

Introduction

WARNING The information in this packing sheet is intended for use by qualified service personnel only. Do not install or use the Model 7797 unless qualified to do so. Failure to recognize and observe normal safety precautions could result in personal injury or death.

WARNING To prevent electric shock when using the Model 7797, do not apply >42V to any Model 77XX switching module or to the front panel terminals of the Model 2700/2750.

The Model 7797 provides access to Model 2700/2750 rear backplane terminals and allows a Model 77XX switching module to be calibrated outside the mainframe. As shown in Figure 1, the Model 7797 is made up of two calibration cards: one for the Model 2700/2750 and one for a Model 77XX switching module. The Model 7797 is used for the following calibration procedures:

- **Model 2700/2750 calibration (2700/2750 calibration card)** — This calibration card has a screw terminal block (TE100) to allow easy access to the DMM backplane input terminals. Supplied jumpers are used to short the rear backplane for manufacturing calibration of the Model 2700/2750. This calibration card is then installed in the mainframe.
- **Model 77XX switching module calibration (77XX and 2700/2750 calibration cards)** — A switching module that has a T/C cold junction (i.e., Model 7700) must be calibrated outside the mainframe. The 2700/2750 calibration card is connected to the 77XX calibration card using the supplied cables. The 2700/2750 calibration card is then installed in the mainframe, and the switching module is connected to the 77XX calibration card.

The individual parts supplied with Model 7797 are listed in Table 1.

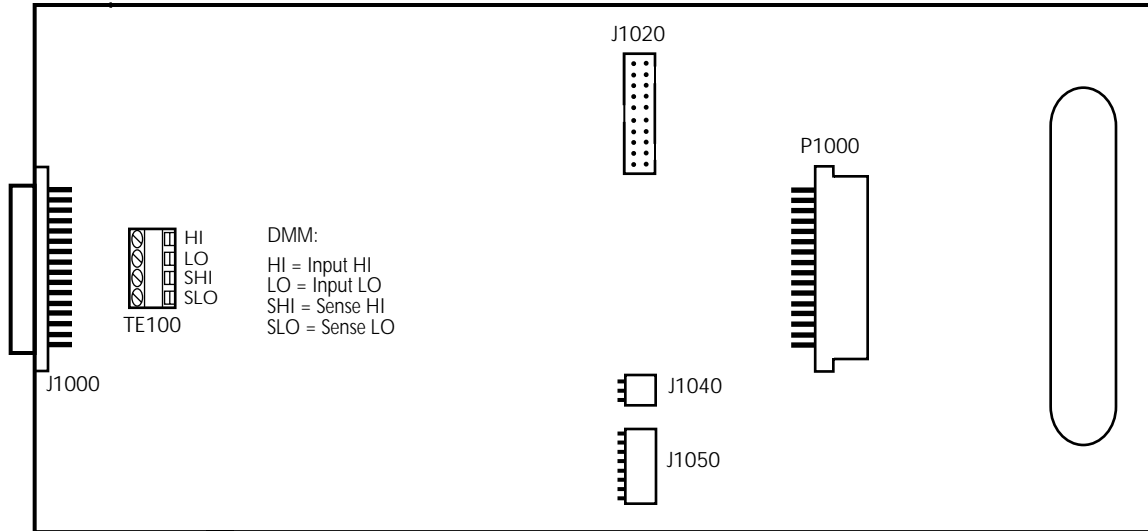
Table 1
Connector parts

Qty	Description
1	Calibration card for Model 2700/2750
3	Jumper (use with TE100)
1	Calibration card for Model 77XX
1	Ribbon cable (20-conductor)
1	Cable (5-conductor)
1	Cable (3-conductor)

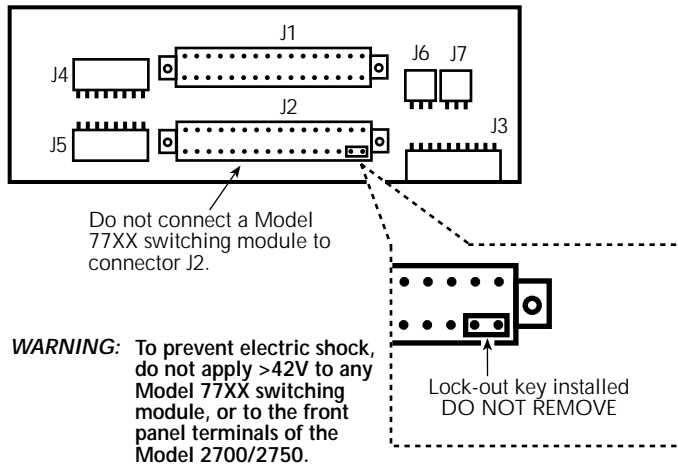
WARNING Power must be removed from all components in the system before installing or removing the Model 7797. For the Model 2700/2750, make sure it is turned off, the line cord is disconnected, and there are no connections to the front panel input terminals. For Model 77XX switching modules, make sure all external power is removed.

Figure 1
 Model 7797 calibration cards

Calibration card for Model 2700/2750:



Calibration card for Model 77XX:



NOTE: Connectors P1000 (2700/2750 calibration card) and J1 (77XX calibration card) are electrically identical. That is, they have the same pinout.

Model 2700/2750 manufacturing calibration

2700/2750 calibration card

Should the Model 2700/2750 require manufacturing calibration (i.e., following repair), the backplane DMM input terminals must be connected together to form a low-thermal short. This low-thermal short is achieved using the 2700/2750 calibration card as follows:

1. Install the three supplied jumpers into the screw terminal block (TE100) of the calibration card as shown in Figure 2.
2. Install the calibration card in slot 1 of the Model 2700/2750 as shown in Figure 3.
3. See “Manufacturing calibration” in Section 2 of the Model 2700 or 2750 Service Manual to calibrate the instrument.
4. When finished, remove the calibration card from slot 1.

Figure 2
TE100 jumper installation for Model 2700/2750 manufacturing calibration

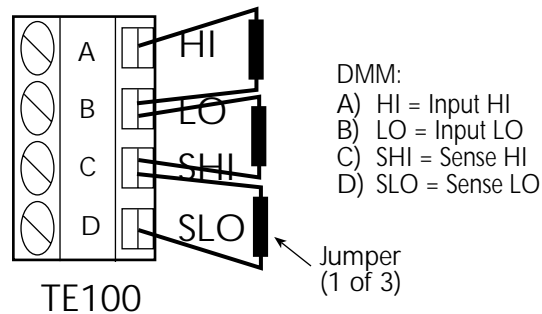
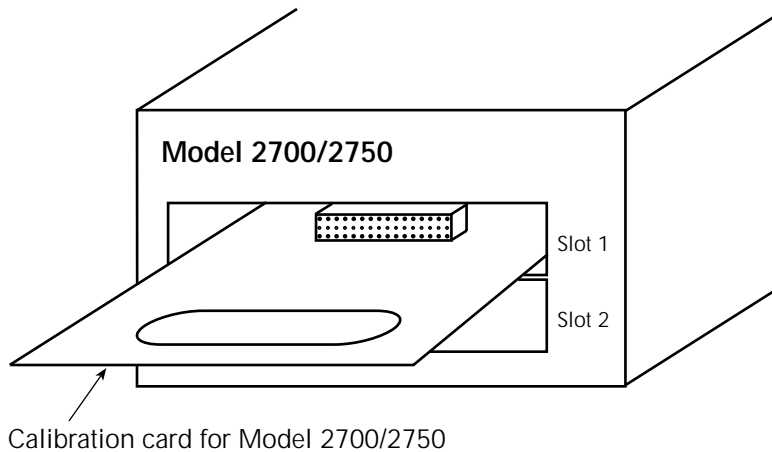


Figure 3
2700/2750 calibration card installed in mainframe



Model 77XX switching module calibration

2700/2750 and 77XX calibration cards

WARNING To prevent electric shock, do not apply >42V to any Model 77XX switching module, or to the front panel terminals of the Model 2700/2750.

A Model 77XX switching module that has a T/C cold junction must be calibrated outside the Model 2700/2750 to avoid card heating during calibration. Perform the following steps to calibrate the temperature sensors on the switching module:

1. If jumpers are installed in the screw terminal block (TE100) of the 2700/2750 calibration card, remove them.
2. Referring to Figure 4, connect the 2700/2750 calibration card to the 77XX calibration card using the three supplied cables.
3. Install the 2700/2750 calibration card in slot 1 (see Figure 3), and position the 77XX calibration card away from the mainframe.

NOTE Do not plug the Model 77XX switching module into connector P1000 of the 2700/2750 calibration card. Heat transferred from the mainframe to the switching module will corrupt calibration.

4. Plug the Model 77XX switching module into connector J1 on the 77XX calibration card as shown in Figure 5.
5. Remove the top cover from the Model 77XX switching module, and use an external RTD sensor.
6. Calibrate the Model 77XX as explained in “Model 7700 calibration” in Section 2 of the Model 2700 or 2750 Service Manual.

NOTE To calibrate the Model 77XX, the temperature of the module PC board must first be measured and recorded. An RTD sensor (such as the Model 8681) can be used to measure the temperature through the front panel inputs of the Model 2700/2750. Make the measurement at the center of the module.

7. When finished, remove the 2700/2750 calibration card from the mainframe, and unplug the switching module from the 77XX calibration card.

Figure 4
Cable connections for calibration cards

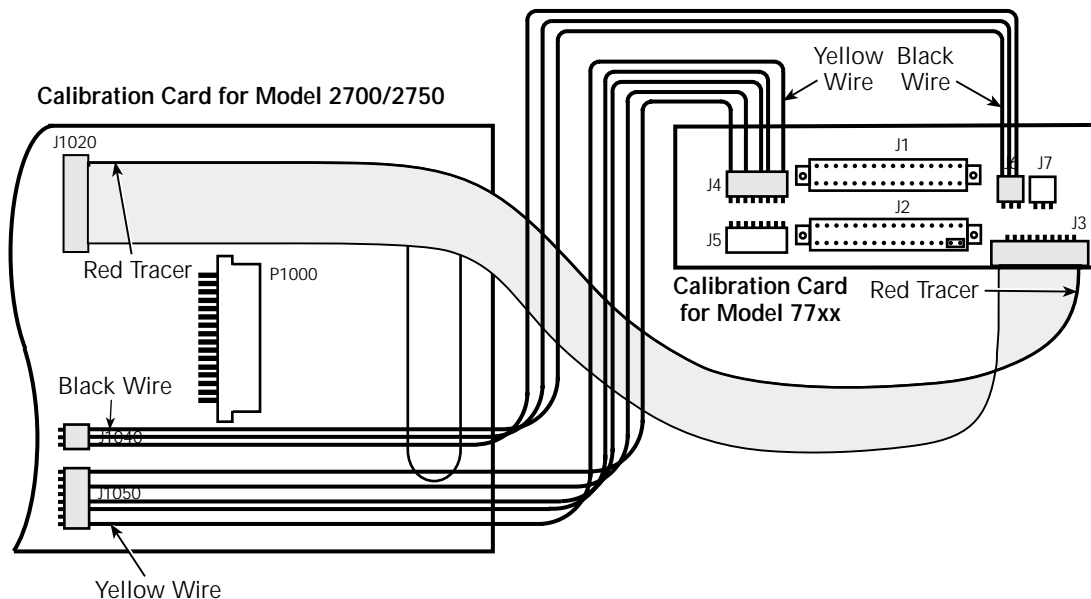


Figure 5
Installing switching module in 77XX calibration card

Caution: The J2 connector on the 77XX calibration card for the Model 77XX is not to be used. It has a lock-out key installed to deter installation of a Model 77XX switching module. Forcing a module into this connector could cause physical damage to the calibration card or the switching module.

