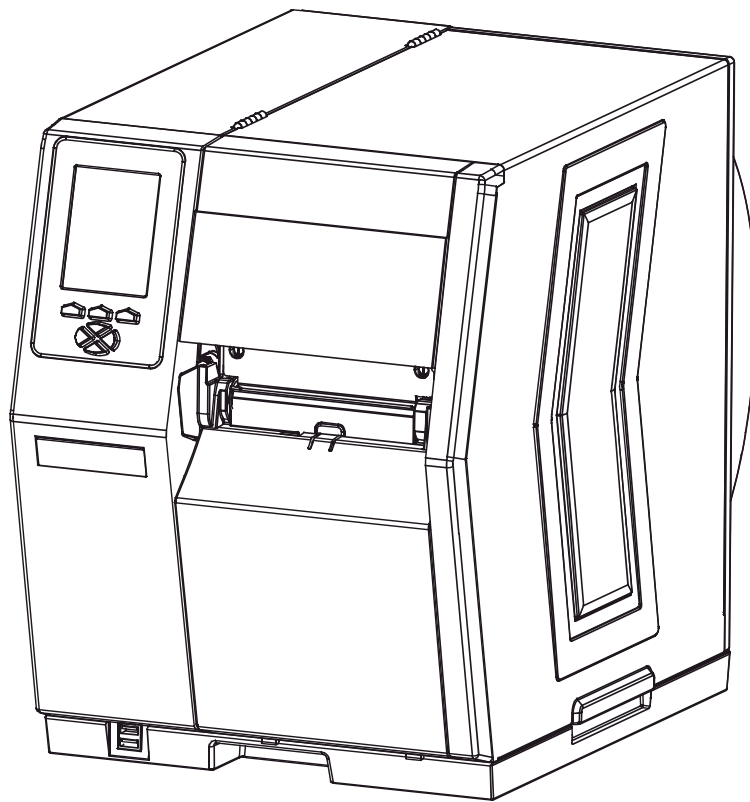# H-Class™

Thermal Transfer Option ▪ ▪ ▪

right by our customers. ▪ ▪ ▪

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Overview

This document describes the contents, installation, and use of the Thermal Transfer option for the H-Class printer. After verifying the kit contents and tools required, follow the steps below to install and begin using the option. A ribbon selection guide and a parts listing are also included, so keep this documentation for future reference.
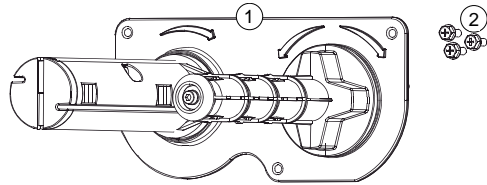
⚠️ CAUTION	*For your safety and to avoid damaging the equipment, turn 'Off' power and unplug the AC power cord from the printer before beginning this installation.*

Contents of the Thermal Transfer Option

This kit contains the following items:

① Thermal Transfer Assembly

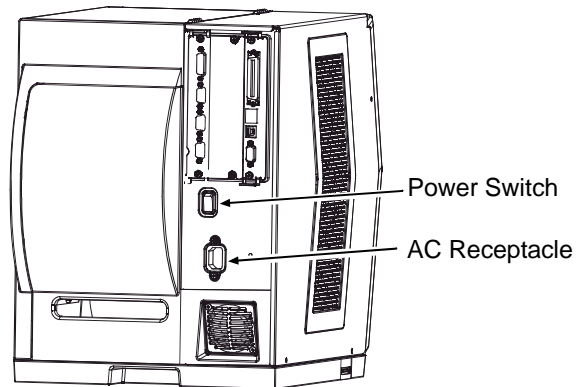② Mounting Screws (3)

③ Static Brush (6" and 8" kits only)

Tools Required

To install this option, you will need a standard and a Phillips screwdriver.
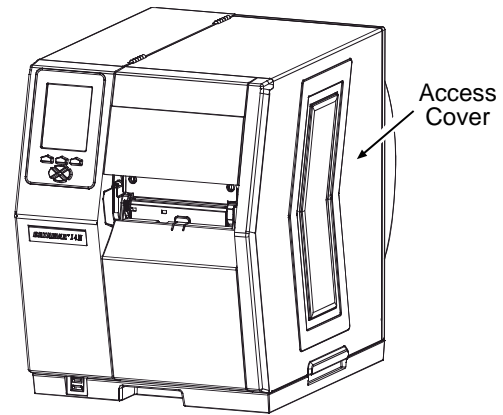
Step 1: Preparing the Printer

A) Turn 'Off' the **Power Switch** and unplug the power cord from the **AC Receptacle**.
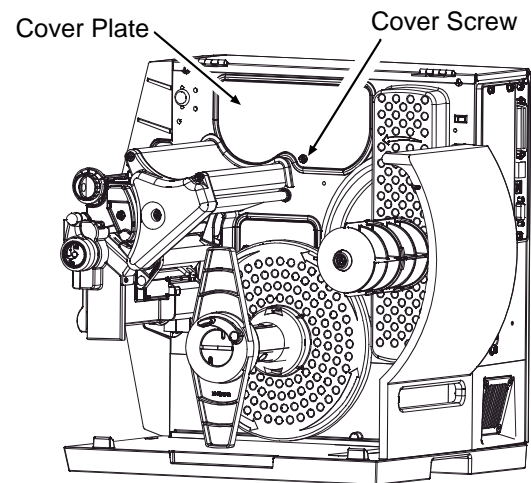
Power Switch

AC Receptacle

B) Raise the **Access Cover**. If installed, remove your media from the printer.

Access
Cover

Cover Plate   Cover Screw

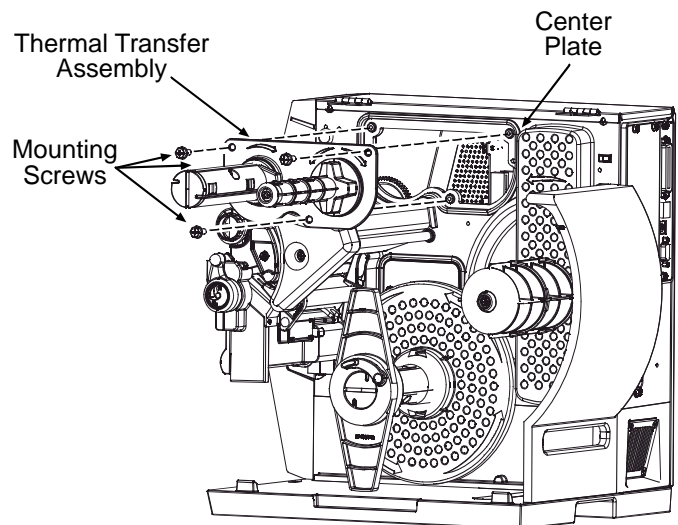**C)** Remove the **Cover Screw** then the **Cover Plate**.

Step 2: Installing the Option

Thermal Transfer
Assembly

Center
Plate

A) Carefully position the **Thermal Transfer Assembly** (Item ①) onto the **Center Plate** of the printer and secure it using the three **Mounting Screws** (Item ②).

Mounting
Screws

6" and 8" printers only

B) Using a Cotton Swab or cloth, moistened with isopropyl alcohol, gently clean the surface where the Static Brush will be installed.

⚠ **WARNING**   Isopropyl alcohol is a flammable solvent; always take the proper precautions when using this substance.

C) Peel the backing from the adhesive strip on the back of the **Static Brush** and affix the brush to the printer in the location shown. Be sure to locate the **Static Brush** as close to the printer's Centerplate as possible.
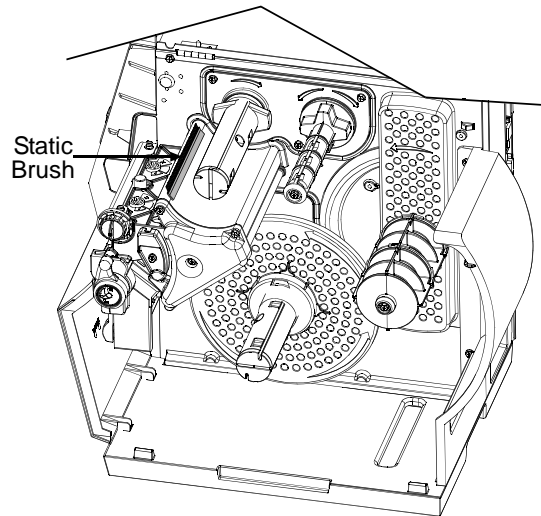
Static Brush

☑ ***Note:*** *The Static brush should be installed so the bristles are as close to the ribbon without actually touching. It may be necessary to install a roll of ribbon in order to properly align the brush to the ribbon.*

Step 3: Configuring the Printer

☑ ***Note:*** *During this procedure, consult the Operator's Manual for detailed front panel instructions.*

Configure the printer for the thermal transfer use as follows:

A) Plug the power cord into the **AC Receptacle** and turn 'On' the **Power Switch**.

B) Press the **MENU Button** on the printer's front panel.

C) Press the **ENTER Key** to select **MEDIA SETTINGS**, and press the key again to select **MEDIA TYPE**.

D) Using the **DOWN Button**, scroll to **THERMAL TRANSFER** then press the **ENTER Key**.

E) Press the **EXIT Key** and then, at the **SAVE CHANGES?** prompt, press **YES**.

Step 4: Aligning the Ribbon Path

Thermal transfer printing relies on a smooth, taut flow of ribbon for consistent print quality; to accomplish this, some components in the printer may need to be adjusted. Align the ribbon path as follows:

A) Install full width thermal transfer **Media** into the printer. Install a slightly wider **Ribbon** onto the **Supply Hub** and route it through the printer (see the *Operator's Manual* for details). Allow the **Ribbon** to feed from the printer along with the **Media**, as shown below:
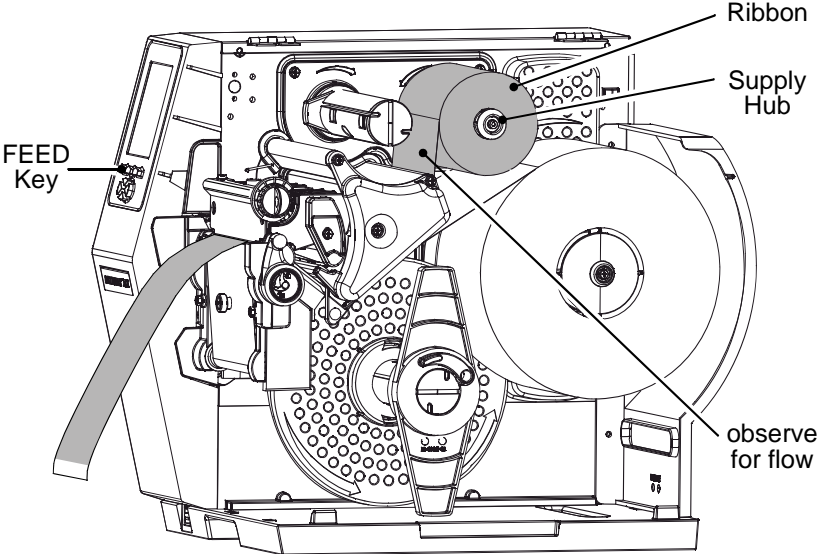

Supply Hub

Ribbon
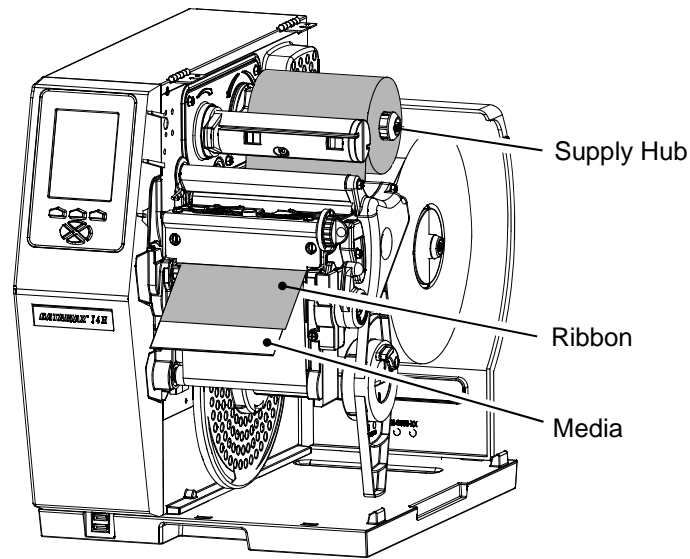
Media

B) Adjust the **Media Guide** to fit the label width, set the **Leveling Cam** to the lowest (disengaged) position, and ensure that the **Printhead Pressure** is balanced (see the *Operator's Manual* for details).


Printhead
Pressure
Adjustment

Leveling
Cam
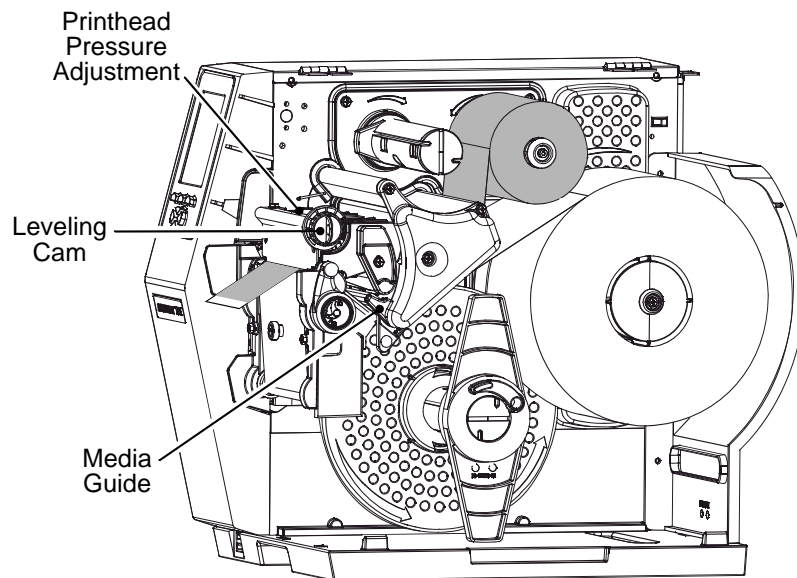
Media
Guide

C) Press the **FEED Key** several times, until media tracking is normalized through the printer. Then, while feeding several more labels, **observe the flow** of the **Ribbon** from the **Supply Hub**. Proceed according to your observations:

- If the ribbon flow is rippling, or if bagging is present, proceed to *D*; or,

- If the ribbon flow is evenly tensioned and smooth, proceed to *E*.

Ribbon

Supply Hub

FEED Key

observe for flow

D) Slightly loosen the **Support Cover Screw** and, while repeatedly pressing the **FEED Key**, slowly adjust the **Idler Adjustment Screw** to **smooth the ribbon flow** from the **Supply Hub**. Afterward, carefully tighten the **Support Cover Screw**, and then feed several more labels to verify your adjustment.

Supply Hub

smooth the ribbon flow

Idler Alignment Screw

Support Cover Screw
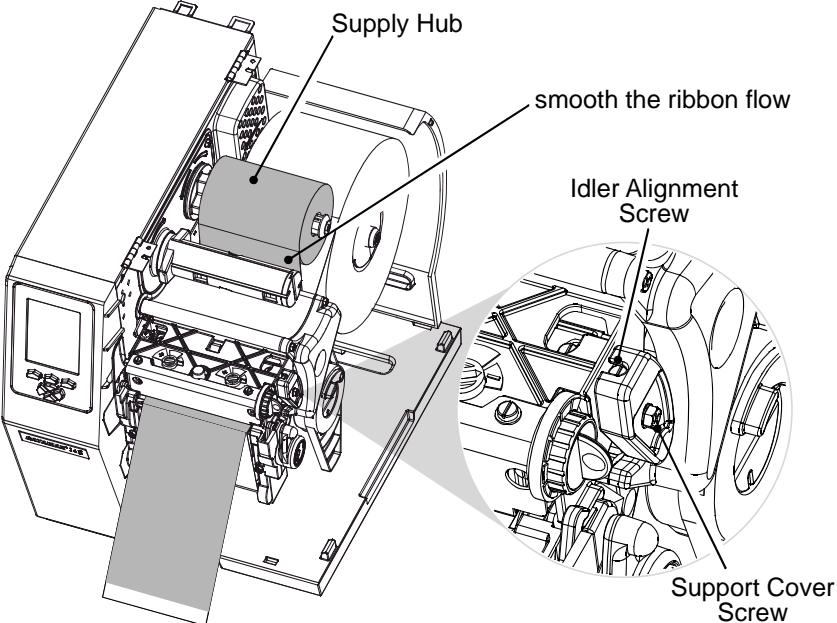
E) Wrap the **Ribbon** in a clockwise direction around the **Take-Up Hub**. Press the TEST Button on the **Front Panel** then use the UP / DOWN Buttons to select the RIBBON TEST LABEL. Select a small quantity of labels and press the ENTER Key. As the labels are output, **observe the flow** of the **Ribbon** from the **Printhead Assembly** to the **Take-Up Hub**. Proceed according to your observations:
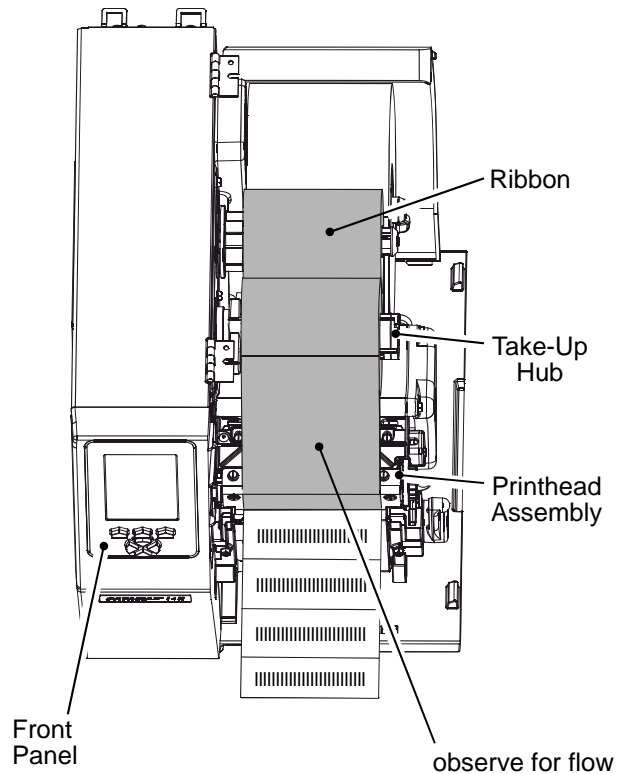

- If the ribbon flow is smooth, press the CANCEL Key, and then proceed to ***F***; or,

- If the ribbon flow is rippling or if bagging is present, slightly loosen both **Ribbon Shield Screws** and then move the **Ribbon Shield** 'in' or 'out' to smooth the flow of the ribbon. Afterward, carefully tighten the **Ribbon Shield Screws**. Print several more labels to verify your adjustment. When finished, press the CANCEL Key to stop printing.
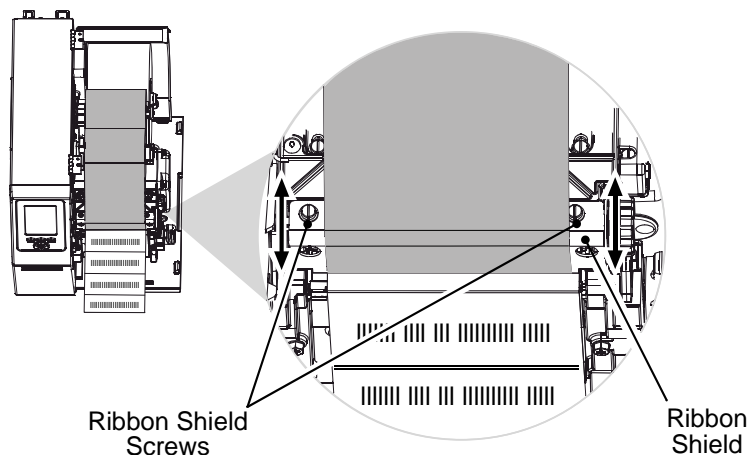
F) Press the TEST Button then use the UP / DOWN Buttons to select the PRINT QUALITY LABEL or the TEST LABEL. Set a quantity of labels to print and then press the ENTER Key. After printing stops, carefully examine the labels for evidence of ribbon wrinkling (i.e., irregular diagonal voids that extend through printed areas). Proceed according to your examinations:

- If no evidence of wrinkling is present on the labels, press the CANCEL Key to stop printing and complete the procedure; or,

- If evidence of wrinkling is present, enter the Test Menu again and reselect the PRINT QUALITY LABEL or the TEST LABEL. Set a quantity of labels to print and press the ENTER Key. Slightly loosen the Ribbon Shield Screws then slightly readjust the Ribbon Shield to eliminate the latent wrinkling. When finished, press the CANCEL Key to stop printing and complete the procedure.

The printer should now be ready for use in thermal transfer mode; however, if you are still experiencing problems with the installation or application of this option, refer to the troubleshooting guide below.

Troubleshooting

The following table covers common installation and use problems.

If experiencing this problem…	*Try this solution…*
'RIBBON FAULT' is indicated on the printer's display panel:	Ensure that ribbon is correctly installed and that the printhead is latched; see the Loading Diagrams on the printer's cover or in the *Operator's Manual*. Check the ribbon hubs for obstructions that may be inhibiting movement. Ensure that the ribbon core fits snugly on the Supply Hub. - Ensure that the media is not slipping under the ribbon (usually caused by an incorrect ribbon and media combination); see Selecting Media and Ribbon, below.
Used ribbon is not being wound by the Take-Up Hub:	Ensure that the leader has been correctly wound and secured to the Take-Up Hub.

If experiencing this problem…	Try this solution…
Labels and ribbon advance normally, but no image is printed:	Examine the used ribbon for an image and proceed accordingly: **If there is an image on the used ribbon:** Verify that the ribbon was properly loaded. The inked side of the ribbon must face the media. (To verify the inked side, press the adhesive backing of a label against the ribbon surface. Ink will only lift from the coated side of the ribbon.) Clean the printhead (see the *Operator's Manual*). Then flip the roll of ribbon on the Supply Hub; see the Loading Diagrams on the printer's cover or in the *Operator's Manual*. **If there is no image on the used ribbon:** The Heat setting may be too low. Make an adjustment in your software program or through the printer's menu system. (Note that the same functional commands from the host computer may override the menu settings; see the *Operator's Manual* for details.) • The media and ribbon combination may be incorrect; see Selecting Media and Ribbon, below.

) *If you have questions, or if problems persist, contact Datamax-O'Neil Technical Support.*

Selecting Media and Ribbon

Because the media and ribbon used will determine the printer's heat and speed settings, consider these factors when selecting your thermal transfer stock and ribbon combination:

- The combination of label facestocks / topcoatings and ribbon formulation may affect image quality.
- The ribbon backcoating can provide printhead protection and, depending upon the formulation, help reduce static build-up.
- The use of a ribbon that is slightly wider than the media backing material (if any) can protect the printhead against wear.

The following table is for reference only; for detailed advice, consult a Datamax-O'Neil Media Representative.

Ribbon Type	Thermal Transfer Media Type	Print Speed		Print Energy	Image Durability
		Inches per Second	Millimeters per Second		
GPR Plus	Great Label TTL	10 – 12 *	254 – 305 *	Medium	Medium
GPR Plus	Coated and Uncoated Paper, Tag Stock, some Films, some Synthetics	2 - 10	51 - 254	Medium	Medium
PGR+	Coated and Glossy Paper, Tag Stock, some Synthetics, Films	2 - 8	51 - 203	Medium	Medium
SDR	Synthetics, Films	4 - 6	102 - 152	High	High

*Highly recommended for optimum print quality at speeds above 10 IPS.

Ribbon Requirements

Ribbon Core: 1.010"   .006" (25.6 mm   .2 mm) inner diameter; where the core is not to protrude beyond ribbon's edge.

Maximum Ribbon Length: 1968 feet (600 meters)

[1] The ribbon width should exceed the web width of the label (label + liner).

Approved Media

Specially formulated for optimum print quality and maximum printhead life, Datamax-O'Neil media and ribbons are strongly suggested for use in your printer. The use of non-Datamax-O'Neil materials may affect the print quality, performance, and life of the printer components (see the *Operator's Manual* Warranty Statement for details). For a current list of approved media and ribbons, contact a Media Representative at (407) 523-5650.