#### CHANGING THE SETPOINT

- 1. Turn unit On/Off Switch on.
- 2. Press Up and Down Arrow keys to chose the new setpoint.
- 3. Press the Enter key. The display will briefly show [LOAD], and then the new setpoint will reappear.

## SELECTING CYCLE SENTRY OR CONTINUOUS MODE

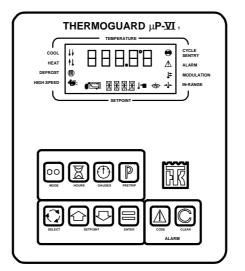
- 1. Turn unit On/Off switch on.
- 2. Press the Mode key to display [CYCLS] and [YES] or [NO].
- 3. Press the Up or Down Arrow key to select the desired mode. [YES] = Cycle Sentry mode, [NO] = Continuous mode.
- 4. Press the Enter key. The display will briefly show [LOAD], and then the new mode will reappear.

#### STARTING THE ENGINE

1. Turn the unit On/Off switch on. If no other key is pressed, the engine will automatically preheat and start in about 10 seconds

CAUTION: The engine starts automatically in both Cycle Sentry and Continuous mode any time the On/Off switch is turned on.

# OPERATING THE THERMOGUARD μP-VI MICROPROCESSOR





TK 50754-2-PC

07 December 1999

#### MANUAL DEFROST CYCLE

- 1. Turn unit On/Off switch on.
- 2. Press the Mode key to display [dEF].
- 3. Press the Enter key. The display will briefly show [LOAD], and then the unit will enter a defrost cycle. The defrost cycle will terminate automatically.

# VIEWING TEMPERATURE DISPLAYS

- 1. Turn the unit On/Off switch on.
- 2. Press the Select key to view the temperature display screens as follows:

[DIS.A] Discharge Air Temperature

[TPDF] Temperature Differential

[COIL] Evaporator Coil Temperature

[AMB.T] Ambient Air Temperature

[SPR.1] Spare Sensor 1

[SPR.2] Spare Sensor 2

[DAS.X] DAS sensors - If present

#### VIEWING GAUGE DISPLAYS

- 1. Turn the unit On/Off switch on.
- 2. Press the Gauge key to view the gauge display screens as follows:

[WAT.T] Engine Water Temp

[OIL.P] Engine Oil Pressure Status

[AMPS] Battery Current Flow

[BATV] Battery Voltage

[RPM] Engine RPM

[CTM.P] Compressor Temp (Screw only)

[SUC.P] Suction Pressure (ETV only)

[DIS.P] Discharge Pressure (ETV only)

[ETV.P] ETV Valve Position (ETV only)

## VIEWING & CLEARING ALARM CODES

- 1. If the Alarm Icon is on, alarm conditions have been detected.
- 2. Press the Code key to display the alarm code. Press the Code key again to display any additional alarm codes. Always record any alarm codes shown.
- 4. After the alarm condition has been corrected, press the Code key to display the alarm code again. When the alarm code is shown in the display, press the Clear key to clear the alarm.

#### **RUNNING A PRETRIP TEST**

- 1. Turn the unit On/Off Switch on.
- 2. Clear all alarm codes.
- 3. Before the engine starts, press the Pretrip key. The Pretrip prompt screen [PrE TRIP] will appear.
- 4. Press the Enter key to start a Pretrip test. The display will briefly show [LOAD] and then the test will begin.
- 5. The Pretrip test is fully automatic. When it is complete [PASS], [CHEC] or [FAIL] will appear on the display.
- 6. If [CHEC] or [FAIL] appears, display and correct any alarm codes and repeat the test.

ALARM CODES		
00	No Fault	
02	Evaporator Coil Sensor	
03	Return Air Sensor	
04	Discharge Air Sensor	
05	Ambient Air Sensor	
06	Engine Water Temp Sensor	
07	Engine RPM Sensor	
09	High Evaporator Temp	
10	High Discharge Pressure	
11	Unit Controlling on Discharge Air Sensor	
12	Sensor Shutdown	
13	Check Sensor Calibration	
15	Glow Plug Check	
17 18	Engine Failed to Crank	
19	High Engine Water Temp	
20	Low Engine Oil Pressure Engine Failed to Start	
21	Cooling Cycle Check	
22	Heating Cycle Check	
23	Cooling Cycle Fault	
24	Heating Cycle Fault	
25	Alternator Check	
26	Check Refrigeration Capacity	
28	Pretrip Abort	
29	Defrost Damper Circuit	
31	Oil Pressure Switch	
32	Refrigeration Capacity Low	
33	Check Engine RPM	
35	Run Relay Circuit	
36	Electric Motor Failed to Run	
37	Check Engine Water Level	
38	Electric Phase Reversed	
39	Water Valve	
40	High Speed Circuit	
41	Engine Water 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	

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Check Belts/Clutch Reset Clock

## **ALARM CODES**

	//L//////// OODLO
52	Heat Circuit
53	Economizer Valve
54	Test Mode Timeout
55	Check Engine Speeds
61	Battery Check
62	Ammeter Out of Calibration Range
63	Engine Stopped - Reason Unknown
64	Pretrip Reminder
66	Low Engine Oil Level
67	Liquid Line Solenoid
70	Hourmeters Exceed 99999
71	Hourmeter 4 Exceeds set limit
72	Hourmeter 5 Exceeds set limit
73	Hourmeter 6 Exceeds set limit
74	Micro Reverted to Default Settings
75	Internal Fault Code, Dealer Resettable
76	Internal Fault Code, Dealer Resettable
77	Internal Fault Code, Dealer Resettable
78	Internal Fault Code, Dealer Resettable
79	Data Log Overflow
80	Compressor Temperature Sensor
81	High Compressor Temperature
82	High Compressor Temperature Shutdown
83	Low Coolant Temperature
84	Restart Null
85	Forced Unit Operation
87	Suction Pressure Transducer
89	ETV Circuit
109	Discharge Pressure Transducer

### **ADDITIONAL INFORMATION**

For additional information consult the Thermo King Operating, Maintenance, Parts and Diagnostic Manuals for your unit.