Section 4

Options

This section provides an overview, specifications, settings, and installation information on the IntelliBar Model 48 and 412 options. This section also lists *Intelli*Tech International, Inc. and dealer order numbers for the available options.

Users can purchase and install industry-standard memory expansion SIMM modules to improve data throughput and overall performance for the IntelliBar Model 48, Model 412, and Model 88 printers.

In addition, *Intelli*Tech options for the Model 48 and 412 printers are listed below.

User-installable options:

- Label Cutter (Model 2401)
- External rewinder (Model 2402)

Factory-installable options:

- Internal rewinder (Model 2405)
- Reflective label sensor (Model 2404)

MEMORY EXPANSION

Depending on the main board, IntelliBar memory expansion can be done in the IntelliBar Model 48 and 412 through the purchase of industry-standard, user-installable, SIMM memory modules made for Apple or PC products and available from retail or mail order computer hardware suppliers. These modules install in pairs in two slots on the main board and increase the printer's standard memory capacity as shown in Table 4-1 and Table 4-2.

NOTE: 70 SIMMs are required or printers with Revision 12, 13, or 14 main boards, while 60 ns, 9-chip SIMMs are required for printers with Rev. 15 or 16 main boards.

Table 4-1 Memory Expansion Upgrade Path, Main Board Rev. 12, 13, or 14

Model	Standard RAM	Expansion RAM									
		1 MB		2.5 MB		4 MB		8.5 MB		10 MB	
		Socket 1	*Socket 2*	*Socket 1*	*Socket 2*	*Socket 1*	*Socket 2*	*Socket 1*	*Socket 2*	*Socket 1*	*Socket 2*
48	1 MB*	—	—	1MB**	1MB**	Not supported		4MB**	4MB**	Not supported	
88	2 MB***	—	—	Not supported		Not supported		Not supported		4MB	4MB
412	2 MB***	—	—	Not supported		1MB	1MB	Not supported		4MB	4MB

* = The Model 48 contains 1 MB of standard RAM in total: 512 KB of RAM soldered on the main board and two 256-KB SIMMs pre-installed in the memory expansion slots.

** = Requires removal of SIMMs already installed.

*** = The Model 412 and Model 88 contain 2 MB of standard RAM soldered on the main board. The Model 88 comes with 10 MB of standard memory and no expandability.

NOTE: Revision 12, 13, and 14 main boards require 70 ns SIMMs.

Table 4-2 Memory Expansion Upgrade Path, Main Board Rev. 15 or 16 (for All Models and Series)

Soldered on Main Board	SIMM Slot 1	2	3	4	Total RAM
2 MB	1 MB	1 MB	None	None	4 MB
2 MB	4 MB	4 MB	None	None	10 MB

NOTE: Revision 15 and 16 main boards require 60 ns SIMMs.

Adding memory to the IntelliBar increases the length of labels that can be output and improves the printer's overall performance.

To avoid corrosion between different metals, use only tin-plated SIMM modules. For memory module installation instructions, see "Memory Expansion Module Installation (All Models)" later in this section.

INTELLIBAR OPTIONS

IntelliBar options are divided into two categories: user-installable and factory-installable. The following subsection describes these options.

User-Installable Options

- Label Cutter (Model 2401) — Lets you quickly print and process labels for immediate application. This user-installable option fits in the front panel in place of the standard peel-off assembly. You must also remove the tear bar from above the platen roller (see "Label Cutter Installation Procedure Overview (Model 48 and 412)" later in this section for installation procedures).

  The cutter is designed for users who require on-demand label printing (usually one label at a time) and the convenience of a label precut and ready to apply. The printer can be programmed to print a number of labels (up to 32,767) and then perform the cut function.

  The cutter is designed to cut paper or synthetic label backing (liner) and can also cut continuous media.

- External rewinder (Model 2402) — Mounts on front of printer and rewinds paper through the front slot. Allows you to prepare labels that can be conveniently spooled for storage or shipment to another location.

Factory-Installable Options

- Internal rewinder (Model 2405) — This option mounts inside the IntelliBar and can be used to spool printed media (labels and backing paper) for convenient storage or transportation of labels in volume quantity. You can also use the rewinder option to spool only the backing paper in peel-off print mode. For label loading instructions, see "Internal Rewinder (Model 48 and 412)" later in this section.

- Reflective label sensor (Model 2404) — This option replaces the printer's standard, transmissive (see-through) label sensor. This option reflects light off the black stripe when tag or ticket stock is fed through the printer and thereby detects the label's home position (used for determining the first print line on the label). Can also be used on butt-cut or specialty die-cut labels.

MEMORY EXPANSION MODULE INSTALLATION (ALL MODELS)

This subsection describes how to install industry-standard SIMM memory modules for increasing printer random access memory.

> **NOTE:** The SIMM modules must have a speed of 70 ns or faster on Rev. 12, 13, or 14 main boards; for Rev. 15 or 16 main boards, the SIMM modules must have a speed of 60 ns or faster. Slower SIMMs are not supported. To avoid corrosion between different metals, use only tin-plated SIMM modules.

The two memory modules must be installed in tandem (both SIMM expansion sockets must be populated with the SIMMs for the printer to operate properly). To install the modules, proceed as follows:

> **CAUTION:** Before handling a SIMM, discharge any static electricity by touching a grounded metal object, such as the metal frame inside the printer.
>
> Always hold a SIMM by its edges. Avoid touching the components on the SIMM.

1. Turn off and unplug the printer.
2. Open the left side cover.
3. Loosen the four cover screws (two on the inside and two on the outside) holding the right side cover in place (see Figure 4-1).
4. Close the left side cover.

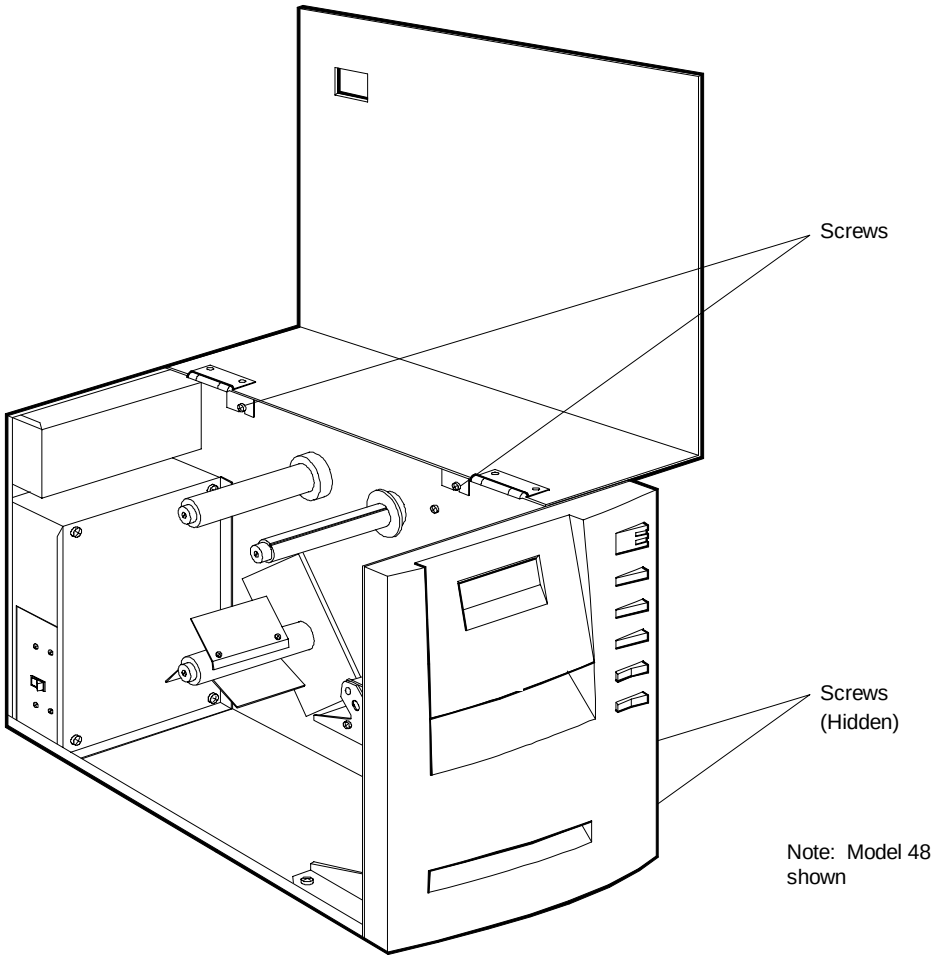
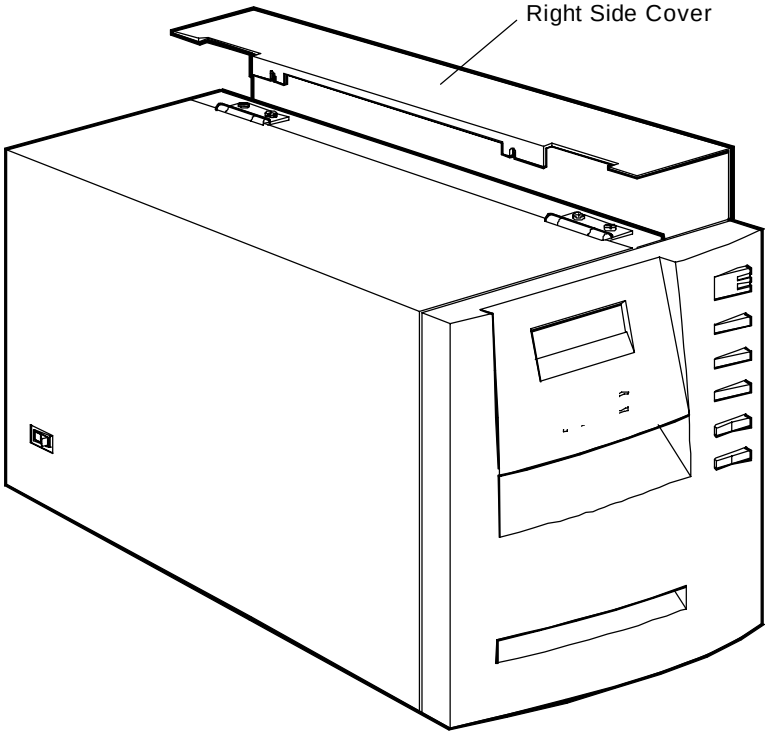


Figure 4-1 Right Side Cover Screws

5. Lift the right side cover up and away from the printer (see Figure 4-2).



Note: Model 48 shown

Figure 4-2 Right Side Cover Removal

6. Depending on the main board installed in the printer, locate the two SIMM sockets on the main board (see Figure 4-3 or Figure 4-4).

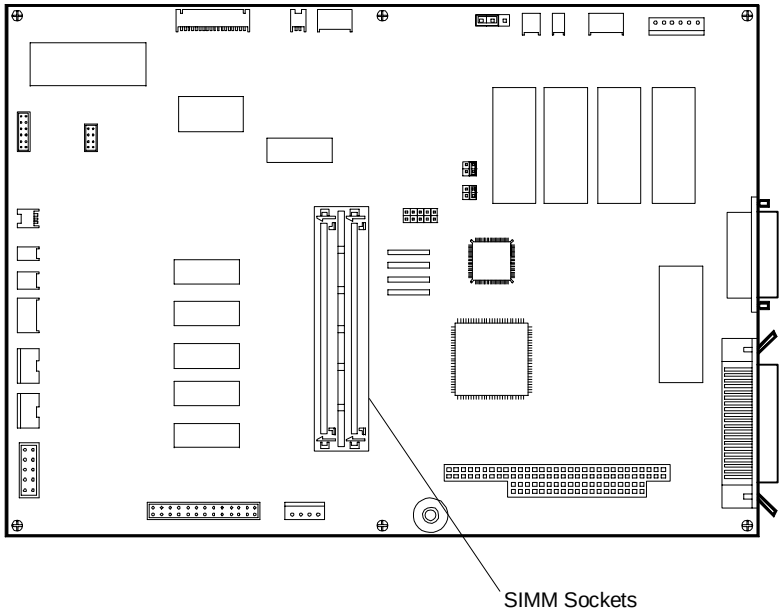


Figure 4-3 SIMM Sockets (Rev. 12, 13, or 14 Main Board)

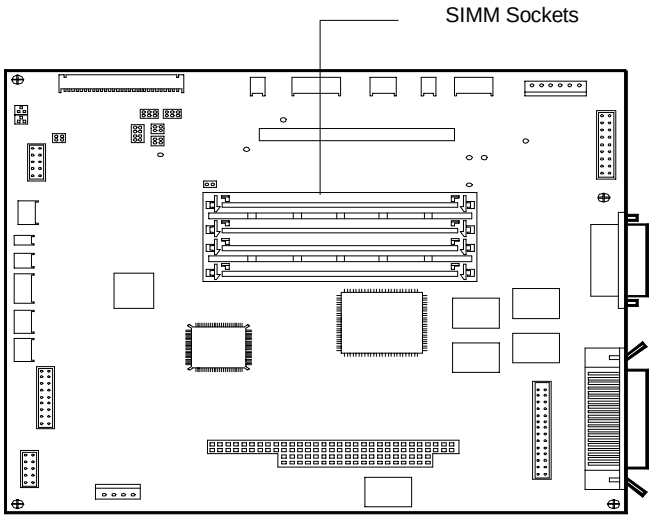


Figure 4-4 SIMM Sockets (Rev. 15 or Rev. 16 Main Board)

Adding Expanded Memory

Use the following procedure to install SIMM modules in the main board SIMM sockets.

Removing an Installed SIMM

If you need to replace a SIMM that is presently installed with a different SIMM configuration, remove the installed SIMM as follows (see Figure 4-5).

1. Press the plastic clips at the outer edges of the socket away from the SIMM.
2. Push the SIMM away from the locking tabs and remove it from the socket.

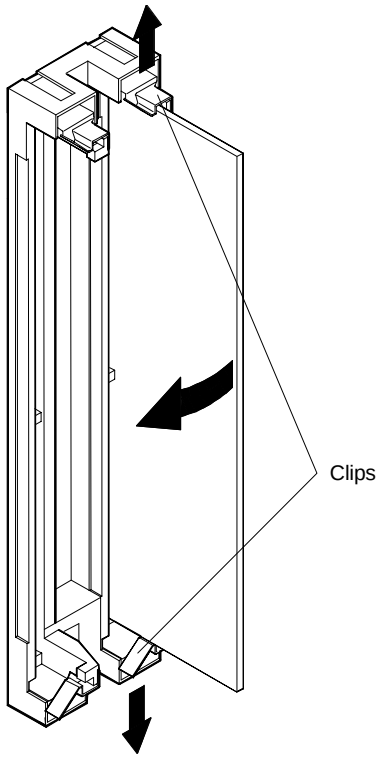


Figure 4-5 Removing a SIMM

Installing a SIMM

Install a SIMM as follows.

1. Align the notched end of the SIMM (see Figure 4-6) with the bottom end of the left or right SIMM socket (see Figure 4-7).

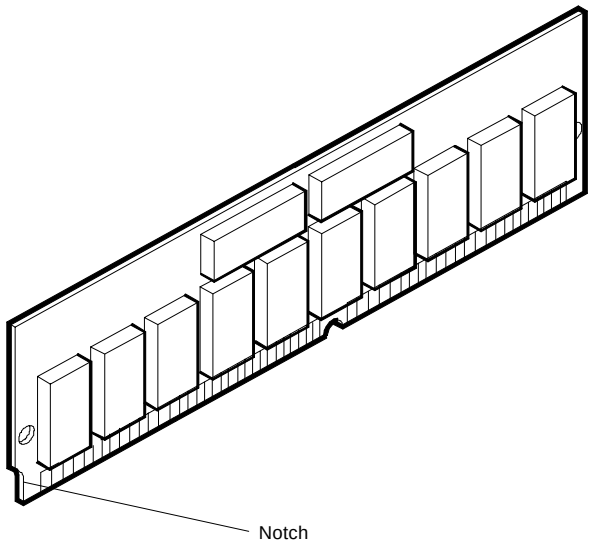


Figure 4-6 Notched End of SIMM

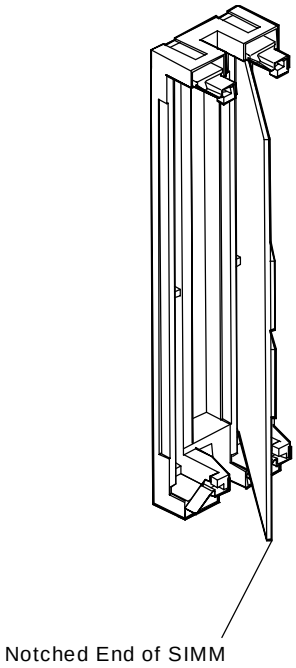


Figure 4-7 Aligning the SIMM

2. Insert the SIMM at an angle into the left or right socket.

3. Carefully tilt the SIMM toward the locking tabs (see Figure 4-8).

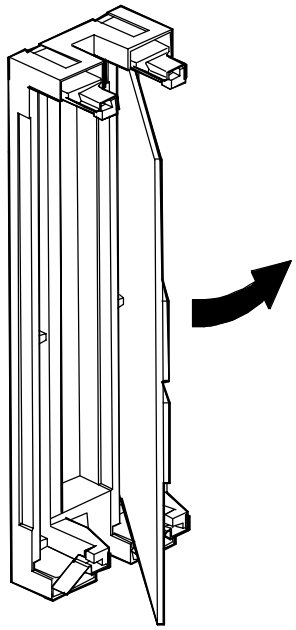


Figure 4-8 Inserting the SIMM

4. Using equal pressure at the ends of the SIMM, push the SIMM until it locks into the locking tabs on the ends of the socket (see Figure 4-9).

5. Repeat the installation procedure for the other SIMM.

NOTE: Be careful when handling the SIMM; the SIMM and socket tabs are fragile.

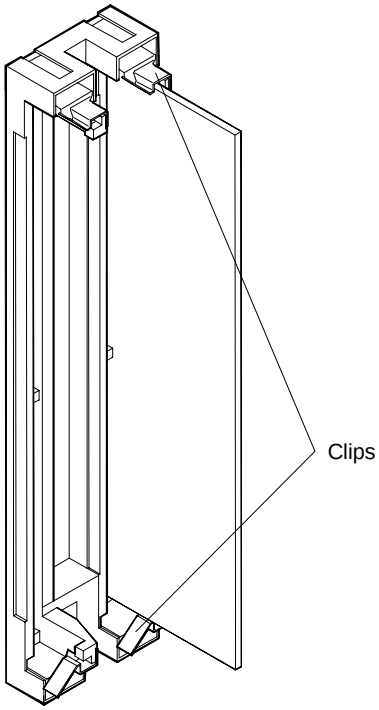


Figure 4-9 Securing the SIMM

LABEL CUTTER INSTALLATION PROCEDURE OVERVIEW (MODEL 48 AND 412)

To install the Model 2401 Label Cutter option, you must do the following:

A. remove the standard peel-off assembly from the printer.

B. install the cutter option.

C. configure the printer to use the cutter option using the control panel menu buttons.

A. Remove the Standard Peel-Off Assembly (Model 48 and 412)

To remove the peel-off assembly from the printer, proceed as follows.

1. Turn off and unplug the printer.
2. Open the left side cover (see Figure 4-10).
3. Press the front panel release latch and gently lower the front panel.

   The peel-off assembly is located on the inside of the front panel.

> **NOTE:** By lifting up the front panel stopper, you can lower the front panel so it is flat on the work table, allowing better access. Figure 4-11 in this section shows the location of the stopper.

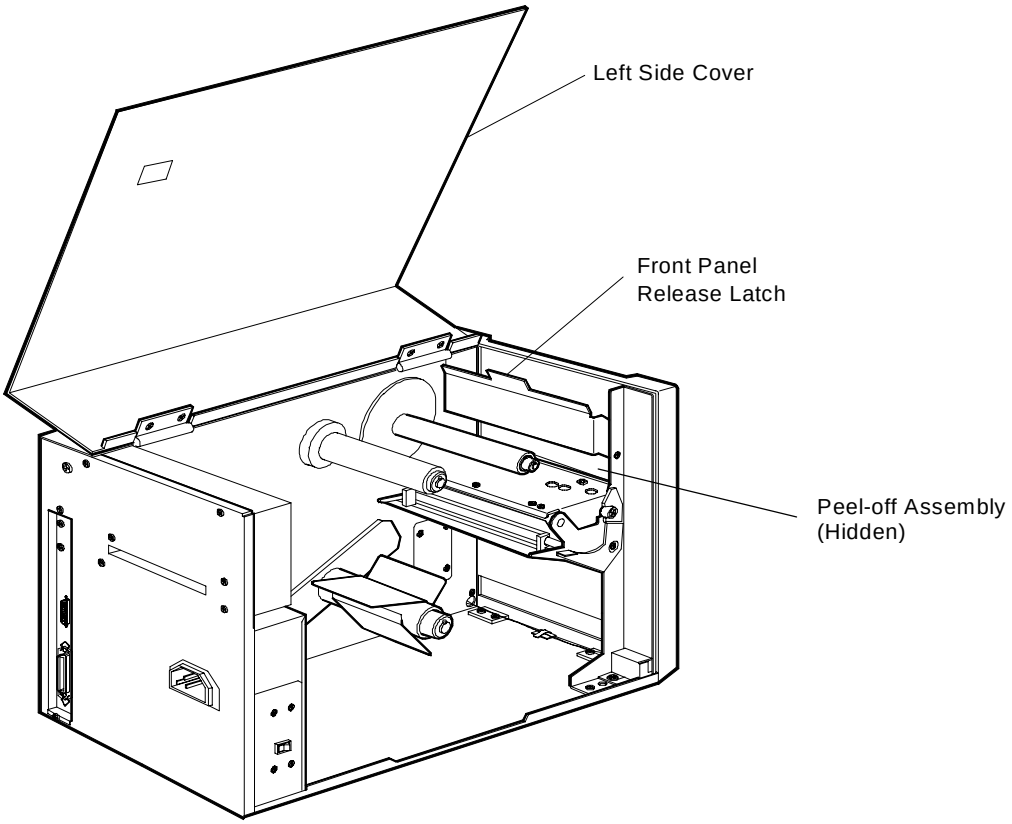


Figure 4-10 Left Side Cover and Front Panel Release Latch

4. Loosen the peel-off assembly thumb screw by turning it counterclockwise (see Figure 4-11).

5. Slide the peel-off assembly upward and out of the notches in the front panel and lift off the assembly.

6. Disconnect the peel-off assembly cable connector from the control panel board.

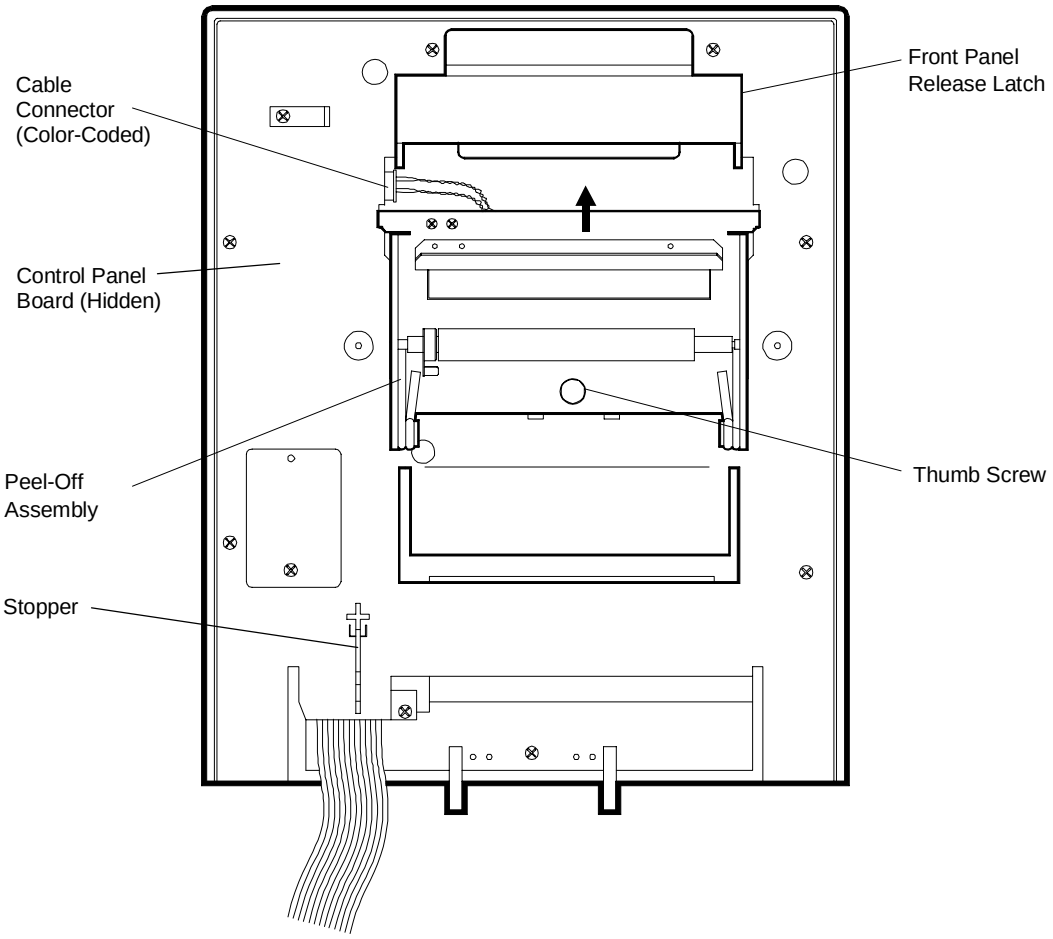


Figure 4-11 Model 48 and 412 Peel-Off Assembly Removal (Inside Front Panel View)

7. Remove the peel-off/tear bar from the printer by sliding it out of the slots (see Figure 4-12).

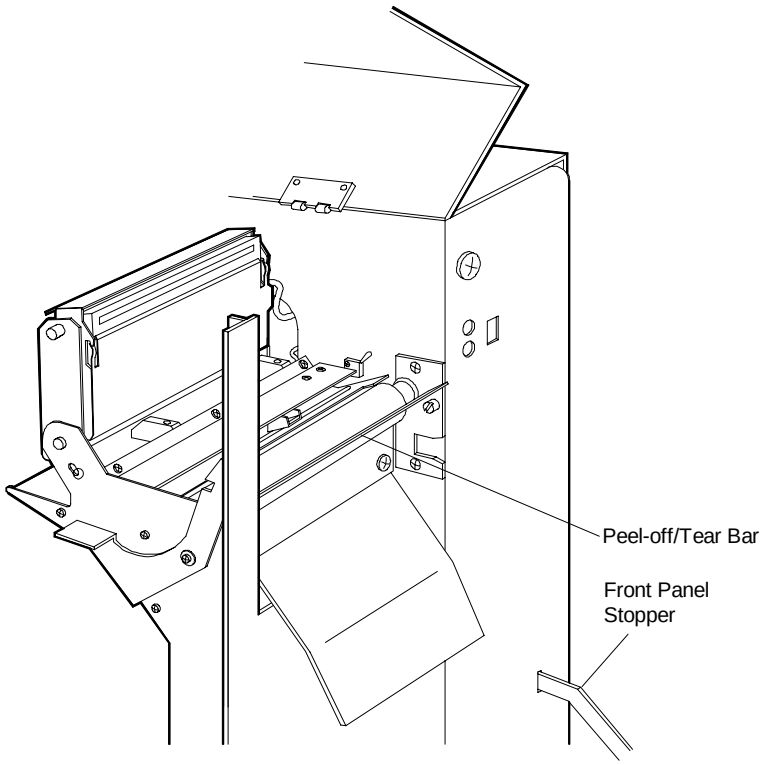


Figure 4-12 Peel-off/Tear Bar Removal (Model 48 and 412)

B. Install the Cutter Option (Model 48 and 412)

To install the label cutter, follow the removal procedure for the peel-off assembly in reverse order.

NOTE: Do not reinstall the peel-off/tear bar.

1. Connect the label cutter cable connector to the lower, six-pin control panel board connector.
2. Slide the label cutter option into the notches on the front panel.
3. Secure the label cutter option to the front panel by turning the thumb screw clockwise (see Figure 4-13).
4. Close and securely latch the front panel.

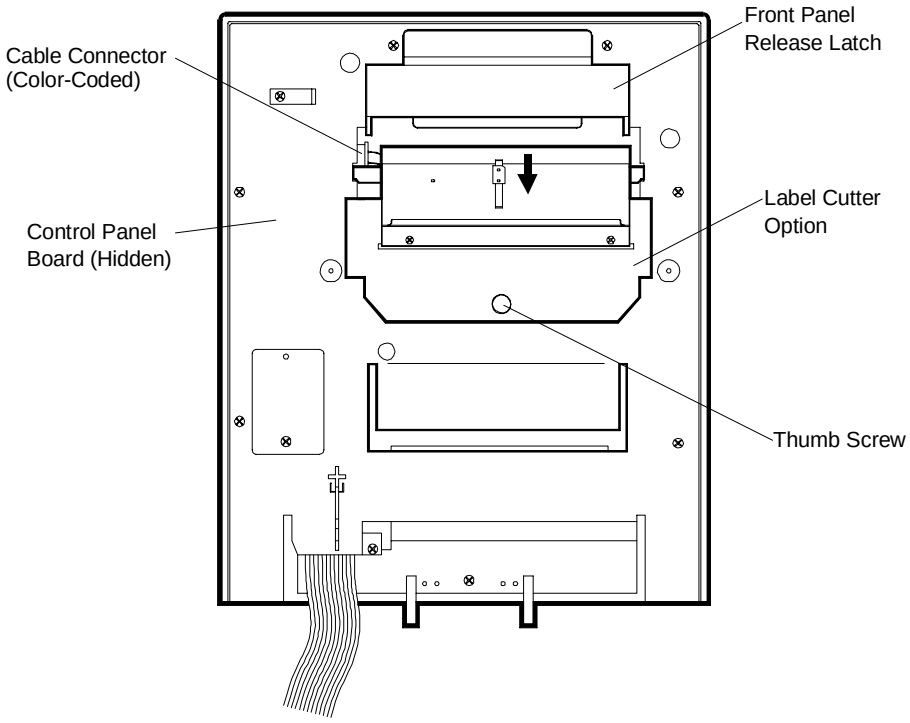


Figure 4-13 Label Cutter Installation (Model 48 and 412)

C. Configure the Printer to Use the Cutter (Model 48 and 412)

After you have installed the label cutter, use the control panel menu buttons to configure the print mode parameter for operating the label cutter option. See "Controls and Indicators" in Section 2 for information on the following set up procedure.

1. Plug in and turn on the printer. Wait for "READY" to appear in the 2-line LCD display.
2. Press **Online** to take the printer off line. The 2-line display will read "OFF LINE, PAUSE."
3. Press **Menu**. The 2-line display will change to "MAIN MENU, PRINT MENU."
4. Press **Select**. The 2-line display will change to "PRINT MENU, PRINT METHOD."
5. Press **Next**. The 2-line display will change to "PRINT MENU, PRINT MODE."
6. Press **Select**. The 2-line display will change to "PRINT MODE=, STANDARD."
7. Press **Next** until "PRINT MODE=, CUT OFF" appears in the display.
8. Press **Select**.

9. Press **Online**. This saves your menu selections, puts the printer online ("READY" appears in the control panel display) and sets up the printer to operate the label cutter after every label.

INTERNAL REWINDER (MODEL 48 AND 412)

This subsection describes how to load labels for the Model 2405 Internal Rewinder option.

> **NOTE:** This option must be installed by *Intelli*Tech International, Inc. service representatives and authorized dealers.

Loading Labels

The internal rewinder can operate in one of two ways. You can rewind labels *and* backing paper (liner) onto the take-up spindle when the printer is in standard print mode. Alternatively, you can rewind only the backing paper when the printer is set to peel-off mode using the control panel menu buttons (see Section 3 for instructions on using the control panel to put the printer in peel-off mode).

The rewinding method you use determines the remaining parts removal and installation procedures for the internal rewinder option.

To load labels, proceed as follows, depending on how you are using the internal rewinder to rewind the label media.

Loading Labels in Standard Mode

To rewind both labels and liner with the printer in standard mode, follow the steps below. (If you are rewinding only the backing paper, see the following subsection, "Loading Labels in Peel-Off Mode.")

1. With the front panel open, remove the peel-off assembly as follows. (The peel-off assembly is located on the inside of the front panel.)

> **NOTE:** By lifting up the front panel stopper, you can lower the front panel so it is flat on the work table, allowing better access. Figure 4-14 in this section shows the location of the stopper.

- Loosen the peel-off assembly thumb screw by turning it counterclockwise (see Figure 4-14).
- Slide the peel-off assembly upward and out of the notches in the front panel and lift off the assembly.

- Disconnect the peel-off assembly cable connector from the control panel board.

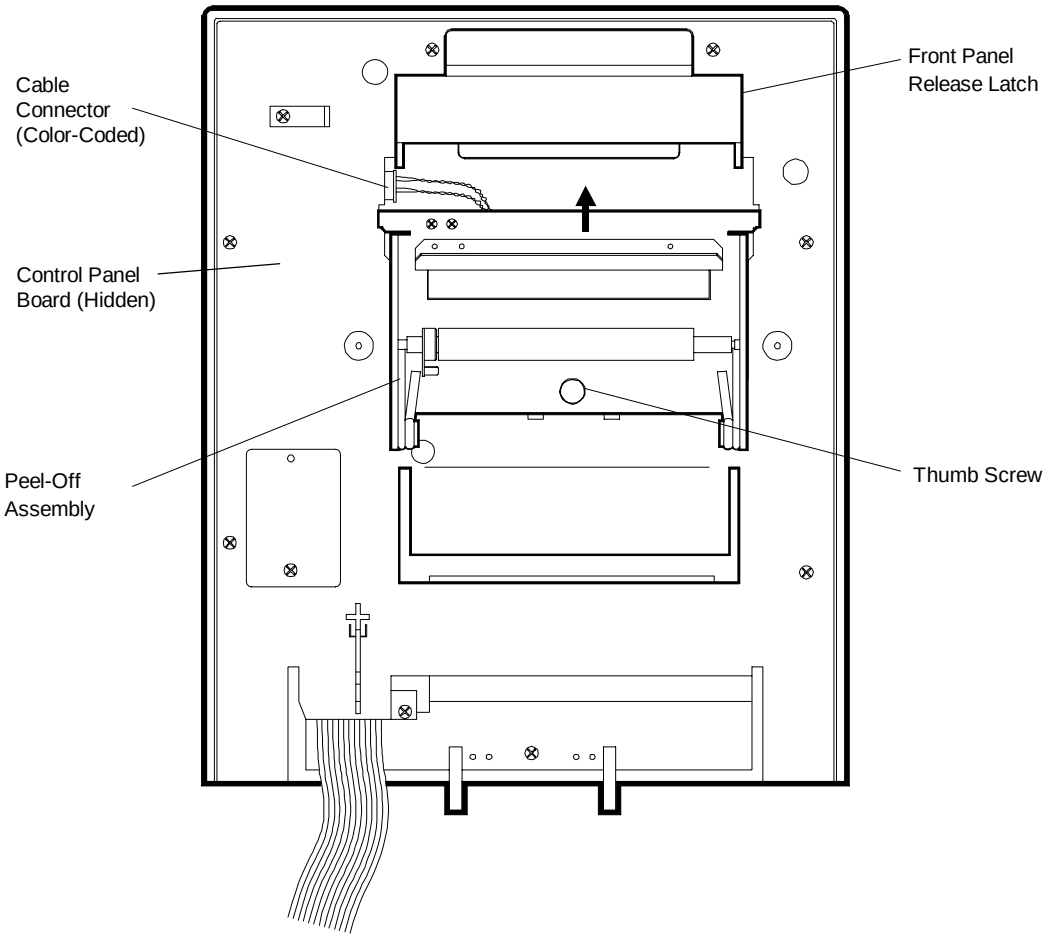


Figure 4-14 Model 48 and 412 Peel-Off Assembly Removal (Inside Front Panel View)

2. Remove the peel-off/tear bar by sliding it out of the notches (see Figure 4-15).

3. Mount the front panel inside cover supplied with the internal rewinder option kit onto the front panel. To install the inside cover, reverse the peel-off assembly removal procedure described in step 1.

- Slide the inside cover into the notches on the front panel.
- Secure the inside cover to the front panel by turning the thumb screw clockwise.

NOTE: No cable connection is required for the front panel inside cover.

4. Insert the front panel label guide supplied with the internal rewinder option kit so that the dimples on the guide's top lip lock in place in the label exit slot on the front panel (see Figure 4-15). Be sure the bottom lip on the label guide is positioned in the label release paper slot as shown in Figure 4-15.

> **NOTE:** When properly positioned, the top lip of the label guide plate should fit into the cut-out on the front panel inside cover (with the dimples secured in the label exit slot).

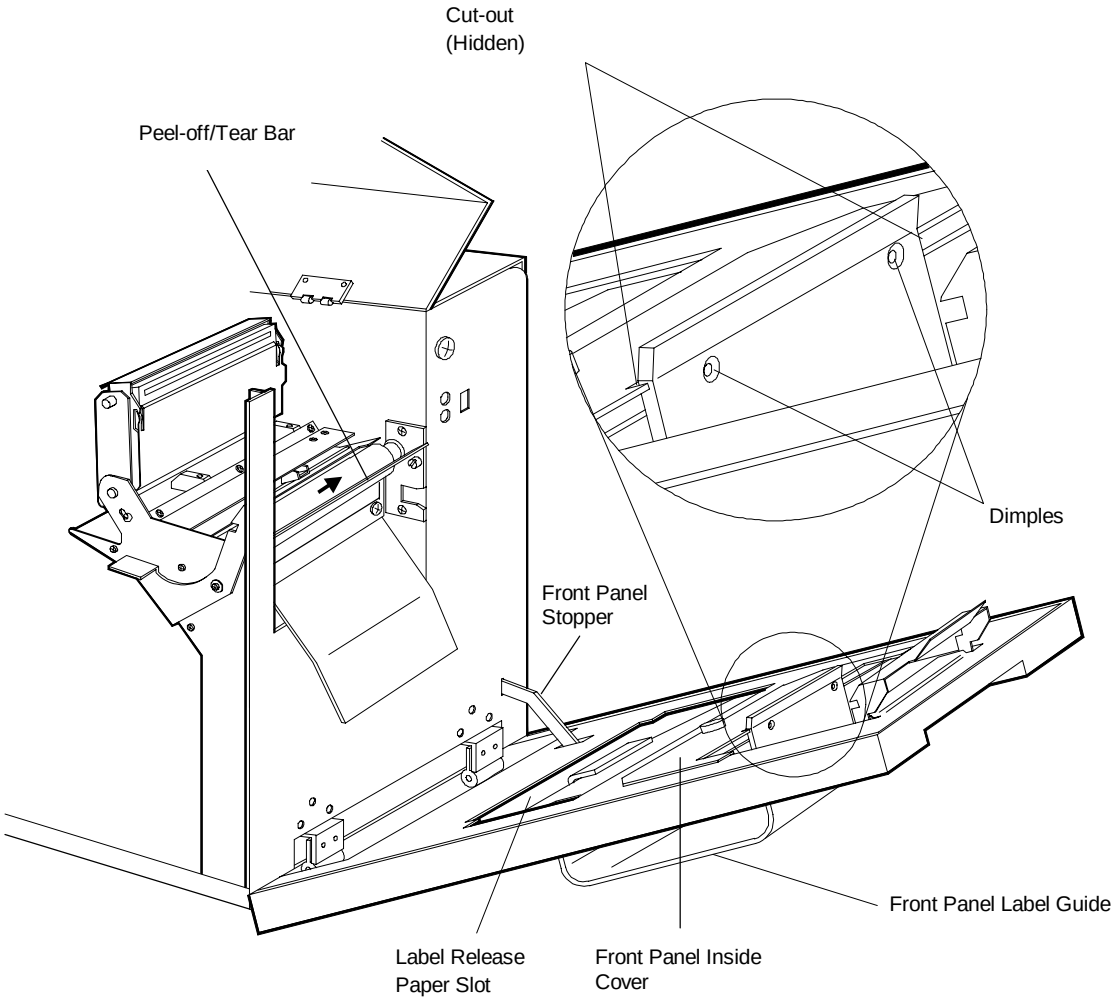


Figure 4-15 Front Panel Label Guide and Inside Cover

5. Follow the label loading instructions in Section 2 (see "Standard Mode, Tear-Off Mode, Cut-Off Mode), and, in addition, proceed as follows to load labels for the internal rewinder option.

- Route the leading edge of the label strip downward from the label exit slot, past the front panel label guide, into the label release paper slot (see Figure 4-16), and between the bar and plate in the lower media guide.
- Guide the label strip away from the lower media guide and thread it onto the internal rewinder take-up spindle.
- Wind the spindle several turns in the clockwise direction to take up any slack in the label roll.
- Adjust the white teflon guides on the lower media guide for the label width.
- Close and securely latch the front panel.

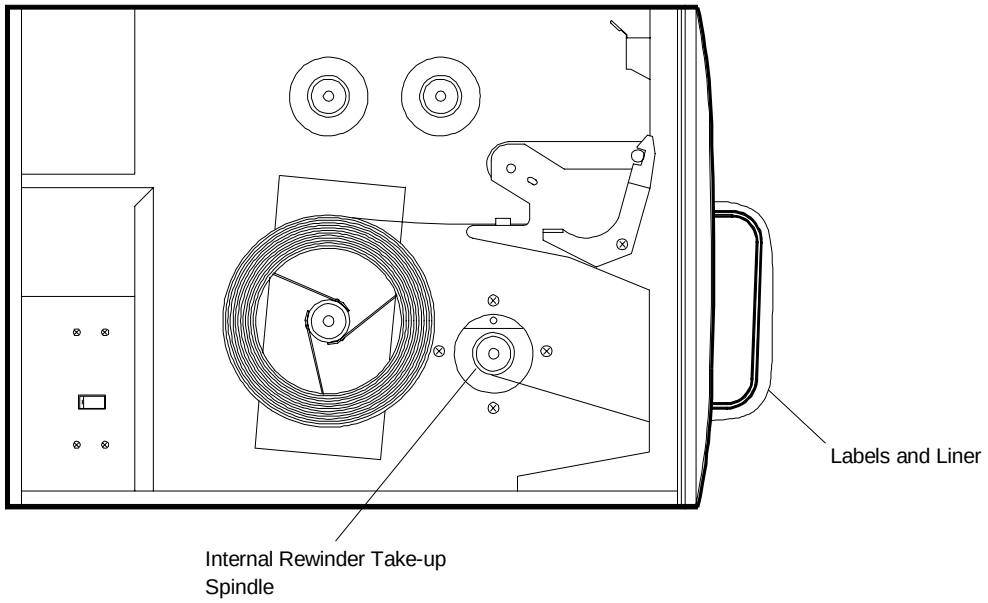


Figure 4-16 Loading Labels for the Internal Rewinder in Standard Print Mode

Loading Labels in Peel-Off Mode

To rewind only the liner with the printer set to peel-off mode, proceed as follows. (If you are rewinding both the labels and liner, see the previous subsection, "Loading Labels in Standard Mode.")

> **NOTE:** The peel-off assembly and peel-off/tear bar must be installed to use peel-off mode.

1. Follow the label loading instructions in Section 2 (see "Peel-Off Mode"), and, in addition, proceed as follows to load labels for the internal rewinder option.

- Route the label strip downward from the tear bar, around the platen roller, and through the slot in the backing paper guide (see Figure 4-17).
- Guide the label strip from the slot in the backing paper guide onto the take-up spindle (see Figure 4-17).
- Wind the spindle several turns in the clockwise direction to take up any slack in the label roll.

2. Close and securely latch the front panel.

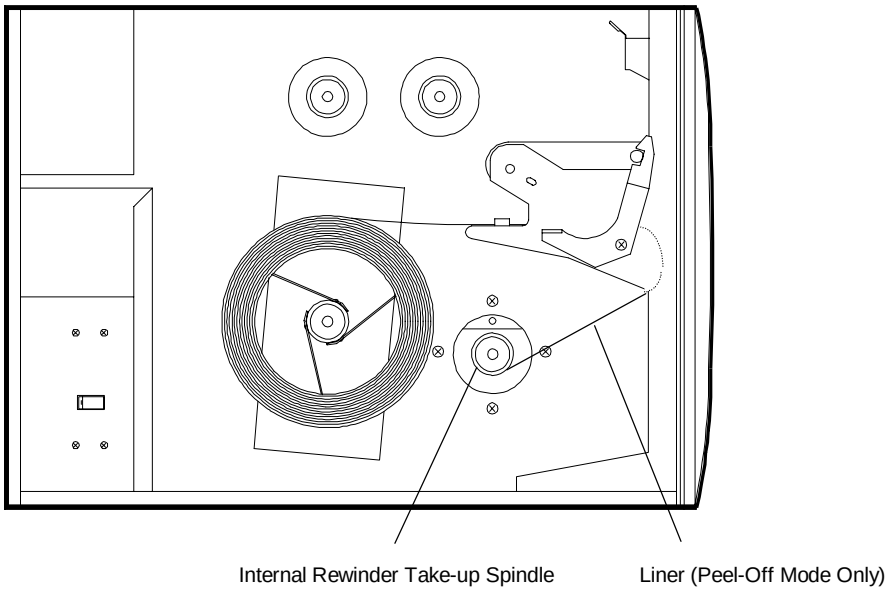


Figure 4-17 Loading Labels for the Internal Rewinder in Peel-Off Print Mode

NOTE: The information in this section is subject to change without notice. This information is provided "as is" without either express or implied warranty. *Intelli*Tech International, Inc. disclaims any and all warranties with regard to this information. *Intelli*Tech shall not be liable in any event for any special, indirect or consequential damages or any damages whatsoever resulting from loss of data, profits or use, for any reason or in any action, arising out of or in connection with the use or performance of this information.