



SUN ELECTRIC CORPORATION

Model: **MTC-4000**

Page: 1 of 4

## ***Field Installation Instructions***

INSTALLATION MUST BE PERFORMED BY QUALIFIED SUN SERVICE PERSONNEL ONLY

### **INSTALLATION OVERVIEW:**

The Installation Procedures **listed** are for the MTC-4000. The unit is shipped as a fully assembled unit, with the exception of the items as listed in the Parts List.

### **PARTS LIST:**

<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QUANTITY</b>
Hole Plug	1374-0110-01	4
Wrench, Suction Separator Bowl	0001-0067-01	1
Oil Cylinder, Disposable	0271-0071-01	1
Screw #10 - 32 x1/2"	0403-1541-08	2
Adapter, GM	0647-0196-01	1
Adapter, Quick-Disconnect, GM/Ford	0647-0197-01	<b>1</b>
Adapter, Quick-Disconnect, Large GM	0647-0199-01	1
Adapter, Ford	0647-0200-01	<b>1</b>
Desiccant Bag	0671-1018-01	10
Hanger, Hose	2161-0023	2
Hose Assembly, Red, with Hand Valve, 10"	3988-0235-01	1
Hose Assembly, Blue, with Hand Valve, 10"	3988-0236-01	<b>1</b>
Hose Assembly, Red, 96"	3988-0244-01	<b>1</b>
Hose Assembly, Blue, 96"	3988-0243-01	<b>1</b>
Cord, AC Power	6001-0197-01	1
Reclaim Tank Assembly	7009-2331-01	1
Cable Assembly, Reclaim Tank	6004-0760-01	<b>1</b>
Probe, temperature	6004-0777-01	<b>1</b>
Installation Instructions	0692-2132-01	<b>1</b>

### **REQUIRED TOOLS**

Complete Sun Issued Tool Kit  
Safety Goggles (0001-5005)

**INSTALLATION:**

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**USE STANDARD REFRIGERANT HANDLING SAFETY PROCEDURES  
WHEN PERFORMING THIS PROCEDURE**

1. Cut Straps, and remove top **of** the carton, top packing, and carton sides.
2. Slide the MTC-4000 and carton base **off of** the pallet, and split the corners **of** the base carton.
3. Lean the **MTC-4000** so that one half of the foam base can be removed.
4. Lean the **MTC-4000** so the other half of the foam base can be removed.
5. Inventory all items using the parts list and inspect for damage. Place the four adapters, Desiccant bags, Cap Plugs, and the Filter Wrench in the Storage Compartment on the rear of the unit.
6. Remove the Cap from the LOW fitting on the rear or the Unit and attach the BLUE Hose Assembly (3988-0243-01).
7. Attach the BLUE Hose Assembly with Hand Valve (3988-0236-01) to the BLUE Hose Assembly.
8. Remove the Cap on the HIGH Fitting on the rear or the Unit and attach the RED Hose Assembly (3988-0244-01)(96").
9. Attach the RED Hose Assembly with Hand Valve (3988-0235-01)(10") to the RED Hose Assembly.

**NOTE:** *The hoses that are supplied with the Hand Valves have an angled fitting with a Schrader Valve depressor on one end, and a straight fitting with no depressor on the other end. The straight fittings on the hoses are attached to the Hand Valve and the fitting with the depressor will attach to the Vehicle that is to be serviced.*

10. Attach the Temperature Probe Assembly (6004-0777-1) to the four pin connector located below pump compartment. Position probe tip above unit so sensor can stabilize (5 min.).
11. Press "TEMP'" Function key. If the left display is lighted, go to step 12. If it is not, change probe dip switch #4 on the Processor board (7001-2188-01) to **"OFF"**. Turn off the unit using the power switch on the rear of the unit to reset the computer for the new dip switch setting. Refer to Figure 1 on Page 3.
12. Remove the Suction Separator Bowl and replace the Desiccant Bag. Use the Suction Separator Bowl Wrench if necessary.
13. Remove the Reclaim Tank Assembly from the packing container. Do Not place it on the Scale until instructed to do so. The Reclaim Tank must be prepped before final installation into the unit.
14. Remove oil bracket from scale and set aside for now.

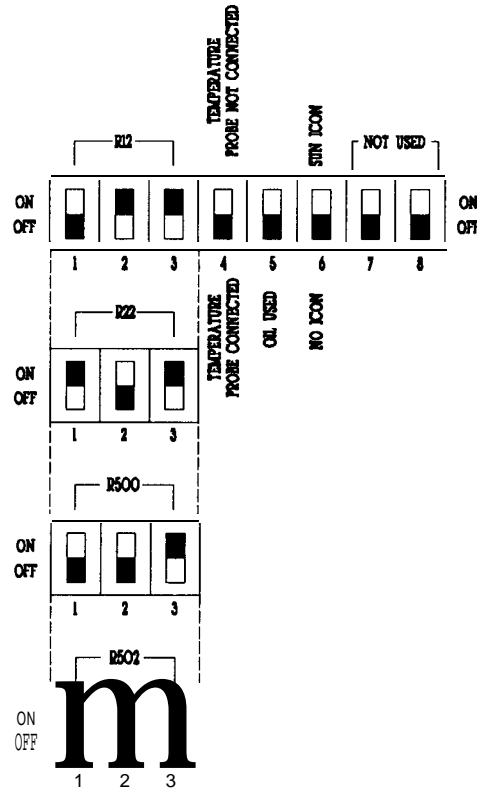


Figure 1. DIP Switch Settings

15. Plug the Unit in and turn on the Main Power Switch on the rear **of** the unit. You should hear 1 beep.
  16. **Press** the POWER ON/OFF button on the front panel.
- NOTE:** Allow the Scale to stabilize. Once the scale stabilizes, the unit **will** beep twice.
17. Programing of the Default Settings can be accessed by pressing and holding both the up and down arrows at the same time for 5 seconds. Select desired default setting by pressing the up and down arrows individually and pressing **<ENTER>** to program.
  18. CALIBRATION: Press and hold the "HOLD/ENTER/RESTART" key for five seconds, "CAL" should be on both displays. Hand Valves should be open.
  19. **Press** "RECLAIM" key, observe that the "IN PROGRESS" LED is flashing and the "HOLD" LED is on. To activate test press "HOLD/ ENTER" key. At the end of calibration the "COMPLETED" LED **will** be on.
  20. Press the "TEMP" key, observe that both displays are the same. Left representing probe and right representing ambient.

21. Connect the BLUE service hose from the LOW port on the back of the unit to the BLUE valve on the new reclaim tank (7009-2331-01) finger tight.
22. Connect the RED service hose from the HIGH port on the back of the unit to the RED valve on the reclaim tank (finger tight).
23. Open both hand valves on reclaim tank and service hoses counterclockwise.
24. Press the AUTO SEQUENCE key on the control panel. The LED next to ENTER VACUUM TIME will light.
25. Press the VALUE ADJUST - UP key twice. The number ten **should** appear in the right LCD.
26. Press the HOLD/ENTER/RESTART key four (4) times. The evacuation procedure will start and run for ten minutes. The LCD should indicate at least 27 **in/hg**. When the unit beeps twice, the procedure **is** finished.
27. Close the RED and BLUE tank valves. Close the service hose hand valves and disconnect the hoses from the tank.
28. Connect the Yellow Hose in the Scale Compartment to the Oil cylinder.
29. Attach the oil bracket to scale with **oil** cylinder in it. You should hear 2 beeps when scale stabilizes.
30. Connect the Reclaim Tank Cable Assembly to the Tank and the "Tank Sensor" Fitting on the underside of the control panel.
31. Connect the Blue Hose to the fitting with the Blue Knob on the Reclaim Tank Assembly.
32. Connect the Red Hose to the fitting with the Red Knob on the Reclaim Tank Assembly.
33. Open the Red and Blue valve on the Reclaim Tank.
34. Set the Tank GENTLY on the Scale and secure it to the Right side of the Scale as viewed from the rear using the velcro strap (CONFIRM TANK DEPRESSES SWITCH). Once the Scale is stable, the unit will Beep twice to indicate that it has recognized that the tank has been installed.
35. Obtain the Virgin Tank from the Customer and connect the Blue Hose in the Scale Compartment to the fitting on top of it. Open the Tank Valve.
36. Turn the Tank upside down and GENTLY place it on the Scale (CONFIRM TANK DEPRESSES SWITCH). Secure it using the two PULL straps attached to the heater blanket. Once the Scale is stable, the unit should BEEP twice to indicate that the tank has been sensed.
37. Mount the two Hooks on the rear of the unit using the two screws supplied.
38. Complete the questionnaire (0692-1834-01).

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\* **INSTALLATION COMPLETE** \*  
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