Chapter 17 Memory Expansion (OPTION)

17.1 Memory Expansion Option (GSE Part #: 09-30-24164)

The indicator uses EEPROM (electrically erasable, programmable, read only memory, also referred to as E^2 memory) to store all setup parameters and other retained data, such as calibration data, accumulated totals, target values, incrementing register, etc. E^2 memory provides excellent protection against undesirable loss of data.

Included in all standard Model 450 Weigh Indicators is one 8 pin socket for a data storage IC. This socket can hold either a 512 or a 2K byte E^2. (GSE Part #09-30-24164). From the factory, this socket has a 512 byte E^2 installed.

Of these 512 bytes, about 212 are used for all the standard setup parameters in the instrument (including approximately 34 bytes for the default selections for Custom Transmit Setup, leaving 300 for optional setup parameters. The features which use variable amounts of storage are listed in Table 17-1 along with the calculations to determine the amount required.

While setting up the indicator, if the error message EEROM Full! appears after making an entry or selection, then the setup you are attempting will not fit into the currently installed memory storage space. Either reduce the size of storage required or install more memory space by adding memory. The indicator automatically senses how much memory has been

Install the Memory Expansion Option to increase memory to 2K bytes (2048 bytes).

installed.

If more memory storage space is required, the following option is available. Replace the standard 512 byte E^2 with a larger E^2 (2K) to the indicator socket labeled U6 (GSE Part #09-30-24164) which can be obtained from a GSE distributor. This will provide a maximum of 2048 storage bytes.

17.2 Installation of Additional Memory

When replacing the main E^2 (U6) in a 450 unit, it is important to know that setup data will be lost. The parameters that will be lost are all of the setup data,

CAUTION!
The following procedure should be performed only by authorized service personnel!

including important calibration data, the serial numbers and the audit trail value. The replacement procedure is as follows: (Refer to figures 17-1 through 17-4 Main Boards PC777C, PC792B, PC800B and PC834).

a. Disconnect the indicator from the AC power source.

b. Remove the rear cover.

c. Install the new E^2 (Part #09-30-24164) in U6.

d. Loosely re-attach the rear panel to the enclosure.

e. Power up the indicator.

f. Allow for changes to be made by keying in **[ZERO] + [SELECT]** simultaneously then press: **[SELECT] [ZERO] [PRINT] [UNITS] [ENTER]**

g. Select the Setup Mode **60000** by pressing **[6] [0] [0] [0] [0] [SELECT].**

The new E^2 amount should be upgraded to 2048 installed.

h. Note that three important parameters will be **lost** when upgrading or changing the E^2.

Mode Number	Description	Memory Use
P1000 - P1XXX	**Custom Transmit Setup**	**One byte per size of transmit setup plus two bytes for each parameter transmitted. This applies to the Custom Transmit Setup.**
P900 - P9XXX	**Input Interpreter Setup**	**There are eight possible interpretations that can be engaged each of which can have a variable number of characters from 1 - 49. If all eight interpretations were used and all 49 characters were stored for each then the total memory required would be 8 x 49 = 392 bytes.**
P119 -	**Linearization setup**	**When linearization is enabled, 41 bytes of memory are absorbed. Each linearization point will absorb 8 bytes of memory. There are a total of five linearization points. One (1) byte of memory is absorbed when the Linearization Feature is enabled. If less than five points are stored, 8 bytes of memory are freed up per point. If less than 41 bytes of memory are free, the unit will not allow linearization to be enabled.**
P600 thru P691	**Naming any parameter**	**Parameter 0 through 91 can accept a name between 1 - 49 characters. Each character will absorb 1 byte of memory.**
P720	**Truck In/Out Weighing**	**When Truck In/Out Weighing is enabled (P720), two bytes of storage memory are immediately used and the remaining storage space is allocated to allow the maximum number of rows possible.**

These parameters include the instrument and board serial numbers and the Audit Trail counter (parameters **P602XX**).

i. Re-attach the rear panel of the 450 to the enclosure.

j. The instrument is now ready to be used with the upgraded amount of E^2 storage memory.

17.3 Additional Memory Replacement

CAUTION!

Servicing procedures must be performed by qualified service technicians only! Attempts to service this instrument by unqualified personnel may void the warranty!

Note:
Board not shown in actual dimensions.

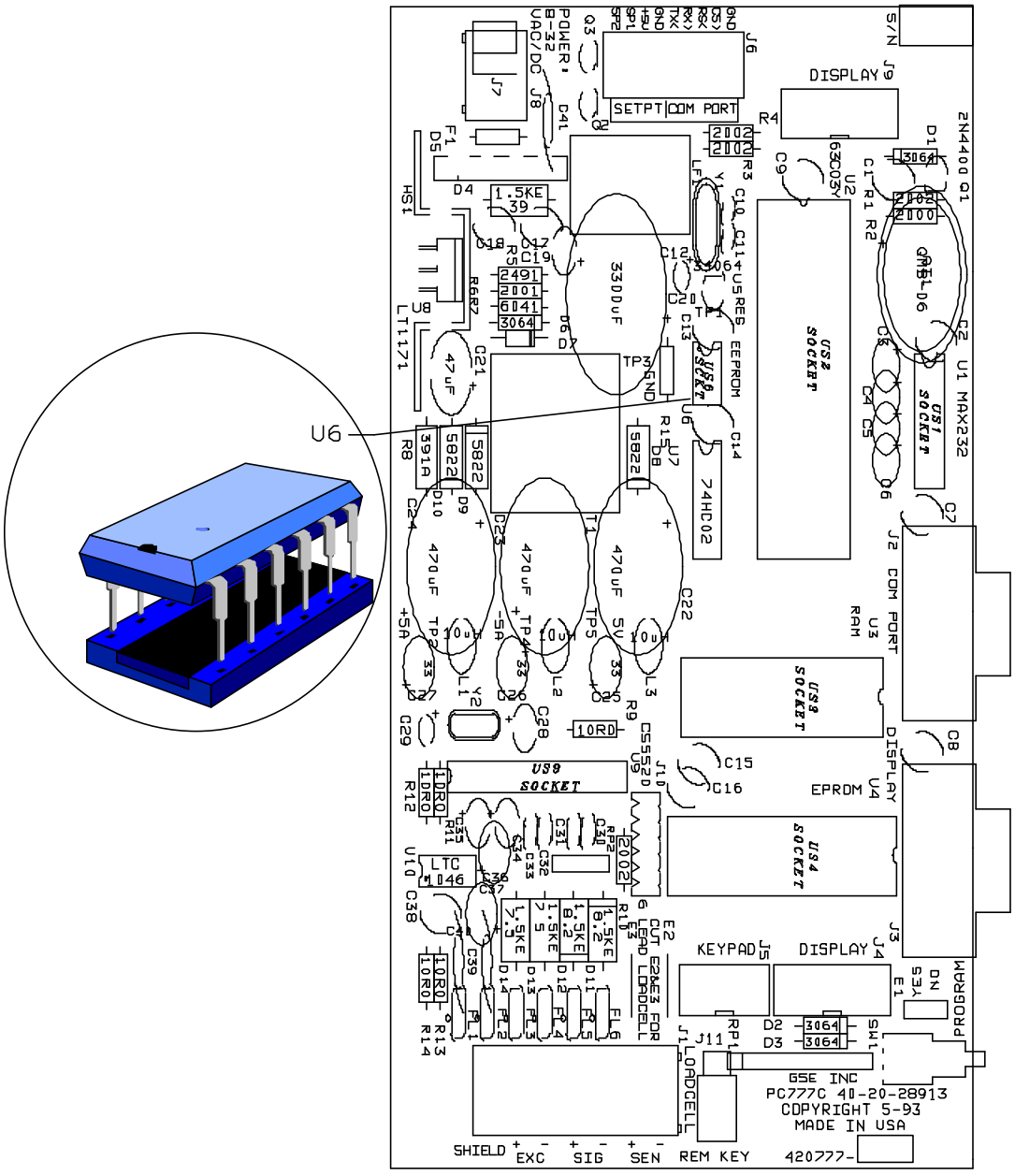

Figure 17-1 Main Board PC777C

CAUTION!

Servicing procedures must be performed by qualified service technicians only! Attempts to service this instrument by unqualified personnel may void the warranty!

Note:
Board not shown in actual dimensions.

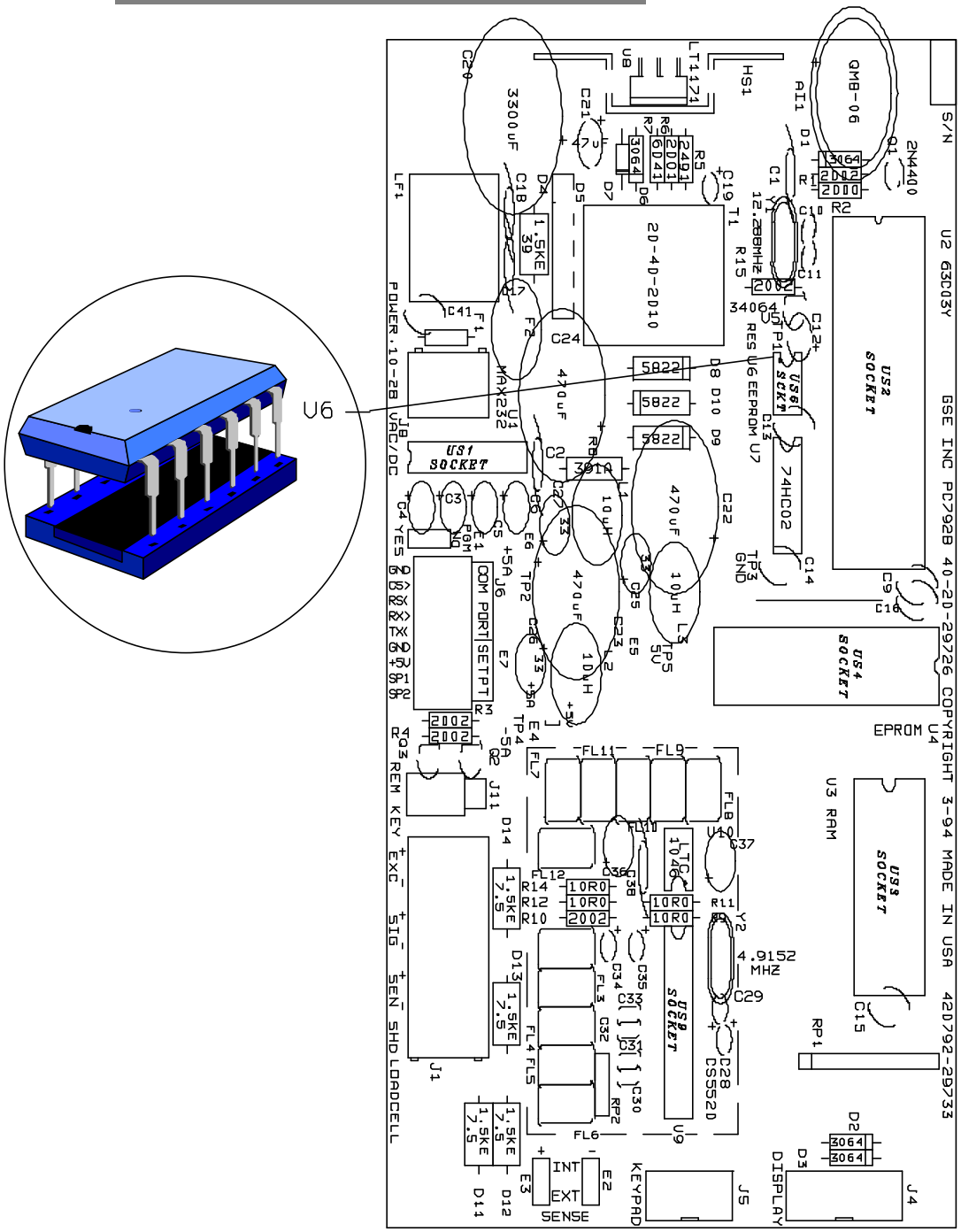

Figure 17-2 Main Board PC792B

CAUTION!

Servicing procedures must be performed by qualified service technicians only! Attempts to service this instrument by unqualified personnel may void the warranty!

Note:
Board not shown in actual dimensions.

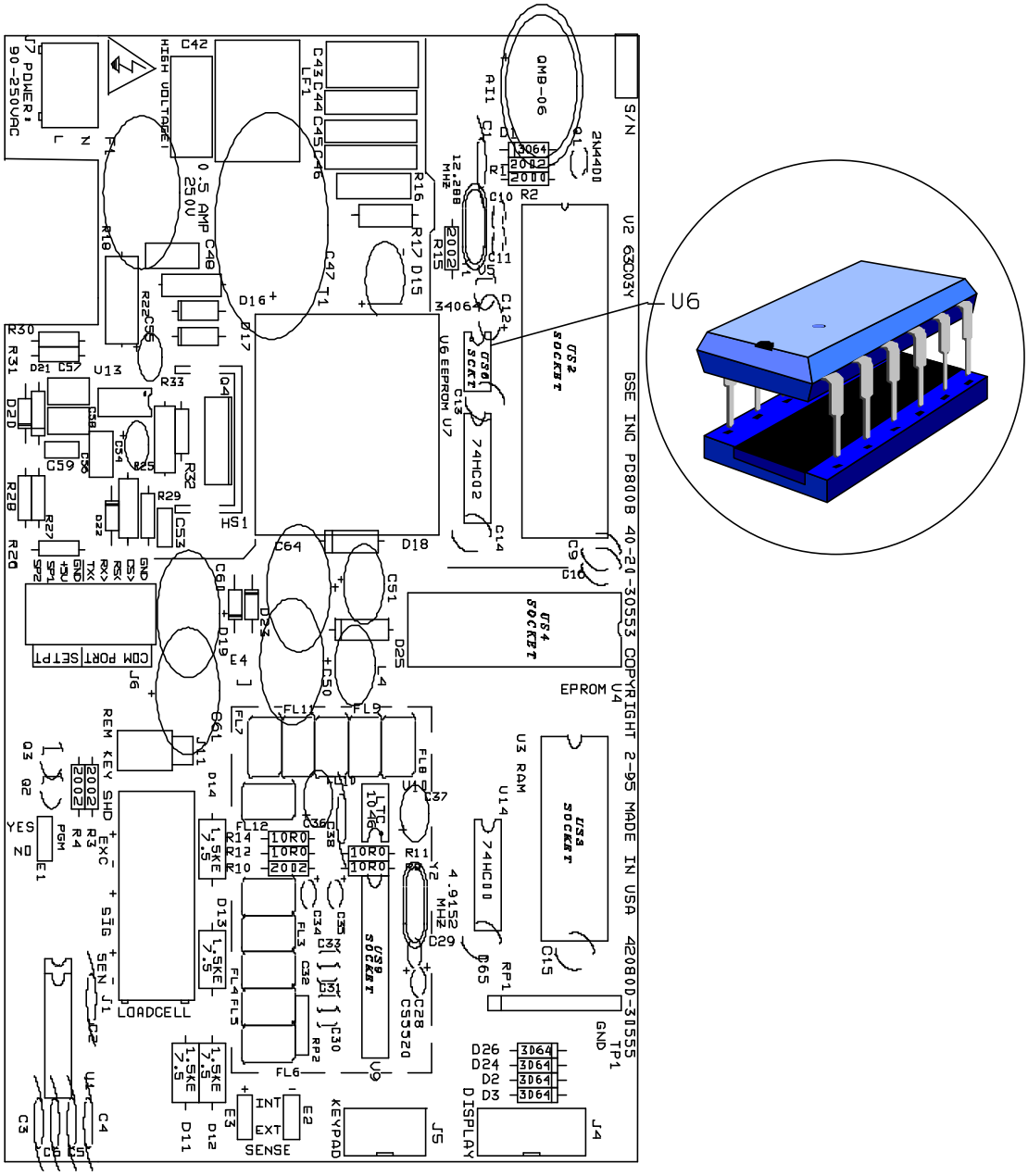

Figure 17-3 Main Board PC800B

Note:
Board not shown in actual dimensions.

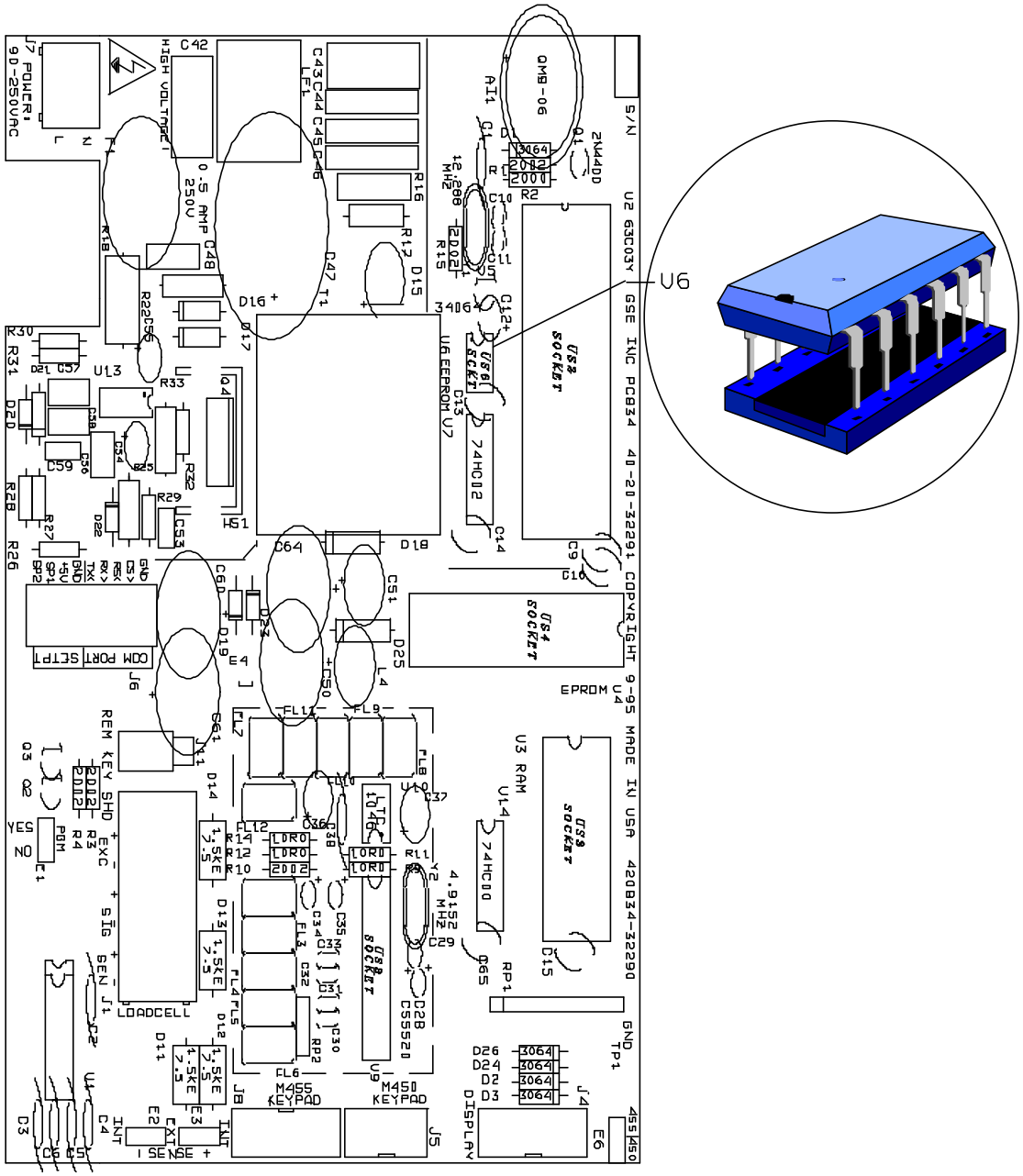

Figure 17-4 Main Board PC834