CRANE MERCHANDISING SYSTEMS
A Crane Co. Company

11685 Main Street
Williston, SC 29853
www.dixienarco.com

E011.2
Coca-Cola E Model (CWD) Machine Environmental Controls Field Retrofit Kit

Revised 10/8/10
Models Affected: All Marketing Machine (CWD) E-model Venders with S3D Controller installed.
Reason: To provide instruction on installing Environmental Control kit in the field.
IMPORTANT: We can not send the Energy Star label unless the end user is a "DOE PARTNER"

Order: 1 - 64604210 Environmental Controls Field Retrofit Kit with Control Board- 501/600E Landscape
1 - 64604190 Environmental Controls Field Retrofit Kit w/out Control Board- 501/600E Landscape
1 - 64604200 Environmental Controls Field Retrofit Kit with Control Board- 276E Landscape
1 - 64604180 Environmental Controls Field Retrofit Kit w/out Control Board- 276E Landscape

NOTE: These kits are for the Landscape machines only.

NOT SUBMITTED TO REGULATORY AGENCIES FOR REVIEW OR APPROVAL.
INSTALLATION OF KIT VOIDS REGULATORY FACTORY APPROVALS.

Parts in Environmental Kit:

QTY - Description
1 - Main Wiring Harness – 804,919,47x.x1
1 - GFCI Power Cord – 804,926,49x.x1
1 – Harness, AC Power Lights – 804,917,37x.x1
1 – Harness, Relay Control – 804,917,42x.x1
1 - Jumper Fan AC Power Harness – 804,917,39x.x1
1 - Temp Sensor & Relay Harness – 804,922,08x.x1
1 - Assembly Choke Relay Plate – 631,006,20x.x3
2 - Jumper AC Fan Power – 804,917,46x.x1
1 - Temp Sensor Harness – 804,925,41x.x1
1 - Main Control Board – 495,061,10x.x3 only included in kits that include the control board
1 - Software 80491139 Note: must have 804,911,391.41 or higher included in kit without control board
1 - Programming label – 803,857,71x.x1

Installation instructions:

1. Unplug the Vender from wall.
2. Remove the Cabinet Front Stiffener Plate (A Figure 1).
3. Disconnect the stack plug power connector from the cabinet harness (B Figure 1).

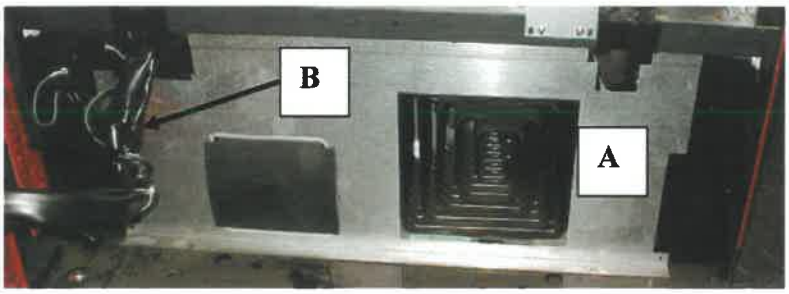

Figure 1

4. Disconnect the connector from the manual Temperature Control on the right side of the inner tank (C Figure 2).
5. Disconnect both Evaporator Fan connectors below the Vend Chute on the right side of the inner tank (D Figure 2).

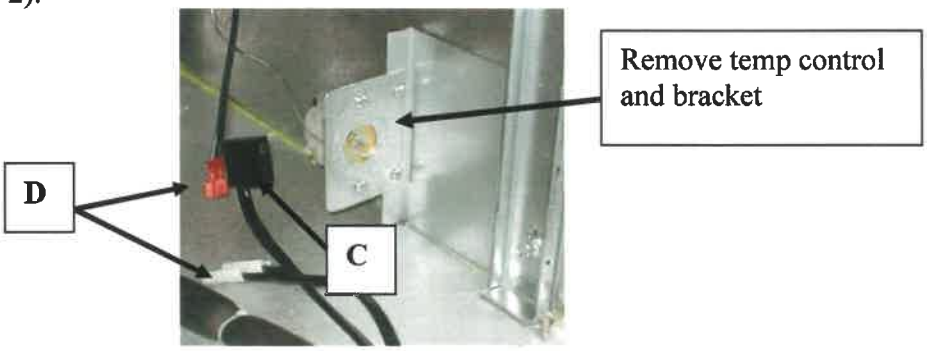

Figure 2

6. Disconnect the ground wire (E Figure 3) from the left side of the cabinet.

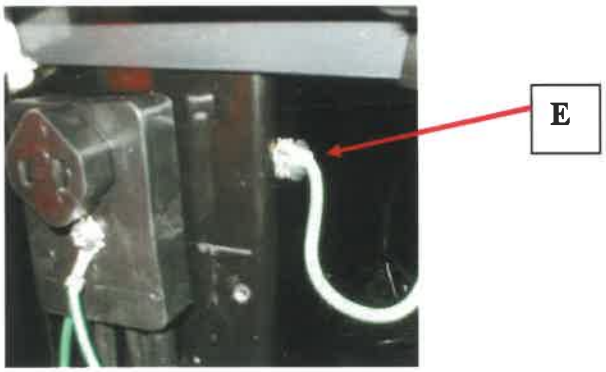

Figure 3

Remove the right and left mullion covers (F) and permagum (G).

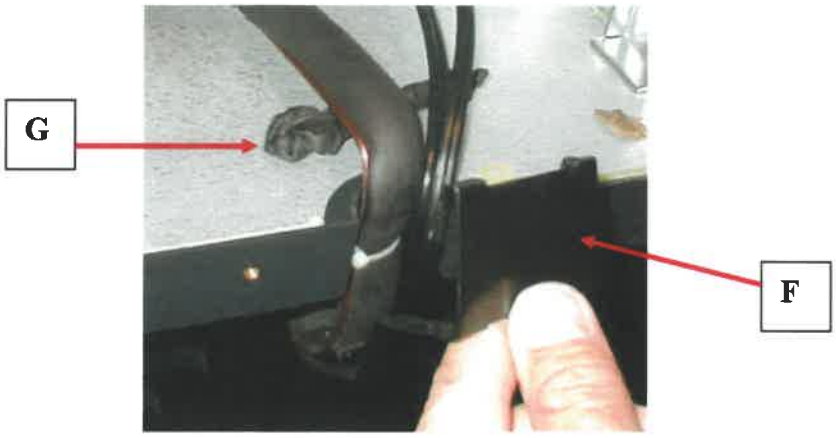

Figure 4

7. Remove the existing Main Wiring Harness from the cabinet.

8. Remove the wire guard (H Figure 5) from the main door.

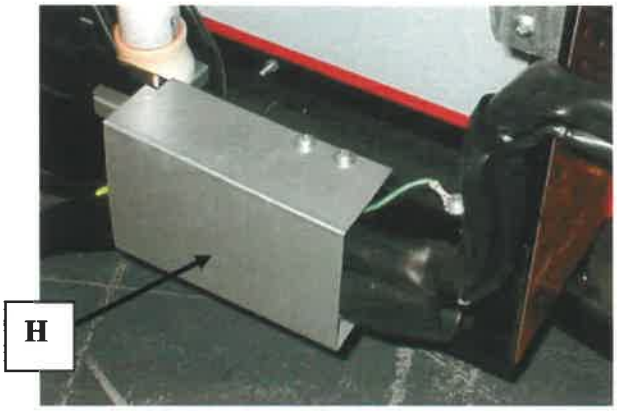

Figure 5

9. Install the new Main Wiring Harness (804,919,47x.x1) in the area where the existing Main Wiring Harness was removed. Use the existing mounting hardware removed in step 8. If the Environmental Kit has been assembled skip to "10g" and proceed. See Figure 6. To connect harness:
    a. Connect the 'ribbed' side of AC Fan connector of the Main Wiring Harness (804,919,47x.x1) to the 'ribbed' side of Fan Jumper harness (804,917,39x.x1).
    b. Connect the other 'ribbed' side of Fan Jumper harness (804,917,39x.x1) to the 'ribbed' side of Evaporator Fan Leads (Figure 2). Connect one end of the 'smooth' side of Fan Jumper harness (804,917,39x.x1) to the smooth side of the Evaporator Fan Leads (Figure 2) and the other smooth side of the Fan Jumper harness (804,917,39x.x1) to the 'NO' contact of Fan Relay.
    c. Connect the 'smooth' side of AC Fan connector of Main Wiring Harness to one side of the jumper lead to the Fan Relay
    d. Connect the remaining side of the Jumper Lead to the Fan Relay to 'NC' contacts of Fan Relay Connect the 'ribbed' side of the Main Wiring Harness (804,919,47x.x1) to 'NO' contact of the Compressor Relay
    e. Connect the 'smooth' side of the Main Wiring Harness (804,919,47x.x1) to 'Common ' contact of the Compressor Relay..

f. Connect the barrel plug (stack plug) of the Main Wiring Harness to the 'smooth' side plug of the In-line AC Choke Harness
g. Connect the 'ribbed' side socket of the In-line AC Choke Harness to the existing cabinet harness plug of the.
h. Connect the Detachable Power Cord 115VAC* (804,926,49x.x1) to the main wiring harness (804,919,47x.x1). Connect the ground wire, of main wiring harness to the existing ground wire location on bottom left, non-refrigerated side of the cabinet. Use existing mounting hardware to secure.

10. Install the new AC Light Harness (804,917,37x.x1).If the Environmental Kit has been assembled skip to "11c" and proceed. See Figure 6. To connect harness:
    a. Connect wire of AC Light Harness (804,917,37x.x1) to the 'NO' (Normally Open) contact of the Light Relay.
    b. Connect wire of AC Light Harness (804,917,370.31) to the 'NC' (Normally Closed) contact of the Light Relay.
    c. Connect the plugs of AC Light Harness (804,917,37x.x1) to the plugs of the existing light harness on the machine. See Figure 6.

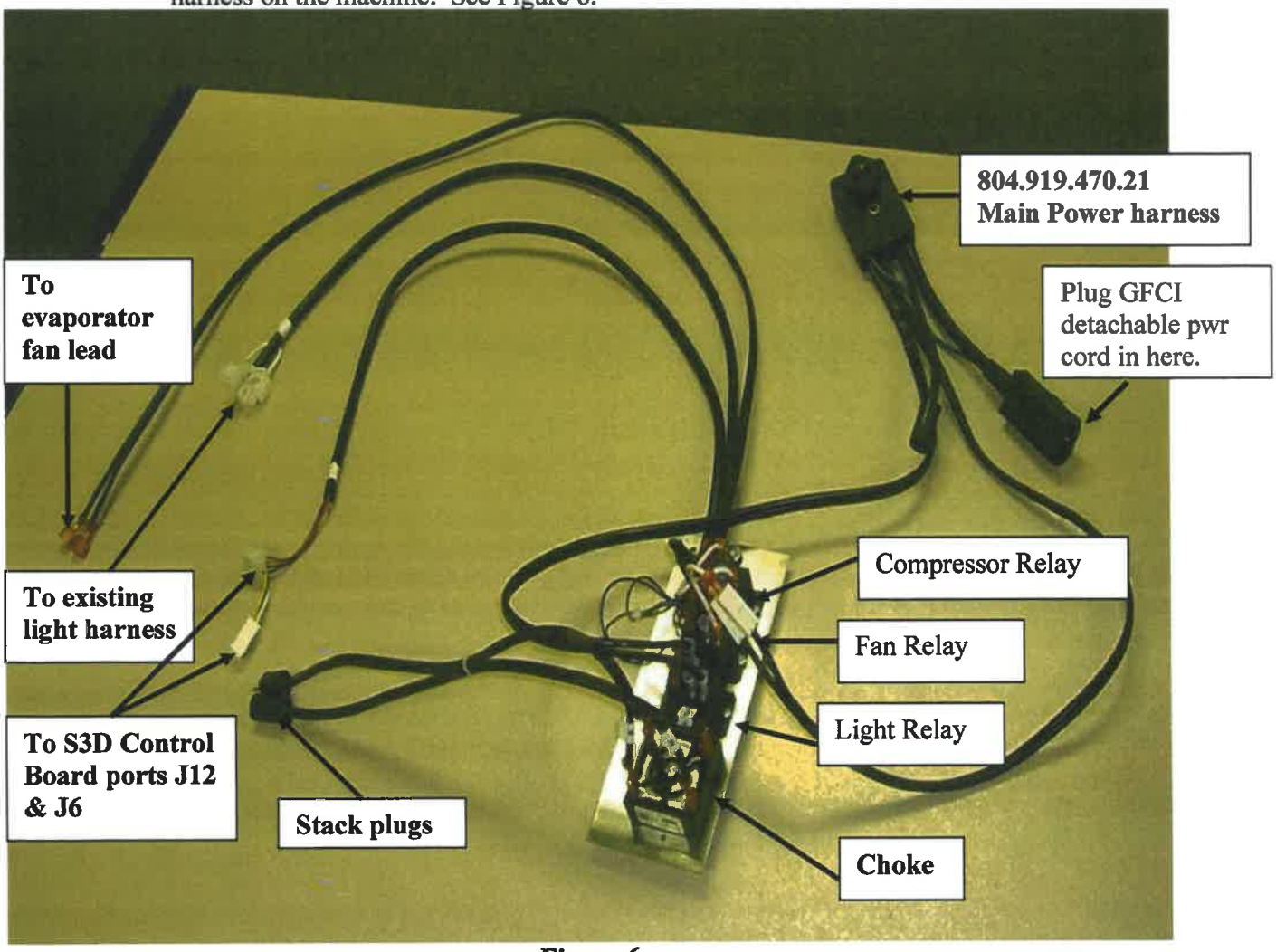

Figure 6

11. Environmental Kit has been assembled skip to "13" and proceed: To connect harness: See Fig 7a & 7b.

a. Connect the 4 pin of the Relay Control harness (804,917,42x.x1) to the 4 position plug of the Encapsulated Temperature Sensor (804,925,41x.x1).
b. Connect the double crimped gray (GRY) wire of the Relay Control harness to one side of the coil of the Compressor Relay.
c. Connect the (Blue) wire of the Relay Control harness to the other side of the coil of the Compressor Relay
d. Connect the double crimped (GRY) wire of the Relay Control harness to one side of the coil of the Fan Relay.
e. Connect the (Brown) wire of the Relay Control harness to the other side of the coil of the Fan Relay.
f. Connect the single crimp gray (GRY) wire of the Relay Control harness to one side of the coil of the Light Relay.
g. Connect the (Orange) wire of the Relay Control harness to the other side of the coil of the Light Relay.

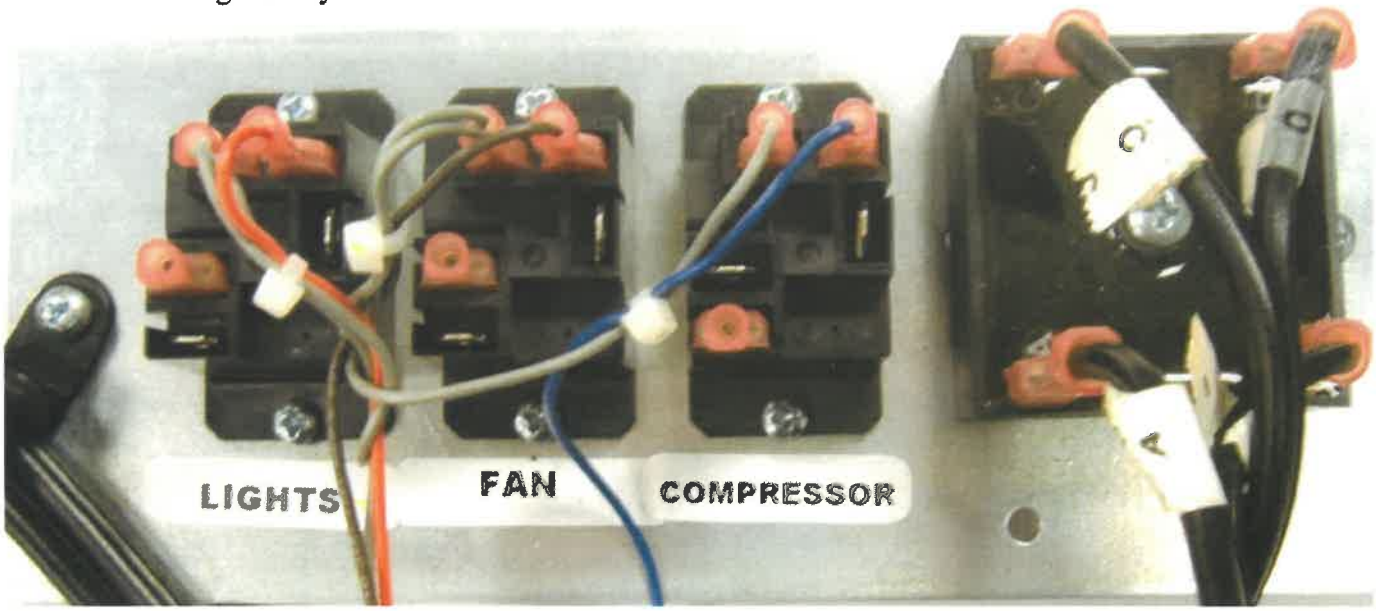

Figure 7a

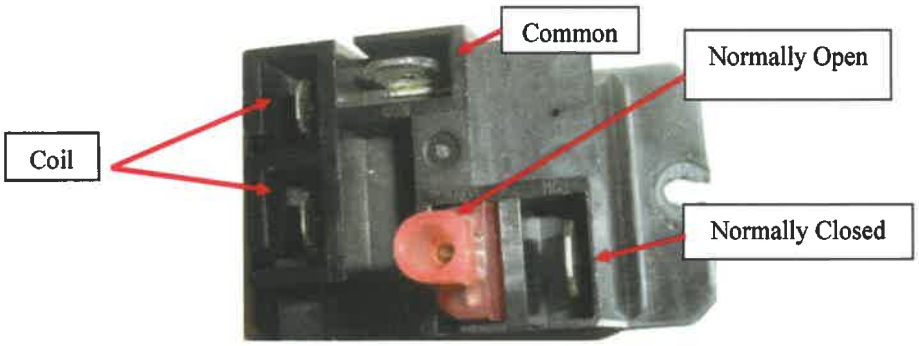

Figure 7b – Showing Light and Fan Relay

12. Install the Encapsulated Temperature Sensor (804,925,41x.x1). If the Environmental Kit has been assembled skip to "13b" and proceed. To install:
    a. Connect the 4 pin plug of Encapsulated Temperature Sensor (804,925,41x.x1) to the 4 pin plug of the Relay Control Harness (804,917,42x.x1).

b. Route the Encapsulated Temperature Sensor Harness below the refrigerated cabinet and up through the left side mullion.
c. Insert the legs of the Encapsulated Temperature Sensor in to the evaporator coils. See figure 8.

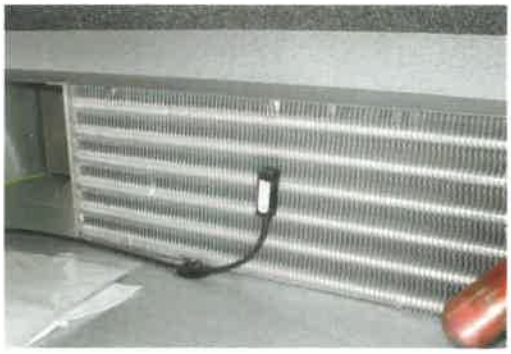

Figure 8

13. Install the Choke and Filter/Stack Plug Lead. If the Environmental Kit has been assembled skip to "14f" and proceed. To install: See figure 7.
    a. Install the Choke, using 10-32 x ½" screw (900,301,81x.x1) to the Mounting Plate.
    b. Install the wire labeled "A" of the Filter/Stack Plug Lead to the contact "A" of the Choke.
    c. Install the wire labeled "B" of the Filter/Stack Plug Lead to the contact "B" of the Choke
    d. Install the wire labeled "C" of the Filter/Stack Plug Lead to the contact "C" of the Choke
    e. Install the wire labeled "D" of the Filter/Stack Plug Lead to the contact "D" of the Choke
    f. Connect the 2 stack plugs of the Filter/Stack Plug Lead to the 2 stack plugs on the Main Power Harness (804,919,47x.x1) Figure 9.

Barrel Stack Plugs

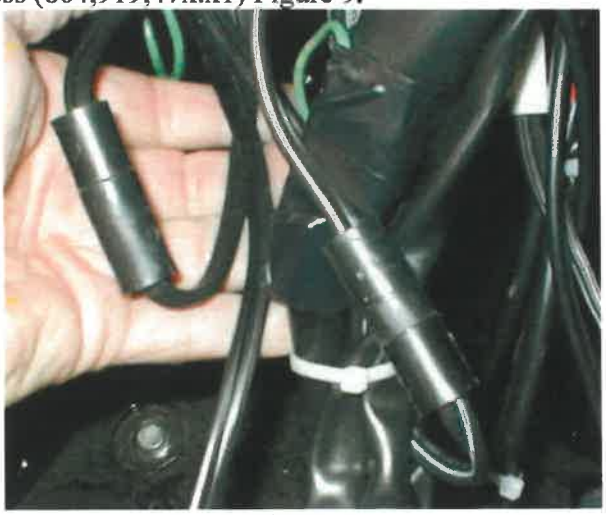

Figure 9

14. Install the S3D Temperature Sensor and Relay Extension Harness. If the Environmental Kit has been assembled skip to "15c" and proceed. To install:
    a. Route the S3D Temperature Sensor and Relay Extension Harness with the existing door harness through the main door to the harness wire plug cover area at the right bottom area of the main door.
    b. Connect the 6 pin plug of the S3D Temperature Sensor and Relay Extension Harness to the 6 pin plug of the Relay Control with Temperature Sensor Extension Harness
    c. Install the S3D control board or new Eprom if needed
    d. Connect the 2 pin plug of the S3D Temperature Sensor and Relay Extension Harness to the J12 port of the S3D Controller. Figure 10.

e. Connect the 6 pin plug of the S3D Temperature Sensor and Relay Extension Harness to the J6 port of the S3D Controller. .

Figure 10