Simple to Start:

Simple to Set: **Setpoint Temperature**

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40 F

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1. Press the ON Key. 2. The THERMO KING Logo appears

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.



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.



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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 0 accordingly. ۲

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

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LOCK BACK



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1. Return to the Standard Display. Press the MENUKev. 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**

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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

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1. Return to the Standard Display.

2. Press the SENSORS Key

3. Press the BACK or NEXT Kevs to scroll through the following sensor screens: Control Return Air

Temperature, Display Return Air Temperature, Control Discharge Air Temperature, Display Discharge 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.

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

Simple to Check: **Pretrip Test**





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

4. Press the UP or DOWN Key as to

2. Return to the Standard Display.

1. Clear all alarm codes.

3. Press the MENU Key.

choose the Pretrip Menu.

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





screen. 2. Press the MENU Kev.

1. Return to the Standard Display

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



Screen.

1. Return to the Standard Display

3. Press the UP or DOWN Key until

5. If alarms are present, the quantity

of alarms and the most recent alarm

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

appear, the display and backlight

1.If the alarm situation has been

2. The display will briefly show

CLEARING ALARMS - PLEASE

WAIT. Then the Alarm Menu will

additional information regarding the

see the complete Alarm Code list in

4. To return to the Main Menu press

the EXIT Key. To return to the

alarm shown on the display. Also

3. Press the HELP Key for

resolved press the CLEAR Key to

this occurs, the Alarm Icon will

will flash on and off.

clear the alarm.

the next column.

reappear.

2. Press the MENU Key.

the Alarm Menu appears.

4. Press the SELECT Key.

code number will be shown.

The Alarm Display will appear.



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

Simple to View: **Clearing Alarm Codes**





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 Control Discharge Air Sensor 4
- 5 Ambient Air Sensor
- 6 Coolant Temp Sensor
- Engine RPM Sensor
- High Evaporator Temperature 9 10 High Discharge Pressure
- Unit Controlling on Alternate Sensor 11
- Sensor or Digital Input Shutdown 12
- Sensor Calibration Check 13 17 Engine Failed to Crank
- 18 High Engine Coolant Temperature
 - Low Engine Oil Pressure
 - Engine Failed to Start
 - Cooling Cycle Check Heating Cycle Check
 - Cooling Cycle Fault

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- Heating Cycle Fault
- 25 Alternator Check 26
 - Refrigeration Capacity Pretrip Abort
- 28 29 Defrost Damper Circuit
- 30 Defrost Damper Stuck
- 31 Oil Pressure Switch
- 32 Refrigeration Capacity Low 33 Check Engine RPM
- 35 Run Relav Circuit
- Electric Motor Failed to Run 36
- 37 Engine Coolant Level
- 38 Electric Phase Reversed 39 Water Valve Circuit
- 40
- Check Engine Coolant Temperature 41
- 42 Unit Forced to Low Speed
- Unit Forced to Low Speed Modulation 43
- 44 45 Hot Gas Bypass or Hot Gas Bypass Circuit
- 46 Check Air Flow
- 48
- 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
- Internal Data Logger Overflow 79
- 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
- Check Electronic Throttling Valve Circuit 89

522 Battery Temperature Sensor Alarm

523 Battery Temperature Sensor Alarm

525 Generator Frequency Range Fault

Generator Operational Limit Output Current

SR-4

Smart Reefer[™] 4

Microprocessor

THERMO KING

SR4

Driver Guide to

Simple

Operation

(IR)

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TK 55771-2-PC (Rev. 0, 01/14)

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528 Controller Not Receiving Messages From

Check Economizer Pressure Sensor

538 Engine J1939 CAN Datalink Degraded

539 Engine J1939 CAN Datalink Failed

Check Camshaft Speed Sensor

Check Exhaust Pressure Sensor

Check Fuel Temperature Sensor

Check Rail Pressure Sensor

Check Glow Plug Circuit

614 Check High Pressure Fuel Pump

612 Check Intake Throttle Circuit

Check Intake Pressure Sensor

610 Check Atmospheric Pressure Sensor

Check Coolant Temperature Sensor

Check Fresh Air Temperature Sensor

Check Intake Throttle Position Sensor

599 Engine Service Tool Connected

600 Check Crankshaft Speed Sensor

Frequency Ratio

Battery Charger

529 Check Fuel Pump Circuit

530 Low Pressure Differential

Reserved

Reserved

613 Check Injector(s)

615 Rail Pressure Fault

616 Engine Overspeed

617 Internal ECU Fault

618 Check EGR System

620 Reserved

621 Reserved

622 Reserved

626

619 ECU Main Relay Fault

699 Unknown ECU Fault

623 TRU CAN Message Timeout

624 Check Intake Air Temperature Sensor

625 Check Intake Air Temperature Sensor

Check Exhaust Temperature Sensor

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524 Generator Operational Limit V out to

- Electric Overload 90
- 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

153 Expansion Module Flash Load Failure

158 Primary Software Failed to Load

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

508 Speed Request Communication Error

512 High Compressor Suction Pressure

514 Minimum ETV Discharge Superheat

515 Minimum ETV Discharge Superheat

516 I/O Controller to Application Controller

513 Low Compressor Suction Ratio

Communication Failure

518 Generator Ground Fault

517 Check for Water in Fuel System

519 Check Battery Charger Input Power

520 Check Battery Charger Output Power

521 Battery Charger External/Environmental Fault

Temperature

Temperature

505 Roadside Condenser Fan Motor Speed Circuit

506 Curbside Condenser Fan Motor Speed Circuit

509 Engine Control Unit (ECU) Failed to Enable

511 Engine Wait to Start Time Delay Expired

510 Engine Control Unit (ECU) Run Signal Failed

- 144 Lost Expansion Module CAN Communication 145 Loss of Controller "On" Feedback Signal
- 146 Software Version Mismatch 148 Autoswitch Electric to Diesel Disabled

157 OptiSet Plus Mismatch

203 Display Return Air Sensor

204 Display Discharge Air Sensor

507 Digital Scroll Output Circuit

- 149 Alarm Not Identified 150 Out of Range Low
- 151 Out of Range High
- High Speed Circuit

- Check Fuel System
- Check Belts/Clutch