMERA SETUP OPERATION

- 5) **AGC** (automatic gain control). Highlight the selection and press "B" changing the selection to **AGC = OFF**.

The reason behind the setup change is as follows. When **AGC** is on, the brightness of an image is automatically controlled by the camera reacting to ambient light changes. Our desire is to set it once and have it remain a constant.

- 6) **ALC** Under the **ALC** sub menu the **Super D** option must be set to off. To enter the sub menu highlight **ALC** and press the center button. Highlight the **Super D** option and press the right arrow key until the setting is off. Arrow down to **RET** hit the center key.

- 7) To save changes and exit the setup program highlight "**END**" and press "E" all changes are saved in EEPROM.

NOTE: If necessary to further adjust the picture quality a **SPECIAL** menu feature is available. From the "**END**" position in the cam setup menu press "B" and "D" simultaneously and hold. Four additional video settings are available for picture clarity. Set them accordingly as needed or leave at mid range. Highlight **RET** and press "E" to return to the cam setup menu

SETTING THE ON/OFF TIMER

27

Description of switches

MAN I AUTO/RAND
 AUTO

- 1) MAN: Bypasses programmed timing.
- 2) AUTO: Gives control to the ON/OFF timer.
- 3) TO/RAND: Timer controlled to +/- 15 min. of program setting.

PROG. I TIME/SET
 RUN

- 1) PROG: Set to the program position when setting ON/OFF times.
- 2) RUN: Used for normal timer operation.
- 3) TIME/SET: Used for setting the correct real time.

EVENT & ON/OFF PUSH BUTTON

EVENT: Active only when the above switch is set to PROG.

ON/OFF: Power override. Used when the timer is set to the RUN mode.

Setting the current time and date

- 1) Slide the switch to the TIME SET position.
- 2) Push the DAY button until the current day is displayed.
- 3) Push the Hour button until the current hour is displayed.
Repeat the same using the MIN. button for the current minute.

Programming the ON/OFF timer

- 1) Slide the switch to the PROG. position. Up to 6 on/off timing periods can be selected using the EVENT button. Example: On 1, Off 1 On 2, Off 2
- 2) The DAY button is used to select the number of days the ON/OFF timer will control the booth. Example if you want the booth to turn on and off at the same time everyday you would push the DAY button until MON. - SUN. is displayed on the LCD readout.
- 3) Use the HOUR & MIN. buttons to select the desired On 1 time for days selected.
Press the EVENT button to select Off 1. Repeat the above for the desired off time.
- 4) Hit EVENT once more and the timer will be set to turn on and off at the same time each of the days selected.

TIMER SETTING CONTINUED

28

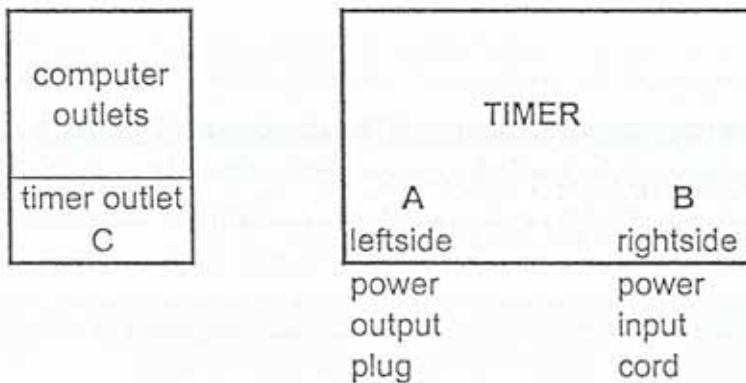
5) Set the switch 1 to AUTO and switch 2 to RUN.

Notes: The timer has a AA battery backup to retain the programming in memory. The programming will be lost if the battery fails during an off state and the timer will need to be reprogrammed.

To reset the programming to default values gently insert the tip of a pen into the RESET port. This action is recommended after a battery failure prior to reprogramming.

Do not forget to reprogram during daylight savings.

In the event of a timer failure the timer may be by-passed by removing the output plug (A) from the timer and plugging it directly into the timer outlet (C). Switch circuit breaker to off position prior to this procedure.



GENERAL PROCEDURES FOR TAKING A PORTRAIT

The Portrait session sequence of events is as follows.

- 1) The customer inserts the correct amount of money for the selected vend.
- 2) The internal booth lighting becomes active. This includes the scanner, the round upper left and the forward fluorescent lights.
- 3) The customer is prompted to select the desired language. Press **SELECT** to highlight the language and press **OK** to enter. (This option is available with Version 1.0 only)
- 4) Next the customer will be prompted press **OK** for **PORTRAIT** or **SELECT** to scan a wallet size picture
- 5) The next prompt allows the customer to select the number of people. **SELECT** for 1 person **OK** for 2. Selecting two will give the customer a landscape style portrait.
- 6) The customer is then prompted for positioning. Look between the arrows and use the **UP** and **DOWN** arrow keys to position him / herself inside the circle. Pressing **OK** will initiate a three sitting session of which one will be selected.
- 7) After the three poses have been taken they are displayed and the customer is prompted to use the **SELECT** button to chose a favorite pose. Pressing **OK** chooses the highlighted selection
- 8) The next prompt is to select the artist to make the sketch. After the selection is made the lights will turn off. This is normal and is not an error. The sketching process will take approximately 3 minutes.

NOTE: In order to properly identify when booth is malfunctioning it is first important to understand the basic operations of the booth when it is functioning correctly.

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
<p>1) Booth out of rotation. "OUT OF PAPER" Message on the monitor</p>	<p>a) Printer tray empty</p>	<p>1) Hit the space bar to display the status page. A printer error will be displayed in upper left corner of the monitor. RBA7 in the upper right corner. Protection block across the bottom. Proceed to the corrective action for the error displayed. If the paper tray is empty refer to "Installing Paper" section of the user's manual.</p>
	<p>b) Paper jamming in the printer. (ref. "clearing paper jams ") pages 7-12</p>	<p>1) Note the type of printer HP-5, HP-6 and the location of the jamming and refer to appropriate section of the user's manual.</p> <p>2) If you are using bordered paper and are experiencing frequent jamming replace with plain 20 pound white.</p>
	<p>c) Printer disconnected from the PC. (ref. PC backplane drawing)</p>	<p>1) Ensure that printer cable " C " is connected at the PC backplane.</p>
	<p>d) Printer not powered up.</p>	<p>1) Ensure the Ready light is on and the power connector is plugged in.</p>
	<p>e) RBA7 Bill acceptor. (ref. fig. 1-10) page 13</p>	<p>1) Ensure the power cable is connected. If it is, unplug and reconnect it note that the plunger cycles.</p> <p>2) Observe the red status LED at the rear of the acceptor. If it is blinking remove the stacker and check the transport path for jamming. (ref. clearing transport path user's manual)</p> <p>3) Ensure the 5 volt line from the from the PC backplane " A " is connected to the blue box.</p> <p>4) Ensure the 25 pin connector from the PC backplane " B " is connected to the blue box.</p>

Troubleshooting Flow Chart

31

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
<p>1) Booth out of rotation. " OUT OF PAPER " continued</p>	<p>d) RBA7 Cont.'</p>	<p>6) Ensure the phone jack from the acceptor to the blue box is connected.</p> <p>7) If the previous steps fail to correct the problem contact tech support for replacement.</p>
<p>2) System halts during boot up sequence</p>	<p>e) Protection block (Version 1 software) (ref. PC backplane drawing)</p> <p>f) Parallel circuit card.</p> <p>a) system hard drive</p> <p>NOTE: Step 1. If the PC is not seeing the hard drive proceed to step 3.</p>	<p>1) Ensure the protection block "F" is properly connected at the PC backplane.</p> <p>2) From the "Out of Paper" message hit "Q". At the C:\VEND prompt type "FOTO" hit "ENTER". Select Run System Configuration ensure the Protection Block Setting = LPT2 and the Lights setting = 0x278.</p> <p>3) If the above settings are correct replace the protection block. Contact tech support.</p> <p>1) The protection block connects to an internal parallel circuit board. If this board fails it could give an indication of a failed protection block. Restart the PC. At the "Verifying DMI" message press the pause button. On the Systems Configuration menu locate "Parallel Ports: 378 278" if 278 is not present the board could need replacement Contact tech support.</p> <p>1) If the system halts at the "Systems Configuration" menu note the "Pri. Master Disk" setting. If "None" is displayed the drive is not being seen by the PC.</p> <p>2) Insert a bootable disk in drive A and restart the PC. At the A: prompt type C: and press "ENTER" if the C: prompt is displayed type DIR E: write down the results. Contact tech support.</p>

Troubleshooting Flow Chart

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
2) System halting during boot up.	a) system hard drive (If step 3 fails contact tech support.)	3) Power the PC down. With the key taped to the top of the PC unlock the hard drive, slide it out, re-insert, lock and power up.
3) Computer continuously reboots	a) Watchdog timer board	1) The watchdog timer board is mounted internally in the PC. If you suspect it is faulty please contact tech support.
4) All monitors are blank	a) Watchdog timer board b) Video amplifier (ref. booth detail drawing) & (PC backplane drawing)	1) See above. 1) Ensure the video input cable "E" is plugged in at both the amplifier and the PC backplane. 2) Ensure that the power input is connected from the power panel. 3) Restart the PC. Observe the front of the PC note that the busy light on the disk drive and hard drive become active then extinguish.
5) One monitor is blank	a) Monitor or Video Amplifier	1) Ensure the power indicator on the monitor is on. Locate the video amplifier and swap the output to the monitor that is out with the output to a known good monitor. If the monitor remains blank swap the monitor.
6) The display field of the monitor is red during portrait mode.	a) Faulty video card or cable. (ref. PC backplane drawing) b) Faulty camera	1) Attempt a scanner transaction. If the problem exists on the scanner camera ensure cable "D" is connected from the PC backplane to each camera. If it is, assume the video card is bad and contact tech support. 1) If the scanner camera checks out. Ensure the power LED on the camera is on. If it is not ensure the power connection from the power panel to the camera is connected.

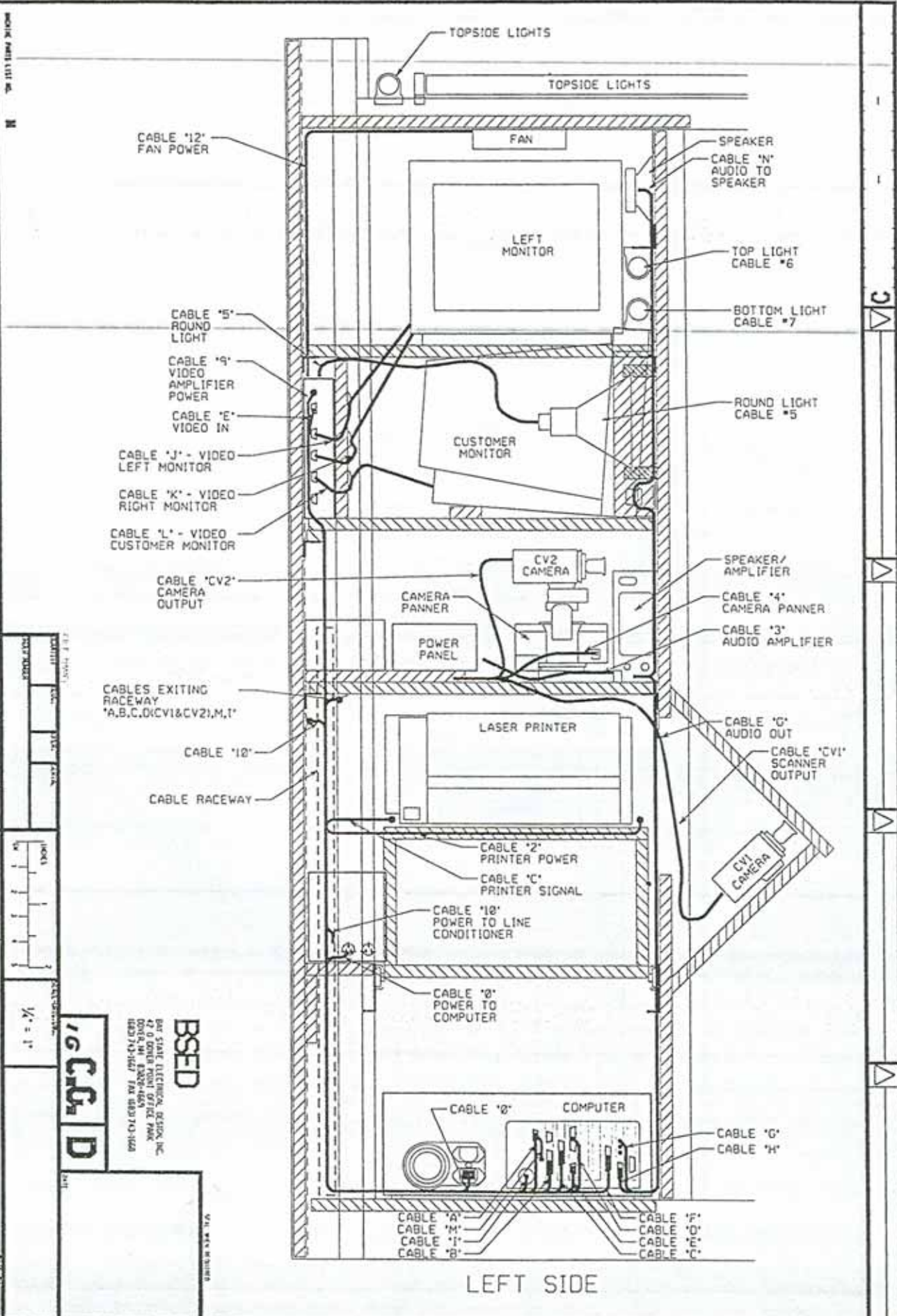
Troubleshooting Flow Chart

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
<p>5) Red display field during portrait mode. "continued"</p>	<p>b) Faulty camera cont.'</p>	<p>2) Ensure cable CV2 is properly connected to the camera</p> <p>3) Swap cables CV1 and CV2. Perform a scanner transaction. If the display is still red the upper camera is faulty.</p>
		<p>4) If the display looks normal, perform a portrait transaction. If the display is red the cable may be faulty.</p> <p>NOTE 1: CV2 is active during the portrait mode. CV1 during the scanner mode. Swapping the cables will reverse the camera positioning.</p> <p>NOTE 2: The scanner camera and the portrait camera do not have identical lens sizes. Keep this in mind if you swap cameras in the course of trouble shooting. The Portrait camera is 8.5mm the scanner is 4.8mm.</p>
<p>7) Portraits appear out of adjustment, too bright or too dark.</p>	<p>a) Camera needs to be adjusted.</p> <p>b) Lighting in the booth (ref. power panel drawing)</p>	<p>1) See camera set up and adjustment procedure in the user's manual.</p> <p>2) Location. If the portraits appear to be too bright ensure that no outside light is penetrating the booth from the top skylight or from the sides. Pay particular attention to the sun's interference at certain times of the day relocating the booth may be an option to consider.</p> <p>3) If the pictures appear too dark ensure all the lights are switching on at the time of a transaction. If they are not, ensure they are plugged into the switched lighting outlets.</p>

Troubleshooting Flow Chart

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
8) Portrait Pictures getting stuck in the chute.	a) The printer drawer	1) Ensure the printer drawer is locked. Ideally the back of the printer should be approximately 5 inches from the outside edge of the booth.
	b) The chute	1) Make sure the chute is clear of any obstructions. The angled portion of the chute may require adjustment. It can be easily bent to line up to the printer output. Make sure not to bend it too flat or the paper will not pass.
9) No audio	a) Audio Amplifier (ref. power panel detail) (ref. PC backplane drawing)	1) Take an accounting picture to ensure you have the most current revision of Portrait software V .95 or 1.0 later have sound enabled.
		2) Ensure power is connected to the Audio Amp.
		3) Ensure the audio output jack " G " is connected from the PC backplane to the amplifier input.
		4) All Portrait booths shipped after 6/12/98 will have an amplified computer speaker that sits behind the left hand door on the right.
10) Camera panner not functioning.	a) No power.	1) Ensure the green power indicator on the base of the panner is lit. If it is not ensure the power cable is plugged in at the panner and the power panel.
	b) The control switches are set incorrectly.	2) Ref. Camera Panner page 16 reference guide.

WORKING PARTS LIST NO.	M		
DATE			
BY			
REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	REVISED	06-19-98	DAVID WARD
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			



LEFT SIDE

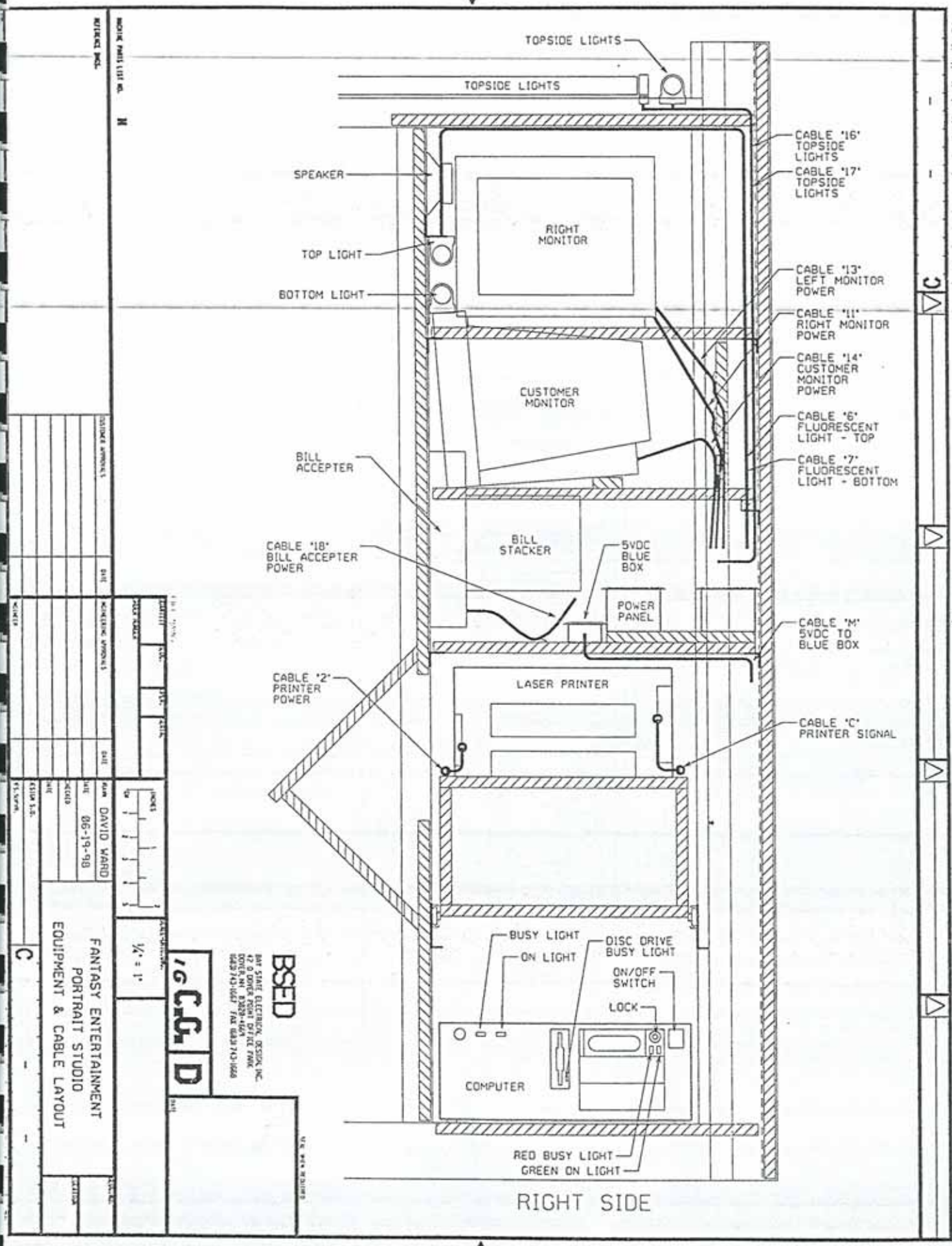
BS&D
 BOX STATE ELECTRONIC DESIGN, INC.
 42 O DONOHUE POINT OFFICE PARK
 DOWNS, ILL. 62428-4555
 (618) 232-5167 FAX (618) 232-5168

CC&D

FANTASY ENTERTAINMENT
 PORTRAIT STUDIO
 EQUIPMENT & CABLE LAYOUT

1/4" = 1'

SEE PLAN SHEET

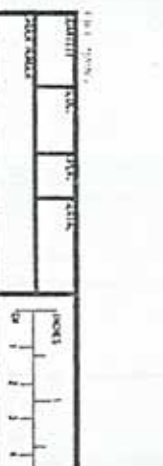


MOORE PARTS LIST NO. N

ITEM NO.	DESCRIPTION	QTY.	UNIT PRICE	TOTAL PRICE

DATE	BY	DESCRIPTION

DATE	BY	DESCRIPTION
06-19-98	DAVID WARD	

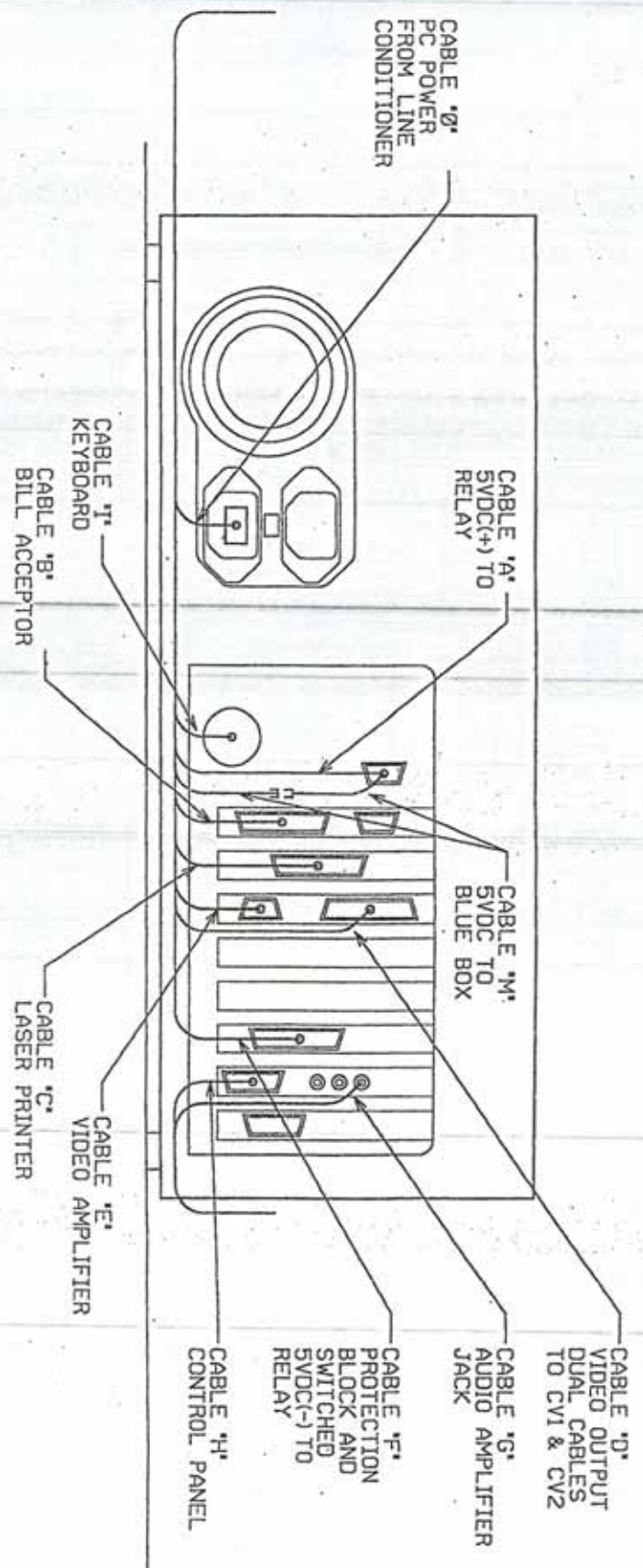


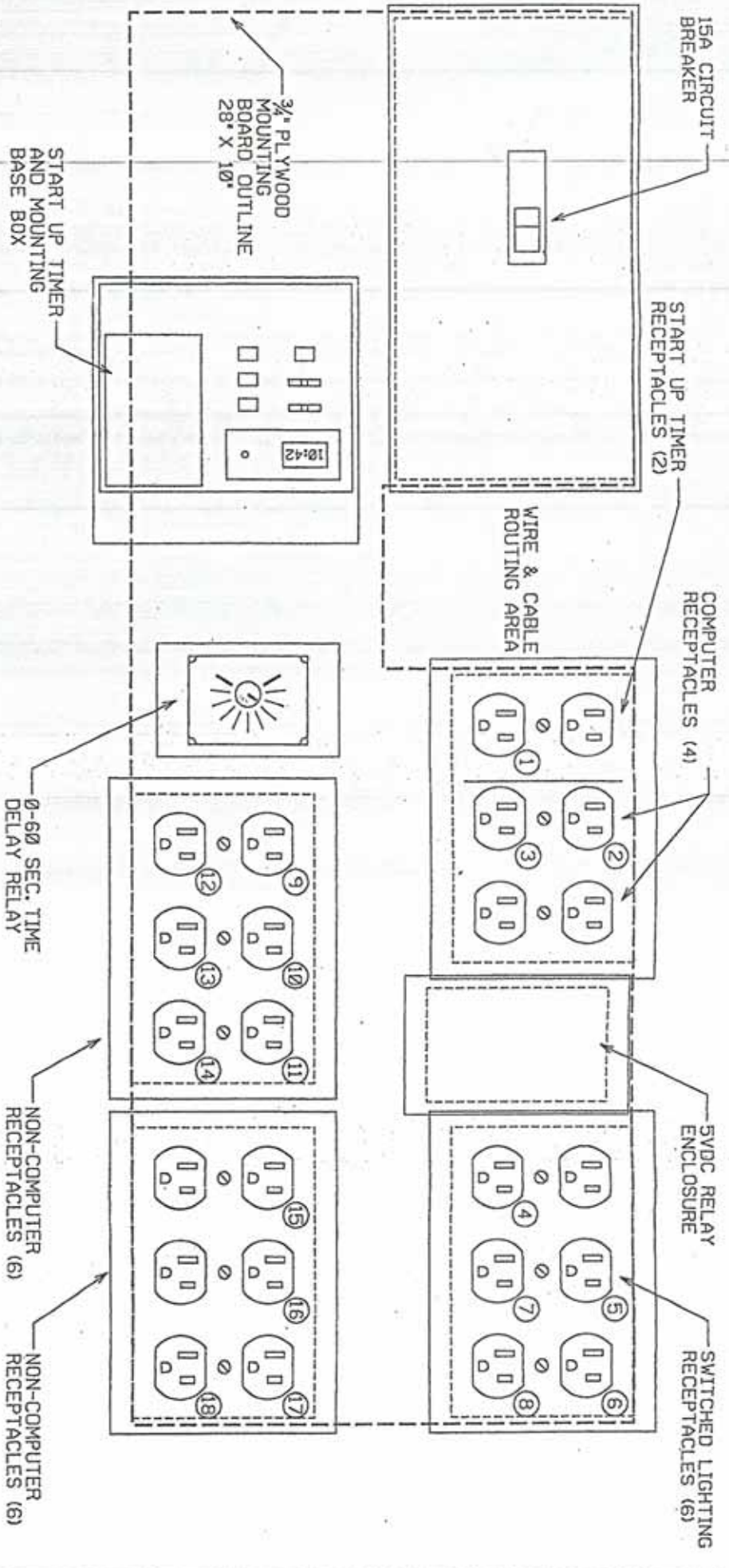
BSED
 BAY STATE ELECTRIC, DESIGN, INC.
 42 O. DOWN POINT OFFICE PARK
 DORSET, NH 03828-4261
 603-763-1667 FAX 603-763-1668

1/2" = 1'

FANTASY ENTERTAINMENT
 PORTRAIT STUDIO
 EQUIPMENT & CABLE LAYOUT

PORTRAIT STUDIO PC CABLE CONNECTIONS





- 1 = ON/OFF TIMER
- 2 = PRINTER
- 3 = AUDIO AMPLIFIER
- 4 = CAMERA PANNER
- 5 = ROUND LIGHT
- 6 = TOP CUSTOMER FLUORESCENT LIGHT

- 7 = BOTTOM CUSTOMER FLUORESCENT LIGHT
- 8 = CONTROL PANEL
- 9 = VIDEO AMPLIFIER
- 10 = LINE CONDITIONER
- 11 = RIGHT MONITOR
- 12 = FAN

- 13 = LEFT MONITOR
- 14 = CUSTOMER MONITOR
- 15 = POWER TO CAMERAS
- 16 = TOPSIDE LIGHTS
- 17 = TOPSIDE LIGHTS
- 18 = BILL ACCEPTOR

PORTRAIT STUDIO POWER PANEL CONNECTIONS