

Getting Started Guide

P/N 064678-003

EasyCoder™ Printer 3400, 3440, and 3600



A **UNOVA** Company

Intermec Technologies Corporation
6001 36th Avenue West
P.O. Box 4280
Everett, WA 98203-9280

U.S. technical and service support: 1-800-755-5505
U.S. media supplies ordering information: 1-800-227-9947

Canadian technical and service support: 1-800-688-7043
Canadian media supplies ordering information: 1-800-268-6936

Outside U.S. and Canada: Contact your local Intermec service supplier.

Related Manuals You Can Order	Intermec Part Number
3400, 3440, and 3600 Bar Code Label	065145
Printer User's Manual	
Data Communications Reference Manual	044737
Model 200 Controller System Manual	063439

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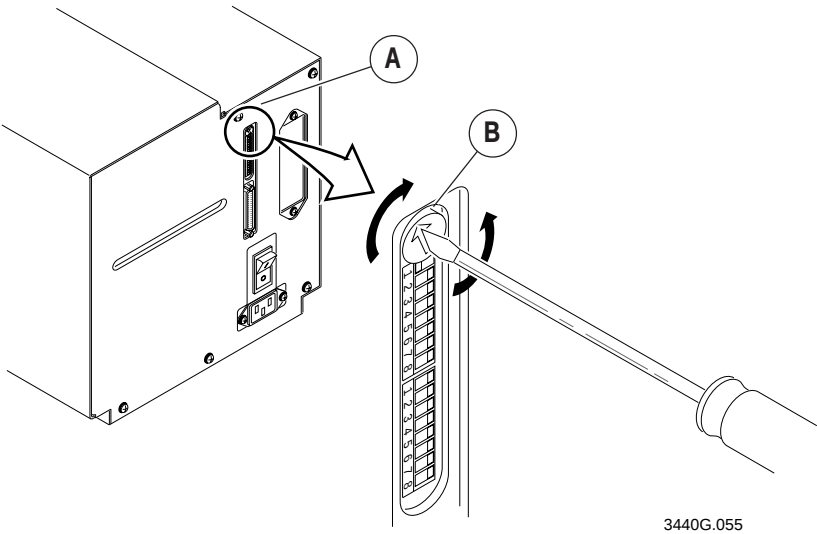
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Adjusting the Print Darkness

Use the darkness adjust control to fine-tune the darkness of print on your labels. The fine adjustments compensate for variations in the media, the printhead, or the printer. Set the darkness adjust control after you enter the media sensitivity number.



A Locate the darkness adjust control on the back of the printer.

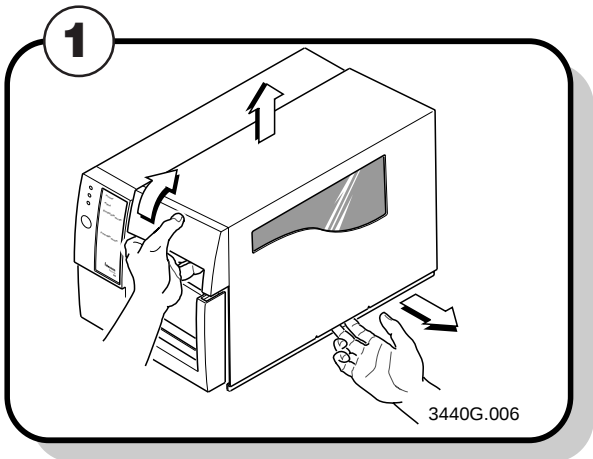
B Use a small straight-slot screwdriver to adjust the print darkness:

- To increase the print darkness, turn the control clockwise.
- To decrease the print darkness, turn the control counterclockwise.

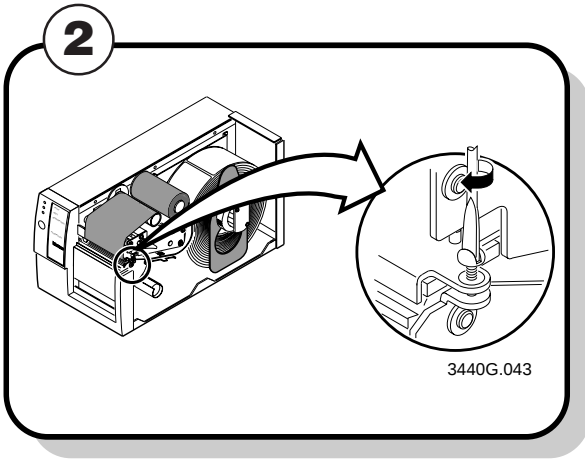
Correcting Uneven Print Quality

You may experience problems in print quality (ribbon wrinkling or light print on one side of your label) if the printhead is not making even contact with the label stock. You need a straight-slot screwdriver to turn the bias adjust screw.

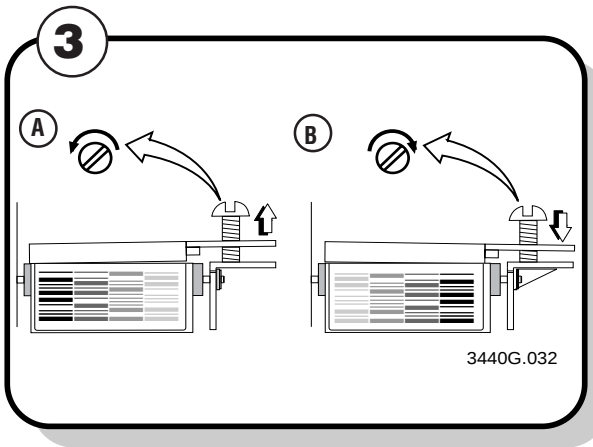
Note: To achieve the best print quality, adjust the bias adjust screw each time you use media of a different width.



Remove the media cover.

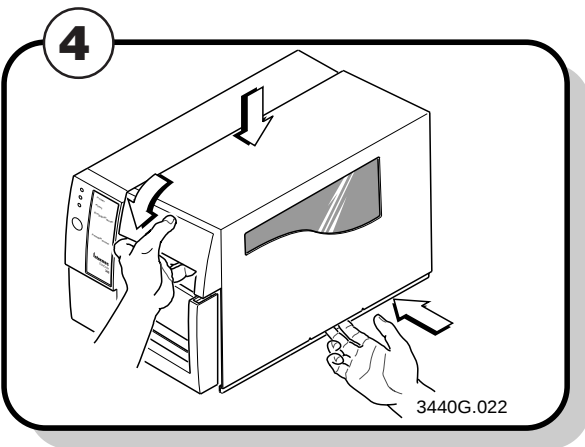


Locate the bias screw.



To compensate for uneven print quality, turn the bias adjust screw as shown.

- A** If printing is light on right side of label, turn the bias adjust screw counterclockwise.
- B** If printing is light on the left side of label, turn the bias adjust screw clockwise.

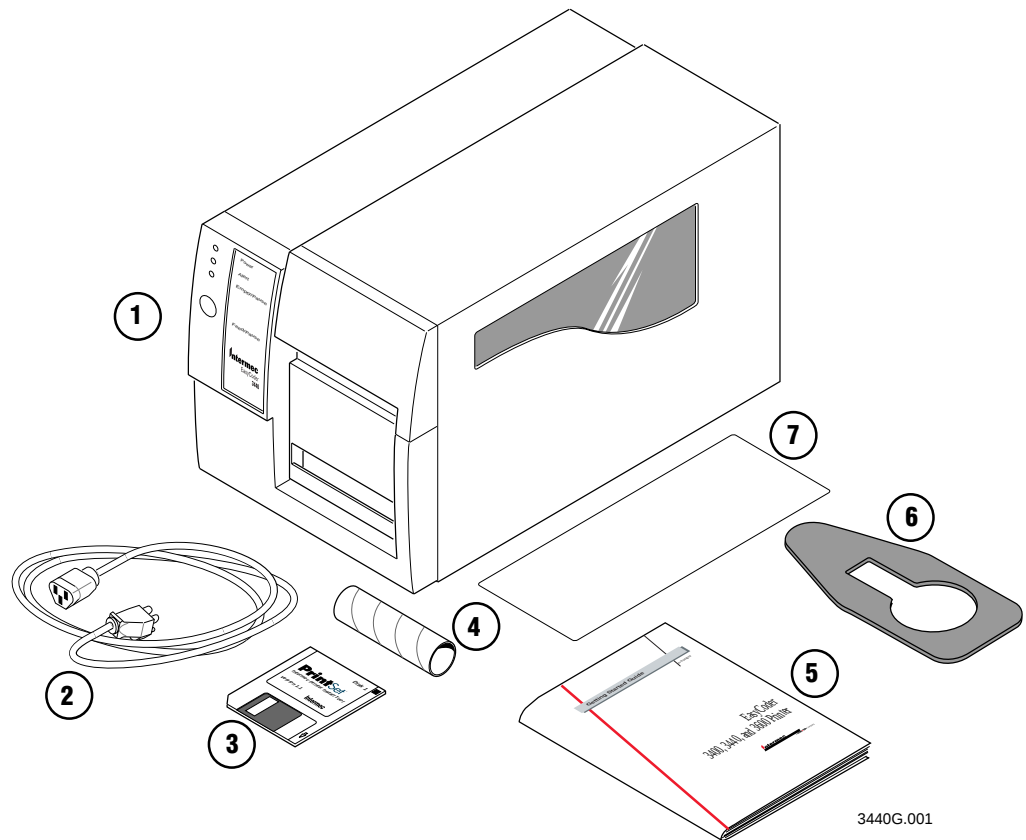


Replace the media cover.

Unpacking the Printer

Remove the accessories, packing material, and the printer from the shipping container. Save the shipping container and packing materials in case you need to move or ship your printer.

Verify the contents of the shipping container against the list below:

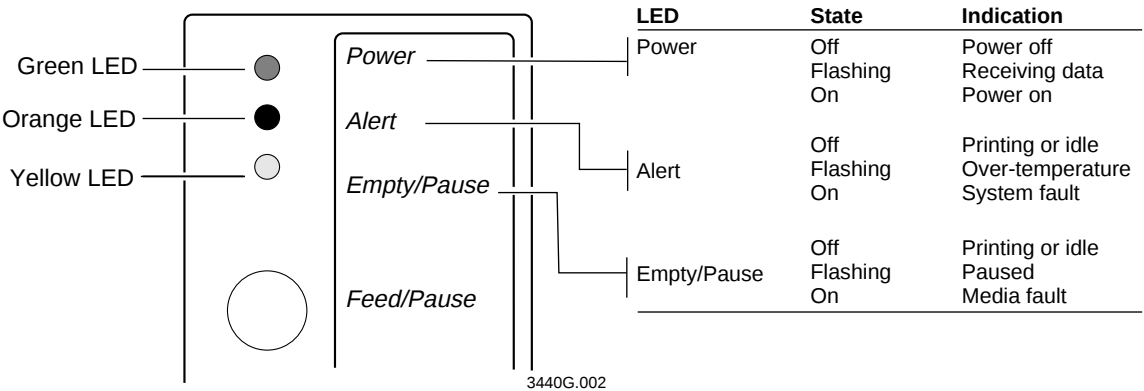


- ① Intermec printer
- ② AC power cord
- ③ PrintSet installation software disk
- ④ Ribbon core
- ⑤ Bar Code Label Printer Getting Started Guide
- ⑥ Media support (not shipped with 3600 printer)
- ⑦ Media envelope

Note: Make sure you remove all packing material from the printer before you proceed.

Understanding the Printer Front Panel

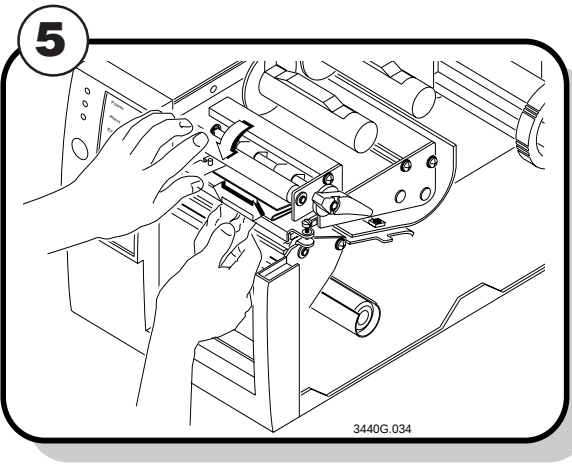
On the front panel of your printer, you will find one button and three light emitting diodes (LEDs). Use the front panel LEDs to monitor the status of the printer:



Note: The green LED on the 3440 printer front panel reads Power/Data.

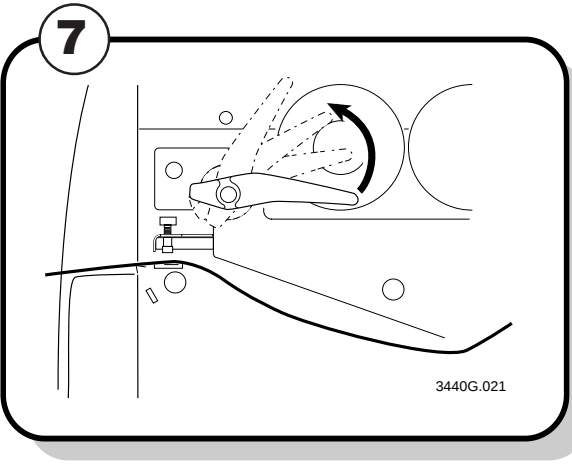
The Feed /Pause button performs the following functions depending on the status of the printer:

Printer Mode	You Want To	What To Do
Idle	Feed out one label or a minimum specified amount of media.	Press and release the Feed /Pause button.
	Continuously feed media.	Press and hold the Feed /Pause button. When you release the button, the media stops feeding.
	Take the printer offline.	Press the Feed /Pause button twice. Press the button again to bring the printer online.
Printing	Pause the printer.	Press and release the Feed /Pause button. Press and release the button again to resume printing.
	Cancel the current print job.	Press and hold the Feed /Pause button until the printer stops printing.
Powered on for the first time	Print the hardware configuration test label.	Press and hold the Feed /Pause button. See “Testing Printer Operation” later in this guide for more information.

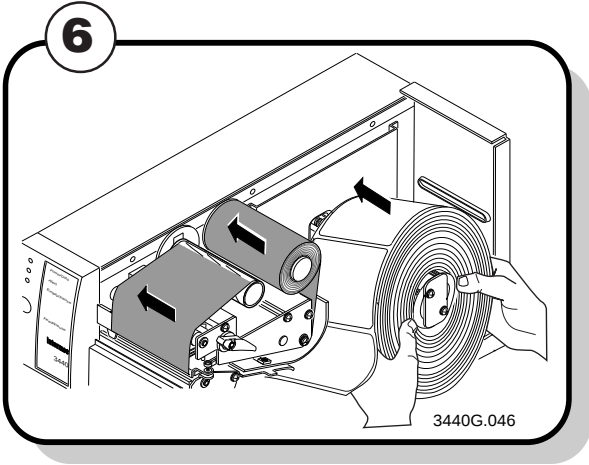


Use a lint-free cloth moistened with alcohol to remove any dirt, adhesive, or debris from the print surface on the bottom of the printhead.

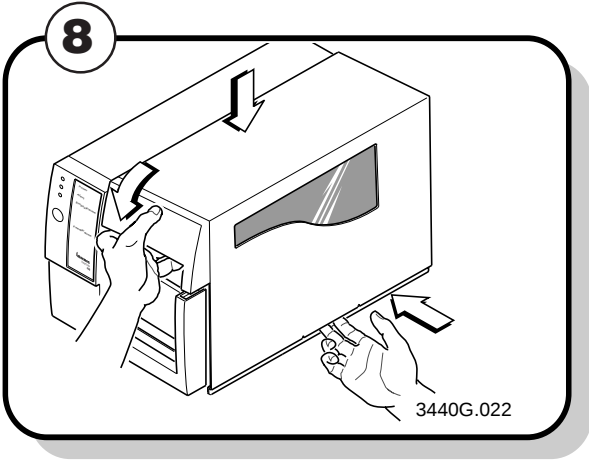
Wait 5 to 10 seconds for the print surface to dry.



Engage the printhead by rotating the head lift lever counterclockwise until it locks in place.



Replace the media and ribbon.



Replace the media cover.

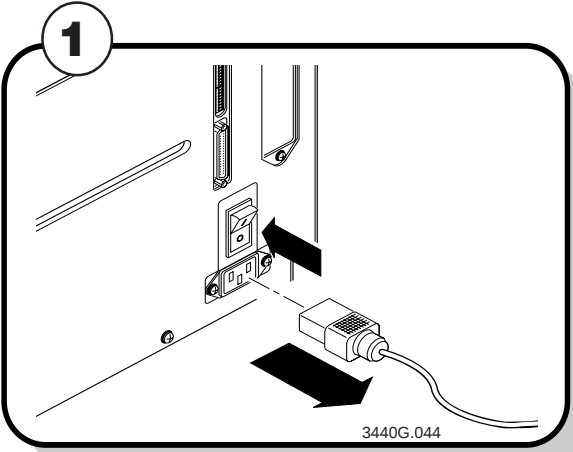
Cleaning the Printhead

In order for the printhead to provide good print quality, it must maintain close contact with the media. Therefore, cleaning media debris from the printhead is very important. You should clean the printhead after every roll, or 6,000 inches (152m), of media have been printed. Clean more often if necessary.

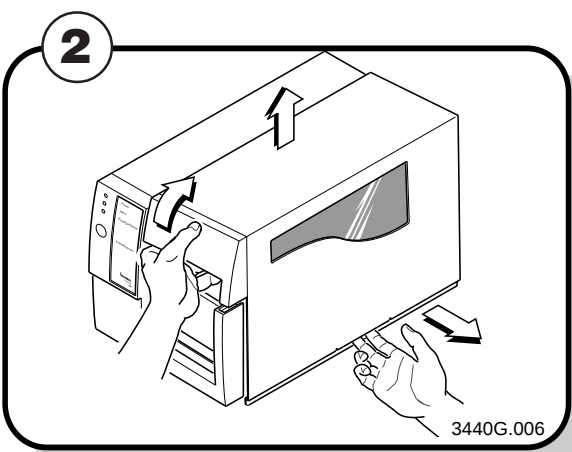


Caution
Do not use sharp objects such as knives or screwdrivers to scrape the printhead clean. Cleaning with sharp objects will damage the printhead. Clean with only a cotton swab, a clean, lint-free cloth, or a tissue damp with isopropyl alcohol.

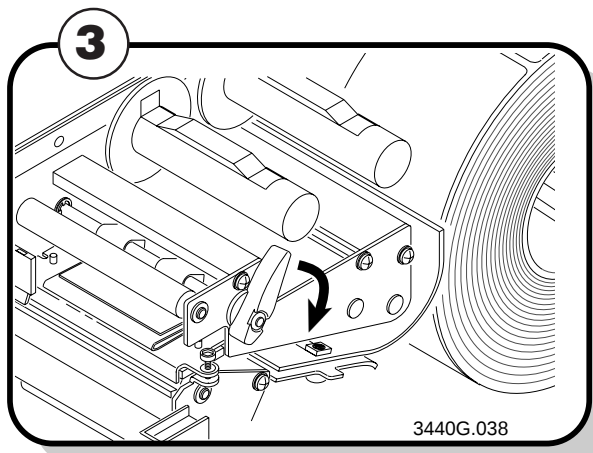
Conseil
N'utilisez pas d'objets pointus tels que couteaux ou tournevis pour nettoyer la tête d'imprimante. Nettoyer avec des objets pointus endommagera la tête d'imprimante. Nettoyez-la seulement avec de la ouate ou avec un linge propre et libre de peluches, humidifié avec de l'alcool d'isopropyle.



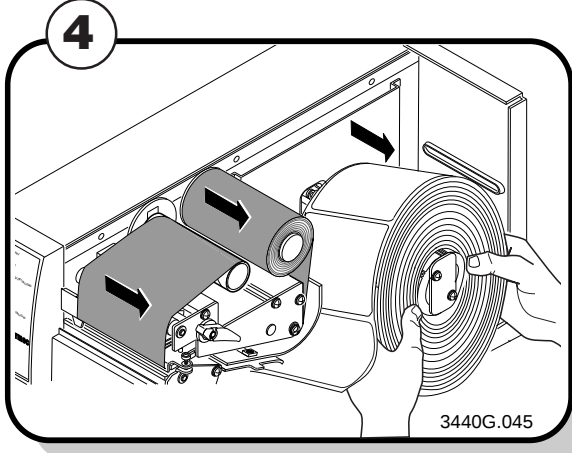
Turn the on/off switch to the off (O) position and remove the power cord.



Remove the media cover.

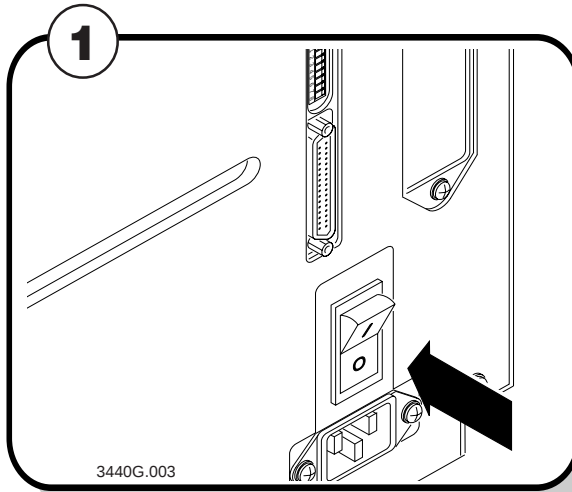


Rotate the head lift lever clockwise to release the printhead. This raises the printhead so that you can clean it.

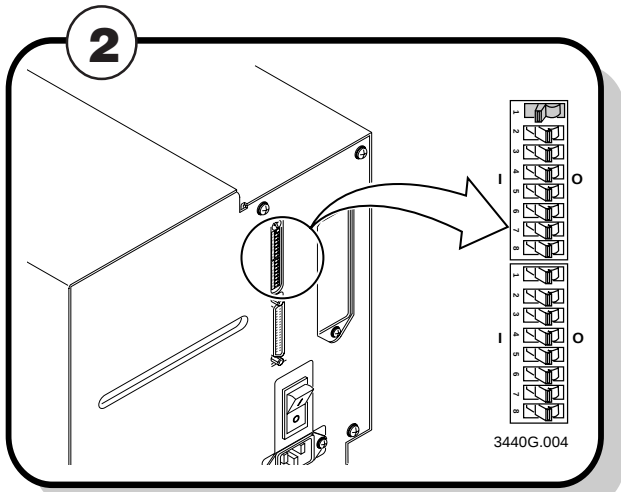


Remove the media and ribbon if necessary.

Connecting the Printer to a Power Supply



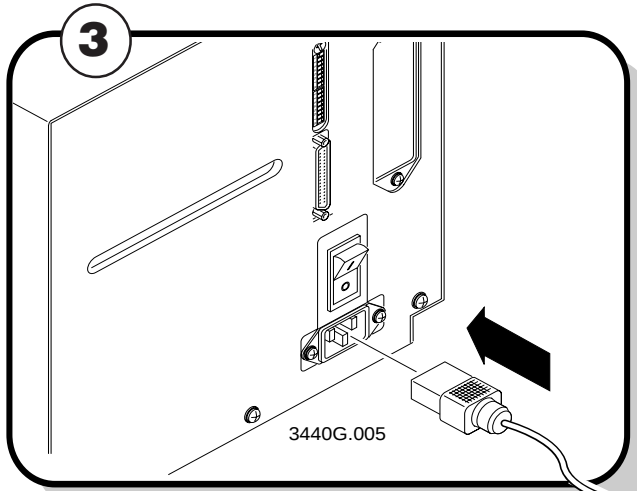
Turn the On/Off (I/O) switch on the back of the printer to the off (O) position.



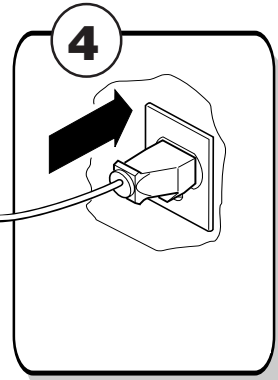
Make sure the DIP switches are set to their default settings.

Top Bank Set switch 1 on (I). Set switches 2 through 8 off (O).

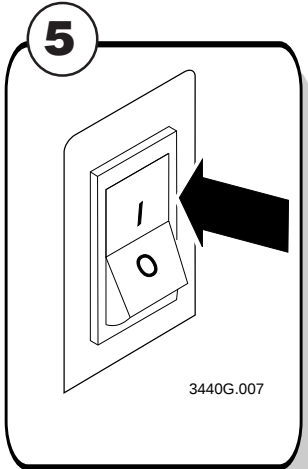
Bottom Bank Set switches 1 through 8 off.



Plug the AC power cord into the receptacle at the rear of the printer.



Plug the other end of the power cord into a grounded wall outlet or surge protector.

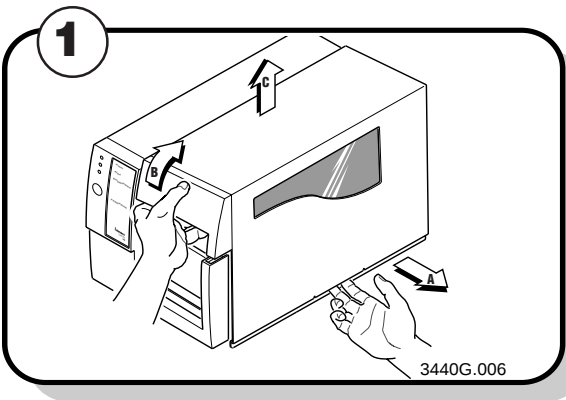


Turn the On/Off switch to the on (I) position.

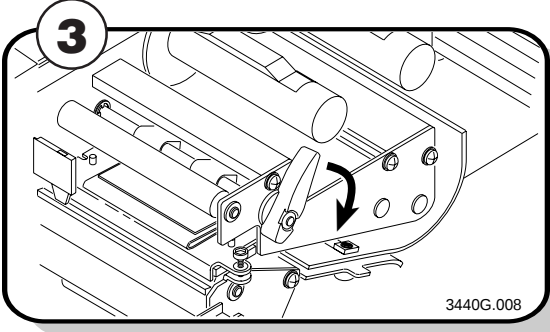
When you power on the printer, the green LED on the front panel lights, the yellow and orange LEDs flash, and the platen roller advances. The yellow LED then stays on until you load media.

Loading a Roll of Media

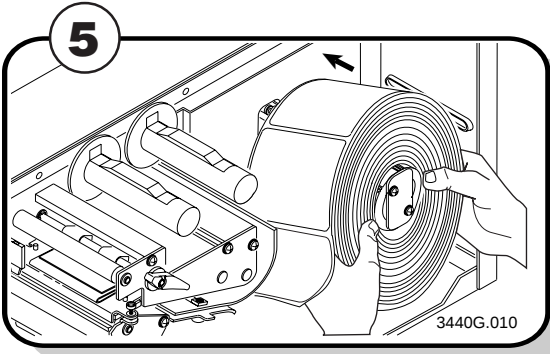
This procedure explains how to load a roll of direct thermal or thermal transfer media.



- A** Use your right hand to pull the bottom of the media cover away from the base of the printer.
- B** Use your left hand to lift the front of the media cover upward.
- C** Lift the media cover away from the top of the printer.

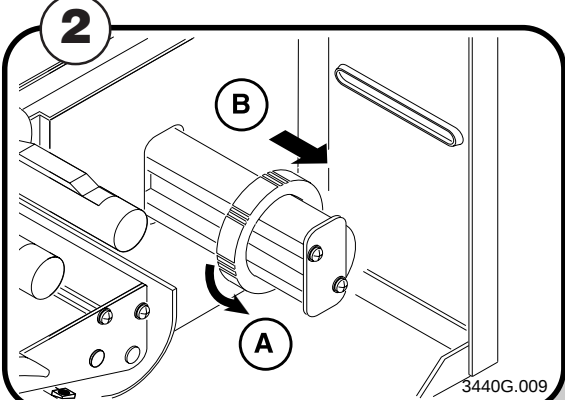


Raise the printhead by rotating the head lift lever clockwise.

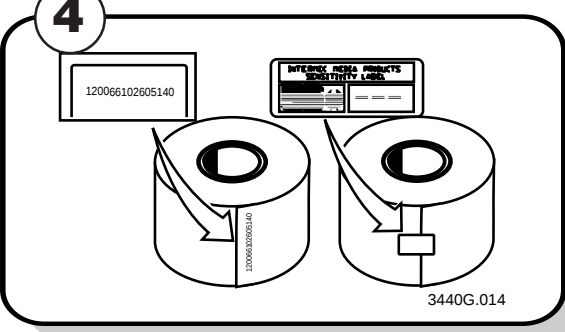


Place the roll of media on the supply roll post.

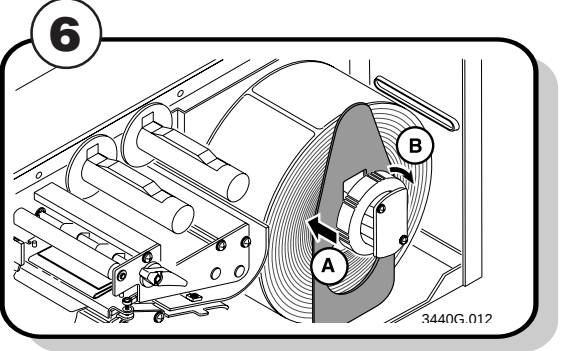
Note: If you are using a narrow roll of media (less than 3 inches), insert the media support between the roll of media and the supply roll retainer before securing it in place.



- A** Turn the supply roll retainer counterclockwise to release it.
- B** Slide it to the outer end of the supply roll post. Turn the supply roll retainer clockwise to lock it.



Save the small label attached to your roll of media or the label with a 15 digit number stamped on it. You will need it to set the correct media sensitivity number. See "Setting the Media Sensitivity Number" later in this guide for help.



- A** Turn the supply roll retainer counterclockwise and slide it up to the edge of the roll of media.
- B** Turn the supply roll retainer clockwise to lock it in place.

3400 and 3600 Printer Direct Thermal Media Sensitivity Settings

Approximate Sensitivity Rating	Sensitivity Setting	Direct Thermal Media
700 Series High Sensitivity	740	Duratherm Lightning Plus 1
	720	Duratherm Lightning Plus 2
400 Series Medium Sensitivity	460	European IR
	450	Duratherm Lightning IR Labels 1
	440	European Thermal
	420	Duratherm Lightning Labels 1
100 Series Low Sensitivity	190	Duratherm Buff Tag
	180	Duratherm II-1
	170	European Tag
	160	Duratherm II Tag
	140	European Top
	130	Duratherm II-2 Labels
	120	European Thermal Economy Tag

3400 and 3600 Printer Thermal Transfer Media and Ribbon Sensitivity Settings

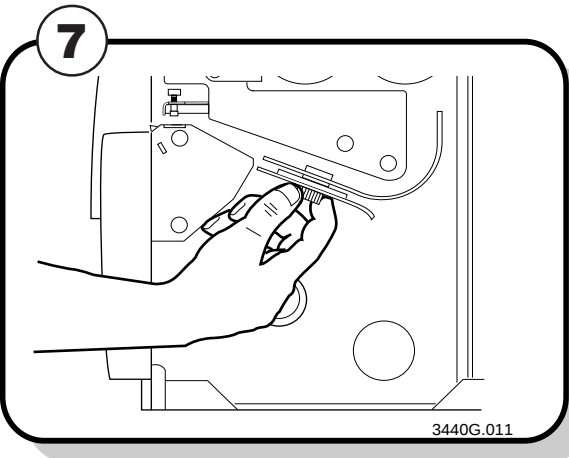
Approximate Sensitivity Rating	Sensitivity Setting	Thermal Transfer Media and Ribbon (Media/Ribbon Stock)
800 Series High Sensitivity (Paper)	864	European Uncoated/Standard 1
	854	Duratron TTR Paper Labels/Standard 1
	834	Duratron TTR Paper Tags/Standard 1
600 Series Medium Sensitivity (Plastic)	687	Duratron TTR Polyester 1/Premium 3/6/7
	683	Duratron TTR Polyester 1/Premium
	677	Duratron Syntran/Premium 3/6/7
	673	Duratron Syntran/Premium
	637	European Polyester/Premium
	633	European Polyethelene/Premium
	627	Duratron Kimdura/Premium 3/6/7
	623	Duratron Kimdura/Premium
500 Series Medium Sensitivity (Paper)	567	Duratron II-1/Premium 3/6/7
	563	Duratron II-1/Premium
	557	Duratron II Tag-5 mil/Premium 3/6/7
	553	Duratron II Tag-5 mil/Premium
	537	European Tag/Premium 3/6/7
	533	European Tag/Premium
	527	Duratron II Tag-7 mil/Premium 3/6/7
	523	Duratron II Tag-7 mil/Premium
	517	European Coated/Premium 3/6/7
	513	European Coated/Premium
300 Series Low Sensitivity (Plastic)	369	Super Prem. Poly./Super Prem.-3
	366	Super Prem. Poly./Super Prem.-7

3440 Printer Direct Thermal Media Sensitivity Settings

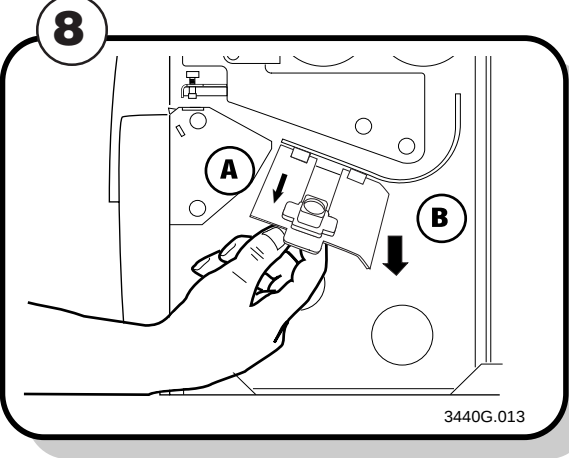
Approximate Sensitivity Ratings	Sensitivity Setting	Direct Thermal Media
700 Series High Sensitivity	720	Duratherm Lightning Plus 2
400 Series Medium Sensitivity	480	Duratherm Lightning IR Tag
	470	Duratherm Lightning-2
	460	European IR
	450	Duratherm IR Lightning-1
	440	European Thermal
100 Series Low Sensitivity	420	Duratherm Lightning-1
	180	Duratherm II-1
	170	European Tag
	160	Duratherm II Tag
	140	European Top
	130	Duratherm II-2

3440 Printer Thermal Transfer Media and Ribbon Sensitivity Settings

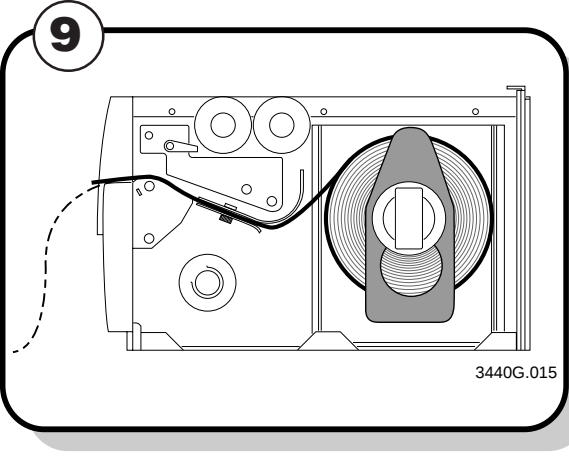
Approximate Sensitivity Ratings	Sensitivity Setting	Thermal Transfer Media (Media/Ribbon Stock)
800 Series High Sensitivity (Paper)	864	European Uncoated/Standard
	854	Duratran TTR Paper Labels/Standard-1
	834	Duratran TTR Paper Tags/Standard-1
600 Series Medium Sensitivity (Plastic)	687	Duratran TTR Poly. or Valeron/Prem.-3/6/7
	677	Duratran Syntran/Premium-3/6/7
	633	European Polyethelene/Premium
	627	Duratran Kimdura/Premium-3/6/7
	623	European Duratran Kimdura/Premium
500 Series Medium Sensitivity (Paper)	567	Duratran II-1/Premium-3/6/7
	565	European Duratran II/Premium
	563	Duratran II/Economy
	533	European Tag/Premium
	527	Duratran II Tag-7 mil/Premium-3/6/7
300 Series Low Sensitivity (Plastic)	513	European Coated/Premium
200 Series Low Sensitivity (Kapton)	369	Super Prem. Poly./Super Prem.
	366	Super Prem. Poly./Super Prem.-7
200 Series Low Sensitivity (Kapton)		
	238	Gloss Polyimide (Kapton)/Gloss Super Prem.
	236	Gloss Polyimide (Kapton)/Super Prem.-7
	226	Matte Polyimide (Kapton)/Super Prem.-7
	222	Matte Polyimide (Kapton)/Matte Super Prem.



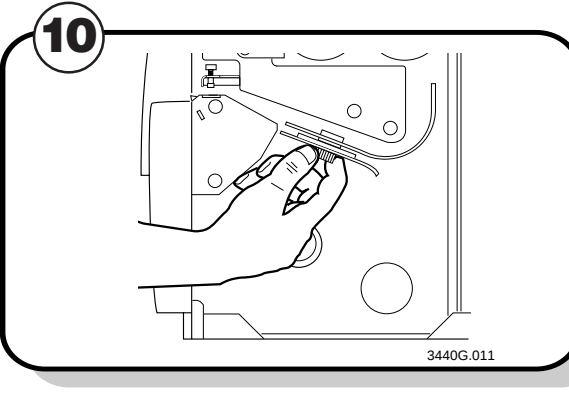
Unscrew the edge guide on the lower media guide.



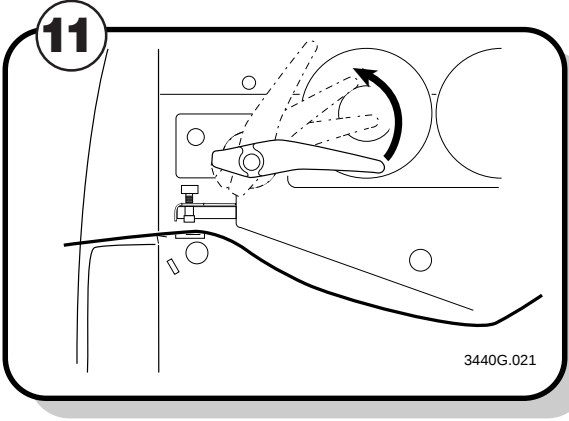
- A** Slide the edge guide to the outer edge of the lower media guide and screw it in place.
- B** Pull down on the lower media guide to allow easy access to the media path.



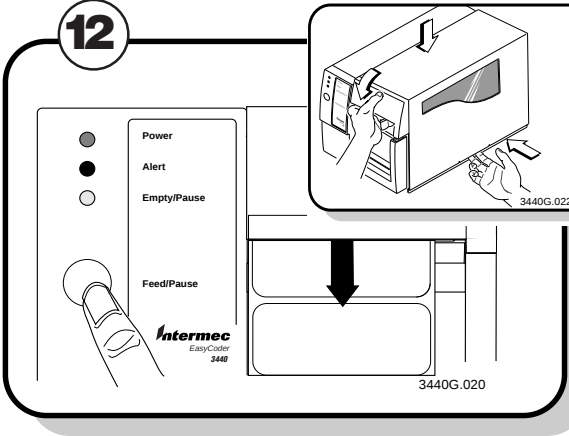
Unroll several inches of media and route it through the printer mechanism.



Release the lower media guide. Unscrew the edge guide and slide it in to the edge of the media. Screw the edge guide in place.



Rotate the head lift lever counterclockwise until it locks.

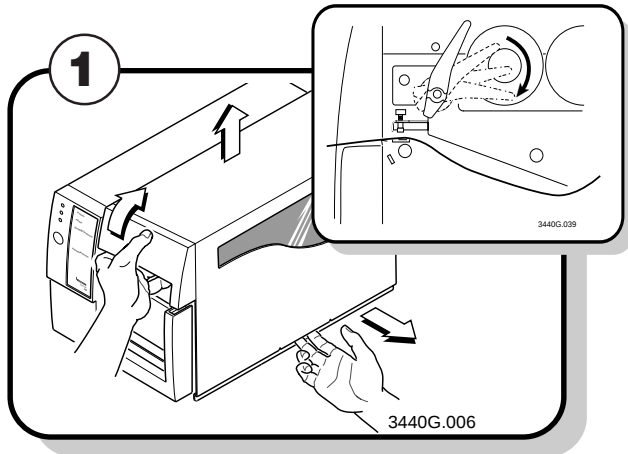


Press the Feed/Pause button to advance one label through the printer.

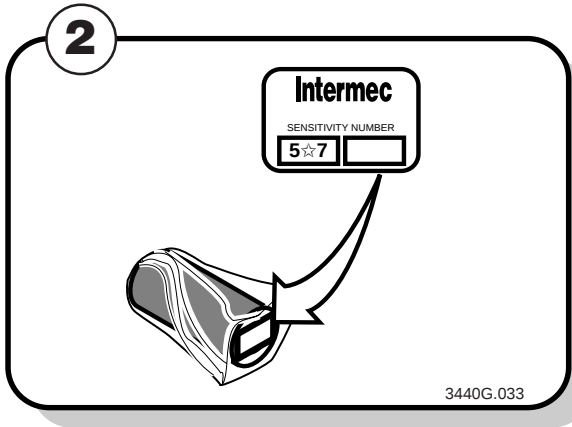
Replace the media cover.

Loading Thermal Transfer Ribbon

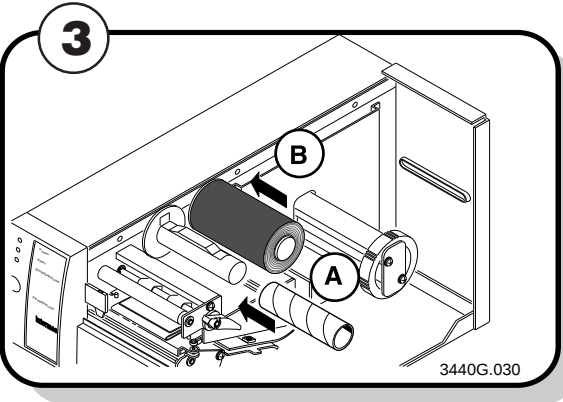
If you plan to print in thermal transfer mode, you must install a thermal transfer ribbon on the ribbon supply hub after you install the thermal transfer media.



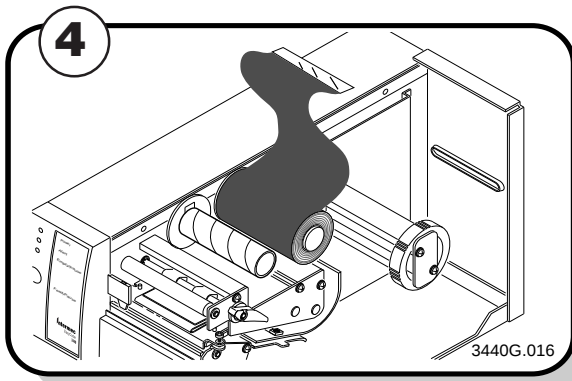
Open the media cover.
Make sure the printhead is raised. If not, turn the head lift lever clockwise until the printhead releases.



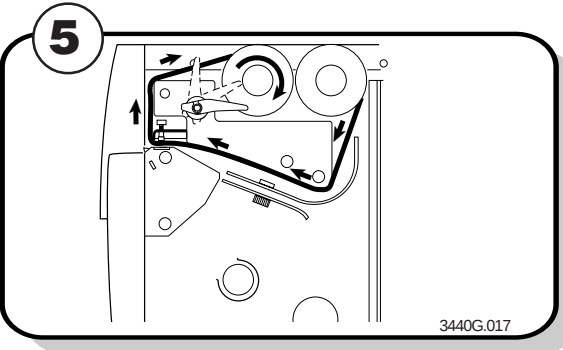
Save the plastic bag that your media came in. Attached to the bag is a label with a three-digit sensitivity number printed on it. You need this number to set the correct media sensitivity number. For help, see “Setting the Media Sensitivity Number” later in this guide.



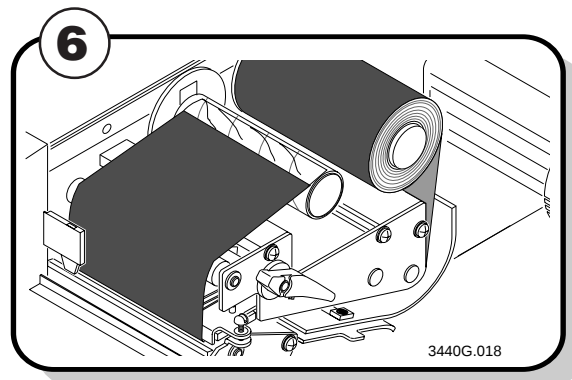
- A Slide the empty ribbon core that comes with the printer onto the ribbon rewind hub.
- B Slide the roll of thermal transfer ribbon onto the ribbon supply hub with the ribbon roller unwinding clockwise.



Detach the leader from the thermal transfer ribbon roll and unwind approximately 8 inches of ribbon.



Route the ribbon leader through the printer mechanism.



Attach the ribbon leader to the empty ribbon core using the adhesive strip on the leader edge.

The sensitivity number on each roll of thermal transfer media or ribbon has an asterisk (*) in place of one of the digits. To optimize the sensitivity number for thermal transfer media, you combine the digits as in this example.

Media or Ribbon	Sensitivity Rating	Description
Thermal transfer media	56*	The asterisk for the third digit is reserved to identify the ribbon’s sensitivity number.
Thermal transfer ribbon	5*7	The asterisk for the second digit is reserved to identify the media’s sensitivity number.
	567	optimum sensitivity rating

To set the sensitivity rating for direct thermal media, use the three-digit sensitivity rating located on the roll of media or listed in the Direct Thermal Media Sensitivity Settings table, later in this guide.

To use DOS to set the media sensitivity number on a PC

- At the DOS prompt, type the following command and press **Enter**:
MODE COM1 96,E,7,1,N
- Type the following command lines and press **Enter**:
COPY CON COM1
<STX><SI>g1,567<ETX>^Z

where:
<SI>g1,567 sets the media sensitivity number to 567.

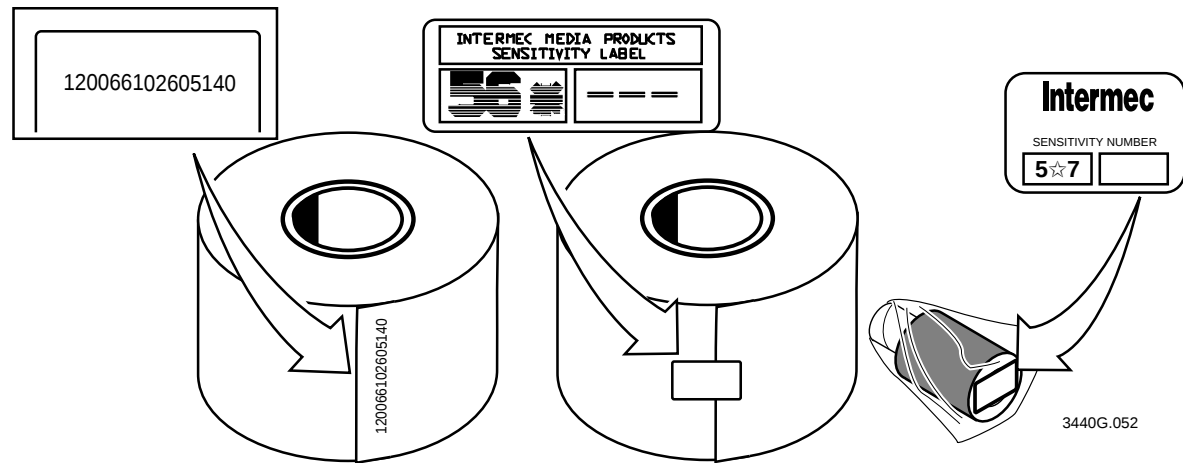
Note: If you receive a write fault error, your cabling may be incorrect. See “Connecting the Printer to Your System” earlier in this guide for more information.

Setting the Media Sensitivity Number

Media sensitivity is important because you use it to optimize print quality and print speed. The three-digit sensitivity number specifies the amount of heat required by the printhead to image a label. The amount of heat that each roll of media or ribbon requires is unique due to different chemistries and manufacturing processes.

Intermec has developed heating schedules (the amount of heat required to image a label) to produce the highest possible print quality for Intermec media and ribbon combinations on Intermec printers. Look for the three digit media sensitivity number on:

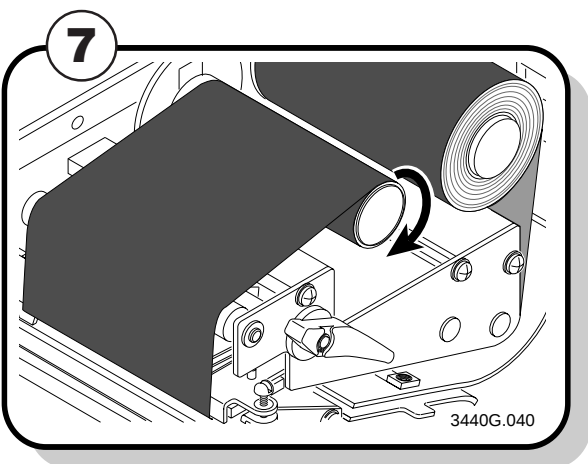
- The side of the media roll. Use the last three digits (140 in the example) of the 15 digit number stamped on the roll for the media sensitivity number.
- A small label attached to the roll of media.
- A small label attached to the plastic bag of your ribbon roll.



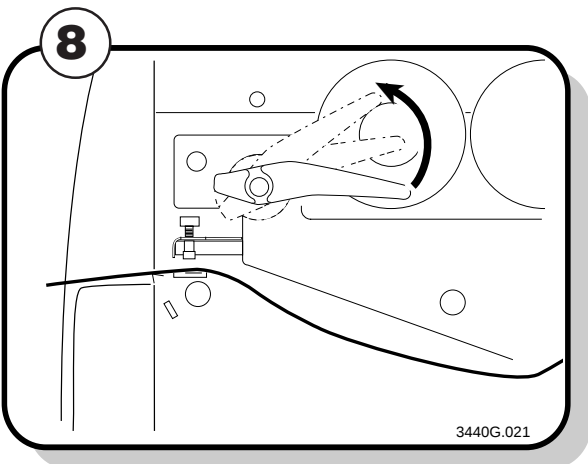
Use this three-digit number to optimize print quality and print speed on your printer. You can achieve the best print quality on the printer by using Intermec ribbon and media products.

The default printer setting for direct thermal media sensitivity is 420. For thermal transfer media, the default setting is 567. Use the information on the packaging that you saved when loading media and ribbon to determine the correct sensitivity number.

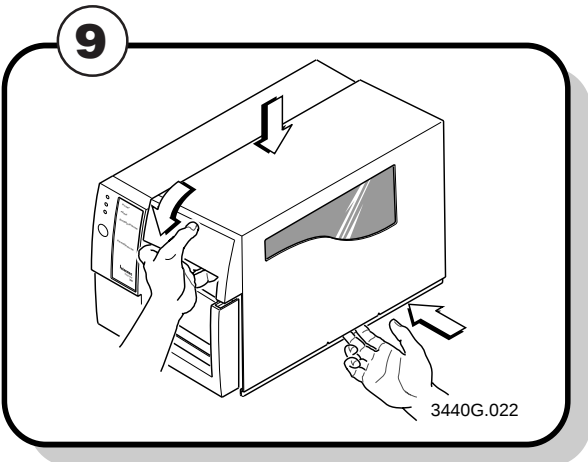
Use PrintSet, your third-party software, or the Intermec printer language (IPL) command set to change the media sensitivity number. For help on how to set the media sensitivity number using the printer command set, see the DOS example on the following page.



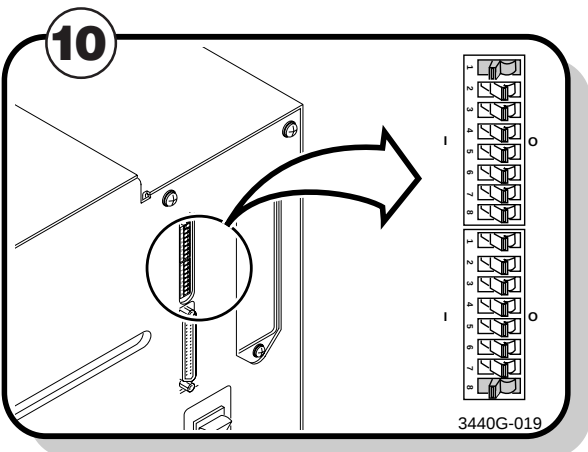
Turn the ribbon rewind hub clockwise until the ribbon runs smoothly through the printhead mechanism.



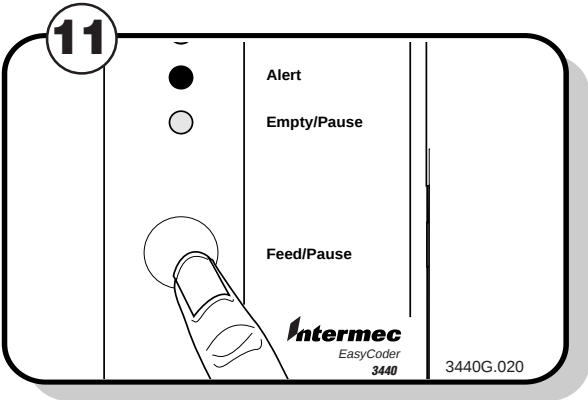
Lower the printhead by turning the head lift lever counterclockwise until it locks.



Close the media cover.



Enable thermal transfer printing by setting DIP switch 8 on the bottom bank of switches to the on (1) position. Turn the printer power off and then on to activate the new setting.

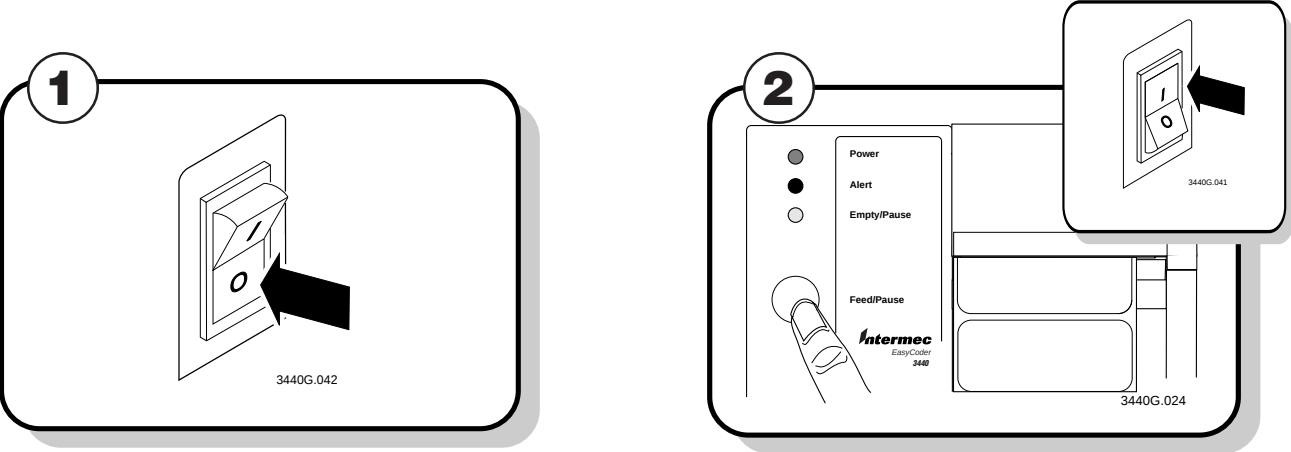


Press the Feed/Pause button to advance the ribbon through the printer.

Note: When replacing the thermal transfer ribbon roll in the future, use the empty thermal transfer ribbon core as the new rewinder core.

Testing Printer Operation

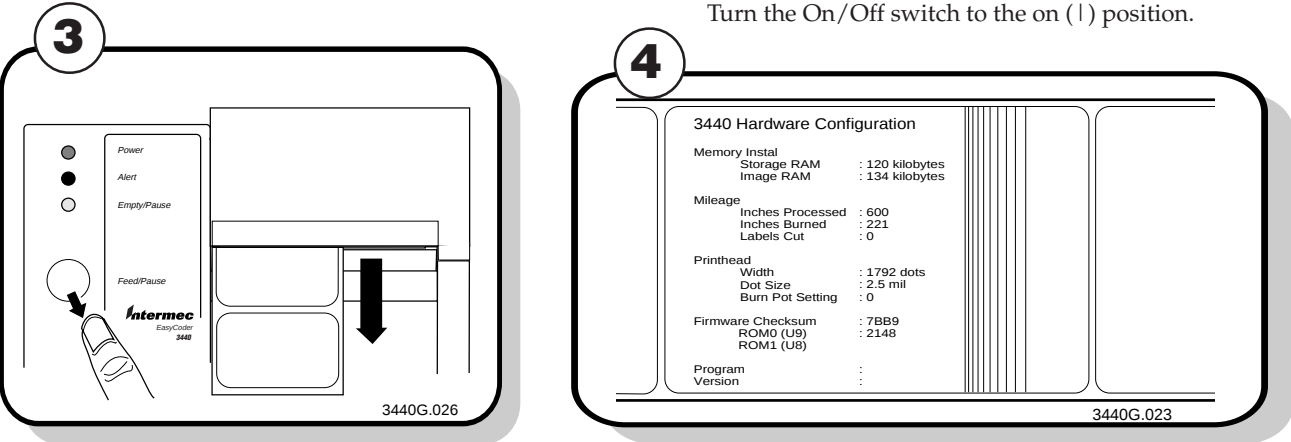
Print a hardware configuration test label to make sure your printer is operating correctly.



Turn the printer On/Off switch to the off (O) position.

Press and hold the Feed/Pause button.

Turn the On/Off switch to the on (I) position.

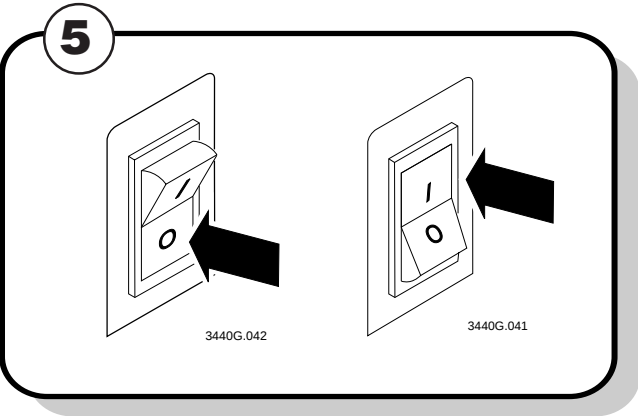


The Alert and Empty/ Pause LEDs blink during the printer self-test.

Release the Feed/Pause button when the media starts moving.

The printer feeds out one or two blank labels and then prints the hardware configuration test label.

Note: The example label printed above is from the 3440 printer. The values on your hardware configuration test label may be different.



Turn the On/Off switch to the off (O) position and then to the on (I) position to return to normal printer operation.

Troubleshooting the Printer

If your labels are not printing properly, check the following table to locate the symptom and correct the problem.

Symptom	Possible Causes	Solution
Blotches on labels.	Printhead is dirty.	Clean the printhead. For help, see “Cleaning the Printhead” later in this guide.
	Poor quality label or ribbon stock.	Replace stock with Intermec label and/or ribbon stock. See “Setting the Media Sensitivity Number” later in this guide to set the correct media sensitivity numbers for Intermec media and ribbon stock.
	Incorrect media sensitivity setting.	Change sensitivity setting to match the type of media you are using. For help, see “Setting the Media Sensitivity Number” later in this guide.
Printing is too light or dark.	Sensitivity command is incorrectly set.	Change sensitivity setting to match the type of media you are using. For help, see “Setting the Media Sensitivity Number” later in this guide.
	Printhead is dirty.	Clean the printhead. For help, see “Cleaning the Printhead” later in this guide.
Printing is not on the label.	Printer is misfeeding.	Make sure the media is installed properly along the entire media path. For help, see “Loading a Roll of Media” earlier in this guide.
Print quality is poor.	Incorrect media sensitivity.	Change the sensitivity setting to match the type of media you are using. For help, see “Setting the Media Sensitivity Number” later in this guide.
	Printhead is dirty.	Clean the printhead. For help, see “Cleaning the Printhead” later in this guide
	Uneven print contrast (density).	Adjust the bias adjust screw. For help, see “Correcting Uneven Print Quality” later in this guide.
	You are using incorrect label or ribbon stock to print labels.	Use only Intermec label and ribbon stock to ensure superior print quality and product performance. See “Setting the Media Sensitivity Number” later on in this guide to set the correct media sensitivity numbers for Intermec media and ribbon stock.
	Ribbon wrinkling.	Check to make sure that you installed the ribbon correctly. For help, see “Loading Thermal Transfer Ribbon” earlier in this guide.
		Adjust the bias adjust screw. For help, see “Correcting Uneven Print Quality” later in this guide.
	Direct thermal/thermal transfer switch set in the wrong position.	Set the DIP switch for the type of media you are using. For help, see “Configuring the Serial Port for Communications” earlier in this guide.

Communicating With the Printer

You are now ready to print labels by downloading data from the host to your printer. *Downloading* is the universal term used to describe the transfer of information from the host to any connected peripheral device, such as your printer. When you transfer data from your printer to the host, you are performing a process called *uploading*.

You can use several methods to download information in your data collection system. The next sections describe different ways to communicate with the printer.

Using the PrintSet Software

Use PrintSet to quickly and easily configure the printer. You can upload the current configuration settings, modify them, and then download them to your printer. Other features of PrintSet include the ability to:

- download graphics and fonts (including TrueType).
- print test labels.
- allocate memory.
- download configuration files.

For help using PrintSet, refer to the online help portion of the application software.

Using Third-Party Software

You can use third-party software to set many of the printer parameters. You can configure the parameters that your software does not set by using the IPL command set or the printer’s DIP switches.

Use your third-party software to create label formats and convert graphics into a user-defined character (UDC) format that your printer can interpret. Refer to your third-party documentation, for more information.

Using the Intermec Printer Language (IPL) Command Set

You can also create labels by downloading formats (designs) and data you create with the printer command set. For help, see the *IPL Programming Reference Manual* available on the Internet at www.intermec.com. You can use the printer command set to perform any function or activate any feature of your printer except for those features or functions that are set with the DIP switches.

Connecting the Printer to Your System

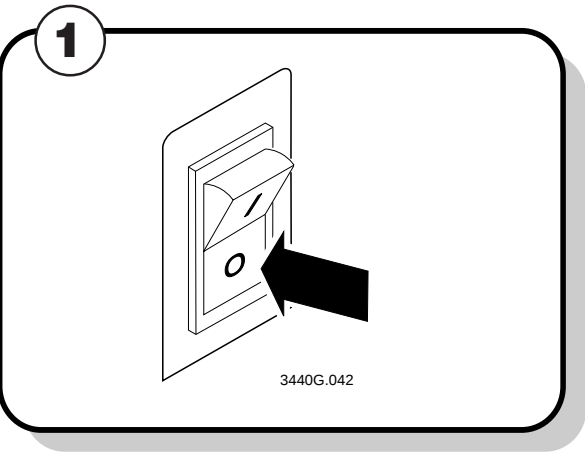
You can connect your printer to a PC, a local area network, an AS/400 (or other midrange system), or a mainframe. Use this section to connect the printer to your system.

Connecting the Printer to a PC

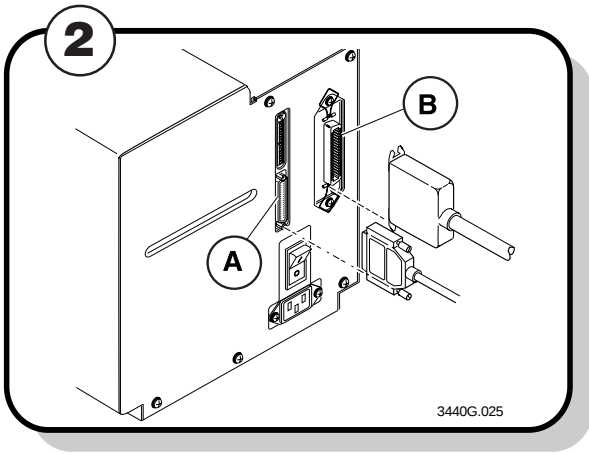
You can connect your printer to either a serial port or a parallel port (if you have the parallel option installed) on your PC. You must provide the correct cables to connect the printer. Contact your Intermec representative for ordering assistance if you do not have the appropriate cables.

Use the following table to determine the correct Intermec cable for your application. Cable schematics for the PC serial cables appear on the next page.

For Connecting To	Use Intermec Cable
PC serial port	
25F-25M, null modem, 9-wire	048668
9F-25M, null modem, 7-wire	048693
PC parallel port	
Parallel port cable	051211



Turn the On/Off switch to the off (O) position.

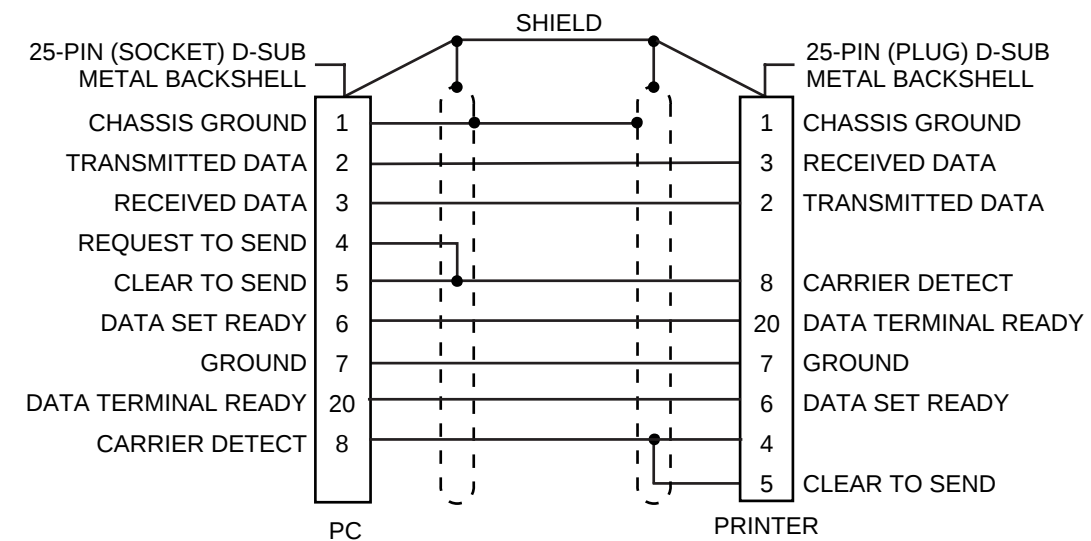


Plug the 25-pin connector into the serial (A) or parallel (B) communications port on the rear of the printer.

Plug the other end of the cable into a serial (COM port) or parallel port on your PC.

Note: If you are connecting the printer to a serial port on your PC, you may need to change the serial port configuration of your PC to match the printer. See “Configuring the Serial Port for Communications” later in this guide for the default printer configuration settings.

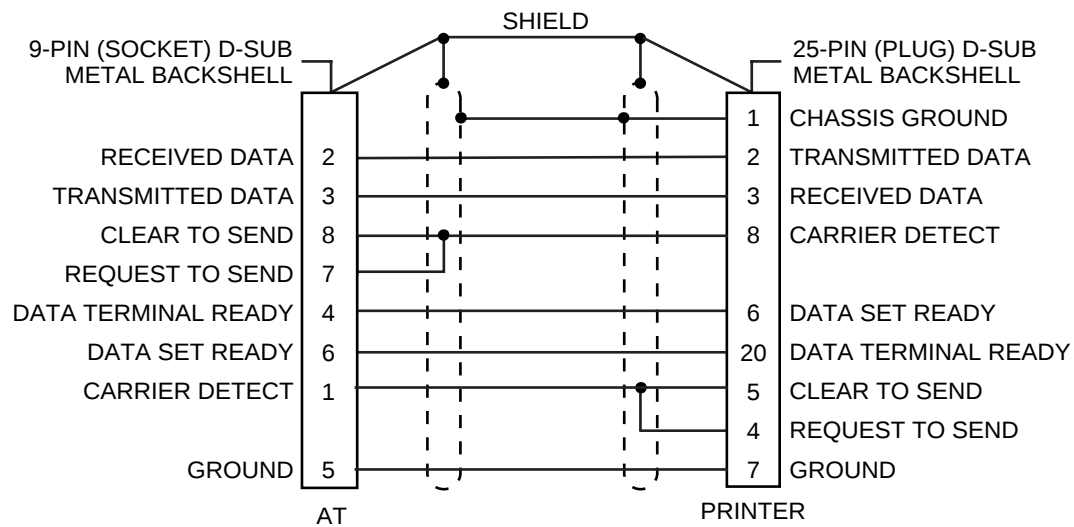
RS-232 Null Modem Cable for 25-pin PC (Intermec Part Number 048668)



NOTE: The metal backshell is connected directly to the shield to achieve electrostatic discharge (ESD) immunity.

3440G.053

RS-232 Null Modem Cable for 9-pin PC (Intermec Part Number 048693)



NOTE: The metal backshell is connected directly to the shield to achieve electrostatic discharge (ESD) immunity.

3440G.054

DIP Switch Settings

O = OFF
1 = ON

Top Bank Switch Number

OFF ON 1 2 3 4 5 6 7 8

Baud Rate Selection							
19,200	0	0	0				
9,600*	1	0	0				
4,800	0	1	0				
2,400	1	1	0				
1,200	0	0	1				
38,400	1	0	1				
57,600	0	1	1				
reserved	1	1	1				
Parity Selection							
Even*				0	0		
Odd				1	0		
None				0	1		
None				1	1		
Number of Data Bits							
7 Bit*						0	
8 Bit						1	
Reserved							
						0	0

O = OFF
1 = ON

Bottom Bank Switch Number

OFF ON 1 2 3 4 5 6 7 8

Multi-drop Address Selection							
*A	0	0	0	0	0		
B	1	0	0	0	0		
C	0	1	0	0	0		
D	1	1	0	0	0		
E	0	0	1	0	0		
F	1	0	1	0	0		
G	0	1	1	0	0		
H	1	1	1	0	0		
I	0	0	0	1	0		
J	1	0	0	1	0		
K	0	1	0	1	0		
L	1	1	0	1	0		
M	0	0	1	1	0		
N	1	0	1	1	0		
O	0	1	1	1	0		
P	1	1	1	1	0		
Q	0	0	0	0	1		
R	1	0	0	0	1		
S	0	1	0	0	1		
T	1	1	0	0	1		
U	0	0	1	0	1		
V	1	0	1	0	1		
W	0	1	1	0	1		
X	1	1	1	0	1		
Y	0	0	0	1	1		
Z	1	0	0	1	1		
0	0	1	0	1	1		
1	1	1	0	1	1		
2	0	0	1	1	1		
3	1	0	1	1	1		
4	0	1	1	1	1		
5	1	1	1	1	1		
Protocol Selection							
XON/XOFF*						0	
Intermec Protocols						1	
XON/XOFF Selection							
No Status Response*						0	
With Status Response						1	
DT/TTR							
Direct Thermal*						0	
Thermal Transfer						1	

Default settings are noted with an *

Default settings are noted with an *

3440G.027

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Configuring the Serial Port for Communications

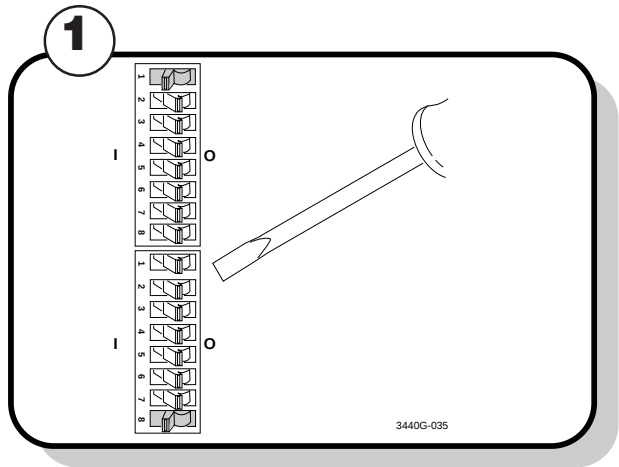
The serial port settings of your printer should match those of your PC or network controlling device. The default settings of the printer are:

Parameter	Setting
Baud rate	9600
Parity	Even
Word length selection	7-bit word
Protocol	XON/XOFF no status response
Device address	A
Media type	Direct thermal

Determine which parameters you need to change and which DIP switches you need to set. Use the DIP switch table on the following page.

The following table provides the maximum baud rates for the printers.

Printer	Maximum Baud Rate
3400B	19,200
3400C	38,400
3440	57,600
3600	19,200



Use a small straight-slot screwdriver to set the appropriate DIP switches on or off.

For example, if you want to change the media type to thermal transfer, set DIP switch 8 on the bottom bank of switches to the on (1) position.

Connecting the Printer to a Network

You can connect your printer to Novell NetWare networks, Token Ring networks, or TCP/IP networks. You can also connect the printer to an AS/400 (or other midrange system) or an IBM mainframe.

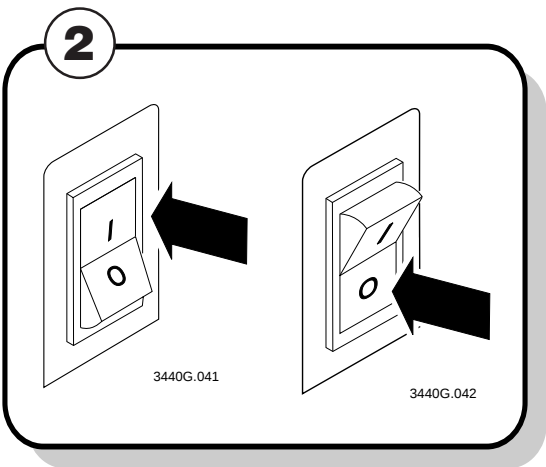
For Connecting To	You Need	Intermec Part Number
Network	Network interface adapter	Contact Intermec or purchase separately
AS/400	Twinax adapter card Twinaxial cable	056835 (Purchase cable equivalent to IBM part number 7362267 or 7362062)
Mainframe	Coax adapter card Coaxial cable	056836 (Purchase cable equivalent to IBM part number 2577672 or 1833108)

The network interface adapter (for example, Ethernet) connects to the parallel port of the printer. Your network must be able to use XON/XOFF (hardware handshake) protocol. If you are installing your printer in a network environment, you may need to change the serial port settings on the printer to match the requirements of your network. You can determine the communications requirements for your network by referring to the controlling device documentation.

If the controlling device is an Intermec product, refer to the following manuals for instructions and information on the necessary cabling and connections.

- *Model 200 Controller System Manual* (Intermec Part No. 063439)
- *9154 Multi-Drop Line Controller System Manual* (Intermec Part No. 048517)
- *9161B Installation Manual* (Intermec Part No. 049572)
- *9180 Network Controller User's Manual* (Intermec Part No. 054292)
- *RF System User's Manual* (Intermec Part No. 053574)
- *Data Communications Reference Manual* (Intermec Part No. 044737)

If you need to change the printer's communications parameters, follow the procedures in "Configuring the Serial Port for Communications" later in this guide.

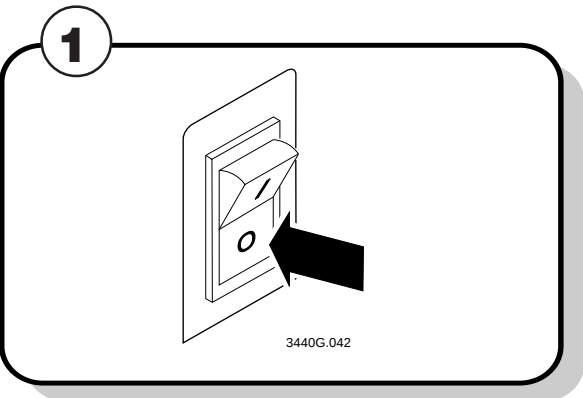


Turn the printer power off and then on again.

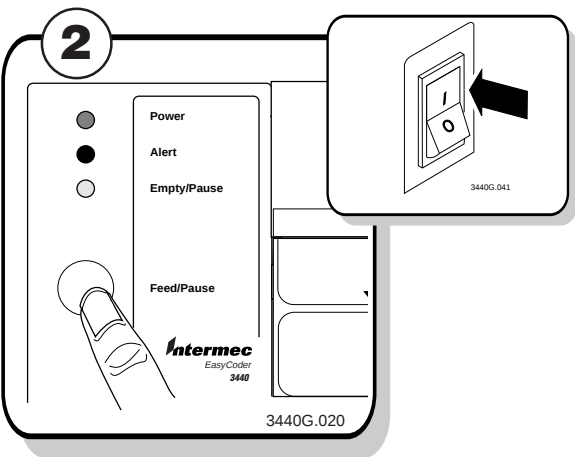
Verifying Printer Communications With Your System

Once you have the printer connected to your system, you need to verify that the printer communicates with your system. The easiest way to test communications is to set the printer to Data Line Print mode and send down a character string from your system.

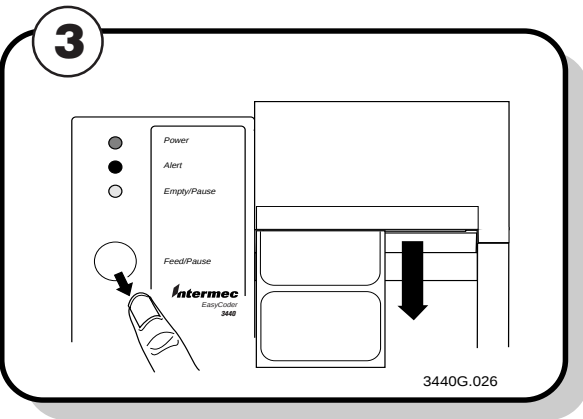
If you have just printed a hardware configuration test label, start with Step 4.



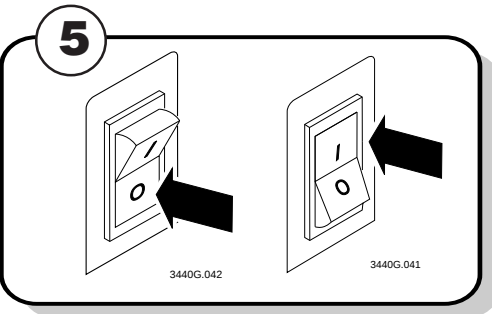
Turn the On/Off switch to the off (O) position.



Press and hold the Feed/Pause button. Turn the On/Off switch to the on (I) position.



Release the Feed/Pause button after the hardware configuration test label prints.



Turn the printer power off and then on again.

Note: An example using DOS to verify printer communications follows this procedure. If this procedure does not work, check to make sure that the DIP switches are set to the default configuration and that the printer cable is securely plugged into the correct port of your system.

To use DOS to verify printer communications

- At the DOS prompt, type the following command and press **Enter** to configure the serial port:
`MODE COM1 96,E,7,1,N`
- Type the following command lines and press **Enter**:
`COPY CON COM1`
`ABCDEF^Z`

where:

`COPY CON COM1` tells the PC to copy the next line of information to communications port COM1.

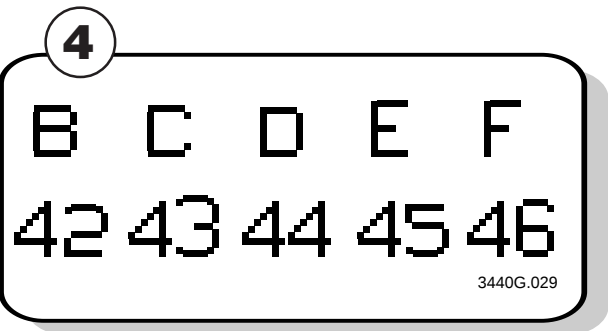
ABCDEF are random characters typed at the host.

^Z (Ctrl-Z) **Enter** sends the information to the printer.

The printer prints the characters (see step 4 on previous page for example).

Note: If you are using a different platform to communicate with your printer, please refer to your system user's manual and the IPL Programming Reference Manual for information on downloading commands.

Note: If you receive a write fault error, your cabling may be incorrect. See "Connecting the Printer to Your System" earlier in this guide for more information.



Send down some characters from your system.

At this point the printer does not attempt to interpret any printer commands. It simply prints each character with its hexadecimal equivalent underneath.