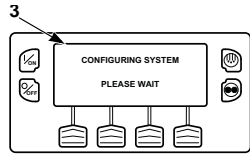
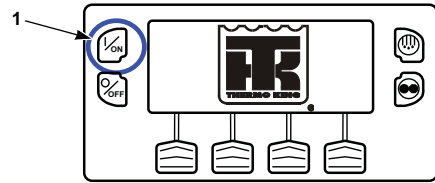


## Simple to Start:

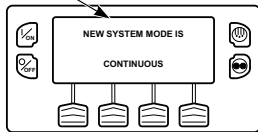
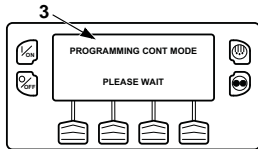
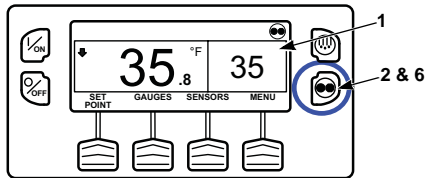


1. Press the ON Key.
2. The THERMO KING Logo appears briefly.
3. The startup screen appears while communications are established and the unit prepares for operation.

4. The Standard Display defaults to the "TemperatureWatch" screen after 2-1/2 minutes. The TemperatureWatch Display will remain on until any key is pressed or a check, prevent or shutdown alarm occurs.

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

## Simple to Set: CYCLE-SENTRY or Continuous Mode

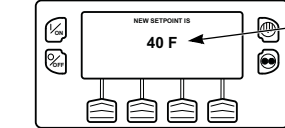
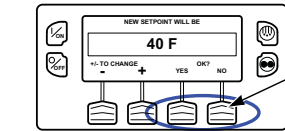
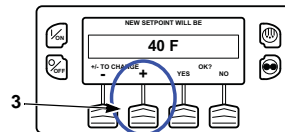
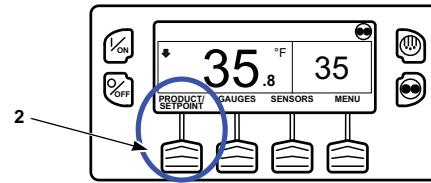


1. Return to the Standard Display.
2. Press the CYCLE-SENTRY/Continuous Key.
3. The "Programming Continuous Mode" or "Programming CYCLE-SENTRY Mode" screen briefly appears.
4. The "New System Mode is Continuous" screen or the "New System Mode CYCLE-SENTRY" screen briefly appears.
5. The Standard Display 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.

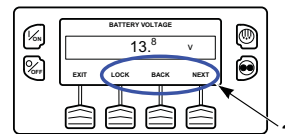
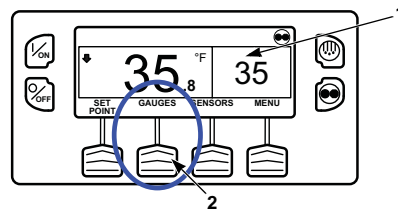
## Simple to Set: Setpoint Temperature



1. Press any key to return to the Standard Display.
2. Press the SETPOINT Key on the Standard Display.
3. Press the + or - Keys to change the setpoint reading.
4. Press the YES or NO Key accordingly.
5. 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



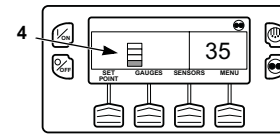
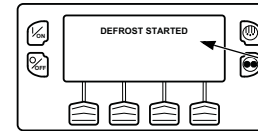
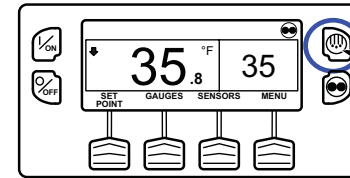
1. Return to the Standard Display. Press the MENU Key.
2. Use UP and DOWN soft keys to scroll to the gauges option. Press the SELECT Key when gauges option is highlighted.
3. Press BACK or NEXT Keys to scroll through following gauges: Coolant Temperature, Coolant Level, Engine Oil Pressure, Engine Oil Level, Amps, Battery Voltage, Accessory Battery Voltage, Engine RPM, Fuel Level Sensor, Discharge Pressure, Suction Pressure, ETV Position, Fresh Air Exchange, I/O. 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.

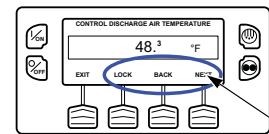
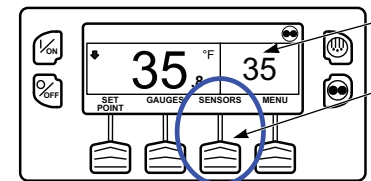
## Simple to Defrost: Initiate Manual Defrost



1. Return to the Standard Display.
2. Press the DEFROST Key.
3. The display will show "Programming Defrost Please Wait."
4. The display then shows the Defrost Display. The bar indicator will fill in showing the time remaining to complete the Defrost cycle. When the Defrost cycle is complete the display returns to Standard Display screen.

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

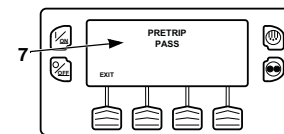
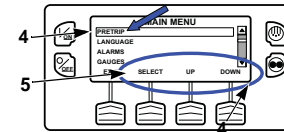
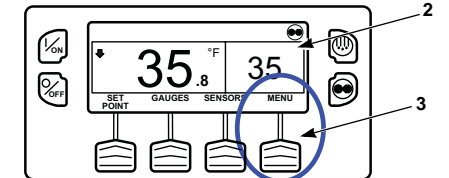
## Simple to Access: Sensors



1. Return to the Standard Display.
2. Press the SENSORS Key.
3. Press the BACK or NEXT Keys to scroll through the following sensor screens: Control Return Air Temperature, Display Return Air Temperature, Temperature Differential, Evaporator Coil Temperature, Ambient Air Temperature, Spare 1 Temperature, 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 Check: Pretrip Test

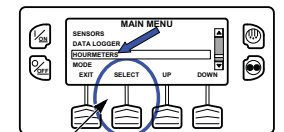
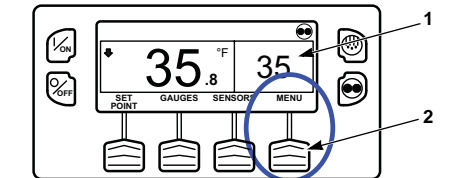


1. Clear all alarm codes.
2. Return to the Standard Display.
3. Press the MENU Key.
4. Press the UP or DOWN Key as to choose the Pretrip Menu.
5. Press the SELECT Key to start a Pretrip Test.
6. If the unit is not running, a Full Pretrip will be initiated. If the unit is running in either diesel or electric 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

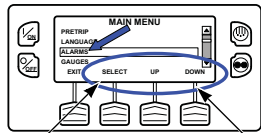
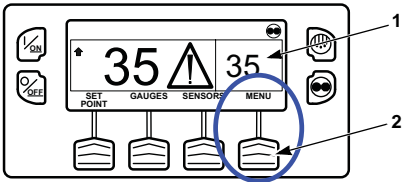


1. Return to the Standard Display screen.
2. Press the MENU Key.
3. Scroll through Main Menu by repeatedly pressing the UP and DOWN Keys until the hourmeters Main Menu Screen appears.
4. Press the SELECT Key to enter the Hourmeters Menu.
5. Press the NEXT and BACK Keys to view the Hourmeter Displays.

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

# Simple to View:

## Cause of Alarm

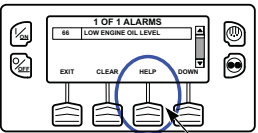
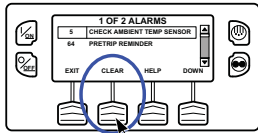


1. Return to the Standard Display Screen.
2. Press the MENU Key.
3. Press the UP or DOWN Key until the Alarm Menu appears.
4. Press the SELECT Key. The Alarm Display will appear.
5. If alarms are present, the quantity of alarms and the most recent alarm code number will be shown.
6. If necessary to view 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 View:

## 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 Main 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 Evaporator Coil Sensor
- 3 Control Return Air Sensor
- 4 Control Discharge Air Sensor
- 5 Ambient Air Sensor
- 6 Coolant Temp Sensor
- 7 Engine RPM Sensor
- 9 High Evaporator Temperature
- 10 High Discharge Pressure
- 11 Unit Controlling on Alternate Sensor
- 12 Sensor or Digital Input Shutdown
- 13 Sensor Calibration Check
- 17 Engine Failed to Crank
- 18 High Engine Coolant 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
- 28 Pretrip Abort
- 29 Defrost Damper Circuit
- 30 Defrost Damper Stuck
- 31 Oil Pressure Switch
- 32 Refrigeration Capacity Low
- 33 Check Engine RPM
- 35 Run Relay Circuit
- 36 Electric Motor Failed to Run
- 37 Engine Coolant Level
- 38 Electric Phase Reversed
- 39 Water Valve Circuit
- 40 High Speed Circuit
- 41 Check Engine Coolant Temperature
- 42 Unit Forced to Low Speed
- 43 Unit Forced to Low Speed Modulation
- 44 Check Fuel System
- 45 Hot Gas Bypass or Hot Gas Bypass Circuit
- 46 Check Air Flow
- 48 Check Belts/Clutch
- 50 Reset Clock
- 52 Heat Circuit
- 54 Test Mode Time-out
- 56 Host Evap Fan Low Speed
- 57 Host Evap Fan High Speed
- 61 Low Battery Voltage
- 62 Ammeter Out of Calibration
- 63 Engine Stopped
- 64 Pretrip Reminder
- 65 Abnormal Temperature Differential
- 66 Low Engine Oil Level
- 67 Liquid Line Solenoid Circuit
- 68 Internal Controller Fault
- 70 Hourmeter Failure
- 74 Controller Reset to Defaults
- 79 Internal Data Logger Overflow
- 80 Compressor Temp Sensor
- 81 High Compressor Temp
- 82 High Compressor Temperature Shutdown
- 83 Low Engine Coolant Temperature
- 84 Restart Null
- 85 Forced Unit Operation
- 86 Discharge Pressure Sensor
- 87 Suction Pressure Sensor
- 89 Check Electronic Throttling Valve Circuit
- 90 Electric Overload
- 91 Electric Ready Input
- 92 Sensor Grades Not Set
- 93 Low Compressor Suction Pressure
- 96 Low Fuel Level
- 98 Fuel Level Sensor
- 99 High Compressor Pressure Ratio
- 105 Receiver Tank Pressure Solenoid Circuit
- 106 Purge Valve Circuit
- 107 Condenser Inlet Solenoid Circuit
- 108 Door Open Time-out
- 110 Suction Line Solenoid Circuit
- 111 Unit Not Configured Correctly
- 113 Electric Heat Circuit
- 114 Multiple Alarms - Cannot Run
- 117 Auto switch from Diesel to Electric
- 118 Auto switch from Electric to Diesel
- 120 Alternator Exciter Circuit
- 121 Liquid Injection Circuit
- 122 Diesel/Electric Relay Circuit
- 127 Setpoint Not Entered
- 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 Autoswitch Diesel to Electric Disabled
- 143 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
- 149 Alarm Not Identified
- 150 Out of Range Low
- 151 Out of Range High
- 153 Expansion Module Flash Load Failure
- 157 OptiSet Plus Mismatch
- 158 Primary Software Failed to Load
- 203 Display Return Air Sensor
- 204 Display Discharge Air Sensor
- 252 Check Fresh Air Exchange Circuit
- 500 Host Evaporator Fan Low Speed
- 501 Host Evaporator Fan High Speed
- 502 Host Evaporator Fan RPM Sensor
- 503 Host Condenser Fan 1 RPM Sensor
- 504 Host Condenser Fan 2 RPM Sensor
- 505 Roadside Condenser Fan Motor Speed Circuit
- 506 Curbside Condenser Fan Motor Speed Circuit
- 507 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 Minimum ETV Discharge Superheat Temperature
- 515 Minimum ETV Discharge Superheat Temperature
- 516 I/O Controller to Application Controller Communication Failure
- 517 Check for Water in Fuel System
- 518 Generator Ground Fault
- 519 Check Battery Charger Input Power
- 520 Check Battery Charger Output Power
- 521 Battery Charger External/Environmental Fault
- 522 Battery Temperature Sensor Alarm
- 523 Battery Temperature Sensor Alarm
- 524 Generator Operational Limit V out to Frequency Ratio
- 525 Generator Frequency Range Fault
- 526 Generator Operational Limit Output Current Reserved
- 527 Reserved
- 528 Controller Not Receiving Messages From 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
- 599 Engine Service Tool Connected
- 600 Check Crankshaft Speed Sensor
- 601 Check Camshaft Speed Sensor
- 602 Check Intake Throttle Position Sensor
- 603 Check Exhaust Pressure Sensor
- 604 Check Coolant Temperature Sensor
- 605 Check Fresh Air Temperature Sensor
- 606 Reserved
- 607 Check Fuel Temperature Sensor
- 608 Check Rail Pressure Sensor
- 609 Check Intake Pressure Sensor
- 610 Check Atmospheric Pressure Sensor
- 611 Check Glow Plug Circuit
- 612 Check Intake Throttle Circuit
- 613 Check Injector(s)
- 614 Check High Pressure Fuel Pump
- 615 Rail Pressure Fault
- 616 Engine Overspeed
- 617 Internal ECU Fault
- 618 Check EGR System
- 619 ECU Main Relay Fault
- 620 Reserved
- 621 Reserved
- 622 Reserved
- 623 TRU CAN Message Timeout
- 624 Check Intake Air Temperature Sensor
- 625 Check Intake Air Temperature Sensor
- 626 Check Exhaust Temperature Sensor
- 699 Unknown ECU Fault

# SR-4 Smart Reefer™ 4 Microprocessor



# Driver Guide to Simple Operation

