

## **INSTALLATION INSTRUCTIONS**

PART NUMBER	154-1201D
PART DESCRIPTION	PROGRAMMING RAM
REV DATE	12/15/2006
MACHINE MODELS	ALL C200H MACHINES



Basic knowledge of the lane machine including mechanical and electrical

TOOLS NEEDED: Phillip Screwdriver



TECHNICAL NOTE

Please thoroughly read the instructions prior to performing the installation of this assembly.

To avoid any potential problems, if at any time during the process you have a question, stop and contact our Tech Support department at the numbers listed below.

Please visit our growing library of videos to see if these instructions are available! You Tube www.youtube.com/user/KegelBowling81



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Note: Write down the machine mileage, present duster unwind time, and all program data before downloading into the PC. Machine mileage will be reset to "0" after upgrade.

- 1. Apply power to the machine, press the Menu key until the keyboard displays the PHOENIX START screen.
- 2. Turn the power OFF and open the long access door on top of the PC.
- 3. Remove the Phillips head screw holding the metal cover. Place a finger in the hole in the middle of the plate and lift it out.
- 4. Make sure the power is OFF. Carefully insert the ME16K (Program) cassette into the socket.
- 5. Apply power to the machine. Set dip switches #1 and #6 to the OFF position. (Switch #1 may already be in the off position, dip switch #3 SHOULD be the only switch in the "ON" position.)
- Insert the programming key (included with download cassettes) and turn to the PROGRAM setting. (If PROGRAM BZ is not showing on the display after turning the key to PROGRAM, press the "CHANGE" key until it does show on the display screen.)
- 7. Press the following keystrokes on the keyboard:

<u>KEY</u>	SCREEN DISPLAYS	
CLEAR	00000	
SHIFT	00000	٨
CONT	00000 CONT	00000
27001	00000 CONT	27001
MONITOR	27001 ^OFF	



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PLAY/SET	27001
	^ON

- 8. The keyboard display will quickly change to ON and then OFF again when the program is transferred. Press CLEAR twice.
- 9. UNPLUG THE POWER CORD and then remove the ME16K cassette from the PC. Store the cassette in its protective case. (If only the program is being updated, and new data is not needed, skip to step 14.)
- 10. With the power OFF, carefully insert the ME16K (Data) cassette into the socket. Plug in the power cord.
- 11. Press the following keystrokes on the keyboard:

<u>KEY</u>	<u>SCREEN DI</u>	SCREEN DISPLAYS	
CLEAR	00000		
SHIFT	00000	۸	
CONT	00000 CONT	00000	
27301	00000 CONT	27301	
MONITOR	27301 ^OFF		
PLAY/SET	27301 ^ON		

- 12. NOTE: The keyboard display will quickly change to ON and then OFF again when the data is transferred. Press CLEAR twice.
- 13. UNPLUG the power cord and then remove the ME16K cassette from the PC. Store the cassette in its protective case.
- 14. The following step (13) is for Phoenix Model B or older machines and Phoenix-S machines prior to the 9.93 version. If your lane machine is <u>NOT</u> one of these machines, skip to step 14(This option is included in the SYSTEMS TO BE MONITORED MENU, on your machine).



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15. Apply power and press the following keystrokes to reset the <u>number of lanes</u> in the bowling center:

<u>KEY</u>	SCREEN DISPLAYS	
CHG	<pre><pre>PROGRAM&gt; BZ</pre></pre>	
CLEAR	00000	
DM	00000 CHANNEL	DM 0000
850	00000 CHANNEL	DM 0850
MONITOR	D0850 00** (**=current # c	f lanes in memory)
CHG	PRES VAL? D0850 00** ????	
X X (# lanes)	PRES VAL? D0850 00** 00xx (>	<pre>x=#of lanes in center)</pre>

WRITE D0850

00xx

- 16. (If you skipped step 13, restore power to the machine.) Turn the gray program key back to the MONITOR position.
- 17. Replace the metal cover and return dip switches #1 and #6 to the ON position. The PHOENIX START screen should appear on the keyboard.
- 18. Test all functions with the I/O TEST keys. Visually check each component as the output is turned on, making sure it matches the keyboard display.
- 19. Access the Manager's Menu and enter the Present Unwind Duster Time that was written down earlier. Also reset the PC clock to reflect the current day and time. The mileage in the machine has been reset to 0 when the new program data is loaded into the PC.

20. A wiring change is necessary for machines that have programs prior to 9.93. The middle OC222 contains outputs 100 - 111 and the right module contains



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outputs 200 - 211. The upper levels of terminals are the even outputs and the lower are odd.

Remove these wires from their outputs:

Green / Orange from 103 Yellow / Violet from 104 White / Red from 111 Red / Violet from 201 Red / Brown from 202

Re-attach to these outputs:

Green / Orange to 201 Yellow / Violet to 202 White / Red to 104 Red / Violet to 111 Red / Brown to 103



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**Kegel's Lane Maintenance Central:** Within USA - 1-800-280-2695 Outside USA - +1 863-734-0200 via e-mail at LMC@Kegel.net website www.kegel.net



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