
PROM Replacement

EPROM & Reader PROM Replacement PC109x

A Member of the Kaba Group



EPROM & Reader PROM Replacement

The enclosed EPROM & Reader PROM upgrade Keyscan control boards for specified Keyscan hardware and/or software features. You must remove the current EPROM and Reader PROM chips and replace them with the enclosed chips. Please be sure that you have complied with the necessary control board/software compatibility requirements outlined by Keyscan at the time of ordering the replacement chips.

Important – Serial Number Format Revision

EPROM serial numbers on CA and EC control boards with firmware 9.20 or higher have 3 alpha characters followed by 4 numeric characters – example AAC1234. Please note the following conventions for enrollment on Keyscan software:

- Aurora – enter all seven characters of the serial number – above example entered as AAC1234
- System VII – enter the last alpha and four numeric characters – above example entered as C1234
- Vantage – enter the last alpha and four numeric characters – above example entered as C1234

Starting with firmware 9.20/9.02 and higher, the access control unit serial number format has been modified. Previously, all serial numbers were comprised of one alpha character followed by four numeric characters.

Figure 1 - EPROM Location on Control Boards with Jumpers

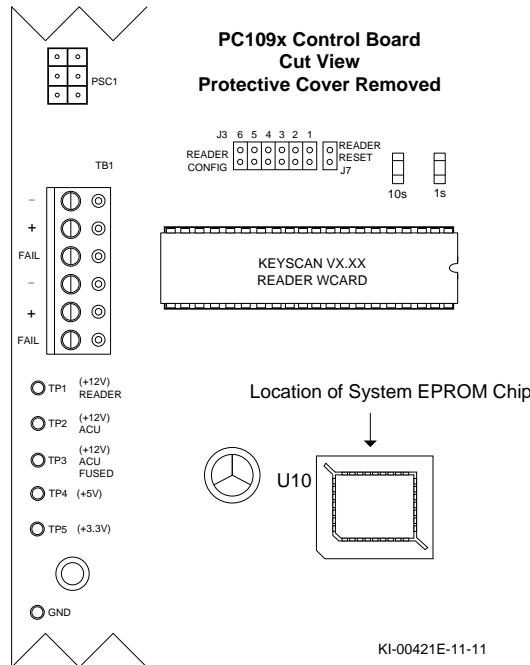


Figure 2 – EPROM Location on Control Boards with DIP Switches

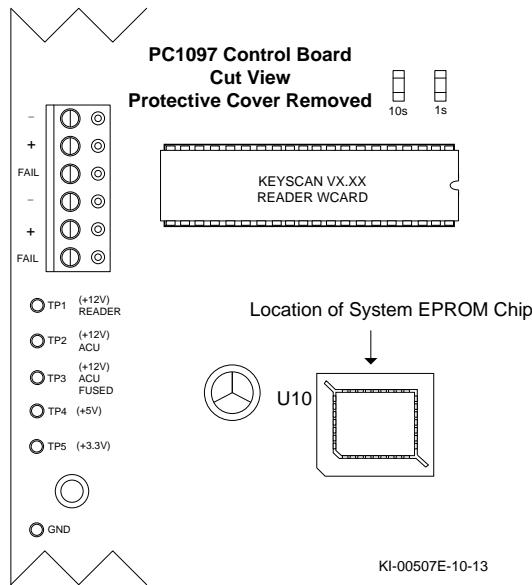


Figure 3 - Reader PROM Location – Control Board with Jumpers

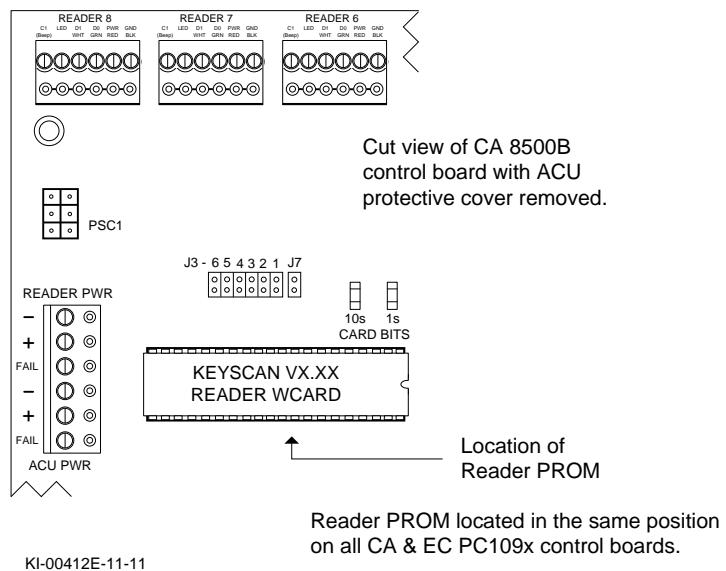
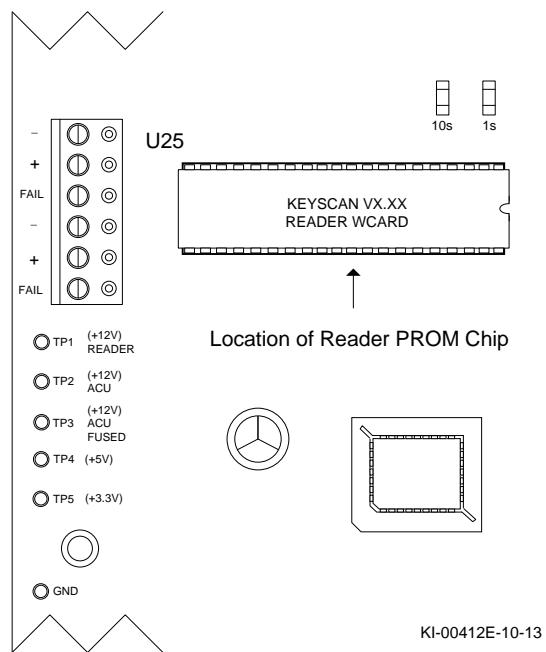


Figure 4 – Reader PROM Location on Control Boards with DIP Switches



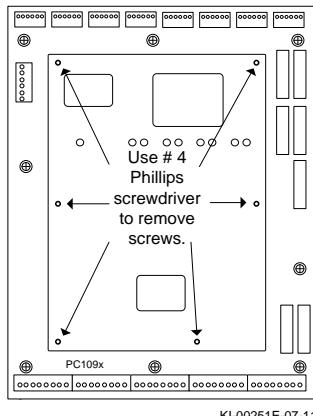
Tools

Before you start, you should have the following tools on hand.

- Extractor – a PLCC extractor is included with the replacement PROMs
- # 4 Phillips screwdriver
- Small slot screwdriver

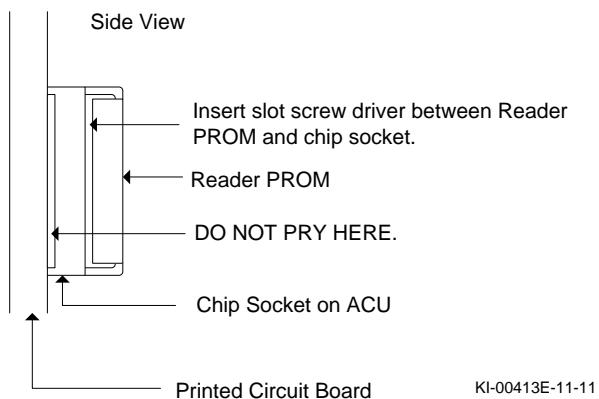
Steps to Mount the System EPROM (U10) & Reader PROM (U25)

- Open the access control unit enclosure door.
- Touch the earth ground lug in the ACU enclosure to discharge body static.
- Power down the CA or EC control board.
- Using a # 4 Phillips screwdriver, unfasten the six screws holding the control board's black protective cover.



KI-00251E-07-11

5. Locate the Reader PROM at U25 on the control board. You will require the slot screw driver.
6. Carefully remove the existing Reader PROM mounted at U25 on the control board. From the left side gently insert the screwdriver between the PROM chip and the chip socket. Partially separate the Reader PROM chip from the chip socket. See the diagram below.



KI-00413E-11-11

7. From the right side of the Reader PROM, repeat the preceding step.
8. Continue to lift and separate from each end of the Reader PROM until you can remove it with your fingers.
9. Before attempting to insert the replacement Reader PROM, you may have to gently press the row of pins on both sides against a flat surface so the pins insert properly into the chip socket.
10. With the notched end to the right, align the Reader PROM pins with the chip socket and insert it into the chip socket at U25.
11. Locate the System EPROM chip at U10 on the control board. You will require the PLCC extractor.
 - Note the System EPROM's socket has two slots positioned at 11 o'clock and 5 o'clock.
12. Carefully insert the two ends of the PLCC extractor into the slots of the System EPROM's socket.
13. Gently pinch the PLCC extractor until the prongs press against the chip.
14. Gently lift the System EPROM chip out of the socket.

15. Before attempting to insert the replacement System EPROM, you may have to gently press the rows of pins on the sides of the replacement chip against a flat surface so the pins insert properly into the chip socket.
16. Ensure the pins align with the socket and insert the replacement System EPROM at the U10 position on the control board.
17. Fasten the black protective cover back on to the control board.
18. If you are changing reader formats, do one of the following procedures; otherwise go to the next step.
 - Jumpers- set the J3 Reader Configuration jumpers
 - DIP Switches - set the reader configuration in the Client software
19. If you are changing Keyscan software applications, do one of the following procedures; otherwise go to the next step:
 - PC1091 - PC1095 – Aurora : J17A = ON / J17B = ON
 - PC1094 – PC1095 – System VII : J17A = OFF / J17B = OFF
 - PC1091 – PC1095 – Vantage : J17A = ON / J17B = OFF
 - PC1097 or higher – Aurora : S2.11 = ON / S2.12 = ON
 - PC1097 or higher – System VII : S2.11 = OFF / S2.12 = OFF
 - PC1097 or higher – Vantage : S2.11 = ON / S2.12 = OFF
20. Re-apply power to the control board.
21. Perform a Clear Memory (reset factory defaults) on the control board as outlined depending on the version:
 - Jumpers - On the control board, place a jumper on J16 – pin H. Momentarily short jumper J11. This may take over two minutes while the control board loads the factory default settings. During the clear memory procedure, the System Status LED flashes red and the control board's piezo emits a cycle of two short beeps followed by a pause. Do not make any changes to the control board during the clear memory procedure. Then remove the jumper from J16 – pin H.
 - DIP Switches – on the control board, press S1, wait 5 seconds. Press S3 within 10 seconds. This process may take over two minutes while the control board loads the factory default settings. During the clear memory procedure, the system status LED flashes red and the control board's piezo emits a cycle of two short beeps followed by a pause. Do not make changes to the control board during the clear memory procedure.
22. Close and secure the access control unit enclosure door.
23. Return to a PC with the Client module, log on to the appropriate site, and perform a full upload.
 - Aurora : Status button > Status > Access Control Unit Status > Select Site > under the Upload column select Full Upload – repeat for each control unit that had an EPROM upgrade
 - System VII or Vantage : Quick Buttons menu > Selective Update > select Site > under Unit Selection either select the control unit or All Units whichever is applicable > click on Select All button > click on Upload button – repeat for each control unit that had an EPROM upgrade if you did not select All Units and have to upload multiple control units