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Firmware Version 1

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UNITED STATES

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and may radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult BRADY Technical Support for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference and, (2) this device must accept any interference received, including interference that may cause undesired operation.

INDUSTRY CANADA

Industry Canada ICES-003:

CAN ICES-3 (A)/NMB-3(A)

EUROPE

Waste Electrical and Electronic Equipment Directive

In accordance with the European WEEE Directive, this device needs to be recycled in accordance with local regulations.
RoHS Directive 2011/65/EU

This product is CE marked and complies with the European Union's Directive 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Turkey

Turkish Ministry of Environment and Forestry

(Directive on the Restriction of the use of certain hazardous substances in electrical and electronic equipment).

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur
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determine for him or herself their adaptability to his/her intended uses. BRADY warrants to
the buyer that its products are free from defects in material and workmanship, but limits its
obligation under this warranty to replacement of the product shown to BRADY’s satisfaction
to have been defective at the time BRADY sold it. This warranty does not extend to any
persons obtaining the product from the buyer.

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OR CONSEQUENTIAL DAMAGES OF ANY KIND ARISING IN CONNECTION WITH
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THIS LICENSE AGREEMENT. IF YOU DO NOT AGREE WITH THESE TERMS &
CONDITIONS, PLEASE PROMPTLY RETURN THIS PACKAGE FOR A FULL REFUND.
Technical Support

Technical Support Numbers/On-line Help

For repair or technical assistance, find your regional Brady Tech Support office in the following list.

- United States: 1-800-643-8766 or via the web at www.bradyid.com/techsupport
- Canada: 1-888-262-7576 or via the web at www.bradycanada.ca
- Mexico & Latin America: 01-800-212-8181 or via the web at www.bradylatinamerica.com
- Europe: +44 333 333 1111 or via the web at www.bradyeurope.com/services

Repair and Replacement Parts

Brady Corporation offers repair and replacement services. Contact Brady Technical Support for repair and replacement information.
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Introduction

Thank you for purchasing the BBP®30 Label Printer mono-color peripheral printer. This compact, easy-to-operate thermal transfer printer easily connects to your computer for printing labels that you produce using Brady Workstation software. Media and ribbons from Brady Corporation are programmed to work specifically with the printer.

Features and Functions

The following are just some of the features that make this system so easy to use and ready to meet your label-printing requirements:

- Small, lightweight (approximately 11 lbs [4.9 kg]) unit, ready for your desktop.
- A variety of media colors, styles and materials and a wide range of single-color ribbons.
- Smart-cell technology that works intelligently with Brady consumables.
- Easy loading media and ribbon supplies.
- Continuous and die-cut media in a variety of high-performance materials.
- Maximum print speed of 4 ips.
- 300 dpi (11.8 dot/mm) print resolution.
- USB device ports.
- Brady Workstation
- Built-in autocutter.
- LED display screen to view system status and set printer defaults and options.

Compatible Applications

The BBP®30 Sign and Label Printer is compatible with Brady Workstation software. When used with this software package, the printer automatically recognizes all enabled and compatible media.

Note: Only Brady BBP®30 supplies work with this printer.
System Specifications

- **Weight**: 11 lbs (4.9 kg)
- **Dimensions** (stored): 8.9 in. x 12.0 in. x 9.5 in. (22.6 cm x 30.5 cm x 24.1 cm)
- **Operating Temperature**: 50 to 104°F (10-40°C)
- **Relative Humidity**: 10% to 80% RH non-condensing
- **Storage**: -4 to 122°F (-20 to 50°C) at 15% to 90% RH non-condensing
- **Voltage**: 90 to 264 VAC, 47 to 63 Hz
- **Print Resolution**: 300 dpi, 11.8 dot/mm
- **Output media size**: up to 4 in. (101.6 mm) wide
Keypad and Menu Functions

The following describes the keys, buttons and display screen that are used to navigate through and use the BBP®30 Label Printer.

User Interface

The user interface (UI) contains the keypad and buttons for using the printer. The main functions are as follows:

<table>
<thead>
<tr>
<th>Item #</th>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><img src="image" alt="Power Button Icon" /></td>
<td><strong>Power Button</strong>: Turns the printer on and off.</td>
</tr>
<tr>
<td>2</td>
<td><img src="image" alt="Menu Icon" /></td>
<td><strong>Menu</strong>: The display screen.</td>
</tr>
<tr>
<td>3</td>
<td><img src="image" alt="Keypad Icon" /></td>
<td><strong>Keypad</strong>: Press (\downarrow) or (\uparrow) to move through primary menu. Press (\leftarrow) to exit or move up a menu. Press (\rightarrow) for menu support functions. Press (\text{OK}) to accept a selection or move through submenus.</td>
</tr>
<tr>
<td>4</td>
<td><img src="image" alt="Feed Icon" /></td>
<td><strong>Feed</strong>: Feeds the labels through the printer to the next notch on the liner. Feeds a full label for die cut; 0.5-inch (12.7 mm) for continuous.</td>
</tr>
<tr>
<td>5</td>
<td><img src="image" alt="Display Screen Icon" /></td>
<td><strong>Display Screen</strong>: See “Display Screen” page 4 for details.</td>
</tr>
</tbody>
</table>
Display Screen

The display screen has two modes:

- **Ready Mode**: Indicates printer status and displays estimated remaining media and estimated remaining ribbon. Also indicates the media and ribbon installed.

- **Menu Selection Mode**: Lets you configure system defaults, view and set printer information, perform input and output operations and perform diagnostics.

**Ready Mode**

The printer has three ready modes:

- **Initializing**
- **Ready**
- **Ready - USB Only**

The table describes the display screen when in idle (Ready) mode.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Printer Status</td>
<td>Displays the online printer status.</td>
</tr>
<tr>
<td>2</td>
<td>Media Status</td>
<td>Displays media part number and estimated amount of remaining media.</td>
</tr>
<tr>
<td>3</td>
<td>Ribbon Status</td>
<td>Displays ribbon part number and estimated amount of remaining ribbon.</td>
</tr>
</tbody>
</table>
Menu Selection Mode

The table describes the main options of the display screen when in menu selection mode. See page 6 for a list of all the menu options.

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut Media</td>
<td>Used to automatically cut the media.</td>
</tr>
<tr>
<td>Status Info</td>
<td>Options to display or print status and configuration information, font list and/or graphic list.</td>
</tr>
<tr>
<td>Printer Settings</td>
<td>Options to set up printer defaults for language.</td>
</tr>
<tr>
<td>Tools</td>
<td>Upgrade from a USB device.</td>
</tr>
</tbody>
</table>
User Interface Menu Structure
Printer Set Up

Unpack and Set up Printer

Carefully unpack and inspect the printer surfaces (interior and exterior) and the labeling system for possible damage during shipping.

**Note:** Be sure to remove any transportation protection from around the printhead and inside the enclosure cover.

What’s in the Box

- BBP®30 Label Printer
- Power Cord
- USB Type B Cable
- Printed Quick Start Guide
- Cleaning Kit (Cat # B31-CCT), not available in all regions - includes foam swabs, adhesive scraping tool, plastic bottle

**Note:** Please keep the original packaging, including the box, in case the printer must be returned.
### System Components

![Printer Components Diagram](image)

#### Figure 1 • Printer Components

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enclosure cover</td>
</tr>
<tr>
<td>2</td>
<td>Label exit chute/auto cutter</td>
</tr>
<tr>
<td>3</td>
<td>Power button</td>
</tr>
<tr>
<td>4</td>
<td>Media</td>
</tr>
<tr>
<td>5</td>
<td>Media wiper</td>
</tr>
<tr>
<td>6</td>
<td>Media guides</td>
</tr>
<tr>
<td>7</td>
<td>Ribbon cartridge</td>
</tr>
<tr>
<td>8</td>
<td>Ribbon cover latch</td>
</tr>
<tr>
<td>9</td>
<td>Ribbon cover</td>
</tr>
<tr>
<td>10</td>
<td>Ribbon cartridge latch</td>
</tr>
</tbody>
</table>
Set up the Printer

Connect Printer Power

To setup the printer:

1. Plug the power cord into the printer at the location shown.

2. Plug the other end of the power cord into an AC power outlet. The printer automatically turns on and displays the printer status and the size and color of the currently installed media.
Install or Change Supplies

The media and ribbon supply cartridges use a “smart cell” to define and track the supply information. The system automatically recognizes the supply information for the installed media and ribbon.

**Note:** The printer can be either on or off when changing supplies.

To install or change ribbon:

1. Open the enclosure cover
2. Release the latch on the ribbon cover and swing open.
3. Release the ribbon cartridge latch and lift the ribbon cartridge up and out.
To install a ribbon:

1. Place the ribbon cartridge with the ribbon over the print head and the product label toward machine, then snap into place.

2. Close and latch the ribbon cover.

3. Close the enclosure cover.

4. If printer was off, press $\text{[\text{on}\text{-}\text{off}]}$. The system detects the media and ribbon colors and sets the amount of remaining supplies.
To install or change media:

1. Open the enclosure cover.

2. Release the latch on the ribbon cover and swing open.

3. If engaged, swing yellow media wiper to the back.

4. Slide yellow media guides out to the sides to fully open.

5. Remove existing media, if installed, by pulling the cartridge from printer.
6. Insert the media cartridge until spindle ends rest in slots of media holder. Media unwinds from the top of the roll and the smart cell should be on the left side of the spindle.

7. Feed media from the top of the roll until it sits just past the black rubber roller.

8. Slide the media guides inward from the sides until they touch the edge of the media liner, with the media under the guides.

9. Move the media wiper into position so it rests on the media.

Note: Not all media requires the use of the media wiper. Engage the media wiper only if continuous media is installed.
10. Close and latch the ribbon cover.

11. Close the enclosure cover.

If printer was off, press \( \text{Power} \). The system detects the media and ribbon colors and sets the amount of remaining supplies.

Feeding and Cutting Label Stock

Use this procedure to advance the media to the cut position, and (optionally) cut the media.

Note: For die-cut media, the media is advanced to the cut position which is the next die-cut label. For continuous media, the media advances until you release the Feed button.

To feed and cut the label stock:

1. With printer power on, press and hold \( \text{Feed} \) until the length of media you want exits the printer.

To cut the media:

2. Press \( \text{Menu} \) to go to the navigation menu.

3. Press \( \text{Up} \) or \( \text{Down} \) to scroll to \( \text{Cut Media} \), then press \( \text{OK} \). The media is cut.
System Power

These procedures describe how to power-up the printer when starting from a non-powered state (i.e., printer has been unplugged) and how to remove power from the printer.

**Note:** With power removed (i.e., printer disconnected from power source), the system clock retains its settings for about 30 days.

Starting Printer

1. **To start printer from a cold state:** Plug the printer into a power source. The system automatically recognizes the supply information for the installed media and ribbon and the display panel indicates *Ready*.

   **Note:** The backlight for the display panel turns off after a pre-defined period of time.

2. **To turn on the backlight:** Press any button.

Powering Off the Printer

When the system is shut down, the display turns off.

To completely remove printer power:

1. Disconnect the power cord from the printer.

To perform a soft power down:

2. Press and release the Power button 🔁. The screen goes blank and the backlight goes off.

Rebooting the Printer

Use this procedure to reboot the printer (e.g., if the screen freezes).

To reset the printer:

1. Press and hold the Power button 🔁 for at least 5 seconds. The system performs the initialization process and restarts the printer.

2. When the *Ready* displays, you can continue printing your labels.
Connect Printer to a PC via USB

Unless you are using Brady Workstation and Direct Print, to use your PC with the BBP®30 Sign and Label printer, you must have the USB device driver installed on your PC.

Note: See Compatible Applications (page 1) for a list of software applications that are compatible with the BBP®30. Refer to your labeling software documentation for instructions about installing and using the software.
User Interface Menu

The User Interface (UI) menu provides feedback and also allows you to access and change printer settings, printer status and tools. A 5-way navigation keypad lets you navigate through the menu structure to choose the option(s) you want.

In *Ready* mode, the UI menu indicates printer status and displays estimated remaining material and ribbon. In *Menu Selection* mode, the display changes to a navigation-type menu. Navigation is divided into 4 major functions:

- Cut Media
- Status Info
- Printer Settings
- Tools

Cut Media

Selecting *Cut Media* from the menu sends a signal to the printer telling it to cut the media.

To set the cut option:

1. Press **Menu** to go to the navigation menu. *Cut Media* is the first option.

2. When you are ready to cut, press **OK**. The printer cuts at the current position of the media.

**Note:** The menu stays on *Cut Media* until you exit the menu.

3. When done, press **↑** to exit to the main menu.
Status Info

Status Info includes information about the printer configuration and fonts. From this menu, you can print a configuration label.

To view system information:

1. Press Menu to go to the navigation menu.

2. Press ▲ or ▼ to scroll to Status Info, then press OK.

3. Press ▲ or ▼ and choose from one of the following options, then press OK:

   Note: For print options, use continuous media to get the best results.

   • **Info**: Displays the current application and firmware version.
   • **Print Configuration**: Prints current printer configuration.

4. When done, press ▲ twice to exit to the main menu.
Printer Settings

The Printer Settings menu lets you set the default values for the printer. Defaults are common settings that are pre-assigned to make the system usable as soon as power is applied (e.g., set date and time to your local date and time). By changing the defaults, you can set the printer to your specific requirements.

Any defaults set here will stay in effect even when power is removed from the printer, and also during upgrades.

Note: If password protection has been implemented, you will need to enter a password to have access to these functions.

Language

To change language setting:

1. Press Menu to go to the navigation menu.

2. Press ▲ or ▼ to scroll to Printer Settings, then press OK.

3. Press ▼ to scroll to Language, then press OK.

4. Press ▲ or ▼ to scroll to the language you want.

5. Press OK to accept the change. It takes a few moments for the settings to take effect.

6. When done, press ◀ twice to exit to the main menu.
Tools

Upgrade from USB Flash Drive

Use this procedure to upgrade the firmware or software from a USB flash drive that contains the upgrade. The system will support only one USB device at a time.

To upgrade software from a USB flash drive:

---

**CAUTION**

Do not interrupt power during an upgrade from a USB flash drive.

---

1. Copy the upgrade files to the root directory of your USB flash drive.
2. Connect the USB flash drive to any available USB port on the printer.
3. Press **Menu** to go to the navigation menu.
4. Press ▲ or ▼ to scroll to **Tools**, then press **OK**.
5. Press ▼ to scroll to **Upgrade from USB**, then press **OK**. The printer automatically downloads and installs the firmware/software from the root directory of the USB flash drive.

---

**Note:** During the upgrade, the screen goes blank. It may take a few moments for the upgrade to complete. When done, the printer returns to the **Ready** menu.
Diagnostics

Some diagnostics are not available for users. Advanced diagnostics are password protected and to be used only with Brady Technical Support. The password is assigned by Brady.

Enter Diagnostic Mode

Use this procedure to access any of the diagnostics menus.

To enter diagnostics mode:

**Note:** A password is required to access the Advanced Diagnostics menus.

1. Press to go to the navigation menu.
2. Press ▲ or ▼ to scroll to Tools, the press OK to go to the submenu.
3. Press ▼ to scroll to Diagnostics, then press OK to go to the diagnostics list.
4. When done, press to exit the test.

Sensors

Print Engine Base (PEB) Settings

This procedure displays the PEB settings on the printer.

To view the PEB settings:

1. Access Diagnostic mode (see “Enter Diagnostic Mode” page 21).
2. Press OK to select Sensors.
3. Press OK to select PEB Settings. The PEB settings display results for the following:

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CutLine - Lead.</td>
<td>xxxx</td>
</tr>
<tr>
<td>Leading - Print</td>
<td>xxxx</td>
</tr>
<tr>
<td>Print - Diecut</td>
<td>xxxx</td>
</tr>
<tr>
<td>Diecut - Tapeout</td>
<td>xxxx</td>
</tr>
<tr>
<td>Rocker Steps</td>
<td>xxxx</td>
</tr>
<tr>
<td>Print - Center</td>
<td>xxxx</td>
</tr>
</tbody>
</table>

4. Press ◀ repeatedly to exit to the main menu or OK to return to the PEB Settings menu.
Sensor Conditions

This diagnostic detects the sensor conditions for ribbon motion, door, cutter, leading (edge), diecut, tapeout, wiper, and center.

Conditions are:

- **BL** (blocked)
- **Clos** (closed) or **Open**
- **Hom** (home position)
- **Eng** (engaged)
- **UnB** (unblocked)

To view the PEB settings:

1. Access Diagnostic mode (see page 21).

2. Press ▼ to scroll to **Sensor Conditions**, then press OK. The sensor settings display results for the following:

<table>
<thead>
<tr>
<th>Sensor</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>RibbonMotion</td>
<td>BL</td>
</tr>
<tr>
<td>Door</td>
<td>Clos/Open</td>
</tr>
<tr>
<td>Cutter</td>
<td>Hom</td>
</tr>
<tr>
<td>Leading</td>
<td>BL</td>
</tr>
<tr>
<td>Diecut</td>
<td>BL</td>
</tr>
<tr>
<td>TapeOut</td>
<td>BL</td>
</tr>
<tr>
<td>Wiper</td>
<td>Eng</td>
</tr>
<tr>
<td>Center</td>
<td>BL</td>
</tr>
</tbody>
</table>

3. Press ◀ repeatedly to exit to the main menu or OK to return to the **Sensor Conditions** menu.
**Analog Readings**

This diagnostic detects the analog readings for the diecut analog/digital converter, head voltage and thermistor temperature.

To view the analog readings:

1. Access **Diagnostic** mode (see page 21).

2. Press ▼ to scroll to **Analog Readings**, then press OK. The readings display for the following:

<table>
<thead>
<tr>
<th>Analog</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diecut A/D</td>
<td>xxxx</td>
</tr>
<tr>
<td>Head Voltage</td>
<td>xxxx</td>
</tr>
<tr>
<td>Thermistor</td>
<td>xxxx</td>
</tr>
</tbody>
</table>

3. Press ▲ repeatedly to exit to the main menu or OK to return to the *Analog Readings* menu.

**Copy Error Logs**

**Printer Error Log**

1. Insert a USB drive into any available port on the printer.

2. Access **Diagnostic** mode (see page 21).

3. Press ▼ to go to **Copy Error Logs**, then press OK.

4. Press OK to select **Printer Error Log**, then press OK. The error log is written to the USB drive and the message *Successfully Copied Error Log* displays.

   **Note:** A message will display if no USB device is detected.

5. Press ▲ repeatedly to exit to the main menu.

To view the error log:

6. Remove the USB drive from the printer and insert into your PC.

7. In Windows Explorer, navigate to the USB drive and open the folder **BBP30 Error Logs**.

8. Double-click the file **PRINTER_ERROR_LOG.txt** to view the log.


**Script Error Log**

1. Access Diagnostic mode (see page 21).

2. Press ▼ to go to Copy Error Logs, then press OK.

3. Press ▼ to go to Script Error Log.

4. Press OK. The error log is written to the USB drive and the message Successfully Copied BPL Error Log and Successfully Copied SM Error Log displays.

   **Note:** A message will display if no USB device is detected.

5. Press ◀ repeatedly to exit to the main menu.

To view the error log:

6. Remove the USB drive from the printer and insert into your PC.

7. In Windows Explorer, navigate to the USB drive and open the folder BBP30 Error Logs.

8. Double-click either of the following files to view the logs:
   
   • BPL_ERROR_LOG.txt
   • SCRIPT_ERROR_LOG.txt
USB Test

The USB test verifies that the USB ports are active. The tests can be performed with a flash drive or a type-B cable.

**USB Flash Drive Test**

To perform a USB test:

1. Access **Diagnostic** mode (see page 21).

2. Press ▲ or ▼ to go to **USB Test**, then press  to select the test.

3. Press  to start the test.

4. Insert a USB flash drive into the **Lower USB** port. The display indicates *DSK2: attached*.

5. Remove the USB flash drive. The display indicates *DSK2: removed*.

6. Repeat steps 4 and 5 for the **Upper USB** port.

7. When done, press  to exit the test.

**USB Type-B Cable Test**

To perform a USB test with a type-B cable:

1. Access **Diagnostic** mode (see page 21).

2. Press ▲ or ▼ to go to **USB Test**, then press  to select the test. The USB Test Status screen displays.

3. Insert a USB type-B cable from the **Lower Host** port to the **Function** port. The display indicates *LPT1: attached*.

4. Remove the USB type-B cable. The display indicates *LPT1: removed*.

5. Repeat Steps 3 and 4 for the **Upper Host** port.

6. When done, press  to exit the test.
Keyboard Setup

This procedure configures the printer to use the selected regional USB keyboard.

To configure a keyboard:

1. Access Diagnostic mode (see page 21).

2. Press ▲ or ▼ to go to Keyboard Setup, then press OK. The list of keyboard options displays.

3. Press ▲ or ▼ to select the regional configuration you want, then press OK. The printer is configured for use with the selected keyboard.

4. Press  repeatedly to exit to the main menu.

Info

Lists the length of label media printed, number of cuts made and the last errors displayed.

To view printer information:

1. Access Diagnostic mode (see page 21).

2. Press ▲ or ▼ to go to Info, then press OK.

3. Press ▲ or ▼ to select the information you want displayed:
   - Printed: Displays the number of ft (mm) of media printed to date.
   - Cuts: Displays the total number of cuts made to date. (Note: The number actually reflects the number of times the printer has retracted the material for a new print.)
   - Last Errors: Displays the last 15 printer error message numbers.

4. Press OK to display the error messages.

---

Note: The errors displayed are for actual messages received. So, if you get the same error multiple times, the screen will display that error once for each occurrence (up to 15).

5. Press  repeatedly to exit to the main menu.

Advanced Diagnostics

A password is required to enter the advanced diagnostic procedures. Contact your Brady Technical Support contact for help with these diagnostics.
Printer Maintenance

Removing Power and Media from Printer

Before performing any maintenance procedure that involves opening the enclosure cover, you should remove the power and media from the printer.

To remove printer power and media:

1. Remove the power plug from the printer.

2. Open the enclosure cover.

3. Release the latch on the ribbon cover and swing open.

4. Release the ribbon cartridge latch and lift the ribbon cartridge up and out.
5. Move yellow media wiper to the back.

6. Move yellow media guides to full-open.

7. Remove media cartridge from the slots of media holder.
Cleaning the Printer

Remove Dust

Dust generated by media cuts can accumulate in the unit. If a significant amount of dust is built up, clean the unit using this procedure.

Materials Required

- Isopropyl Alcohol
- Compressed Air Bottle, purchased locally (e.g., HOSA AIR-464 Gear Duster)

To clean dust from the printer:

CAUTION

Always wear safety glasses when using compressed air.

1. Remove power and media from the printer (see page 27).
2. Using compressed air, spray all visible areas inside the printer to remove accumulated dust.
3. Using a cloth moistened with isopropyl alcohol, wipe any remaining dust from inside the printer.
4. Wipe exterior cover and frame of printer for dirt and residue.
Clean Printer and Keypad Residue

Whenever performing any maintenance on the printer, you should also clean any residue caused by the media.

Materials Required

- Compressed Air Bottle, purchased locally (e.g., HOSA AIR-464 Gear Duster)
- Lint-free Cloth
- Isopropyl Alcohol
- Safety Glasses

To clean residue from the printer:

---

CAUTION

Always wear safety glasses when using compressed air.

---

1. Remove power and media from the printer (see page 27).

2. With safety glasses on, spray compressed air on any parts of the printer that have built-up residue.

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Note: If compressed air is not available, use a lint-free cloth lightly moistened with isopropyl alcohol and wipe off residue.

---

3. If necessary, use a moistened, lint-free cloth to clean the keypad.

4. Replace the ribbon and tape.

5. Close all covers and plug in the power cord.
Clean LCD Screen

Materials Required

- Lint-free Cloth, non-abrasive
- Isopropyl Alcohol
- or -
- Pre-moistened Cloth (appropriate for cleaning PC screens)

To clean the LCD screen:

**Note:** Normal cleaners with ammonia, soaps, or any acids can damage the screen. Use only a lint-free cloth dampened with isopropyl alcohol.

1. Lightly moisten a lint-free cloth with isopropyl alcohol, or use a pre-moistened cloth suitable for cleaning a PC screen.
2. Gently rub the damp cloth across the screen until all of the residue is removed.
Clean Auto-Cutter Blade

**Note:** When cleaning the cutter, you should also clean the media and cutter sensors (see page 34).

**Materials Required**

- Isopropyl Alcohol
- Cleaning Kit (Cat # B31-CCT), includes foam swabs, adhesive scraping tool, plastic bottle (not available in all regions)

To clean the cutter:

1. Remove power and media from the printer.
2. Squeeze the two yellow cutter tabs [2a] to release the cutter. The cutter mechanism and exit chute [2b] will slide down behind the ribbon cover.
3. Fill the plastic bottle from the cleaning kit with isopropyl alcohol.
4. Clean metal cutting blade:
   - If the cutting blade shows significant residue, use the adhesive scraping tool from the cleaning kit, or other flat-edged tool, to gently scrape the residue off the cutting blade.
   - Moisten one of the foam swabs from the cleaning kit with the alcohol. Do not allow the alcohol to drip from the swab.
   - Clean cutting blade with moistened swab until all residue is removed.

5. Close the cutting blade by pushing up on the exit chute until the cutter tabs snap into place.

   **Note:** You may need to hold ribbon cover up slightly to access the exit chute.

6. Replace the ribbon and tape.

7. Close all covers and plug in the power cord.
Clean Sensors

The sensors are located inside the printer and may be covered with dust that results from cutting the media. The media sensor is located under the yellow media guide.

Materials Required

- Cleaning Kit (Cat # B31-CCT), includes foam swabs, adhesive scraping tool, plastic bottle (not available in all regions)
- Isopropyl Alcohol

To clean the sensors:

1. If necessary, remove power and media from the printer (see page 27).
2. With the ribbon cover open, use a pre-moistened swab and thoroughly clean the surface of the sensors at the locations shown:

   CAUTION

   Do not allow the alcohol to drip from the swab.

   • Center die-cut sensor [2a]
   • Tape out/die-cut sensors [2b]
     (Note: Sensor is located under the yellow media guide.)
Clean Tape Entrance

This procedure cleans the tape entrance, exit area and exit chute. The tape entrance can become sticky because of adhesive buildup.

**Note:** Clean the exit area after cleaning the sensors (see page 34). The cleaning swab may be damaged when cleaning the exit area.

Materials Required

- Cleaning Kit (Cat # B31-CCT), includes foam swabs, adhesive scraping tool, plastic bottle (not available in all regions)
- Kimwipes® or other non-abrasive cloth
- Isopropyl Alcohol
- Compressed Air Bottle, purchased locally (e.g., HOSA AIR-464 Gear Duster)

**CAUTION**

Always wear safety glasses when using compressed air.

To clean the tape entrance:

1. Lightly moisten a lint-free cloth with isopropyl alcohol.

**CAUTION**

**Do not use isopropyl alcohol on the print head!** Isopropyl alcohol may permanently damage the print head.

2. At the top of the tape entrance, rub along entire length of the tape entrance to remove the adhesive residue [2]. If necessary, use the adhesive scraping tool or other flat-edged tool, covered with the Kimwipe, to push against the tape entrance to clean all of the residue from the entrance.
3. Wet a cotton swab with isopropyl alcohol and thoroughly clean along the entire media entrance area.

CAUTION

When cleaning, don’t pinch or gouge the platen roller. Use only compressed air.

4. Use compressed air to clean off dust on the entire printer, including the platen roller.
Clean the Cutter Blade Exit Area

This procedure cleans the cutter blade exit area and the exit chute.

**Note:** You should clean the exit area after cleaning the cutter blade and sensors. The cleaning swab may be damaged when cleaning the exit area.

**Materials Required**

- Cleaning Kit (Cat # B31-CCT), includes foam swabs, adhesive scraping tool, plastic bottle (not available in all regions)
- Isopropyl Alcohol

To clean the exit chute:

1. If necessary, remove power and media from the printer (see page 27).
2. Close the ribbon cover. It does not need to snap into place.
3. Using a swab pre-moistened with alcohol, clean the exit chute entrance [3a] and exit chute ramp [3b].

**Note:** To reach all areas of the exit chute, you can close the enclosure cover and tilt the printer up.

4. Replace the ribbon and tape.
5. Close covers and plug in the power cord.
Clean Printhead

Materials Required

- Cleaning Kit (Cat # B31-CCT), includes foam swabs, adhesive scraping tool, plastic bottle (not available in all regions)
- Isopropyl Alcohol

CAUTION

Use only the materials supplied in the cleaning kit. Using other materials may permanently damage the printhead.

To clean the printhead:

1. Remove power and media from the printer (see page 27).
2. Fill the plastic bottle from the cleaning kit with isopropyl alcohol.

CAUTION

Do not rub the swab over the bronze-colored area of the printhead. This may permanently damage the printhead.

3. Moisten one of the foam swabs from the cleaning kit with the alcohol and gently rub across the green and black area only of the printhead [3].

4. Replace the ribbon and tape.
5. Close all covers and plug in the power cord.
Replacing the Media Wiper

Materials Required

- Media Wiper (5 pack) Kit, Cat #B31-WIPER (sold separately)

To replace the media wiper:

1. Remove power and media from the printer (see page 27).
2. Lift and hold the wiper arm while grasping the tab of the wiper insert [2].
3. Pull the tab slightly forward and then slide the wiper insert out of the wiper arm.
4. To replace the wiper, insert the lip of the wiper insert into the slot [4] of the wiper arm and slide in until the tab snaps into place.

5. Replace the ribbon and tape.
6. Close all covers and plug in the power cord.

Clearing Jams

To clear jams from the printer:

1. Remove all damaged ribbon and/or media from the printer.
2. Check that there is no damage to the print head, sensors, or any other parts.
3. Check whether any cleaning is needed. If cleaning is required, see page 29 for details.
4. Reload ribbon and media and clear all error messages.

Replacing/Adjust Media End Caps

In the unlikely event that your tape roll comes apart, contact Tech Support for assistance in replacing or adjusting the end caps. See page v for details.
Troubleshooting

Messages

The BBP®30 Label Printer contains error messages that describe what action you should take to resolve any messages or errors.

Messages indicate the problem for the task being performed and also provide a possible corrective action.

Printing Errors

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printer not ready.</td>
<td>The ribbon cover is open or the cutter is not in operating position.</td>
<td>Close and latch ribbon cover or move cutter to operational position.</td>
</tr>
<tr>
<td>Error: 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printer Error</td>
<td>Ribbon cover was opened during printing.</td>
<td>Close ribbon cover.</td>
</tr>
<tr>
<td>Error: 16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printer Error</td>
<td>Media wiper is not engaged.</td>
<td>Engage media wiper arm.</td>
</tr>
<tr>
<td>Error: 21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printer Error</td>
<td>Media wiper is engaged but should not be used on this media.</td>
<td>Disengage the media wiper arm.</td>
</tr>
<tr>
<td>Error: 22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor print quality.</td>
<td>Printhead needs cleaning.</td>
<td>Clean printhead with isopropyl alcohol and swab.</td>
</tr>
<tr>
<td>Error: 1024</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Hardware Errors

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printer too warm. Print job canceled.</td>
<td>The printhead is too hot.</td>
<td>The printhead has reached maximum operating temperature. Allow printer to cool down approximately 10 minutes, then re-initiate the print job.</td>
</tr>
<tr>
<td>Error: 18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printer too cold. Print job canceled.</td>
<td>The printhead has not reached operating temperature.</td>
<td>Normal operating range is between 50-104°F (10-40°C). Allow printer to warm up to operating temperature before printing.</td>
</tr>
<tr>
<td>Error: 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media jam. Print job canceled.</td>
<td>Media is jammed in the printer [45]; Media is in the media guides, but not detected by the cutter home sensor [80]; Media is in the home position but not detected by the media out notch sensor [85]; Media is in the printer but not detected by the leading edge sensor [87].</td>
<td>Clear media path and reinstall media, then re-initiate the print job. If error persists, contact Technical Support.</td>
</tr>
<tr>
<td>Errors: 45, 80, 85, 87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cut quality poor.</td>
<td>Cutter needs cleaning because of adhesive build up on the cutter.</td>
<td>• Unlatch cutter and push down away from roller. • Remove residue from blades with flat-edged tool, then clean with isopropyl alcohol. • Close cutter and printer. • From exit chute, swab back of blades with isopropyl alcohol.</td>
</tr>
<tr>
<td>Error: 1025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residue on labels.</td>
<td>Media wiper needs to be replaced.</td>
<td>• Swing media wiper arm to upright position. • Slide wiper out of wiper arm toward left side of the printer. • Slide replacement wiper into slot on wiper arm.</td>
</tr>
<tr>
<td>Error: 1027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor media detection on the printer, or print registration problems.</td>
<td>Media end cap not centered on spindle.</td>
<td>Adjust the center position of the media roll.</td>
</tr>
</tbody>
</table>
## Media Errors

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error reading media memory cell. Reload or replace media.</td>
<td>Printer cannot read the media memory cell: media validation failed [48]; cannot read media cell [49]; cannot read memory CRC [50]; cell is wrong version [51]; media counter shows no media remaining [52].</td>
<td>Replace media. If problem persists, contact Technical support.</td>
</tr>
<tr>
<td>Errors: 48, 49, 50, 51, 52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media out.</td>
<td>Media sensor shows end of media. Print job canceled.</td>
<td>Verify media guides are positioned correctly at the edge of the media or replace roll if empty.</td>
</tr>
<tr>
<td>Error: 53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media is jammed.</td>
<td>Media is jammed somewhere in the printer. Print job canceled.</td>
<td>Clear the media path and re-initiate the print job.</td>
</tr>
<tr>
<td>Error: 54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media not detected.</td>
<td>Media is not loaded correctly.</td>
<td>Reload media: 1. Insert media. 2. Feed media between guides to middle of black roller. 3. Verify guides are positioned to media edge.</td>
</tr>
<tr>
<td>Error: 55</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Ribbon Errors

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ribbon Out.</td>
<td>The ribbon ran out or broke during the print job.</td>
<td>Replace ribbon and close inside printer cover. Re-initiate the print job.</td>
</tr>
<tr>
<td>Error: 58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ribbon too narrow.</td>
<td>The installed ribbon is narrower than the installed media.</td>
<td>Replace the ribbon cartridge with wider ribbon.</td>
</tr>
<tr>
<td>Error: 62</td>
<td></td>
<td>- or - Replace the media with a width that matches the ribbon.</td>
</tr>
<tr>
<td>Error reading ribbon memory cell.</td>
<td>The printer cannot read the ribbon memory cell: memory cell code incorrect [64], cannot read cell [65], data in cell is corrupted [66], cell is wrong version [67], ribbon counter shows no ribbon remaining [68].</td>
<td>Replace the ribbon. If problem persists, contact Technical Support.</td>
</tr>
<tr>
<td>Errors: 64, 65, 66, 67, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media mismatch.</td>
<td>The installed ribbon is not recommended for use with the current media.</td>
<td>Replace the ribbon with a type that is compatible with the media.</td>
</tr>
<tr>
<td>Error: 69</td>
<td></td>
<td>- or - Replace the media with a type that is compatible with the ribbon.</td>
</tr>
</tbody>
</table>