Thermo
SCIENTIFIC

SC859X1 Rev. I Software EPROM

INSTALLATION INSTRUCTIONS FOR ALL NCAT ASPHALT CONTENT TESTERS

Revision "I" Software

Retrofittable to all Models of the NCAT Asphalt Content Furnace Tester

Power Interrupt
If power is lost, then regained during a test, the unit will restart the blower and continue the test until the endpoint is reached. However, it will read "Results Invalid" "Test Interrupted."

Programmable Timer
New timer allows user to program a specific date and time for the unit to begin its preheat cycle.

Inactivity Mode
Allows user to choose "inactivity mode" which puts unit back to "sleep" as long as no other keys are pressed after 4 hrs. from intial timer wake-up. This mode can be toggled OFF and ON by using the hidden key "Timer" routine. The displayed mode is the active mode.

Auto Program switching to idle at test endpoint
- Increases the number tests run per day
- Frees operator's time
- Asterisk documents endpoint on printout (see enclosed sample printout on page 2)

Maximum test time extended to 255 minutes and load size to 4,000 grams
- Meets ASTM and AASHTO maximum load size requirements
- Saves time - no need to split sample size

Asphalt content expressed in percent loss
- Meets ASTM and AASHTO test result requirements
- Saves time - no need to manually adjust results from gram loss to percent loss

Bitumen Ratio added to print out test results
- Meets international and U.S. requirements
- Saves time - no need to perform manual calculations

Installation

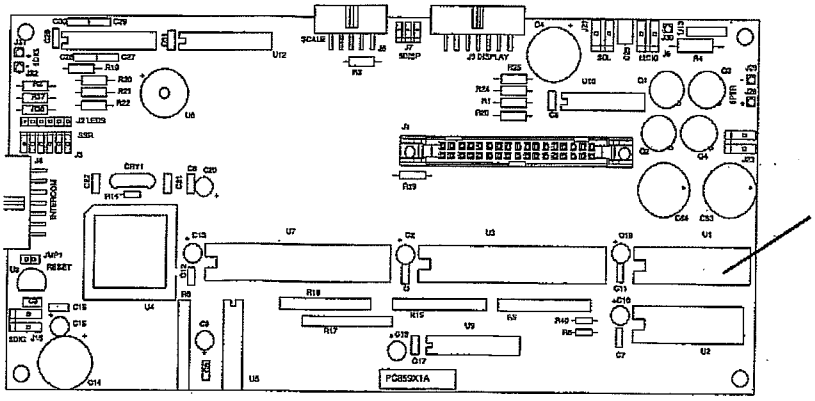
```
Elapsed Time:  39:00
Sample Weight: 1270g
Weight Loss:   79.8g
Percent Loss:  6.28%
Temp Comp:     0.17%
Calib. Factor: 0.26%
Bitumen Ratio: 6.27%
=======================
Calibrated Asphalt Cont
        5.85%
=======================
 39  495   79.8   6.28*
 38  494   79.8   6.28
 37  495   79.7   6.27
 36  495   79.5   6.25
 35  497   79.3   6.24
 34  499   79.1   6.22
 33  503   78.7   6.19
 32  506   78.2   6.15
 31  509   77.7   6.11
 30  513   77.1   6.07
 29  516   76.2   6.00
 28  519   75.4   5.93
 27  521   74.5   5.86
 26  524   73.5   5.78
 25  526   72.2   5.68
 24  528   70.8   5.57
 23  529   69.5   5.47
 22  530   68.0   5.35
 21  531   66.4   5.22
 20  531   64.8   5.10
 19  532   63.2   4.97
 18  536   59.6   4.69
 17  536   59.3   4.66
 16  536   59.0   4.64
 15  537   58.2   4.58
 14  539   56.9   4.48
 13  546   54.8   4.31
 12  563   50.9   4.00
 11  612   43.9   3.45
 10  640   34.1   2.68
  9  536   22.1   1.74
  8  459   11.7   0.92
  7  439    5.3   0.41
  6  433    4.0   0.31
  5  427    2.8   0.22
  4  420    2.0   0.15
  3  414    1.4   0.11
  2  409    0.9   0.07
  1  411    0.5   0.03
---|----|-------|------
  T|TEMP|WT.LOSS|%LOSS
-----------------------
Filter Set Pt:  750°C
Chamber Set Pt: 500°C

Tested By:_____________
Mix Type: FM-2
Sample ID: HMA505/
Time: 15:41:31
Date: 3-11-97
```

Sample printout

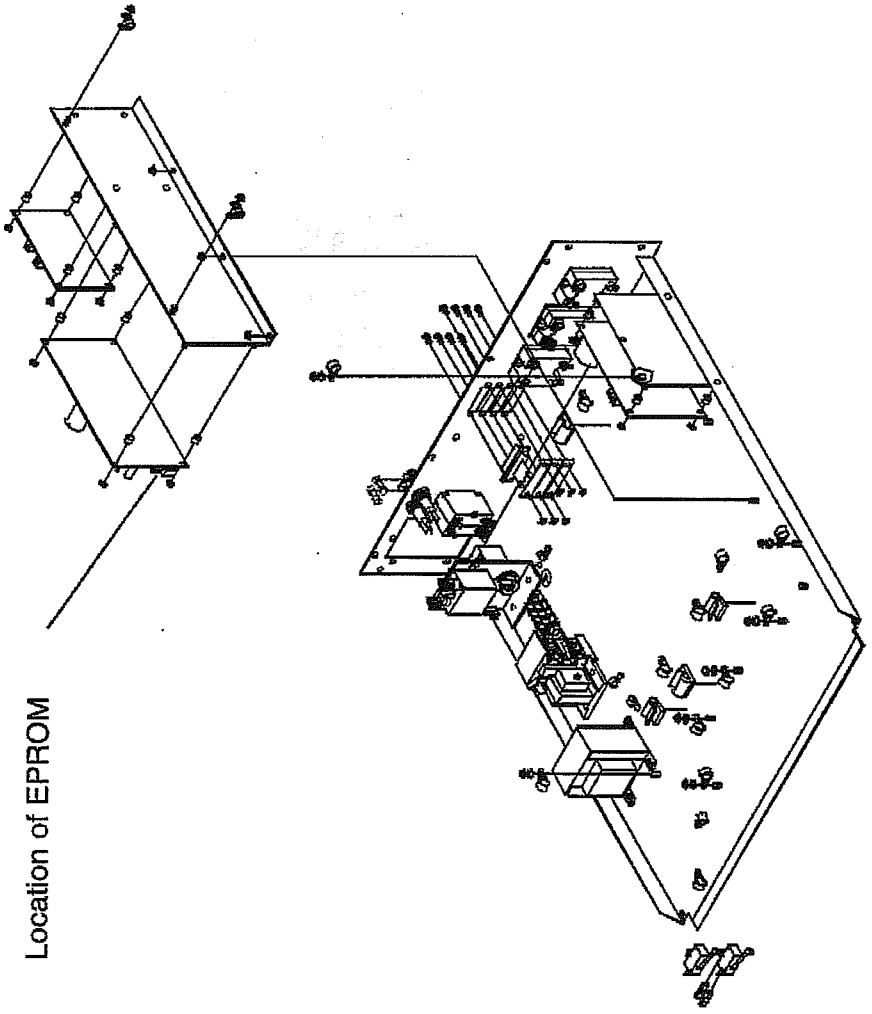
Instructions

1. Open hinged front control panel by removing four screws.
2. The SC859X1 EPROM is mounted in a 16-pin socket on the edge of the PC859X1A board on the right side of the furnace. A label on top of EPROM indicates the part number and revision level.
3. Note orientation of the EPROM notched end to rear of the furnace. Gently pry the chip from its socket until removed. Do not use magnetic tools in the vicinity of the EPROM.
4. Gently mount the new EPROM into the open socket. Adjust pins on a flat surface if not matching socket.
5. Refasten control panel.
6. Turn power switch on. Review and adjust default values.
7. Your unit is now ready for operation.

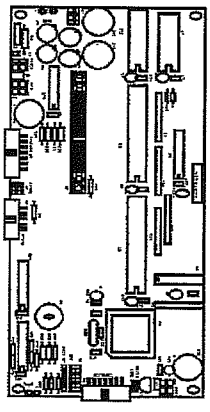


Printed Circuit Board Assembly

Exploded View



Location of EPROM



Ordering Information

Revision "I" Software Kit

Part No. AY1087X3

1 ea. SC859X1 EPROM Labelled Rev. I Software
1 ea. Installation Instructions
1 ea. Set of Operation Manual Amendments

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