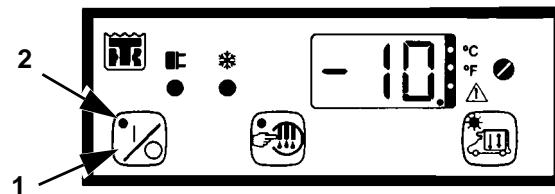


## Turn Unit On or Off:

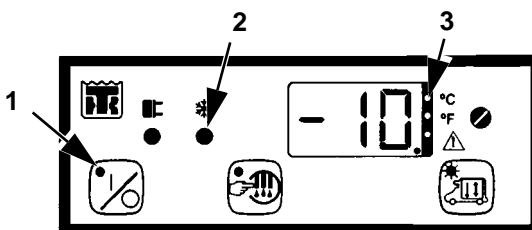


**Engine Operation:** Start the truck engine.

**Electric Standby Operation:** Connect external power supply to power receptacle. Correct power supply voltage must be used. Power cord LED will go ON.

1. Press ON-OFF Key to start the unit. Internal return air temperature will be displayed.
2. ON LED Indicator. When on, indicates that the unit has started.

## Return Air Temperature:

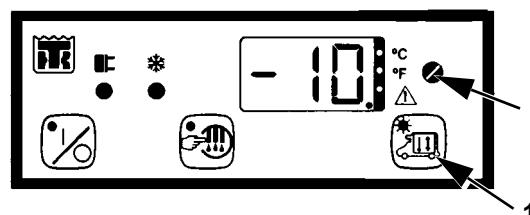


During normal operation (unit is ON and cooling), these LEDs will be on:

1. ON LED Indicator
2. Unit Operation LED
3. Celsius/Fahrenheit LED Indicator

The return air temperature will be displayed on the screen.

## Enter Setpoint Temperature:

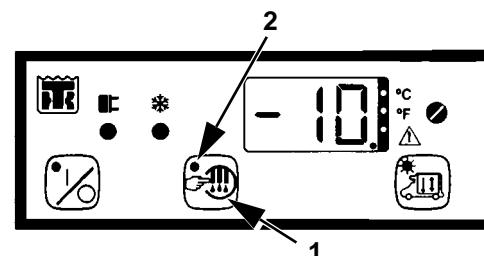


1. Press the Setpoint Key. The current Setpoint Temperature will be displayed on the screen.
2. While pressing the Setpoint Key, turn the Setpoint Adjust Dial until the display shows the desired Setpoint Temperature.
3. Release the Setpoint Key. The current box temperature will be displayed on the screen. The unit will attempt to adjust and hold the box temperature to the new Setpoint Temperature.



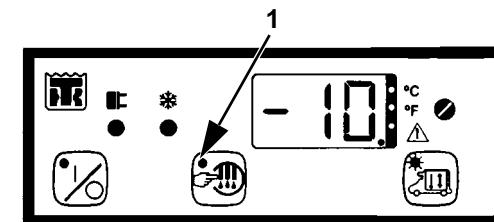
**CAUTION:** The Setpoint Temperature can be changed by turning the Setpoint Adjust Dial when the Setpoint Key is not pressed.

## Start Manual Defrost:



1. Press the Manual Defrost Key. Unit will start the defrost cycle if the evaporator coil temperature is below 36 F (2.2 C).
2. The defrost LED will go ON. The unit will return to the cool mode automatically when the defrost cycle is completed.

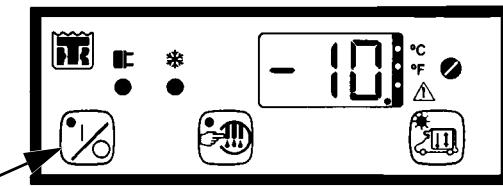
## Automatic Defrost:



The system will initiate a defrost cycle automatically if the evaporator coil temperature is below 36 F (2.2 C).

1. The defrost LED will go ON. The unit will return to the cool mode automatically when the defrost cycle is completed.

## Stop Defrost Cycle:



1. Press and release the ON-OFF Key twice to stop the defrost cycle.

## **After Start Inspection:**

1. Thermostat: Dial the thermostat setting above and below the box temperature to check thermostat operation.
2. Pre-Cooling: With the thermostat set at the desired temperature, allow the unit to run for one-half to one hour (longer if possible) before loading the truck. Pre-cooling will remove residual body heat and moisture from the box interior and provide a good test of the refrigeration system.
3. Defrost: When the unit has finished pre-cooling the truck interior (evaporator temperature dropped below 36 F (2.2 C), initiate a defrost cycle with the manual defrost switch. Defrost cycle ends automatically.

## **Loading Procedure:**

1. Be sure the unit is OFF before opening the doors to minimize frost accumulation on the evaporator coil and heat gain inside the box. (Unit may be running when loading the truck from a warehouse with door seals.)
2. Spot check and record load temperature while loading. Note any off-temperature product.
3. Load product so that there is adequate space for air circulation completely around the load. DO NOT block the evaporator inlet or outlet.
4. Products should be pre-cooled before loading. Thermo King units are designed to maintain loads at the temperature at which they were loaded. Transport refrigeration units are not designed to pull hot loads down to temperature.

## **Post Load Procedure:**

1. Be sure all the doors are closed and locked.
2. Adjust thermostat to desired temperature setpoint.
3. Start the unit.
4. Half an hour after loading, defrost the unit by momentarily pressing the Manual Defrost Key. If the coil temperature has dropped below 36 F (2.2 C), the unit will defrost. The defrost cycle should stop automatically.

## **Weekly Pretrip Inspection:**

The following Weekly Pretrip Inspection should be completed before loading the truck. While the weekly inspection is not a substitute for regularly scheduled maintenance inspections, it is important part of the preventive maintenance program designed to head off operating problems before they happen.

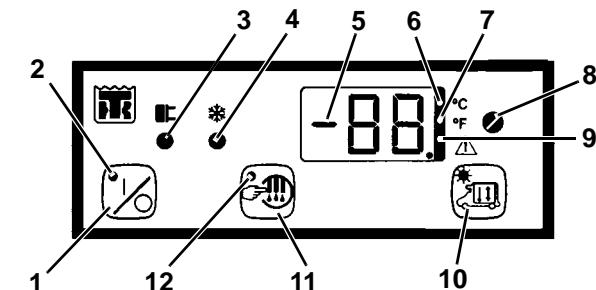
1. Leaks: Inspect for leaks and worn refrigerant lines.
2. Belts: Inspect for cracks, wear and proper belt tension.
3. Mounting Bolts: Inspect bolts are properly tightened.
4. Electrical: Electrical connections should be securely fastened. Wires and terminals should be free of corrosion, cracks or moisture.
5. Defrost Drains: Check the defrost drain hose and fittings to be sure that they are open so condensate can run out during defrosting. Check the bottom end of drain hose to be sure that is not plugged or crushed.
6. Structural: Visually check for physical damage.

## **Weekly Post Trip Checks:**

1. Wash the unit.
2. Check for leaks.
3. Check for loose or missing hardware.
4. Check for physical damage to unit.

# **V-200/V-300/V-500 M-13 Control System Operating Guide**

## **Control Panel Features:**



1. ON/OFF Key
2. ON LED
3. Power Cord LED
4. Unit Operation LED
5. Minus Sign
6. Celsius LED Indicator
7. Fahrenheit LED Indicator
8. Setpoint Adjust Dial
9. AC Overload LED
10. Setpoint Key
11. Manual Defrost Key
12. Defrost LED

**CAUTION: This is a quick reference guide.  
Always refer to the operating manual for  
detailed instructions.**



TK 52857-1-PC (Rev. 0, 01/05)