# INSTRUCTIONS FOR DRAIN PUMP KIT - DCE Models A thru C

All Units: Follow Section I - "Assembly Instructions" Below, Then Proceed To Either Section II - "Gravity Drain Conversion Instructions," Or Section III - "Replacing Existing Pump" Instructions As Applicable.

## SECTION I - ASSEMBLY INSTRUCTIONS

Using the kit parts shown in the figure below, mount the pump assembly (P/N 12-2503-21, sold separately) to the bracket and assemble fittings, hoses, and electrical connector. Two white pre-formed hoses are included in the kit: Use the hose with a straight end for old-style bins having a "tee" fitting at the sump/bin drain, or use the hose with a formed elbow for current models having the sump drain routed inside the bin.

Note: Before installing the discharge elbow onto the pump nipple, visually inspect elbow for proper assembly of check valve and spring (see detail A below.) Tighten the elbow so no more than two threads show and the elbow is pointing towards the REAR (motor end) of the assembly.

# SECTION II - GRAVITY DRAIN CONVERSION INSTRUCTIONS



Use these instructions to convert an existing gravity drain system to a pump drain system.

Unit must be completely accessible from the rear to complete the installation of discharge tubing. If necessary, remove the unit from it's built in location to provide full access.

1. Set ON/OFF/BIN LEVEL control knob to the OFF position. Disconnect power and water to the unit. Remove electrical control box cover and kick plate. Remove existing bin drain tubing (BE PREPARED FOR WATER TO DRAIN FROM BOTH THE STORAGE BIN AND DRAIN TUBING.)

2. Uncoil the 10-foot long discharge tubing and push one end completely onto the barbed discharge elbow of the pump and securely fasten it with the worm-gear clamp (See figure 1). Route the other end through the rear of the unit to a convenient drain location.

3. Carefully slide the pump assembly into the base of the unit and fasten it to the base using two black snap fasteners, pushing them through the holes in the bracket and the matching holes in the base of the unit. Push white pre-formed tube onto bin drain fitting and secure with one short tie-wrap. (See figure 1)



### **GRAVITY DRAIN CONVERSION, CONTINUED**

4. Move black power cord wire from the bin level control to L01 on the terminal board in the control box.

5. Route the wire harness from the drain pump assembly into the control box and connect the wires as follows:

Black to L01 on the terminal board

White to L02 on the terminal board

Red to bin level control that previously used black wire moved in step 4 above

Green to the grounding screw

6. Refer to the wiring diagram below and re-check all electrical connections for proper placement. Place the up-dated electrical wiring diagram sticker over the existing one on the control box cover.



## **GRAVITY DRAIN CONVERSION, CONTINUED**

7. Restore power to the unit and with the ON/OFF/BIN LEVEL control still in the OFF position, pour several quarts of water into the bin. The drain pump should turn on and pump the water out of the bin, perhaps cycling on and off several times during the process. Pump cycling is normal since the pump-out rate of the drain pump is greater than the rate of drain through the bin.

8. While the pump is discharging water, THOROUGHLY CHECK THE ENTIRE DRAIN SYSTEM FOR LEAKS.

9. Re-install unit into built-in or free-standing location. ENSURE THAT NO KINKS OCCUR IN WATER INLET OR DRAIN TUBING.

10. Restore potable water supply and manually advance the unit's timer to the HARVEST position. Turn the ON/OFF/BIN LEVEL control knob ON to the required operating range setting for the application. Check unit for at least one cycle to ensure proper operation and to allow a final check for leaks of any kind.

11. Re-install control box cover and kick-plate. Conversion of a gravity drain system to a drain pump system is now complete.

#### SECTION III - REPLACING AN EXISTING OLD-STYLE RESERVOIR TYPE PUMP

1. Set ON/OFF/BIN LEVEL control knob to the OFF position. Disconnect power and water to the unit. Remove electrical control box cover and kick plate.

2. Remove old drain pump and connecting bin drain and discharge tubing. (BE PREPARED FOR WATER TO DRAIN FROM BOTH THE STORAGE BIN AND DRAIN TUBING.)

If existing pump has a vent tube installed, you must disconnect it but may leave the vertical tube in place, since it will no longer be used.

NOTE: Although we recommend using the  $\frac{\gamma_2^{"}}{2}$  ID discharge tubing included in the kit due to its heavy wall-thickness and resistance to kinking, IF THE EXISTING DISCHARGE TUBING IS  $\frac{\gamma_2^{"}}{2}$  ID, you need not remove it nor pull the unit out of a built-in location to complete this installation.

3. Disconnect and remove all wires from old pump to control box; they will no longer be used.

4. Uncoil the 10-foot long discharge tubing (or use existing tubing if it is  $\frac{1}{2}$ " ID) and push one end completely onto the barbed discharge elbow of the pump and securely fasten it with the worm-gear clamp (See figure 1). Route the other end through the rear of the unit to a convenient drain location.



## REPLACEMENT INSTRUCTIONS, CONTINUED

5. Carefully slide the pump assembly into the base of the unit and fasten it to the base using two nap fasteners, pushing them through the holes in the bracket and the matching holes in the base of the unit. Push white pre-formed tube onto bin drain fitting and secure with one short tie-wrap. (See figure 1)

6. In the control box you will find a wire nut connecting two black wires and one yellow wire from the old drain pump. Cut off this wire nut, discard the yellow wire, and strip approximately 3/8" of insulation from each of the black wires. Next, crimp a 1/4" female quick connector from the kit onto each of the black wires. Finally, push both quick connectors onto terminal L03 of the terminal board.

7. Remove and discard the RED wire between L01 of the terminal board and the bin level control.

8. Route the wire harness from the drain pump assembly into the control box and connect the wires as follows:

- Black to L01 on the terminal board
- · White to L02 on the terminal board
- Red to bin level control where original red wire was removed in step 7 above
- · Green to the grounding screw



#### **REPLACEMENT INSTRUCTIONS, CONTINUED**

9. Refer to the wiring diagram below and re-check all electrical connections for proper placement. Place the up-dated electrical wiring diagram sticker over the existing one on control box cover

10. Restore power to the unit and with the ON/OFF/BIN LEVEL control still in the OFF position, pour several quarts of water into the bin. The drain pump should turn on and pump the water out of the bin, perhaps cycling on and off several times during the process. Pump cycling is normal since the pump-out rate of the drain pump is greater than the rate of drain through the bin.

11. While the pump is discharging water, THOROUGHLY CHECK THE ENTIRE DRAIN SYSTEM FOR LEAKS.

12. Re-install unit into built-in or free-standing location. ENSURE THAT NO KINKS OCCUR IN WATER INLET OR DRAIN TUBING.

13. Restore potable water supply and manually advance the unit's timer to the HARVEST position. Turn the ON/OFF/BIN LEVEL control knob ON to the required operating range setting for the application. Check unit for at least one cycle to ensure proper operation and to allow a final check for leaks of any kind.

14. Re-install control box cover and kick-plate. Replacement is now complete.

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