

## Keypad Keys

1. The Alarm Code Key displays any current alarm codes.
2. The Off Key turns the microprocessor off.
3. The On Key turns the microprocessor on.
4. The Select Key is used to choose the Mode or Setpoint screens.
5. The Enter Key loads a new setpoint or mode setting.
6. The Pretrip Key is used to start a pretrip test.
7. The Up Arrow Key is used to increase a setpoint or change prompts.
8. The Down Arrow Key is used to decrease a setpoint or change prompts.
9. The Alarm Clear Key clears any current alarm codes.

## Display Icons

- A. The Defrost Icon appears when the unit is defrosting.
- B. The In-Range Icon appears when the box temperature is within a few degrees of setpoint.
- C. The Heat/Cool Icon appears when the unit is heating (the "up arrow" will be displayed) or cooling (the "down" arrow will be displayed).
- D. The CYCLE-SENTRY Icon appears when CYCLE-SENTRY mode has been selected.
- E. The Alarm Icon appears when an alarm condition has been detected by the microprocessor.
- F. The Electric Standby Icon appears when a unit with electric standby is operating in electric mode.
- G. The Setpoint Icon appears when the setpoint is being shown in the lower display.

## Starting the Engine on Units Equipped with CYCLE-SENTRY

1. Make sure the unit On/Off switch is "ON."
2. Press the ON key (on the remote unit).
3. If no other key is pressed, the engine will automatically pre-heat and start in about 10 seconds.

*CAUTION: The engine starts automatically in either CYCLE-SENTRY or Continuous mode.*

## Changing the Setpoint

1. Make sure the unit On/Off switch is "ON."
2. Press the ON key (on the remote unit).
3. Press the SETPOINT Up or Down arrow keys to choose the new setpoint.
4. When the desired setpoint is shown on the display, press the ENTER key (=). The display will briefly show [Lod] and then the new setpoint will appear on the display.

*NOTE: The ENTER key (=) must be pressed, or the setpoint will not be changed.*

## Selecting CYCLE-SENTRY or Continuous Run mode

1. Make sure the unit On/Off switch is "ON."
2. Press the ON key (on the remote unit).
3. Press the SELECT (cycling arrows) key to display [CYCLS] and [YES] or [nO].
4. Press the SETPOINT Up or Down arrow keys to select the desired mode. [YES] = CYCLE-SENTRY, [nO] = Continuous.
5. Press the ENTER key (=). The display will briefly show [Lod] and then the new mode will appear on the display.

*NOTE: The ENTER key (=) must be pressed, or the setting will not be changed.*

## Starting a Pretrip Test

1. Make sure the unit On/Off switch is "ON" and the engine is NOT running.
2. Press the ON key (on the remote unit).
3. Clear any alarm codes.
4. Press the Pretrip key (P) to display [PrE] and [trP].
5. Press the ENTER key (=). The display will briefly show [Lod] and the pretrip test will begin.

*NOTE: If the ENTER key (=) is not pressed within 10 seconds, the pretrip test will not start.*

## Starting a Manual Defrost Cycle

1. Make sure the unit On/Off switch is "ON."
2. Press the ON key (on the remote unit).
3. The unit must be running in Continuous mode, CYCLE-SENTRY mode, or be in CYCLE-SENTRY Null mode and the coil temperature must be below 45 F (7 C). If these conditions are not met, a manual defrost cycle cannot be initiated.
4. Press the Select key (cycling arrows) to display [dEF].
5. When [dEF] is shown on the display, press the ENTER key (=). The display will briefly show [Lod], and the unit will start a defrost cycle. The defrost cycle will terminate automatically.

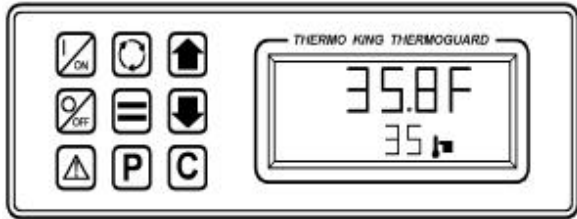
*NOTE: The ENTER key (=) must be pressed, or the manual defrost cycle will not start.*

## Viewing and Clearing Alarm Codes

1. Make sure the unit On/Off switch is "ON."
2. Press the Code key (exclamation point in a triangle) to display any alarm codes.
3. Correct the alarm condition(s) (refer to the Operators Manual).
4. After the alarm condition(s) has been corrected, press the Code key (exclamation point in a triangle) to display the alarm code. Then press the Clear key (C) to clear the alarm code from memory.

# THERMOGUARD µP VI Microprocessor

## In-Cab Remote Control Operating Instructions



Operate Your Unit From the  
Comfort of the Cab

Save Valuable Transit Time

---

### THERMOGUARD µP VI Alarm Codes

---

- 00 No Fault
- 02 Evaporator Coil Sensor
- 03 Return Air Sensor
- 04 Discharge Air Sensor
- 05 Ambient Sensor
- 06 Water Temperature Sensor
- 07 RPM Sensor
- 09 High Evaporator Temperature
- 10 High Discharge Temperature
- 11 Unit Controlling on Discharge Air
- 12 Sensor Shutdown
- 13 Check Sensor Calibration
- 15 Glow Plug Check
- 17 Engine Failed to Crank (CYCLE-SENTRY)
- 18 High Engine Water Temperature
- 19 Low Engine Oil Pressure
- 20 Engine Failed to Start
- 21 Cooling Cycle Check
- 22 Heating Cycle Check
- 23 Cooling Cycle Fault
- 24 Heating Cycle Fault
- 25 Alternator Check
- 26 Refrigeration Capacity Check
- 28 Pretrip Abort
- 29 Damper Circuit
- 31 Oil Pressure Switch
- 32 Refrigeration Capacity Low
- 33 Check Engine RPM
- 34 Modulation Circuit
- 35 Run Relay Circuit
- 36 Electric Motor Failed to Run
- 37 Check Engine Coolant Level
- 38 Engine Phase Reversed
- 39 Water Valve Circuit
- 40 High Speed Circuit
- 41 Engine Coolant Temperature Check
- 42 Unit Forced to Low Speed
- 43 Unit Forced to Low Speed Modulation
- 44 Fuel System Check
- 45 Hot Gas Circuit
- 46 Air Flow Check

---

### THERMOGUARD µP VI Alarm Codes (continued)

---

- 48 Check Belts/Clutch
- 50 Reset Clock
- 52 Heat Circuit
- 53 Economizer Valve Circuit
- 54 Test Mode Time Out
- 55 Check Engine Speeds
- 61 Low Battery Volts
- 62 Ammeter Out of Calibration Range
- 63 Engine Stopped - Reason Unknown
- 64 Pretrip Reminder
- 66 Low Engine Oil Level
- 67 Liquid Line Solenoid Circuit
- 70 Hourmeters Exceed 99999
- 71 Maintenance Interval Hourmeter #4 Exceeds Set Limit
- 72 Maintenance Interval Hourmeter #5 Exceeds Set Limit
- 73 Maintenance Interval Hourmeter #6 Exceeds Set Limit
- 74 Microprocessor Reverted to Default Setting
- 75 Internal Fault Codes, Factory or Dealer Reset Only
- 76 Internal Fault Codes, Factory or Dealer Reset Only
- 77 Internal Fault Codes, Factory or Dealer Reset Only
- 78 Internal Fault Codes, Factory or Dealer Reset Only
- 79 Data Log Overflow
- 80 Compressor Temperature Sensor
- 81 High Compressor Temperature
- 82 High Compressor Temperature Shutdown
- 83 Low Engine Coolant Temperature
- 84 Restart Null
- 85 Forced Unit Operation
- 87 Suction Pressure Sensor
- 89 Electronic Throttling Valve (ETV) Circuit
- 109 Discharge Pressure Sensor

#### Additional Information

For additional information about this remote control unit, consult the THERMOGUARD µP VI Microprocessor Control System Diagnosis Manual (TK 50566)