

Series 90 Electronic Conversion Kit
Coke, 7Up B7, & Dr. Pepper D3 Series 90 Venders
E003.4

NOT SUBMITTED TO REGULATORY AGENCIES FOR REVIEW OR APPROVAL

PURPOSE: To convert a Series 90 single price vender to an electronic vender with multiprice and accounting information capabilities.

ORDER: 804,911,350.04 Series 90 Electronic Conversion Kit Coke/7Up B7/Dr. Pepper D3

PARTS INCLUDED:

1	804,909,960.21	Conversion Main Harness Coke/7Up B7/Dr. Pepper D3 (Ardac# 2x6211)
1	804,909,710.01	Micro Mech Harness (Same as SIID) (Ardac# 94x87)
1	See List Below	Note Acceptor Harness (Sold Separate)
1	804,910,870.01	Transformer Harness & Transformer (Ardac# 2x6194)
1	804,911,740.01	Control Board (Ardac# 2x6191)
1	803,845,720.01	Display Label (Ardac# 80x1068)
1	801,809,290.01	Display Lens (Ardac# 17x1308)
1	804,911,770.01	Display Board (Ardac# 2x6121)
7	900,301,500.01	Self Drilling Screws without washer (Ardac# 30x247)
1	900,301,650.01	Self Drilling Screws with washer (Ardac# 30x375)
2	900,201,790.01	Counter Sunk Screws (F.H.M.S.) (Ardac# 30x197)
2	801,809,310.01	Stand Off (Ardac# 21x107-0312)
2	900,800,990.01	#6 Keps Nuts, Plastic (Ardac# 32x24)
6	901,902,560.01	Wire Ties (Ardac# 17x167)
1	904,601,450.01	Pink 250 Faston (single wire, male) (Ardac# 35x646)
1	904,601,130.01	Blue 250 Faston (double wire) (Ardac# 35x473)
1	804,911,760.01	Display Harness (Ardac# 2x6123)
1	803,902,480.01	Programming Instructions (Ardac# 47x143)
1	803,902,470.01	Installation Manual E003.4 (Ardac# 40x254)

Note Acceptor Harness Kits:

USA Kit
Mars VFM1&3
 High-level
 Low-level
BA30
Maka NB10L
Rowe CBA-2 (\$1&\$5)

Coke/7Up/Dr. Pepper D3

Ardac# 48x782

Ardac# 48x783
Ardac# 48x787
Ardac# 48x784
Ardac# 48x785
Ardac# 48x786

TOOLS NEEDED:

1	Drill
1	#30 (1/8") Drill Bit
1	Phillips Screw Driver
1	Saber Saw and Blade
1	File

ELECTRONIC CONVERSION

Installation: Coke/7Up B7/Dr. Pepper D3

1. Unplug the vender.
 2. Remove and discard the vend relay.
 3. Remove the single-price changer; it is not used with the electronic kit.
 4. Remove the note acceptor for kit installation.
 5. Remove the fluorescent bulbs from the door for kit installation.
 6. To mount the control board assembly to the vertical bulkhead of the door, follow these steps:
 - A. Position the control board assembly on the vertical bulkhead above the coin insert area with the motor power connector (J1) down. See figure 3, page 5.
 - B. Using the control board as a template, mark the top hole and bottom slot of the control board mounting plate.
 - C. Remove the control board assembly.
 - D. Using a #30 (1/8") drill bit, drill a hole on the two positions marked in step 6B.
 7. Start, do not tighten, the self drilling screw with the washer in the bottom hole drilled.
 8. Position the control board assembly so the bottom slot fits around the screw installed in step 7.
 9. Install a self drilling screw without a washer in the top hole of the control board assembly.
 10. Tighten the top and bottom control panel assembly mounting screws.
 11. To mount the transformer to the vertical bulkhead of the door, follow these steps:
 - A. Position the transformer approximately two inches above the control board assembly with the wire tabs down.
 - B. Using the transformer as a template, mark the two mounting holes.
 - C. Remove the transformer.
 - D. Using a #30 (1/8") drill bit, drill a hole on the two positions marked in step 11b.
 12. Install the transformer wiring harness on the transformer or check for proper wiring.
 - A. Note the tabs on the transformer are numbered.
 - B. On tab #6, connect the yellow wire.
 - C. On tab #7, no wire is connected.
 - D. On tab #8, connect the red wire.
 - E. On tab #9, no wire is connected.
 - F. On tab #10, connect the light blue wire.
 - G. On tab #1, no wire is connected.
 - H. On tab #2, connect the black wire.
 - I. On tab #3, no wire is connected.
 - J. On tab #4, connect the white wire.
 - K. On tab #5, no wire is connected.
 13. Place the transformer in position and secure it with one self drilling screw without a washer.
 14. Use the second mounting screw to secure the transformer harness ground wire and the transformer.
 15. To mount the display board assembly to the front of the door, follow these steps:
 - A. Cut out the paper template provided on page 6 of these instructions.
 - B. Place the template on the front of the door where you will install the display.
- IMPORTANT: THE DISPLAY HAS TO BE ABOVE THE TOP OF THE NOTE ACCEPTOR OR TO THE SIDE OF THE NOTE ACCEPTOR TO ALLOW FOR CLEARANCE.**
- C. Mark the two circular holes and the rectangular hole.
 - D. Use a #30 (1/8") drill bit and drill the two circular holes.
 - E. Drill a hole in each of the corners of the rectangular hole marked. The holes will need to be large enough to insert a saber saw blade.
 - F. Cut out the rectangular hole with a saber saw.
 - G. File any sharp edges.
 - H. Place the display lens on the front of the door, over the hole cut in step 15E.
(See figure 2, page 5.)
 - I. Place the two counter sunk screws in the holes in the lens and through the door. Secure the screws with two standoffs and tighten. (See figure 2, page 5.)

- J. Place the display board on the standoff studs. Ensure the display LED aligns with the cut out and secure it with the #6 plastic keps nuts. (See figure 2, page 5.)
- K. Place the display label on the display lens. Ensure the red window of the label aligns with the cutout. Remove the wire plug cover which protects the cabinet and door harness plugs and caps.
- ... Disconnect the door harness from the cabinet harness.
18. Install the conversion main harness. Route the harness along the existing door harness.
19. Remove the wires from the normally open contact of all select switches and tape them with electrical tape. (NOTE: The normally open contact is shown in figure 1, page 4.)
20. Connect the conversion main harness to the normally open contacts by following these steps:
 - A. Select switch #1 - plug on kit black wire.
 - B. Select switch #2 - plug on kit red wire.
 - C. Select switch #3 - plug on kit green wire.
 - D. Select switch #4 - plug on kit yellow wire.
 - E. Select switch #5 - plug on kit light blue wire.
 - F. Select switch #6 - plug on kit brown wire.
 - G. Select switch #7 - plug on kit orange wire.
 - H. Select switch #8 - plug on kit gray wire.
 - I. Select switch #9 - plug on kit violet wire.
 - J. Select switch #10 - plug on kit white/black wire.
- NOTE: On 5, 6, or 8 select venders, you will have wiring not being used. Wire tie unused wires so they will not get damaged.
- 21a. On venders with one row of select buttons, remove the wire from the common (wire #10) of the highest numbered select switch.
- 21b. On venders with two rows of select buttons, remove the wire from the common (wire #10) of the highest odd numbered select switch.
22. Connect the kit white wire to the common of the select switch you removed the wire in step 21. Route the rest of the harness up to the control board assembly.
- ... Connect the conversion main harness to the control board assembly using figure 3 on page 5.
25. Connect the transformer harness to the control board assembly using figure 3 on page 5.
26. Connect the transformer harness two-way cap to the conversion main harness two-way plug.
27. Mount the 15-pin Jones mounting bracket to the vertical bulkhead.
28. Connect the controller coin mech (micro mech) harness to the board and to the mounting bracket.
29. Connect the display harness to the display board and the control board.
30. Mount the note acceptor to be used.
31. Connect the proper note acceptor interface harness (not included in the kit) to the note acceptor and the board.
32. Mount the controller coin mech and plug in the 15 way Jones plug.
33. Install the fluorescent bulbs removed in step 5.
34. Dress the wire harness and secure it with wire ties.
35. Install the wire plug cover removed in step 16.
36. Locate the far left sold-out switches.
 - A. On 10 column venders, column #10.
 - B. On 8 column standard depth venders, column #4.
 - C. On 8 column "T" model venders, column #3.
 - D. On 6 column adaptable venders, column #6.
 - E. On 6 column dual adaptable venders, column #3.
 - F. On 5 column adaptable venders, column #5.
37. Locate the far left sold out switch connector.
38. Locate the wire in the normally open of the red connector. Follow it to the common of the white connector where it is double crimped to another wire. Cut the wire that runs from the normally open of the red connector to the common of the white connector close to the white connector.
- ... Locate the pink male faston connector in the kit. Remove the insulation approximately ¼" from the end of the wire cut in step 38. Crimp the wire in the pink faston connector.
40. Locate the far left vend motor switch red connector.

41. Locate the wire in the common position (#2) of the red connector. Measure approximately 3" from the connector and cut wire #2.
42. Locate the blue faston connector in the kit. Remove the insulation approximately 1/4" from the end of both halves of wire #2 cut in step 41. Double crimp both sides of wire #2 in the blue faston connector.
43. Connect the pink faston connector to the blue faston connector.
44. Plug in the vender and test for proper operation.

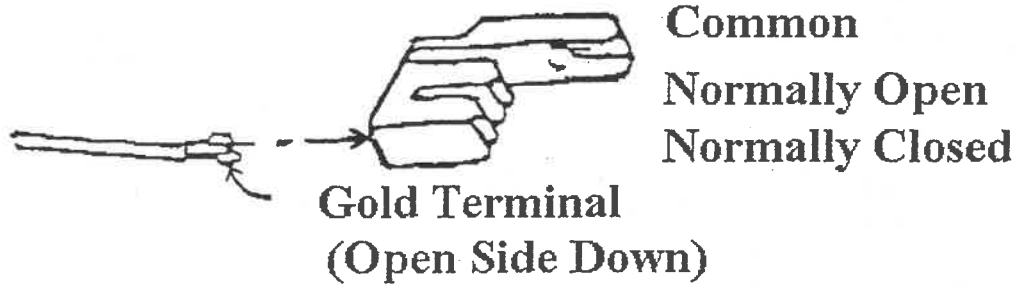


Figure 1

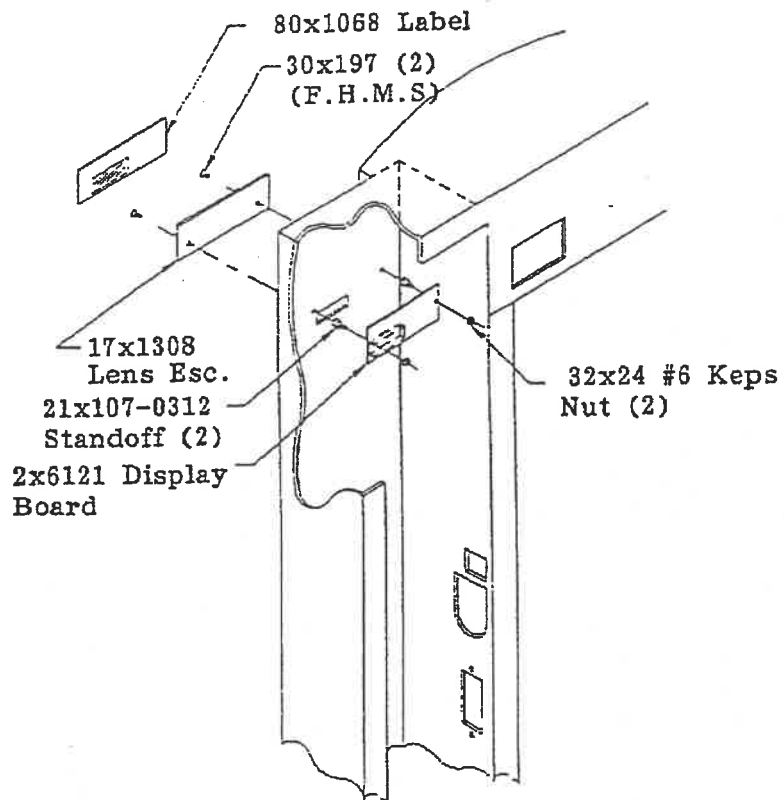


Figure 2

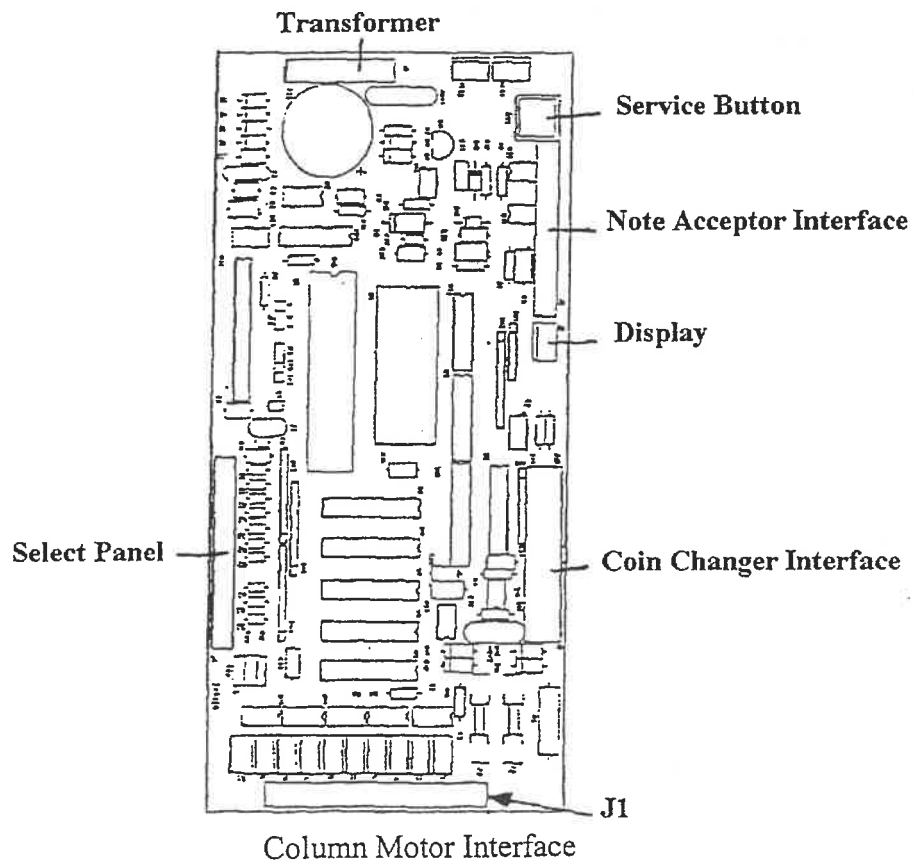
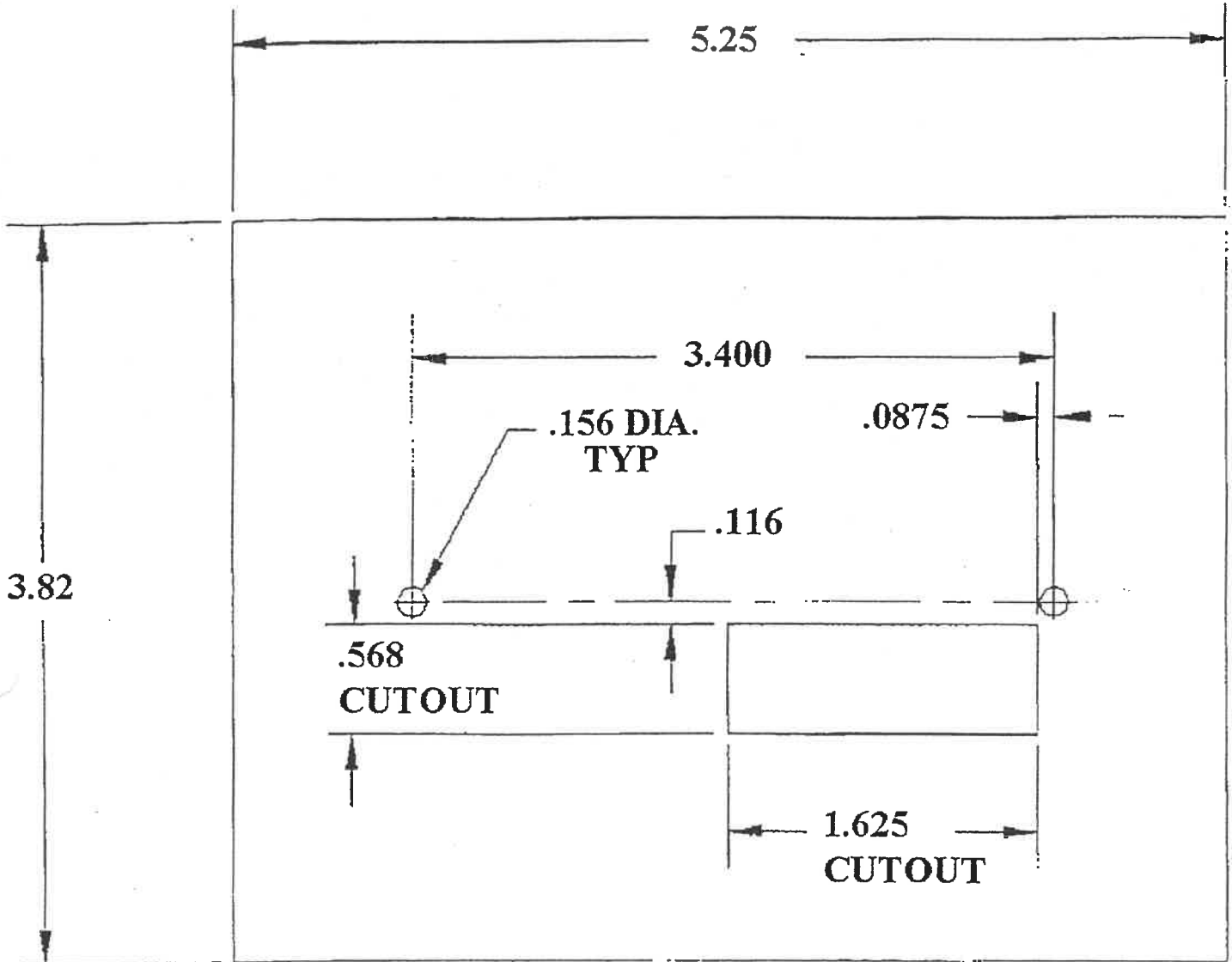


Figure 3

SERIES 90 ELECTRONIC CONVERSION KIT
COKE, 7UP B7, AND DR. PEPPER D3 SERIES 90 VENDERS



CAUTION
TEMPLATE IS NOT TO SCALE.
PLEASE MEASURE AND ADJUST FOR ANY VARIATION.