METTLER TOLEDO®

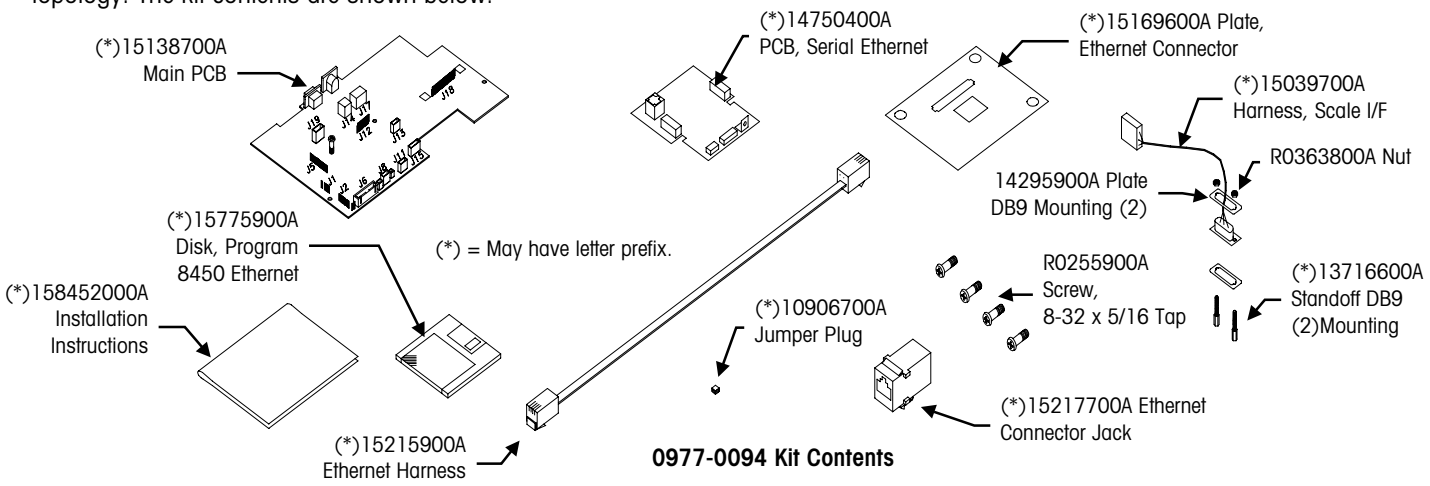
Installation Instructions

0977-0094

Model: 8450
Kit Number: 0977-0094
Description: Main PCB, Serial, and Ethernet Interface Kit

Kit Description

This kit will upgrade the Model 8450 to the newer Ethernet capable Main PCB (*)15138700A and add Ethernet capability and a Serial Interface for a remote scale base. This kit is required before installing the Ethernet Upgrade Kit if the Model 8450 Main PCB is the older (*)14475900A PCB. This kit will allow connection to an Ethernet Network using 10 Base-T wiring in a star or tree topology. The kit contents are shown below.



0977-0094 Kit Contents

Installation

Disconnect the AC power cord from the outlet before proceeding. Remove the printer cover. Remove the platter and spider (on units with load cell) or the dead deck cover (on dead deck units). Next remove the top cover screws. Slightly lift the top cover and disconnect the keyboard harnesses, then remove the top cover assembly.

Disconnect the load cell, power supply, and printer harnesses from the Main PCB. Remove the three mounting screws (Figure 2). Lift the Main PCB up on the side opposite the power supply enough to clear the power supply, then remove the Main PCB. Install the new Main PCB in reverse order.

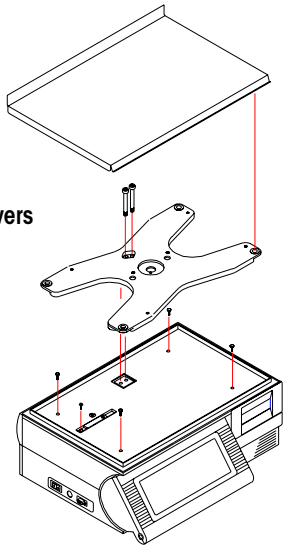


Figure 1: Removing Covers

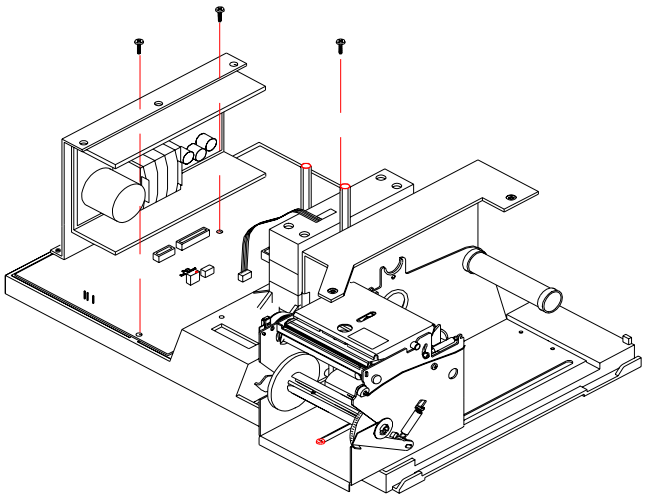


Figure 2: Removing Main PCB Model 8450

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After the Main PCB has been installed, install the Serial and Ethernet parts as shown below.

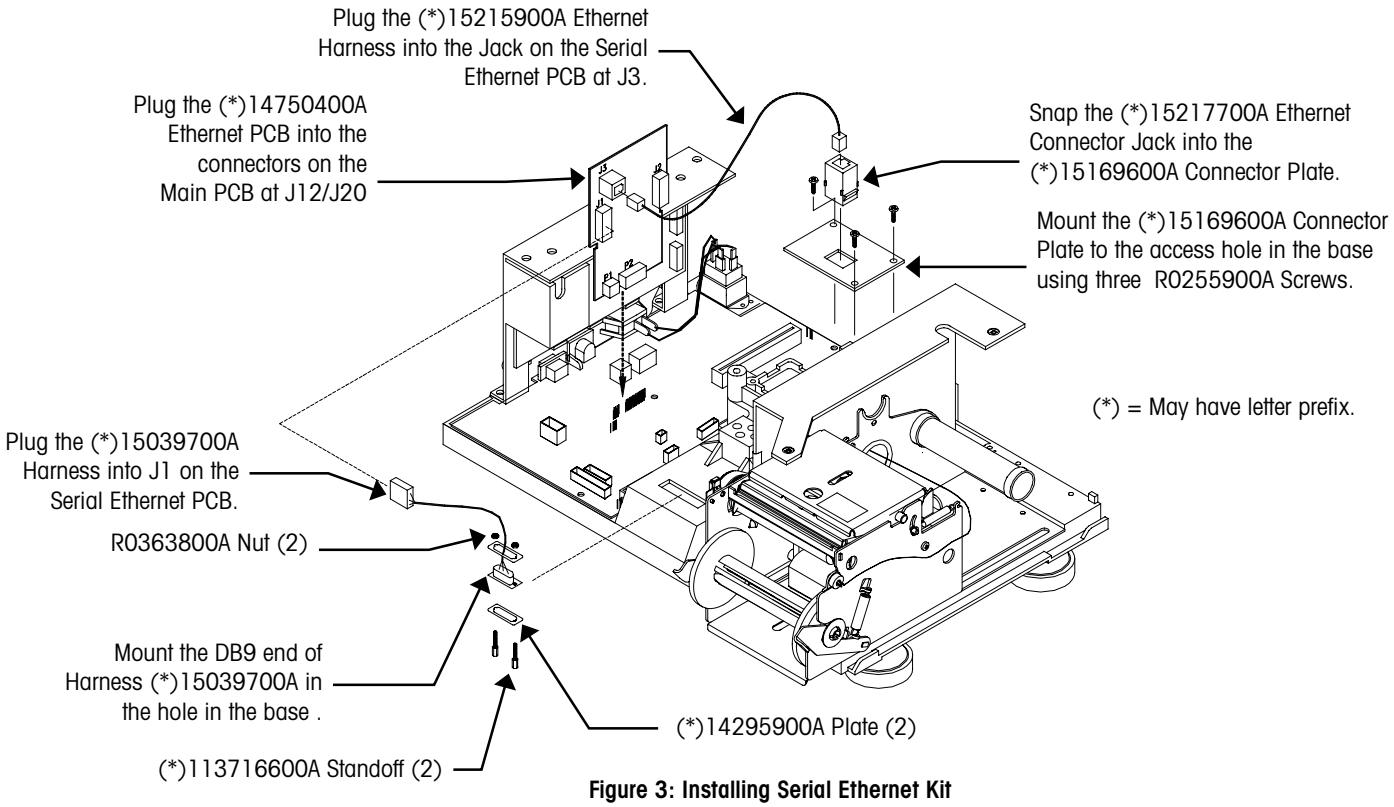

Figure 3: Installing Serial Ethernet Kit

Reinstall the cover, spider and platter when the kit installation is completed.

The kit is shipped with a program diskette for the Model 8450 Ethernet software. The new software must be flashed into the unit before it can be used on the Ethernet network. Copy the contents of the diskette to a separate sub-directory on your PC's hard disk drive. The program files are compressed and must be uncompressed before they can be downloaded to the scale. The files are self-extracting, requiring you to just type in the file name to uncompress them (example: 12345R). The new files created are the software program files (Example: 12345R.HEX) that are used with FLASHPRO (the downloader program also on the diskette) to download the program into the unit.

Before downloading the software, turn the power switch OFF. Connect the cable (shown in Figure 4) end marked PC to the PC's serial port and the other end to the Model 8450 AUX Port, located on the side of the unit (Figure 4). With power off, press and hold the CAL Switch (see Figure 4), then turn the power switch to ON and release the switch when the display indicates it is ready for download. Type in the flashpro command line and press ENTER. The FLASHPRO command line is as follows:

FLASHPRO -Tfilename.hex

(Replace filename.xxx with the actual file name on the distribution diskette. Example: FLASHPRO -t123456R.hex) If you get a DOS Bad command or file name error, check to make sure you have not mistyped the file name (ex: FLASHPRO), and the file FLASHPRO.EXE is in your PC's path or current directory.

The PC display should show ACKNOWLEGEMENT. (If a UART Error is displayed, check that the cable is connected to COM1, and the correct cable is used.) FLASHPRO will display A's during the download process, (Acknowledgment). When the download is complete, FLASHPRO will display the message "File Transfer Successful".

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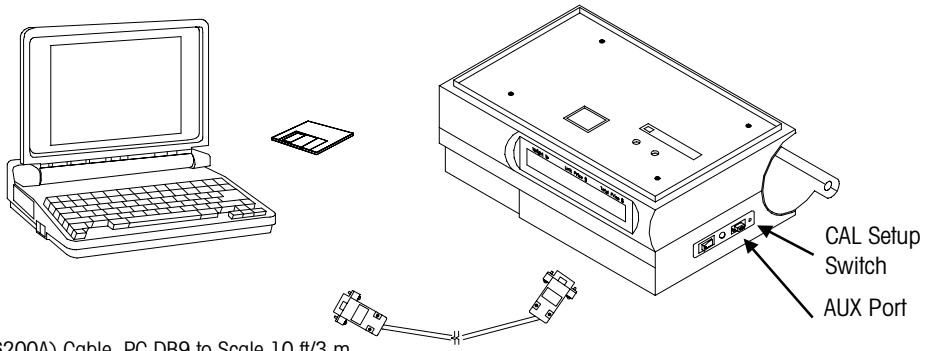

0900-0285 (*13816200A) Cable, PC DB9 to Scale 10 ft/3 m
0900-0297 (*14102600A) Cable, PC DB9 to Scale 25 ft/7.62 m
0900-0286 (*13816300A) Cable, PC DB25 to Scale 10 ft/3 m
0900-0298 (*14102800A) Cable, PC DB25 to Scale 25 ft/7.62 m

Figure 4: Flashpro Hardware

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Configure the Model 8450

To find the Windows NT Server IP address, click START, PROGRAMS, then COMMAND PROMPT at the NT Server. Type IPCONFIG at the DOS prompt to display the IP address of the server. Write this number down. It will be used to enter into the client configuration. Refer to the Service Manual for setup details. The Ethernet configuration is accessed by pressing the SETUP MODE key, then the UNIT ID key. The following must be set up for the Ethernet network.

SCL? - The IP Address identifies the client on the network. The IP Address is a unique number consisting of four parts separated by periods. (Ex: 146.207.40.1)

GW? – Gateway IP address is used if the server is on a different network.

Use the following key sequence to set the client IP address and Gateway address. The example shows setting the IP address to 146.208.104.015.

Press:	SETUP
Press:	ENTER
Press:	UNIT ID
Display:	**SCL 255.255.255.255**
Press:	ENTER
Display:	**SCL? 255.255.255.255** (SCL is this scale's IP.)
Key In:	**146 208 104 015** (no spaces or .'s needed)
Press:	ENTER
Display:	**Port 0**
Press:	ENTER
Display:	**Port ? 0**
Key In:	**2305** (always set to this number)
Press:	ENTER
Display:	**GW 255.255.255.255** (GW is the Gateway's IP.)
Press:	ENTER
Display:	**GW? 255.255.255.255**
Key In:	146 208 104 100 (no spaces or .'s needed)
Press:	ENTER
Display:	**SCL 146.208.104.015** (shows the new number entered)
Press:	CLEAR to exit setup mode.

Turn power off and back on to reset the scale with the new data.

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Connecting to the Model 8270 Remote Scale Base

Disconnect power to the Model 8450. Using Cable 0900-0305, connect the DB-9 connector from the Model 8270 scale base to the Scale Interface Port DB-9 connector installed in the Model 8450 base. The Model 8270 scale base must be installed on a stable level surface. The stability and level is adjusted using the scale feet with the bubble indicator on the scale spider as a reference (Figure 5).

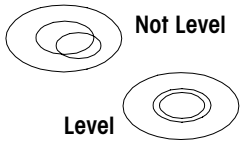


Figure 6: Bubble Indicator

Remove cover plate from Model 8270 scale base and install Jumper P/N (10906700A) on both pins of W4. Jumper W1, W2 and W4 should be shorted and W3 should be open. (See Figure 6.)

Reassemble Model 8270. Apply either the 50X.01 lb or 20X.005 kg decal from the capacity label (*)14624500A) to the front right side of the panel bezel.

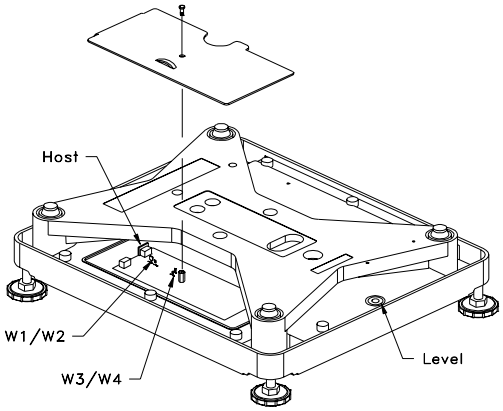


Figure 5: Model 8270 Scale Base

Calibration with the Model 8270

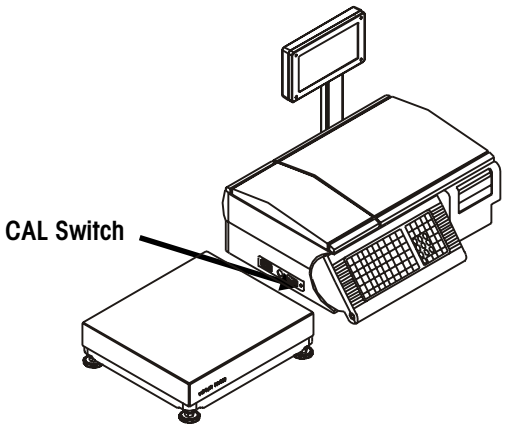
The CAL key is used to access the calibration menu. Test weights are required to calibrate the Model 8450. You may have to remove the Calibration Seal (if used) in order to press the CAL switch. In Setup mode at the prompt **SELECT FUNCTION**, press the CAL key on the Setup overlay. You will then be prompted to press the CAL switch. The CAL switch is located in the access hole shown in Figure 3-3. Insert a non-metallic object in the hole to press the switch.

After pressing the CAL Switch, you will be presented the following calibration menu. Press the DOWN and UP keys to navigate through the menu. Press the ENTER key followed by the DOWN and UP keys to change the displayed options, then press ENTER again to accept the displayed selection.

Press UP or DOWN to display **LOAD CELL**, then press ENTER. Press UP/DOWN to display **EXT-8270**, then press ENTER to accept. Next, press the UP or DOWN keys until **CALIBRATE** displays.

When **CALIBRATE** displays, press ENTER to start the calibration procedure.

1. The display will show **Empty Scale, Enter.** Make sure the scale platter is empty, then press the ENTER key.
2. The display shows **Capturing Zero...** and the top display counts down from 15 while setting zero.
3. The scale will next ask for amount of test weight: **Load: 10.00**. Recommended minimum test weights are 20 lb or 10 kg. Place the test weight on the scale pan. Enter the amount of the test weight, then press the ENTER key (or just press ENTER if the displayed value is correct). The display will show **Capturing Span…,** and the top display will count down from 15 while setting span (full capacity).
4. When calibration is complete, the display shows **Calibrated!!!**.



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