OPERATING THE THERMOGUARD µP-T MICROPROCESSOR



Truck Smart Reefer Units are operated by a Remote Control Panel. This panel may be located in the truck cab or mounted on the truck box.

Used on:

TD-II Smart Reefer Truck Units

RD-II Smart Reefer Truck Units

KD-II Smart Reefer Truck Units

MD-II Smart Reefer Truck Units

TK 41237

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CHANGING THE SETPOINT

1. Press the On Key to turn the unit on.

2. Press the Up and Down Arrow keys to chose the new setpoint.

3. Press the Enter key. The display will briefly show [Lod], and then the new setpoint will reappear.

SELECTING CYCLE SENTRY OR CONTINUOUS MODE

1. Press the On Key to turn the unit on.

2. Press the Select key to display [CYCLS] and [YES] or [nO].

3. Press the Up or Down Arrow key to select the desired mode. [YES] = Cycle Sentry, [nO] = Continuous.

4. Press the Enter key. The display will briefly show [Lod], and then the new mode will reappear.

STARTING THE ENGINE

1. Press the On key to turn the unit on. If no other key is pressed, the engine will automatically preheat and start in about 10 seconds. **CAUTION:** The engine starts automatically in either Cycle Sentry or Continuous mode.

MANUAL DEFROST CYCLE

- 1. Press the On Key to turn the unit on.
- 2. Press the Defrost Key.

3. The Defrost Icon will appear and the unit will enter a defrost cycle. The defrost cycle will terminate automatically.

VIEWING PROMPT & DISPLAY SCREENS

1. Press the On Key to turn the unit on.

2. Press the Select key to view the prompt and display screens as follows:

[Alr]	Alarm codes if any
[CYCLS]	Cycle Sentry prompt
[dIS]	Discharge air temperature
[coL]	Evap coil temperature
[tLH]	Total unit hours
[EnH]	Diesel engine hours
[ELH]	Electric hours
[Hr4]	Hourmeter 4 if enabled
[Hr5]	Hourmeter 5 if enabled
[Hr6]	Hourmeter 6 if enabled
[oIL]	Engine oil pressure
[EnT]	Engine coolant temperature
[rPn]	Engine RPM
[bAt]	Battery voltage
[bLlt]	Display backlight select
[dFI]	Initial defrost interval
[ddr]	Defrost duration

ELECTRIC MODE OPERATION

1. Units equipped with the Electric Standby option will automatically switch to Electric Mode operation any time the unit is connected to a source of Standby Power, the Standby Power source is energized and the unit is turned on.

2. The unit will operate in either Continuous or Cycle Sentry mode as selected.

VIEWING & CLEARING ALARM CODES

1. Press the On Key to turn the unit on

2. If the Alarm Icon is "on", alarm conditions have been detected

3. Press the Select key. The Alarm Screen and alarm code will appear. If more than one alarm is present, each will be displayed for several seconds. Always record any alarm codes shown. They are invaluable to the service technician.

4. After the alarm condition has been corrected, press the Select key to display the alarm code. When the alarm code is shown in the display, press the Enter key to clear the alarm.

ALARM CODES

- 00 No fault
- 02 Evaporator coil sensor
- 03 Return air sensor
- 04 Discharge 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
- Sensor shutdown
 Engine failed to crank
- 18 High engine water temp
- 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
- 28 Unit Self Check abort
- 31 Oil pressure sensor
- 32 Refrigeration capacity low
- 33 Check engine RPM
- 35 Run Relay circuit
- 36 Electric motor failed to run 37 Check engine water level
- 37 Check engine water level38 Electric phase reversed
- 38 Electric phase reversed40 High speed circuit
- 52 Heat circuit
- 54 Test Mode timeout
- 61 Battery check
- 63 Engine stopped reason unknown
- 66 Low engine oil level
- 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
- 77 Internal fault code, dealer resettable

RUNNING A UNIT SELF CHECK

1. Press the On Key to turn the unit on.

2. Clear any alarm codes that may exist.

3. Press and hold the Thermo King Logo key for at least 3 seconds. The Unit Self Check prompt screen will appear.

4. Press the Enter key to start a Unit Self Check test. The display will briefly show [Lod] and the test will begin.

5. The test is fully automatic. When complete, [PASS], [CHEC] or [FAIL] will appear on the display. The unit will continue to control to setpoint.

ADDITIONAL INFORMATION

For additional information consult the following Thermo King manuals for your unit.

Operating Manual

Maintenance Manual

Parts Manual

Diagnosis Manual - TK 41017