**Reissued: 2-Jun-05**

| Model: PRIPORT PINKGOLD/PGB4/PGP | Date: 2-Dec-03 | No: R-C238-**012a** |
|---|---|---|
| Subject: New Model PGA3P/PGB4P information (China only) | Prepared by: M. Kanomata, Priport Service Planning Section | |

| Classification: | ☐ Troubleshooting | ☐ Part information | ☐ Action required |
|---|---|---|---|
| | ☐ Mechanical | ☐ Electrical | ☐ Service manual revision |
| | ☐ Paper path | ☐ Transmit/receive | ☐ Retrofit information |
| | ☒ Other (New model information) | | |

**Model Name:**

| | |
|---|---|
| PINKGOLD: | Ricoh JP3000/JP3800, Gestetner 5430/5428C, RexRotary 1330, nashuatec CP430, Savin 3260DNP, Standard SD370, Lanier LDD030 |
| PGB4 (China only): | Ricoh JP2800, Gestetner 5425C |
| PGA3P (China only): | Ricoh JP3810P, Gestetner 5438P |
| PGB4P (China only): | Ricoh JP2810P, Gestetner 5435P |

**RTB Reissue**

The areas in ***bold/italics*** were changed.

***Changes:***

1. ***The Paper Feed Side Pad (Paper Plate Thin Pad) was deleted from the accessory list (section 1.2.1).***
   ***Note: This part was deleted from the beginning of mass-production (PGA3-P, PGB4-P only).***
2. ***Some section numbers were changed to match the PINKGOLD Service Manual.***

- - - - - - - -

This bulletin contains all service-related information unique to Model PGA3P (C246) / PGB4P (C254), which is scheduled for official release in China in February 2004. Please add this information to your PinkGold Series Service Manuals and also refer to RTB #R-C238-004 for PGB4 information.

**Note:** Please also see MB #M-C238-025 for a list of the components unique to the PGA3P/PGB4P.

| **Model:** PRIPORT PINKGOLD/PGB4/PGP | **Date:** 2-Dec-03 | **No:** R-C238-**012a** |
|---|---|---|

# OVERALL INFORMATION

## SECTIONS CONTAINING DIFFERENCES BETWEEN THE C246/C254 AND C238/C247

Service Manual:

| Section | Item | Remarks |
|---|---|---|
| 1 | Installation | ***Some items changed.*** |
| 2 | Preventive maintenance | *(no differences)* |
| 3 | Replacement and adjustment | *(no differences)* |
| 4 | Troubleshooting | Some items changed. |
| 5 | Service tables | Some items changed. |
| 6 | Detailed section descriptions | *(no differences)* |
| 7 | Point to point diagrams | *(no differences)* |
| SPEC | Specifications | Some items added. |
| C600 | Document Feeder | *(no differences)* |
| CLT | Printer controller unit | New documents |

# *1. INSTALLATION*

## *1.2  INSTALLATION PROCEDURE*

### *1.2.1 MAIN BODY*

*Accessory Check*
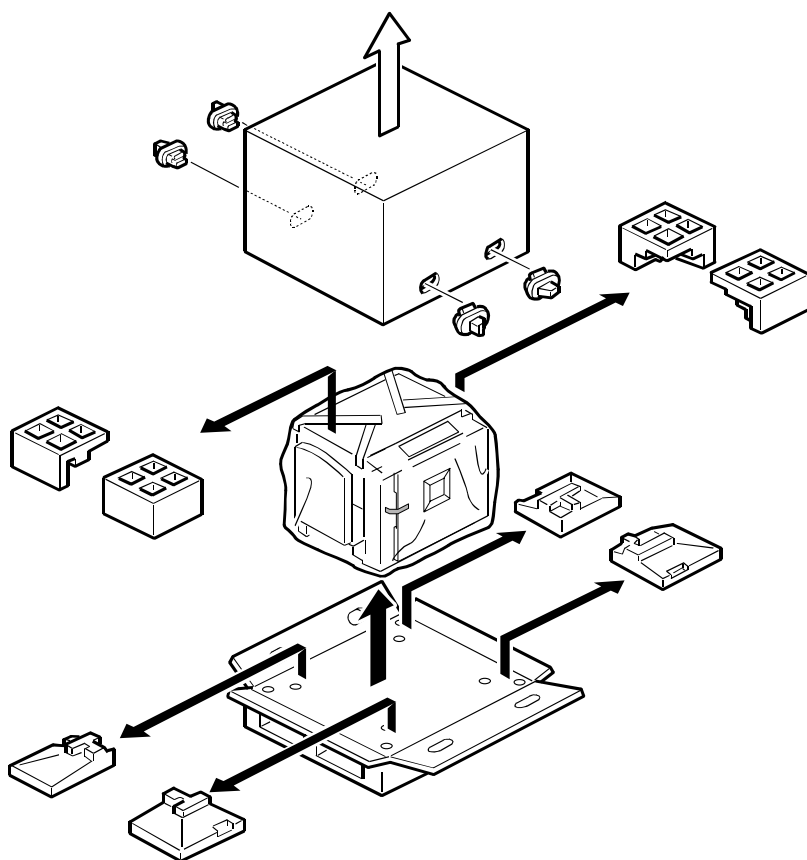


*Make sure that you have all the accessories listed below:*

| Description | Quantity |
|---|---|
| 1. **Master Spool**........................................................................ | **2** |
| 2. **Operating Instructions**........................................................ | **1** |
| 3. **NECR (Ricoh version only)**................................................. | **1** |
| 4. **Model Name Plates (C238-22, -52 and -54 only)**........................ | **1 set** |

| **Model:** PRIPORT PINKGOLD/PGB4/PGP | **Date:** 2-Dec-03 | **No:** R-C238-**012a** |
|---|---|---|

## 4. TROUBLESHOOTING

## 4.3 FUSE, LED, VR, DIP-SW, AND TP TABLES

### 4.3.4 DIP SWITCHES

Ink detection board

| No. | Normal drum for PGA3P | Normal drum for PGB4P | Colour drum | A4 black drum |
|---|---|---|---|---|
| SW1 | OFF | OFF | OFF | ON |
| SW2 | OFF | OFF | ON | OFF |
| SW3 | ON | OFF | OFF | OFF |
| SW4 | OFF | OFF | OFF | OFF |

## 5. SERVICE TABLES

## 5.7 MAIN MENU NO.6: ADJUSTMENT

The colour drum for Model PGA3P is the same as that used on the PinkGold A3, however the normal drum has been changed to one designed to further reduce noise. This new normal drum uses the drum flange from Model HP4. Therefore on the PGA3P, the normal and colour drums have separate components and also have separate settings for the three SP modes listed below.

**Differences in SP Mode Settings**

The settings for the following SP modes are different for normal vs. colour drums installed on Models PGA3P (see tables on next page). Please note that this does not apply to the PGB4P.

- SP6-23 (Paper Registration - Each Speed)

- SP6-24 (Paper Registration - Each Speed (skip feed))

- SP6-27 (Paper Roller Buckle)

**Important:** Although these settings are different, it is not necessary to perform any manual settings when either drum is replaced. This is because the machine automatically applies the appropriate settings according to the setting of the Dip SW on each drum. Therefore please be sure not to change these Dip SW settings.

**NOTE:** 1) Since the actual values for the above modes are different for the normal and color drums, it is only possible to access/change these settings for the drum installed. For example if the normal drum is installed, only the settings for SP6-23, -24 and -27 designed for the normal drum can be accessed.
2) If there is no drum installed in the machine, the settings for the above SP modes cannot be accessed, the Jam M indicator will blink, and the four-digit paper counter on the operation panel will be displayed as "dru".

## 5.7.6 SP6-23 (PAPER REGISTRATION – EACH SPEED)

| Menu Items | Speed | Default | Settings | Notes |
|---|---|---|---|---|
| Paper registration –each speed | 15 rpm | 101 | 0 to 255 | Used for: PGA3P normal drum |
| | 30 rpm | 103 | | |
| | 60 rpm | 92 | | |
| | 75 rpm | 84 | | |
| | 90 rpm | 72 | | |
| | 105 rpm | 59 | | |
| | 120 rpm | 45 | | |
| Paper registration –each speed | 15 rpm | 103 | 0 to 255 | Used for: PGA3P colour drum |
| | 30 rpm | 107 | | |
| | 60 rpm | 93 | | |
| | 75 rpm | 82 | | |
| | 90 rpm | 70 | | |
| | 105 rpm | 59 | | |
| | 120 rpm | 45 | | |
| Paper registration –each speed | 15 rpm | 101 | 0 to 255 | Used for: PGB4P |
| | 30 rpm | 102 | | |
| | 60 rpm | 94 | | |
| | 75 rpm | 86 | | |
| | 90 rpm | 72 | | |
| | 105 rpm | 58 | | |
| | 120 rpm | 72 | | |

## *5.7.7 SP6-24 (PAPER REGISTRATION – EACH SPEED (SKIP FEED))*

| Menu Items | Speed | Default | Settings | Notes |
|---|---|---|---|---|
| Paper registration –each speed (skip feed) | 15 rpm | 101 | 0 to 255 | Used for: PGA3P normal drum |
| | 30 rpm | 103 | | |
| | 60 rpm | 93 | | |
| | 75 rpm | 86 | | |
| | 90 rpm | 75 | | |
| | 105 rpm | 63 | | |
| | 120 rpm | 50 | | |
| Paper registration –each speed (skip feed) | 15 rpm | 103 | 0 to 255 | Used for: PGA3P colour drum |
| | 30 rpm | 107 | | |
| | 60 rpm | 94 | | |
| | 75 rpm | 84 | | |
| | 90 rpm | 73 | | |
| | 105 rpm | 63 | | |
| | 120 rpm | 50 | | |
| Paper registration –each speed (skip feed) | 15 rpm | 101 | 0 to 255 | Used for: PGB4P |
| | 30 rpm | 102 | | |
| | 60 rpm | 95 | | |
| | 75 rpm | 87 | | |
| | 90 rpm | 73 | | |
| | 105 rpm | 60 | | |
| | 120 rpm | 44 | | |

## 5.7.8 SP6-27 (PRESS ROLLER BUCKLE)

| Menu Items | Speed | Default | Settings | Notes |
|---|---|---|---|---|
| Press roller buckle | 15 rpm | 1.00 | 0.00 to 1.00 | Used for: PGA3P normal drum |
| | 30 rpm | 1.00 | | |
| | 60 rpm | 0.92 | | |
| | 75 rpm | 0.92 | | |
| | 90 rpm | 0.92 | | |
| | 105 rpm | 0.92 | | |
| | 120 rpm | 0.92 | | |
| Press roller buckle | 15 rpm | 1.00 | 0.00 to 1.00 | Used for: PGA3P colour drum |
| | 30 rpm | 1.00 | | |
| | 60 rpm | 0.88 | | |
| | 75 rpm | 0.87 | | |
| | 90 rpm | 0.85 | | |
| | 105 rpm | 0.86 | | |
| | 120 rpm | 0.88 | | |
| Press roller buckle | 15 rpm | 1.00 | 0.00 to 1.00 | Used for: PGB4P |
| | 30 rpm | 1.00 | | |
| | 60 rpm | 0.93 | | |
| | 75 rpm | 0.92 | | |
| | 90 rpm | 0.90 | | |
| | 105 rpm | 0.90 | | |
| | 120 rpm | 0.90 | | |

## SPECIFICATIONS

The following are the only differences in specification between this model and the C238/C247. All other items are the same.

| No. | Item | Remarks |
|---|---|---|
| 1 | Model names | A3 size:<br>Ricoh Priport JP3810P (C246-96)<br>Gestetner 5438P (C246-82)<br>B4 size:<br>Ricoh Priport JP2810P (C254-96)<br>Gestetner 5435P (C254-82) |
| 2 | Printer controller unit | Embedded Printer Controller Unit fitted as standard |
| 3 | Printer drivers | Drivers support Chinese |

## *PRINTER CONTROLLER UNIT*

### Trademarks

Microsoft®, Windows®, and MS-DOS® are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

### Symbols

This manual uses several symbols. The meanings of these symbols are as follows:

| | |
|---|---|
| ☛ | See or Refer to |
| 〰 | Clip ring |
| ℂ | E-ring |
| 𝄢 | Screw |
| 🔌 | Connector |

**Reissued: 2-Jun-05**

| **Model:** PRIPORT PINKGOLD/PGB4/PGP | **Date:** 2-Dec-03 | **No:** R-C238-**012a** |
|---|---|---|

## INSTALLATION

The PGA3P/PGB4P are equipped with a standard printer controller unit and Video I/F board. Connect the printer controller unit to the host computer with a parallel cable. Then, install the printer driver in the host computer.

| Host computer | IBM PC/AT compatible PC |
|---|---|
| Interface | IEEE1284B (Compatible, Nibble, ECP) |
| Operating Systems Supported | Windows 95/98/Me, Windows NT4.0, Windows 2000/XP |
| Printer Driver | Digital Duplicator A3 300 GDI Digital Duplicator B4 300 GDI |

**NOTE:** The Printer drivers for Windows NT4.0 are only for Intel x86 compatible platforms. There is no Windows NT4.0 printer driver for the PowerPC, Alpha, or MIPS platforms.
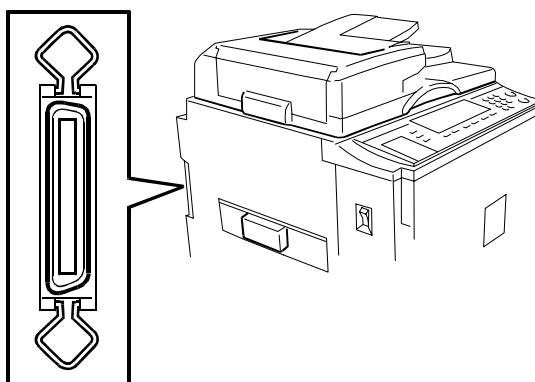
**Reissued: 2-Jun-05**

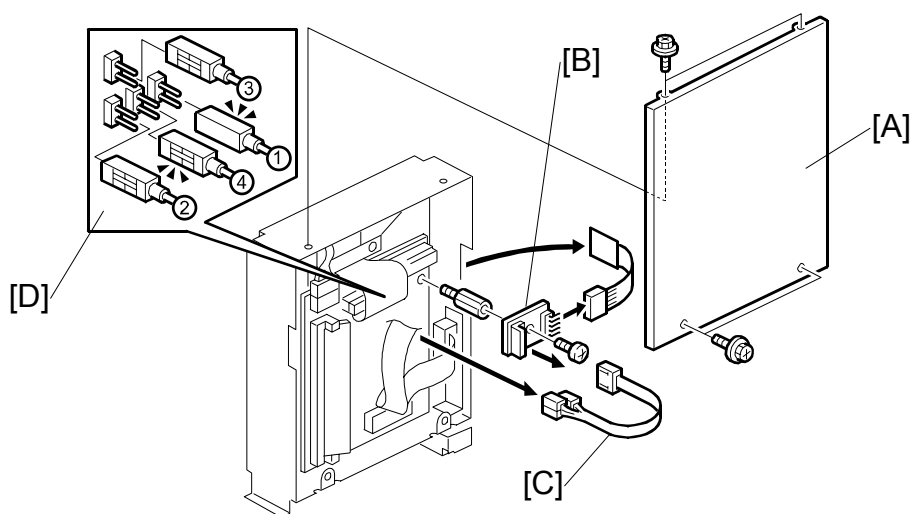| **Model:** PRIPORT PINKGOLD/PGB4/PGP | **Date:** 2-Dec-03 | **No:** R-C238-**012a** |
|---|---|---|

# REPLACEMENT AND ADJUSTMENT

| ⚠ CAUTION |
|---|
| **Before removing any of the controller components, make sure to do the following:** |
| 1. **Turn off the machine main power.**<br>**Note: However if the "Data-in" lamp on the operation panel is blinking or lit, wait until the document or report is printed before turning the power off.** |
| 2. **After the power is off, disconnect the power cord from the outlet and the cable from the machine.** |

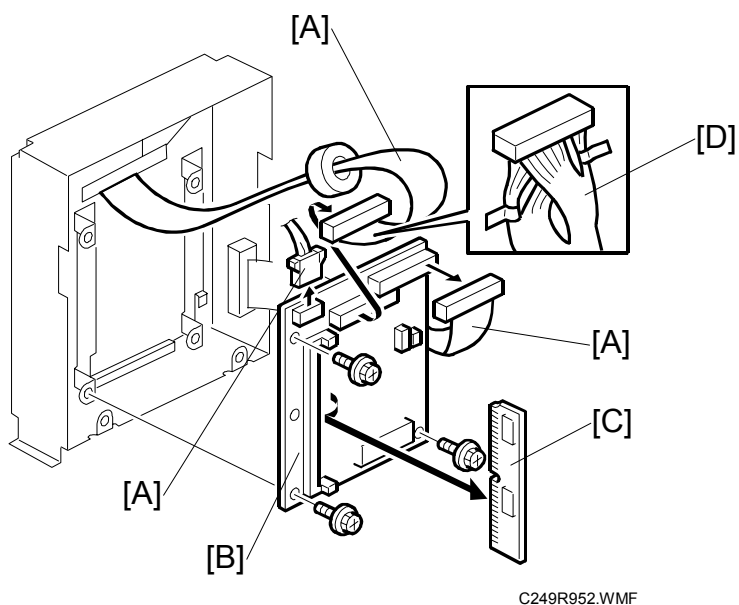## CONTROLLER BOARD MEMORY



C249R951.WMF

[A]: Cover

[B]: Keypad board

**NOTE:** When you attach the connector [C], make sure to attach it in the correct position and orientation [D].

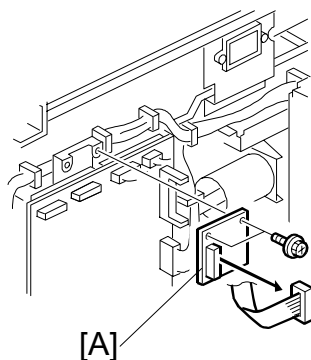| **Model:** PRIPORT PINKGOLD/PGB4/PGP | **Date:** 2-Dec-03 | **No:** R-C238-**012a** |
|---|---|---|



C249R952.WMF

[A]: Connector

[B]: Printer controller board

[C]: SIMM module

**NOTE：** The twisted end of the harness [D] should be connected to the controller board.

# VIDEO I/F BOARD



[A]: Video I/F Board

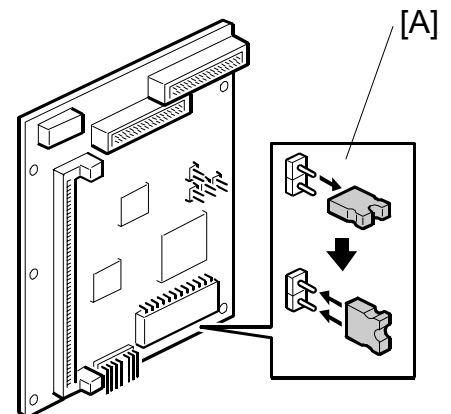| **Model:** PRIPORT PINKGOLD/PGB4/PGP | **Date:** 2-Dec-03 | **No:** R-C238-**012a** |
|---|---|---|

## LOAD PROGRAM

This procedure is for upgrading the system firmware for the controller.

> **NOTE：** If the controller does not start up after a firmware update, try downloading the firmware again. If it still does not work, replace the flash ROM on the printer controller board.

> ⚠**CAUTION**
> **Do not turn off the machine while downloading the firmware.**

1. Before downloading new firmware, print the test page and check the current version.

2. Turn off the machine.

3. Remove the rear cover and controller cover.

4. Set the jumper next to the flash ROM to the ON position [A].

5. Turn on the machine.

6. Boot up the PC and access an MS-DOS prompt or Command prompt.

7. Use the COPY command to update the flash ROM, . e.g. "copy file_name LPT1:" (where LPT1 is the connected port).

[A]

C249R957.WMF

8. While the flash ROM is updating, the left LED [B] on the control button board remains lit.

[B]
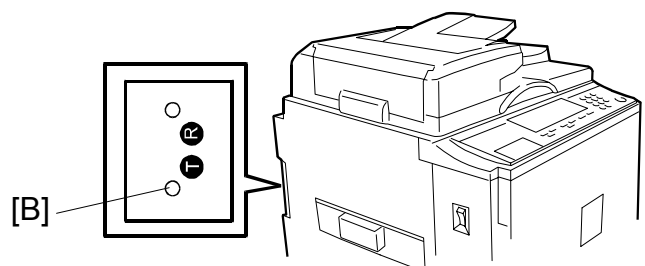
**Reissued: 2-Jun-05**

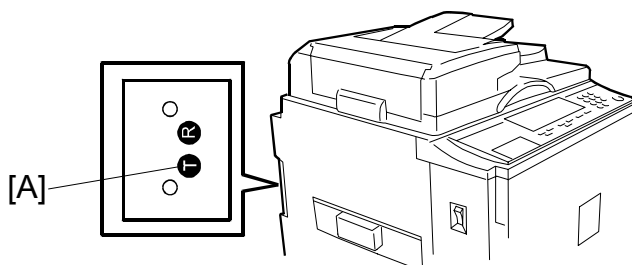| **Model:** PRIPORT PINKGOLD/PGB4/PGP | **Date:** 2-Dec-03 | **No:** R-C238-**012a** |
|---|---|---|

9.  When the left LED flashes rapidly, the update is complete.

10. Turn off the machine.

11. Set the jumper back to the OFF position [C].

12. Turn on the machine and print out the test page using the test page button. Then check to see that the new version has been successfully installed.
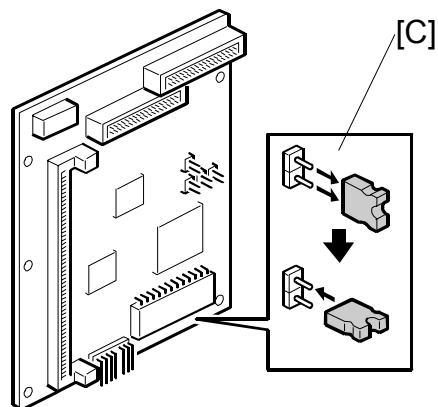


C249R958.WMF

# TEST PAGE

Press the test page button [A] on the keypad board. The right LED will start flashing quickly, indicating that the controller is in the process of creating the test page.
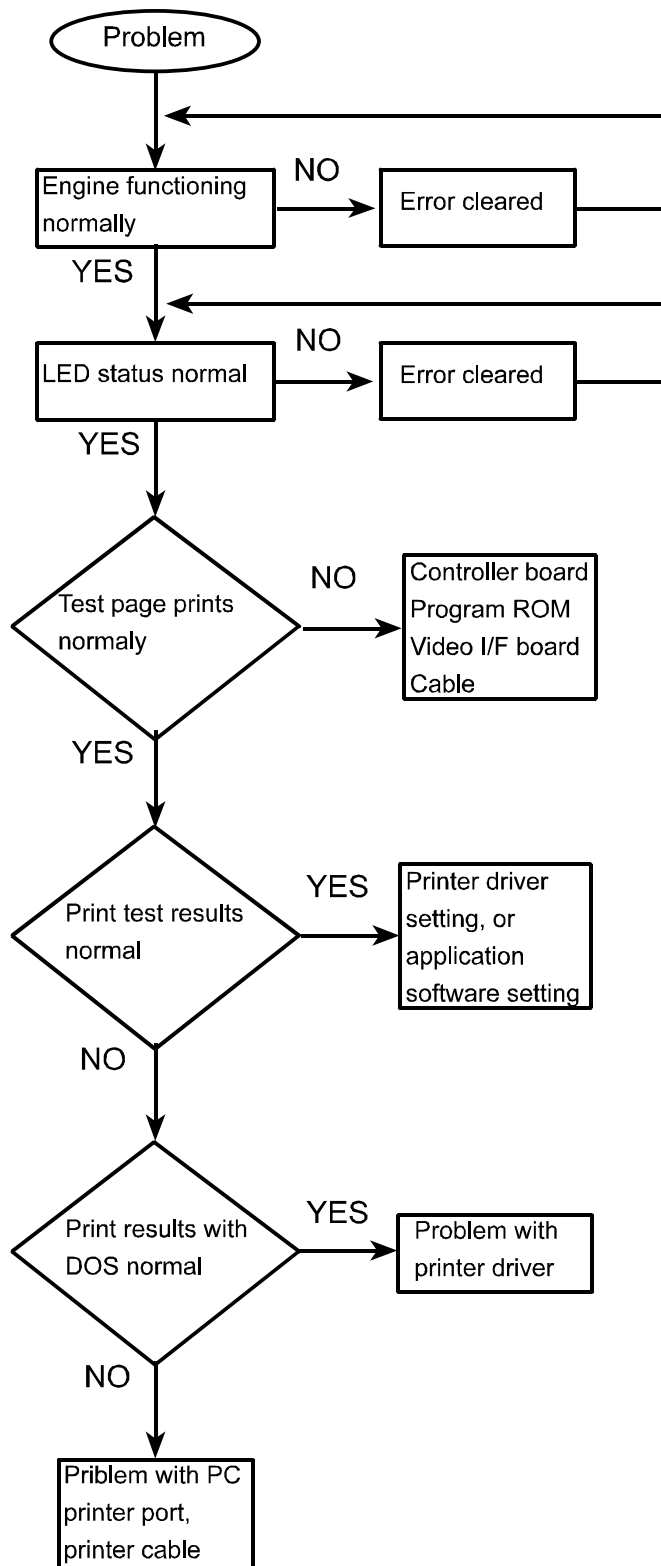
# TROUBLESHOOTING

## TROUBLESHOOTING FLOWCHART

**Reissued: 2-Jun-05**

| Model: PRIPORT PINKGOLD/PGB4/PGP | Date: 2-Dec-03 | No: R-C238-**012a** |
|---|---|---|

## LED STATUS LIGHT SEQUENCE AND CONDITIONS



Right LED

Left LED
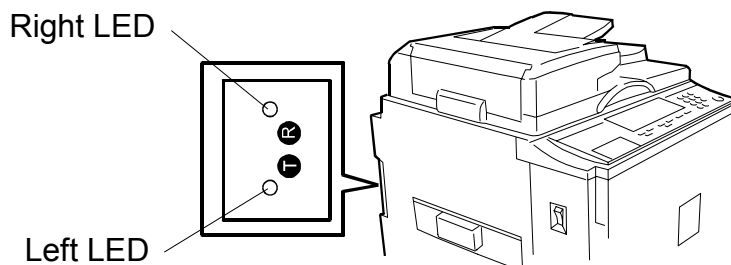
### *Power on and activation*

| STATUS | DESCRIPTION | CHECK POINT |
|---|---|---|
| All LEDs are off | No power supply | -No AC power supplied.<br>-AC cord not properly connected.<br>-Power supply failure in the controller. |
| Right LED is on | Power on | - |
| Left LED is flashing | Performing self-diagnostic test before Ready condition | - |
| Left LED is flashing rapidly | Receiving data | - |
| Left LED remains on | -Transferring data<br>-Creating a master | - |
| Left LED remains off | Idle | - |
| Left LED flashing slowly at regular intervals | Engine error | Check message on operation panel. |

| **Model:** PRIPORT PINKGOLD/PGB4/PGP | **Date:** 2-Dec-03 | **No:** R-C238-**012a** |
|---|---|---|

### *Test page button*

| STATUS | DESCRIPTION | CHECK POINT |
|---|---|---|
| Left LED is flashing | Receiving data | - |
| Left LED is on | Creating a master | - |
| Left LED remains on | Printing | - |
| Left LED flashes then remains off. | No response from the engine. | -Turn the engine Off/On.<br>-Check if the controller is properly connected to the engine.<br>-Check if the engine is online.<br>-Check if the SIMM card is positioned correctly. |
| Left LED flashes slowly at regular intervals | Engine error | -Check the error message on the engine control panel.<br>-Check if the controller is properly connected to the engine. |

| **Model:** PRIPORT PINKGOLD/PGB4/PGP | **Date:** 2-Dec-03 | **No:** R-C238-**012a** |
|---|---|---|

## PRINTER DRIVER OPERATION

If the Windows test page does not print or does not look right, check the printer driver operation using these steps:

1.  Select the Details tab in the Properties menu of the printer driver.

2.  Change the port connection to "File:".

3.  Click on the Apply button. Then select the General tab and click on the Print Test Page button.

4.  Set the file name (e.g. test.prn), then set the disk/directory location and save the file.

5.  Click "YES" when the message pops up and asks whether the test page printed correctly.

6.  Access an MS-DOS prompt or command prompt.

7.  Check to see that the engine and controller are ready for printing. Then execute the following command at the MS-DOS prompt or command prompt. "copy /b test.prn lpt1".

    **NOTE:** 1) Always input "/b" after the Copy command.
    2) The above example applies if the file name saved in Step 4 is "test.prn".
    3) If the controller is connected to the second PC port, replace "lpt1" with "lpt2".

8.  Input "exit," then exit from the MS-DOS prompt or command prompt.

9.  If the test page has printed correctly, change the printer driver port from "File:" back to its previous setting.
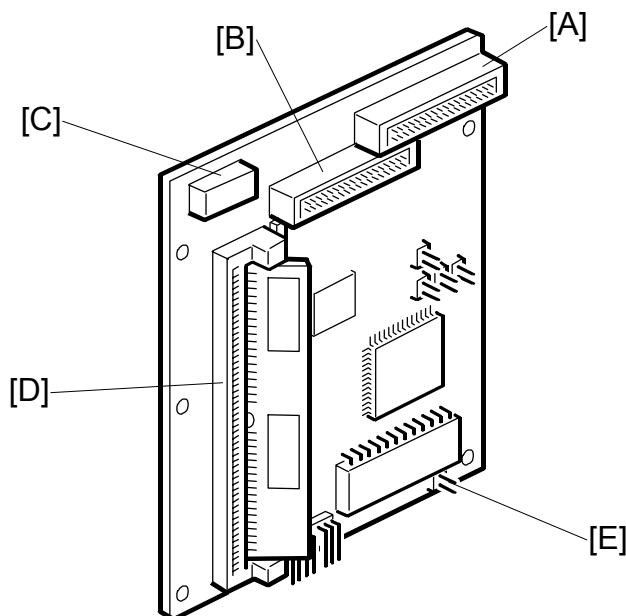
## SERVICE TABLES

There are no SP modes for the printer controller unit.

| **Model:** PRIPORT PINKGOLD/PGB4/PGP | **Date:** 2-Dec-03 | **No:** R-C238-**012a** |
|---|---|---|

# DETAILED DESCRIPTIONS

## OVERVIEW



C249D950.WMF

| DESCRIPTION | CONTROLLER |
|---|---|
| CPU | Analog Devices ADSP chip |
| RAM | 16MB (SIMM) |
| Flash ROM | 1MB EPROM |

| REF. | CONNECTOR | | DESCRIPTION |
|---|---|---|---|
| | **Name** | **Configuration** | |
| A | IEEE1284 I/F | 26-pin socket | To IEEE1284 Interface |
| B | Engine Interface | 26-pin socket | To video I/F board |
| C | Power connector | 4-pin socket | To power cable |
| D | SIMM Interface | 72-pin SIMM | For connecting the SIMM module |
| E | Upgrade firmware jumper | 2-pin | Upgrading controller firmware |

**Reissued: 2-Jun-05**

| Model: PRIPORT PINKGOLD/PGB4/PGP | Date: 2-Dec-03 | No: R-C238-**012a** |
|---|---|---|

## MACHINE LAYOUT
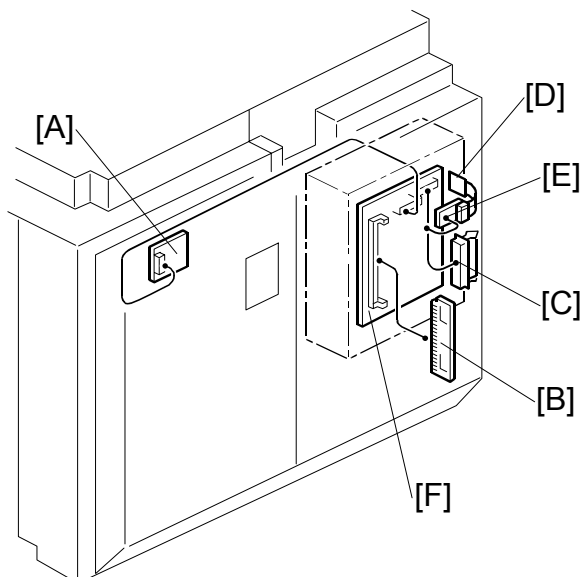


| REF. | COMPONENT |
|---|---|
| A | Video Interface Board |
| B | SIMM Module |
| C | IEEE1284 Interface |
| D | Control Button Board |
| E | Keypad Board |
| F | Printer Controller Board |

**Reissued: 2-Jun-05**

| **Model:** PRIPORT PINKGOLD/PGB4/PGP | **Date:** 2-Dec-03 | **No:** R-C238-**012a** |
|---|---|---|

## SEPECIFICATIONS

| Controller Type | Embedded |
|---|---|
| Configuration | Internal embedded controller |
| Printer Language | GDI |
| Print Resolution | 300dpi |
| Memory (RAM) | 16MB (SIMM) |
| Resident Fonts | None |
| Host Interface | IEEE1284B (Compatible, Nibble, ECP) |
| | |
| Host PC | IBM PC/AT compatible PC |
| Operating Systems Supported | Windows 95/98/Me, Windows NT4.0 (*1), Windows 2000/XP |
| Printer Driver | Digital Duplicator A3 300 GDI<br>Digital Duplicator B4 300 GDI |

**NOTE:** The Printer drivers for Windows NT4.0 are only for Intel x86 compatible platforms. There is no Windows NT4.0 printer driver for the PowerPC, Alpha, or MIPS platforms.