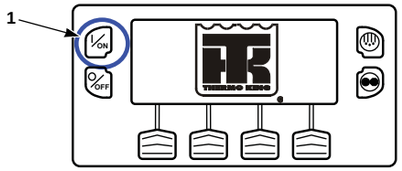
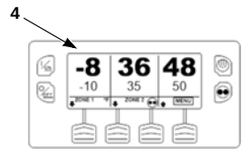
Simple to Start:





1. Press the ON Key.

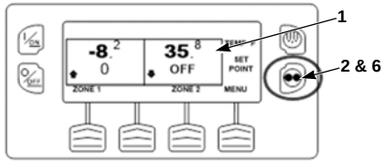
2. The THERMO KING Logo appears briefly.

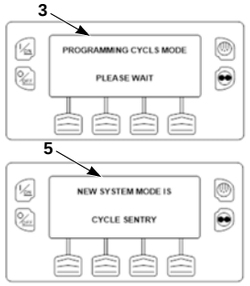
3. The startup screen appears while communications are established and the unit prepares for operation.

4. The Standard Display defaults to the “TemperatureWatch” screen after 2 1/2 minutes. (Three Zone shown.) The TemperatureWatch Display will remain on until any key is pressed or a check, prevent or shutdown alarm occurs and will show the return air temperature and setpoint for each zone.

NOTE: For more detailed information, see the Operation chapter in the appropriate unit operating manual.

Simple to Set:
CYCLE-SENTRY or Continuous Mode





1. Return to the Standard Display.

2. Press the CYCLE-SENTRY/ Continuous Key.

3. The “Programming Continuous Mode” or “Programming CYCLE-SENTRY Mode” screen briefly appears.

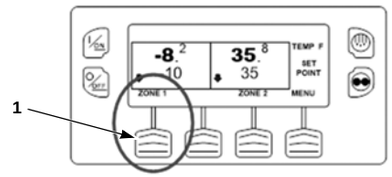
4. The “New System Mode is Continuous” screen or the “New System Mode CYCLE-SENTRY” screen briefly appears.

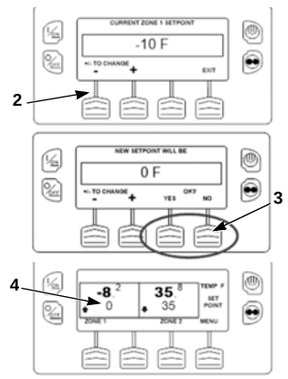
5. The Standard Display appears and the heading on top of screen reads the new mode.

6. Pressing the CYCLE-SENTRY/Continuous Key again will change the unit back to the previous mode.

NOTE: For more detailed information, see the Operation chapter in the appropriate unit operating manual.

Simple to Set:
Setpoint Temperature





1. Press any soft key to return to the Standard Display. Press the appropriate ZONE Key on the Standard Display.

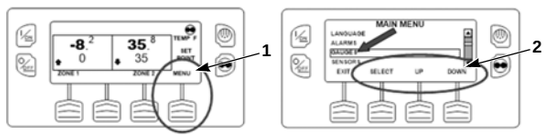
2. Press the + or - Keys to change the setpoint reading.

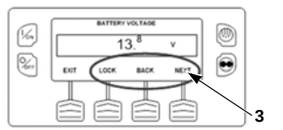
3. Press the YES or NO Key accordingly.

4. The Standard Display appears with setpoint changed to the new setpoint.

NOTE: For more detailed information, see the Operation chapter in the appropriate unit operating manual.

Simple to Check:
Gauges





1. Return to the Standard Display. Press the MENU Key.

2. Use UP and DOWN soft keys to scroll to the gauges option. Press the SELECT Key when gauges option is highlighted.

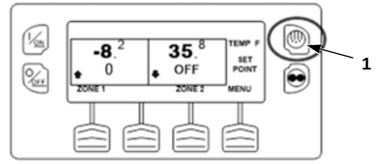
3. Press BACK or NEXT Keys to scroll through following gauges: Coolant Temperature, Coolant Level, Engine Oil Pressure, Engine Oil Level, Amps, Battery Voltage, Engine RPM, Fuel Level Sensor, Discharge Pressure, Suction Pressure, ETV Position, I/O (Input/Output State). If no keys are pressed within 30 seconds, the screen will return to the Standard Display.

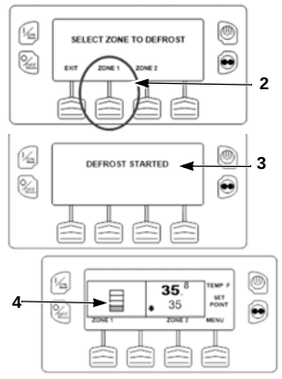
4. Press the LOCK Key to display any gauge screen for an indefinite period. Press the key again to unlock the screen.

5. Press the EXIT Key to return to the Standard Display.

NOTE: For more detailed information, see the Operation chapter in the appropriate unit operating manual.

Simple to Defrost:
Initiate Manual Defrost





1. In Standard Display, press the DEFROST Key.

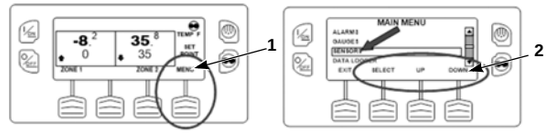
2. Select Zone to defrost.

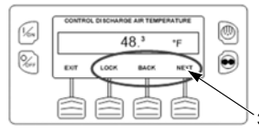
3. Display briefly shows [DEFROST], [PROGRAMMING DEFROST - PLEASE WAIT] and then [DEFROST STARTED].

4. Display shows the Defrost Display. The bar indicator shows approximate defrost time remaining.

NOTE: For more detailed information, see the Operation chapter in the appropriate unit operating manual.

Simple to Access:
Sensors





1. Return to the Standard Display. Press the MENU Key.

2. Use UP and DOWN soft keys to scroll to the sensors option. Press the SELECT Key when sensors option is highlighted.

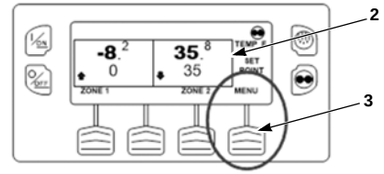
3. Press the BACK or NEXT Keys to scroll through the sensor screens for each Zone: Return Air Temperature, Discharge Air Temperature and Temperature Differential. Continue scrolling to see Ambient Air Temperature, Spare Sensors 1-3, Datalogger Temperature Sensors 1-6 and the Board Temperature Sensor. If no keys are pressed within 30 seconds, the screen will return to the Standard Display.

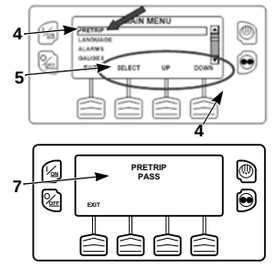
4. Press the LOCK Key to display any sensor screen for an indefinite period. Press the key again to unlock the screen.

5. Press the EXIT Key to return to the Standard Display.

NOTE: For more detailed information, see the Operation chapter in the appropriate unit operating manual.

Simple to Test:
Pretrip Test





1. Clear all alarm codes.
(See “Simple to Clear” on other side of this pocket card.)

2. Return to the Standard Display.

3. Press the MENU Key.

4. Press the UP or DOWN Key to choose the Pretrip Menu.

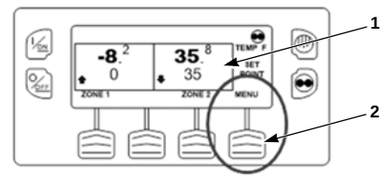
5. Press the SELECT Key to start a Pretrip Test.

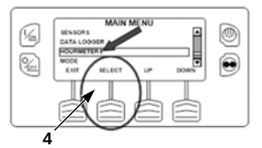
6. If the unit is not running, a Full Pretrip will be initiated. If the unit is running in either diesel or electric mode, a Running Pretrip will be performed.

7. When all tests are complete, the results are reported as PASS, CHECK or FAIL. If the results are CHECK or FAIL, the accompanying alarm codes will direct the technician to the cause of the problem.

NOTE: For more detailed information, see the Operation chapter in the appropriate unit operating manual.

Simple to Check:
Hourmeters





1. Return to the Standard Display screen.

2. Press the MENU Key.

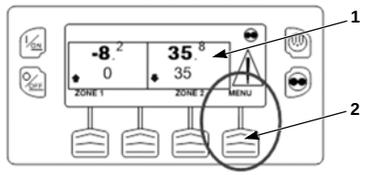
3. Use UP and DOWN soft keys to scroll to the Hourmeters option.

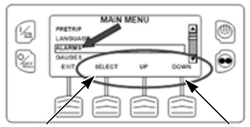
4. Press the SELECT Key when Hourmeters option is highlighted.

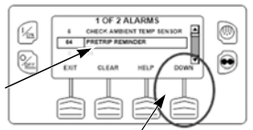
5. Press the NEXT and BACK Keys to view the Hourmeter Displays.

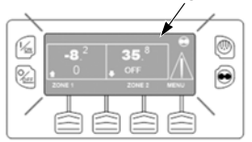
NOTE: For more detailed information, see the Operation chapter in the appropriate unit operating manual.

Simple to View:
Cause of Alarm









1. Return to the Standard Display Screen.

2. Press the MENU Key.

3. Press the UP or DOWN soft keys to scroll to the Alarm option.

4. Press the SELECT Key when Alarms Option is highlighted.

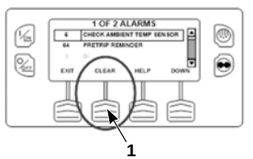
5. If alarms are present, the quantity of alarms and the most recent alarm code number will be shown.

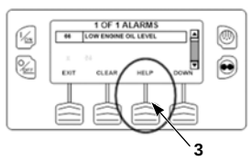
6. If necessary to view all alarms, scroll down using the DOWN Key.

7. If a serious condition occurs, the unit will be shut down to prevent damage to the unit or the load. If this occurs, the Alarm Icon will appear, the display and backlight will flash on and off.

NOTE: For more detailed information, see the Operation chapter in the appropriate unit operating manual.

Simple to Clear:
Clearing Alarm Codes





1.If the alarm situation has been resolved press the CLEAR Key to clear the alarm.

2. The display will briefly show CLEARING ALARMS – PLEASE WAIT. Then the Alarm Menu will reappear.

3. Press the HELP Key for additional information regarding the alarm shown on the display. Also see the complete Alarm Code list in the next column.

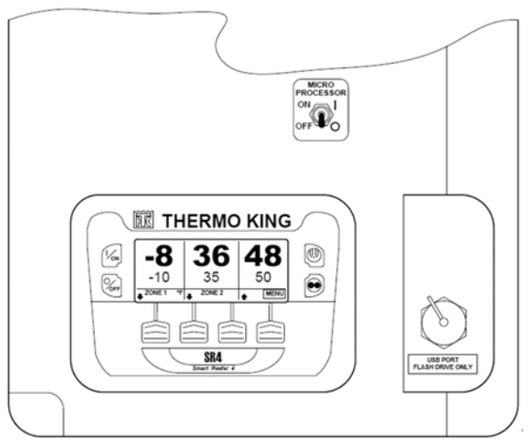
4. To return to the Alarms Menu press the EXIT Key. To return to the Standard display press the EXIT Key again.

NOTE: For more detailed information, see the Operation chapter in the appropriate unit operating manual.

Simple to Determine:
Cause of Alarm

0 No Alarms Exist
2 Check Evaporator Coil Sensor (Zone)
3 Check Return Air Sensor (Zone)
4 Check Discharge Air Sensor (Zone)
5 Check Ambient Air Sensor
6 Check Coolant Temp Sensor (Engine Only)
7 Check Engine RPM Sensor (Engine Only)
9 High Evaporator Temperature (Zone)
10 High Discharge Pressure
11 Unit Controlling Alternate Sensor (Zone)
12 Sensor Shutdown (Zone)
13 Sensor Calibration Check (Zone)
17 Engine Failed to Crank (Engine Only)
18 High Engine Coolant Temperature
19 Low Engine Oil Pressure
20 Engine Failed to Start
21 Cooling Cycle Check (Zone)
22 Heating Cycle Check (Zone)
23 Cooling Cycle Fault (Zone)
24 Heating Cycle Fault (Zone)
25 Alternator or Battery Charger Check
26 Check Refrigeration Capacity (Zone)
28 Pretrip Abort
29 Check Defrost Damper Circuit
30 Defrost Damper Stuck
31 Check Oil Pressure Switch
32 Refrigeration Capacity Low (Zone)
33 Check Engine RPM
35 Check Run Relay Circuit
36 Electric Motor Failed to Run
37 Check Engine Coolant Level
38 Electric Phase Reversed
39 Check Water Valve Circuit
40 Check High Speed Circuit
42 Unit Forced to Low Speed
44 Check Fuel System
45 Check Hot Gas Bypass Circuit
46 Check Air Flow
48 Check Belts or Clutch
49 Check Spare Sensor 1
50 Reset Clock
52 Check Heat Circuit
53 Check Liquid Line Solenoid or Economizer Valve
54 Test Mode Timeout
56 Check Host Evaporator Blower Low Speed
57 Check Host Evaporator Blower High Speed
61 Low Battery Voltage
62 Ammeter Out of Calibration
63 Engine Stopped
64 Pretrip Reminder
65 Abnormal Temperature Differential (Zone)
66 Low Engine Oil Level
67 Check Liquid Line Solenoid Circuit
68 Internal Controller Fault Code
70 Hourmeter Failure
74 Controller Reset to Defaults
79 Internal Data Logger Overflow
80 Check Comp Temp Sensor
82 High Comp Temp Shutdown
83 Low Engine Coolant Temperature
84 Restart Null
85 Forced Unit Operation
86 Check Discharge Pressure Sensor
87 Check Suction Pressure Sensor
89 Check Electronic Throttling Valve Circuit
90 Electric Overload
91 Check Electric Ready Input
92 Sensor Grades Not Set (Zone)
93 Low Compressor Suction Pressure
96 Low Fuel Level
96 Low Fuel Level
98 Check Fuel Level Sensor
99 High Compressor Pressure Ratio
105 Check Receiver Tank Pressure Solenoid Circuit
106 Check Purge Valve Circuit
107 Check Condenser Inlet Solenoid Circuit
108 Door Open Timeout (Zone)
110 Check Suction Line Solenoid Circuit
111 Unit Not Configured Correctly (Zone)
112 Check Remote Fans (Zone)
113 Check Electric Heat Circuit (Zone)
114 Multiple Alarms - Can Not Run
117 Auto Switch from Diesel to Electric
118 Auto Switch from Electric to Diesel
120 Check Alternator Excite Circuit
121 Check PWM Liquid Injection Circuit
122 Check Diesel/Electric Circuit
127 Setpoint Not Entered (Zone)
128 Engine Run Time Maintenance Reminder #1
129 Engine Run Time Maintenance Reminder #2
130 Electric Run Time Maintenance Reminder #1
131 Electric Run Time Maintenance Reminder #2
132 Total Unit Run Time Maintenance Reminder #1
133 Total Unit Run Time Maintenance Reminder #2
134 Controller Power On Hours
141 Auto-switch Diesel to Electric Disabled
143 Check Remote Zone Drain Hose Heater Output
144 Lost Expansion Module CAN Communication
145 Loss of Controller On Feedback Signal
146 Software Version Mismatch
148 Autoswitch Electric to Diesel Disabled
150 CargoWatch Sensor Out of Range Low (Zone)
151 CargoWatch Sensor Out of Range High (Zone)
152 CargoWatch Sensor Failed (Zone)
153 Expansion Module Flash Load Failure
157 OptiSet File Mismatch
158 Primary Software Failed to Load
159 Check Battery Condition
160 Lost Radio Expansion Board CAN Comm.
203 Check Display Return Air Sensor (Zone)
204 Check Display Discharge Air Sensor
233 REB Transitioning - Conservative to Full Null
234 Check Relative Humidity Sensor Circuit
251 REB Miss-configured
252 Check Auto Fresh Air Exchange Door Circuit
500 Check Host Evaporator Blower Low Speed
501 Check Host Evaporator Blower High Speed
505 Check Roadside Cond. Fan Motor Speed Circuit
506 Check Curbside Cond. Fan Motor Speed Circuit
507 Check Digital Scroll Output Circuit
508 Speed Request Communication Error
509 Engine Control Unit (ECU) Failed to Enable
510 Engine Control Unit (ECU) Run Signal Failed
511 Engine Wait to Start Time Delay Expired
512 High Compressor Suction Pressure
513 Low Compressor Suction Ratio
514 Low Compressor Discharge Pressure
515 Minimum ETV Discharge Superheat Temp
516 I/O Controller to Application Controller Com Failure
518 Generator Ground Fault
519 Battery Charger Input Voltage Out of Range
520 Battery Charger Output Fault
521 Battery Charger Overheat Shutdown
522 Check Battery Temperature Sensor
523 Unit Battery Exceeded High Temp. Limit
524 Generator Operational Limit V out to Frequency Ratio
525 Generator Frequency Range Fault
526 Generator Operational Limit Output Current
528 Failed J1939 CAN Communication Base Controller/Battery Charger
529 Check Fuel Pump Circuit
530 Low Pressure Differential
531 Check Economizer Pressure Sensor
538 Engine J1939 CAN Datalink Degraded
539 Engine J1939 CAN Datalink Failed
540 Illegal Engine Operating State
542 Battery Charger Fault - Unit Forced to Low Speed
543 Battery Charger Internal Short
544 Battery Charger External Short
545 Battery Charger Output Voltage Exceeded Limit
546 Battery Charger Operating Bulk Voltage Out of Range
547 AC Bus Phase Loss
548 Battery Charger Temp Below Op. Range
549 Battery Charger AC Input Overvoltage
550 Battery Charger Internal Overvoltage Fault
551 Battery Charger Internal temp Sensor Fault
552 Battery Charger Charging - Low Battery
553 Battery Charger Operating Derated Due to High Temp
599 Engine Service Tool Connected
800 Crankshaft Position Sensor Error
801 Camshaft Position Sensor Error
804 Engine Coolant Temperature Sensor Error
807 Fuel Temperature Sensor Error
808 Rail Pressure Sensor Error
809 Intake Air Pressure Sensor Error
810 Atmospheric Pressure Sensor Error
811 Glow Plug Circuit Error
813 General Injector Error
815 Fuel Pressure Regulator Error
818 EGR Valve Actuator Error
819 ECU Power Relay Error
820 Main ECU Relay Error
825 T1 Air Intake Temperature Sensor Error
826 T2 Air Intake Temperature Sensor Error
827 EGR Valve Position Sensor Error
828 Lambda System Error
829 Engine Communication Error
830 Air Flow Meter Error
832 Engine Sensor Power Supply Error
833 High Pressure Pump Fuel Metering Unit Error
834 Water in Fuel Sensor Error
836 Major ECU Failures
838 Intake Error System Error
839 Engine Speed Error
840 Fuel Injection Energizing Error
841 High Pressure Pump Wear
842 Engine Running in Safe Mode - Low Speed
843 Fuel Injection System Error
844 Failed to Crank
845 Starter Relay Error
846 T50 Switch Error
847 Variant Coding Error
853 Engine Overspeed (No DTC)
854 ECU Self Commanded Shutdown
899 Unknown ECU Fault

SR-4 MT Smart Reefer™ 4 Microprocessor



Driver Guide to Simple Operation

THERMO KING

TK 55870-2-PC (Rev. 0, 01/14)