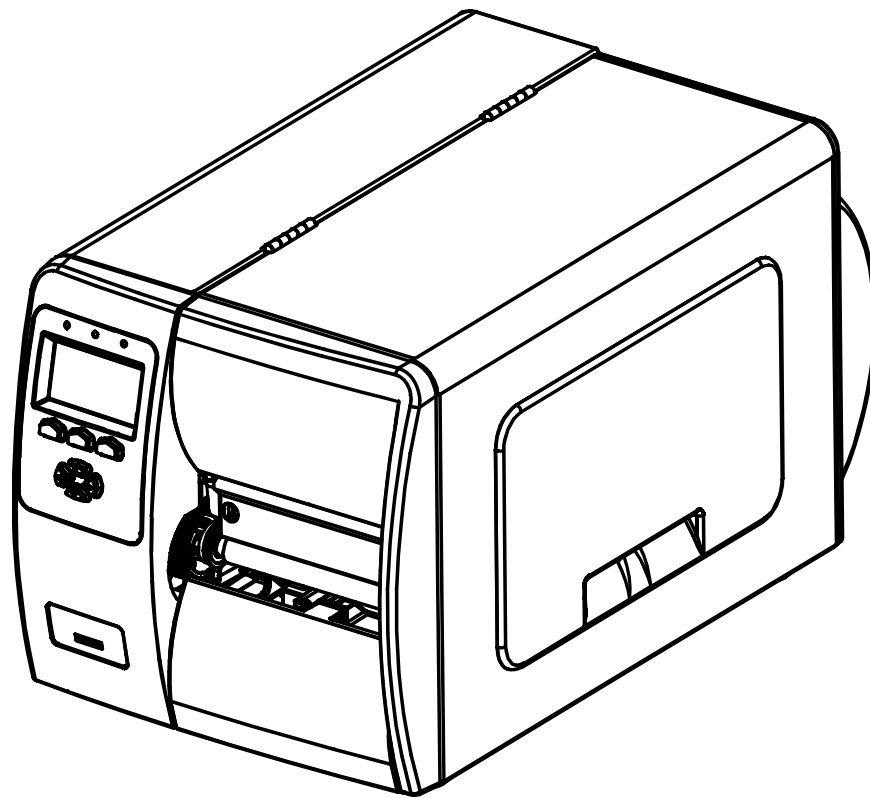


# M-Class™ *Mark II*

RFID Ready Option ■■■



right by our customers. ■■■



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## Overview

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This document describes the contents and installation of the M-Class Mark II RFID options. Only qualified service personnel should perform this installation. After verifying the kit contents and the tools needed, follow the steps below to install the option.



- This RFID device complies with FCC Radio Frequency exposure limits for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body. If 20cm distance cannot be maintained, end users are to be 20cm from printer extremity.
- Any changes or modifications to this RFID module not expressly approved by Datamax-O'Neil Corporation will void the user's authority to operate the equipment.
- RFID operation is subject to the following two conditions: (A) this device may not cause interference, and (B) this device must accept any interference, including interference that may cause undesired operation of this device.
- For your safety and to avoid equipment damage, always turn OFF power and unplug the printer's power cord before beginning this installation and when performing service.
- To avoid equipment damage, never apply power to the printer with the Antenna Cable disconnected.

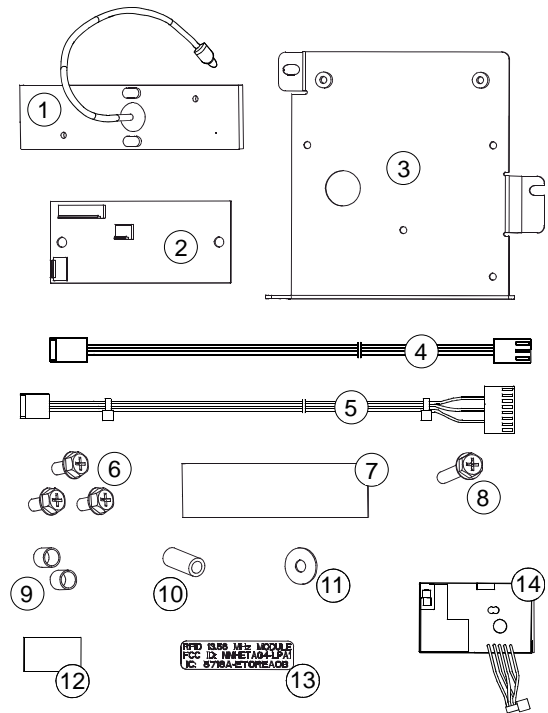
**☑ Note:** *This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.*

## Contents

The contents of the kit differ according to the type of RFID option:

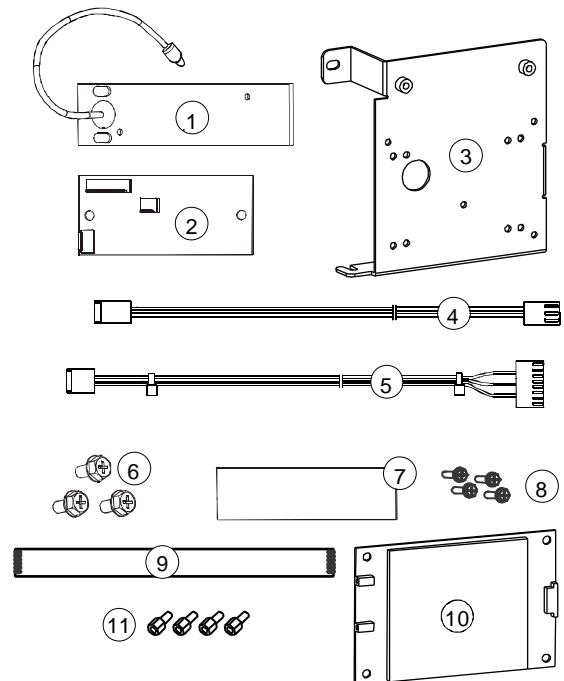
### ► HF Option\*:

- ① Antenna
- ② Regulator CCA
- ③ Mounting Plate
- ④ Power Cable
- ⑤ Comm Cable
- ⑥ Screw (3), M4 HD 8
- ⑦ Double-Sided Tape
- ⑧ Screw, M4 HD 25
- ⑨ Short Spacer (2), .34 X .31
- ⑩ Long Spacer, .25 X .62
- ⑪ Washer
- ⑫ RF Shield
- ⑬ FCC Label
- ⑭ HF Module



### ► UHF Option\*:

- ① Antenna
- ② Regulator CCA
- ③ Mounting Plate
- ④ Power Cable
- ⑤ Communications Cable
- ⑥ Screw (3), M4 x 8
- ⑦ Double-Sided Tape
- ⑧ Screw (4), M3 x 6
- ⑨ I/O Cable
- ⑩ UHF Module
- ⑪ Standoff (4) M3x13



\*Also included, but not shown, is the *RFID Quick Start Guide* (P/N 92-2450-01).

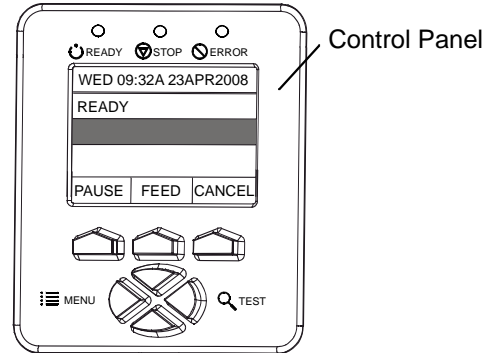
## Tools Required

A Phillips screwdriver is needed, and a PC with an Internet connection may also be required.

### Step 1: Checking Firmware

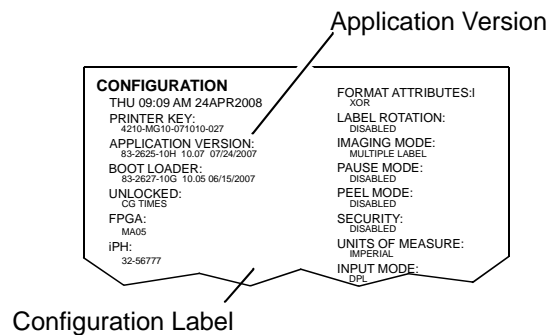
A) Verify the firmware version in the printer:

Press the **TEST Button** on the **Control Panel**.  
Using the **DOWN Button**, scroll to **PRINT CONFIGURATION** and press **TEST**.



B) Examine the **Application Version** printed on the **Configuration Label** and proceed accordingly:

- If 14.09 (or greater), go to Step 2; or,
- If 14.08 (or less), go to [ftp.datamax-oneil.com](http://ftp.datamax-oneil.com) and download a new version. Follow the "Updating Firmware" instructions in the *Operator's Manual* and install the update.

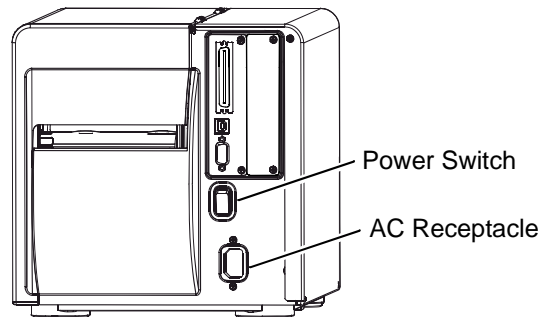


### Step 2: Preparing the Printer

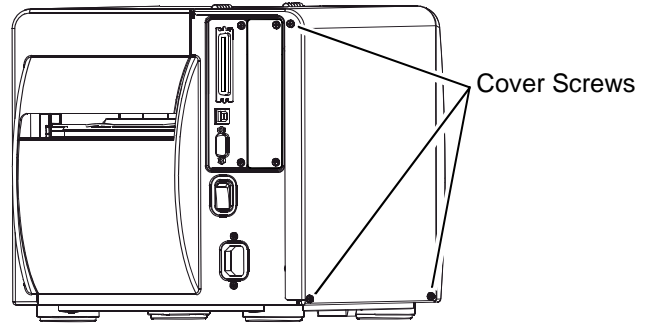


Always wear a wrist strap and follow ESD prevention measures when handling circuit card assemblies.

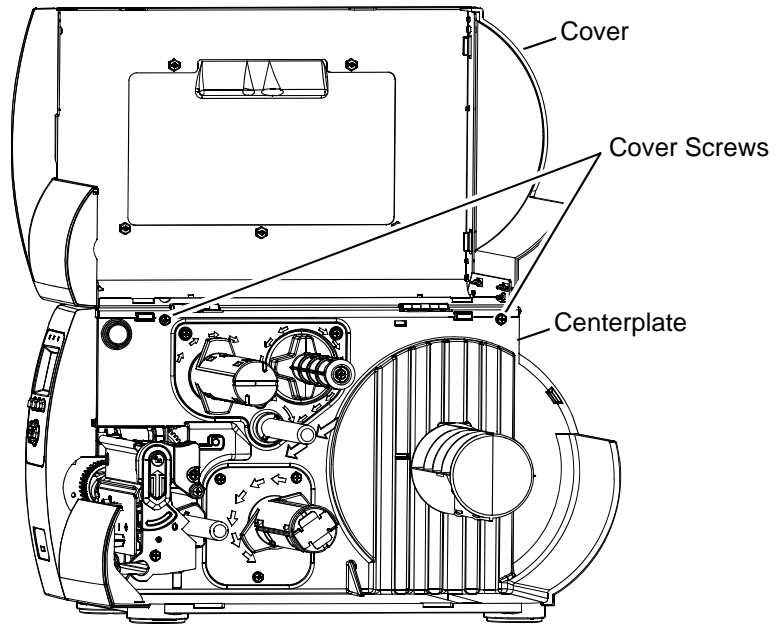
A) Turn OFF the **Power Switch** and unplug the power cord from the **AC Receptacle**.



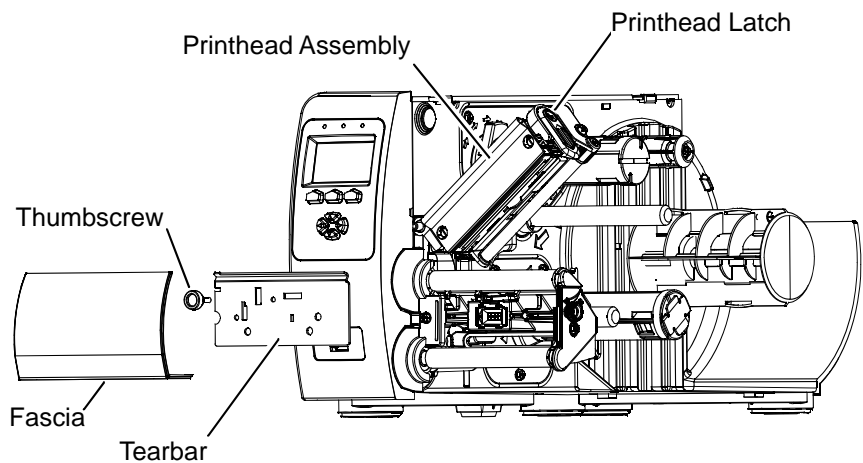
**B)** Remove the **Cover Screws** on the outside of the printer.



**C)** Raise the **Cover**. Loosen the **Cover Screws** on the **Centerplate** then remove the **Cover**.



**D)** Remove the **Fascia**, **Thumbscrew** and **Tearbar** (or other output attachment). Press the **Printhead Latch**, and then raise the **Printhead Assembly**. Remove media from the printer.

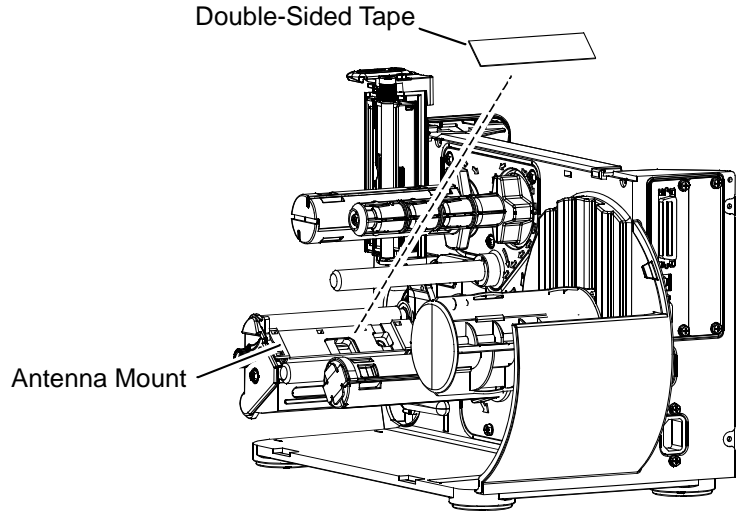


### ***Step 3: Installing the Option***

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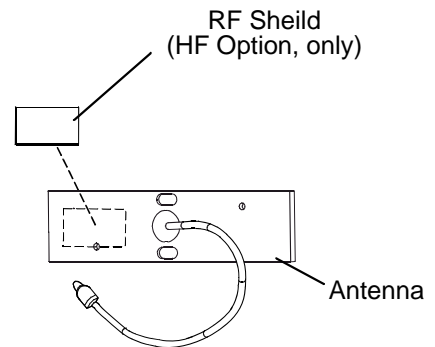
- A)** Peel the backing from the **Double-Sided Tape** (Item 7). Affix the **Double-Sided Tape** to the recessed area of the **Antenna Mount**.

If installing the **HF Option**, proceed to B; otherwise, go to C.

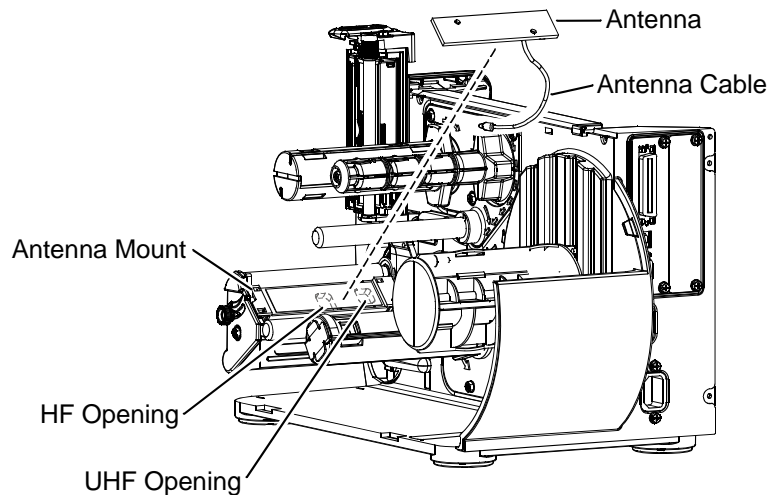


- B) HF Option, only –**

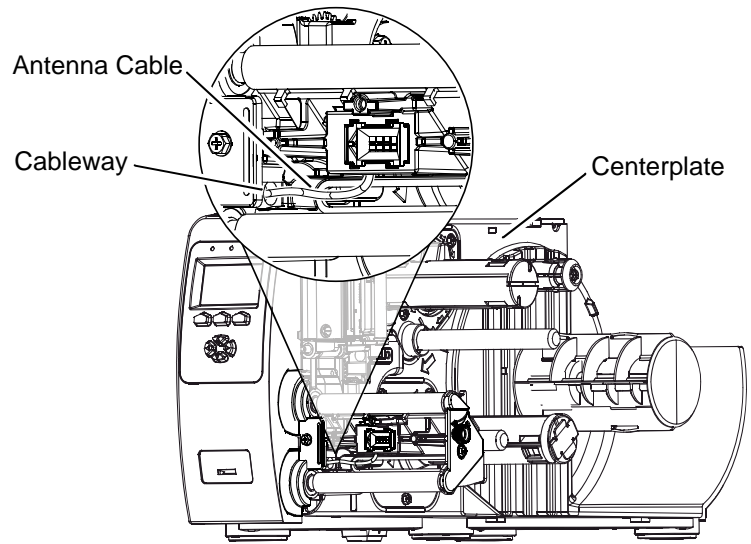
Peel the backing from the **RF Shield** (Item 12). Affix the **RF Shield** to the **Antenna** (Item 1) in the area as shown, right.



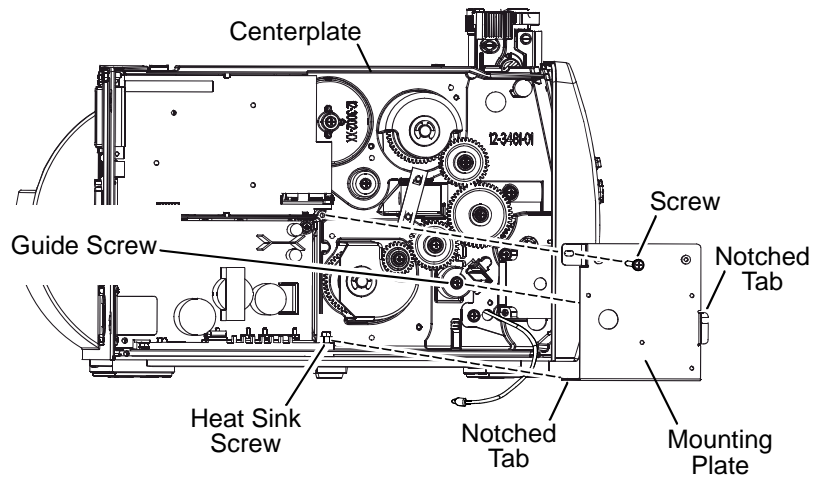
- C)** According to the option type, cut the tape over the **HF Opening** or **UHF Opening** in the **Antenna Mount**. Route the **Antenna Cable** through the opening. If installing the **HF Option**, orient the RF Shield over the **UHF Opening**. Affix the **Antenna** (Item 1) in the **Antenna Mount**.



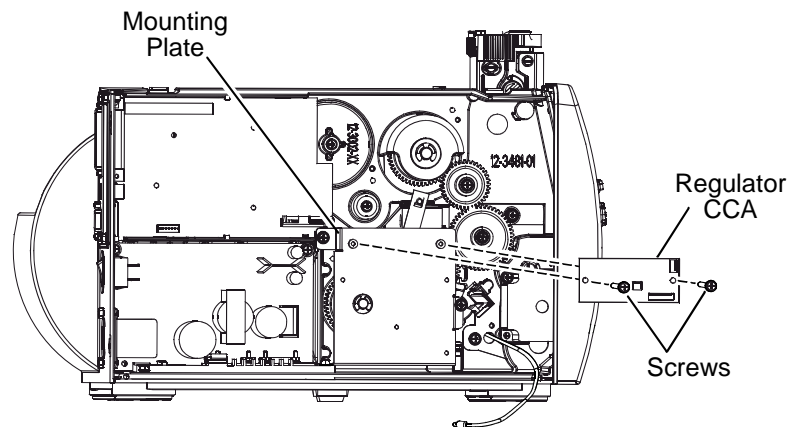
- D)** Route the **Antenna Cable** through the **Cableway** in the **Centerplate**.



- E)** Loosen the **Guide Screw** and the **Heat Sink Screw** then slide the **Notched Tabs** of the **Mounting Plate** (Item 3) underneath. Secure the **Mounting Plate** to the **Centerplate** using the **Screw** (Item 6) and then tighten the **Guide Screw** and the **Heat Sink Screw**.



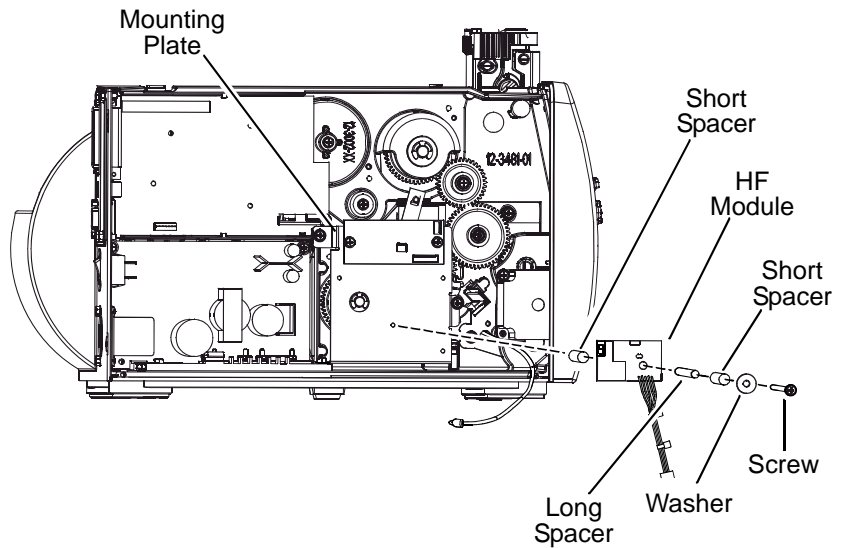
- F)** Secure the **Regulator CCA** (Item 2) to the **Mounting Plate** using the **Screws** (Item 6) then proceed according to the option type:



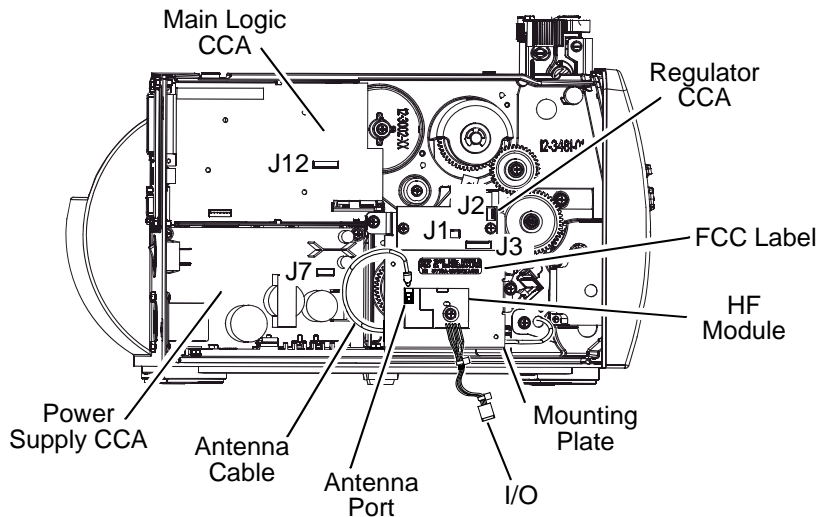


**HF Option:**

**G)** Place the **Washer** (Item 11) and then the **Long Spacer** (Item 10) onto the **Screw** (Item 8). Place a **Short Spacer** (Item 9) over the **Long Spacer** and **Screw**. Insert the **Long Spacer** and **Screw** through the **HF Module** (Item 14). Place a **Short Spacer** (Item 9) over the **Long Spacer** and **Screw** then secure the assembled parts to the **Mounting Plate**, as shown.



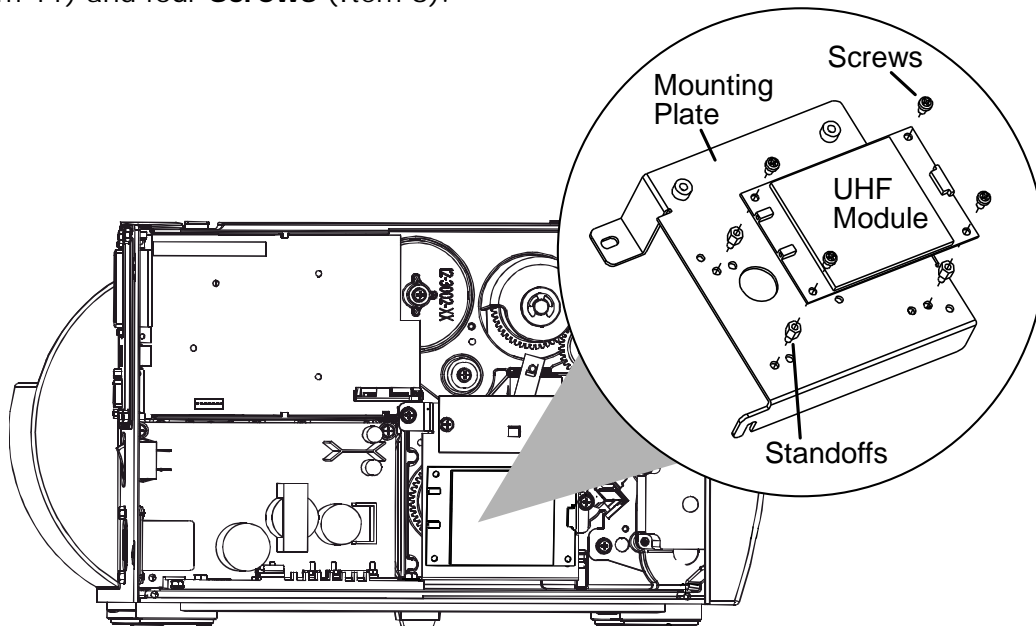
**H)** Affix the **FCC Label** (Item 13) to the **Mounting Plate**. Route the **Antenna Cable** behind the **Mounting Plate** and then connect the cables according to the table below:



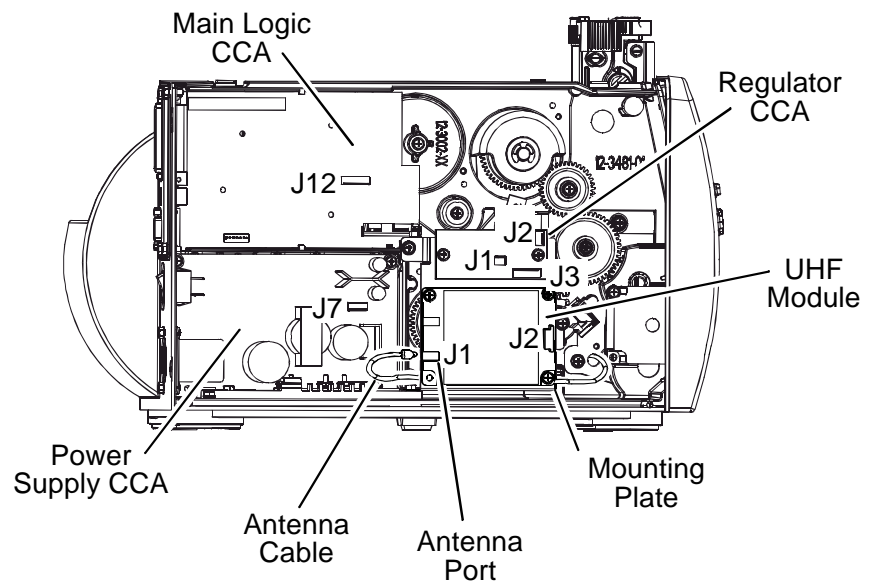
Cable	From	To
Antenna Cable	Antenna	Antenna Port – HF Module
Power Cable (Item 4)	J7 – Power Supply CCA	J1 - Regulator CCA
Comm Cable (Item 5)	J12 – Main Logic CCA	J2 – Regulator CCA
I/O	HF Module	J3 – Regulator CCA

**UHF Option:**

**G)** Secure the **UHF Module** (Item 10) to the **Mounting Plate** using the four **Standoffs** (Item 11) and four **Screws** (Item 8).



**H)** Route the **Antenna Cable** behind the **Mounting Plate** and then connect the cables according to the table below:

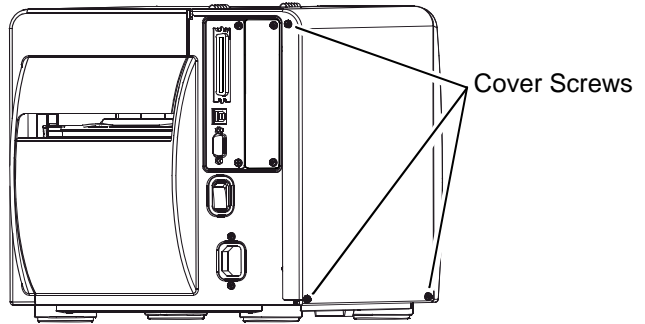


Cable	From	To
Antenna Cable	Antenna	Antenna Port J1 – UHF Module
Power Cable (Item 4)	J7 – Power Supply CCA	J1 - Regulator CCA
Comm Cable (Item 5)	J12 – Main Logic CCA	J2 – Regulator CCA
I/O Cable (Item 9)	J2 – UHF Module	J3 – Regulator CCA

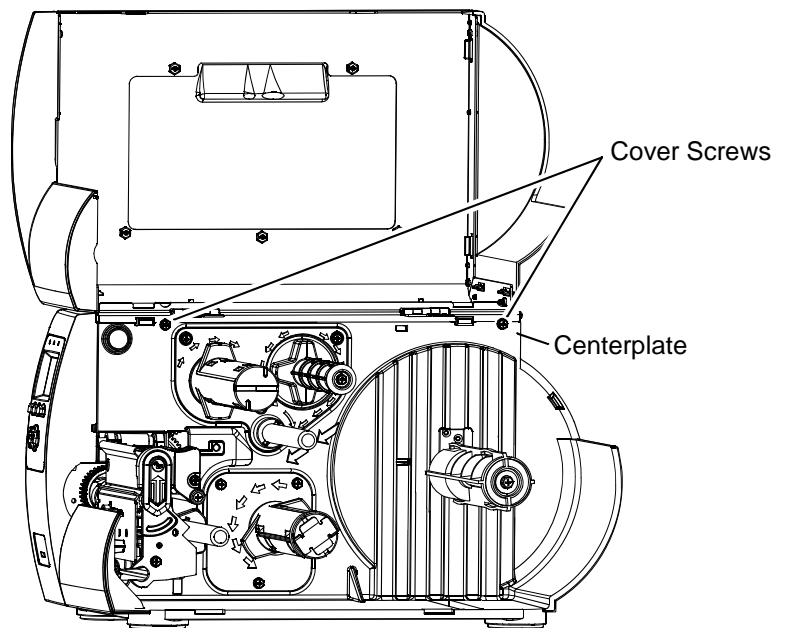
### **Step 3: Returning Operation**

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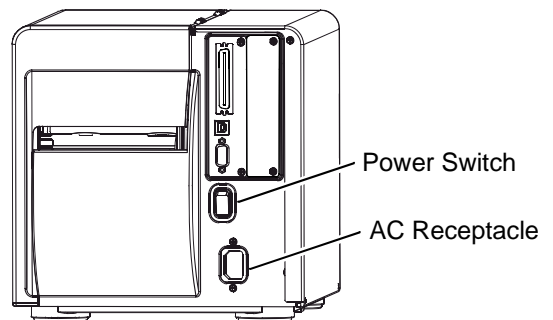
- A)** Dress the installed cables into the existing cable bundle. **RECHECK ALL CONNECTIONS.** Lower and latch the Printhead Assembly. Replace the Cover. Reinstall and tighten the three **Cover Screws.**



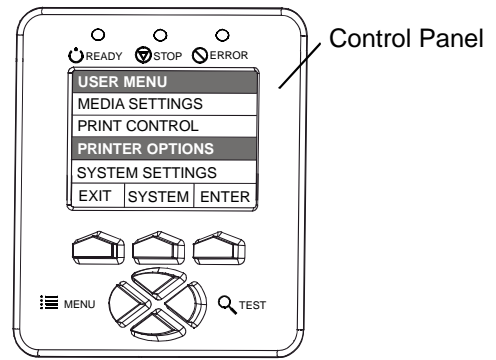
- B)** Replace the Tearbar and Thumbscrew (or other output attachment). Replace the Fascia. Tighten the **Cover Screws** on the **Centerplate.**



- C)** Plug the power cord into the **AC Receptacle** and turn ON the **Power Switch.**



D) Enable the option by following the instructions below:



Step	Instruction	Displayed Message
<i>a</i>	Press the <b>MENU Button</b> on the <b>Control Panel</b> .	<div style="border: 1px solid black; padding: 2px;"> <p>USER MENU</p> <hr/> <p>MEDIA SETTINGS</p> </div>
<i>b</i>	Using the <b>DOWN Button</b> , scroll to <b>PRINTER OPTIONS</b> and press the <b>ENTER Key</b> .	<div style="border: 1px solid black; padding: 2px;"> <p>PRINTER OPTIONS</p> <hr/> <p>MODULES</p> </div>
<i>c</i>	Scroll to <b>RFID</b> and press <b>ENTER</b> .	<div style="border: 1px solid black; padding: 2px;"> <p>RFID</p> <hr/> <p>RFID MODULE</p> </div>
<i>d</i>	Press <b>ENTER</b> .	<div style="border: 1px solid black; padding: 2px;"> <p>RFID MODULE</p> <hr/> <p>DISABLED</p> </div>
<i>e</i>	Scroll to the installed module type and press <b>ENTER</b> .	<div style="border: 1px solid black; padding: 2px;"> <p>RFID</p> <hr/> <p>RFID MODULE</p> </div>
<i>f</i>	Press the <b>EXIT Key</b> , and then the <b>YES Key</b> . (A reset will occur then, following initialization, the RFID Indicator will appear.)	<div style="border: 1px solid black; padding: 2px;"> <p>READY</p> <hr/> <div style="border: 1px solid black; display: inline-block; padding: 2px;">RFID</div> </div>
	<p><b>☑ Note:</b> If an <b>RFID FAULT</b> occurs, ensure that the correct module has been selected. If the fault continues, recheck the installation.</p>	

This completes installation. Refer to the *RFID Quick Start Guide* to begin using the option.