Installation Manual

Trailer Edition
Precedent™ S-600 RR and S-700 RR
Single Temperature Systems
For Domestic Refrigerated Containers (DRC),
and Rail Box Car (RBC) Applications
TK 55902-2-IM (Rev. 5, 02/15)
Release History

Released  (06/14)
Rev. 1   (07/14) Pages 42-43: Added remote door lock information.
Rev. 2   (09/14) Pages 5 and 52: Text was changed to better clarify which fuel fittings can and cannot be used, page 11: corrected dimension (2x17-3.0 mm, 67.05 in.) to show the distance from upper mounting bolt to lower mounting bolt.
Rev. 3   (10/14) Page 52: Changed “Do not use Teflon tape on the fuel fittings in a Precedent unit” to “Do not use PTFE thread sealing tape on the fuel fittings in a Precedent unit”.
Rev. 4   (01/15) Pages 5 and 52: Added important note about fuel tank air vent.
Rev. 5   (02/15) Pages 5, 12 and 13: Changed information regarding unit mounting bolt lengths.
Introduction

This manual was written to assist with the installation of the **Thermo King Precedent S-600 RR and S-700 RR Single Temperature Rail Ready** refrigeration systems onto a Domestic Refrigerated Container (DRC) and Rail Box Car (RBC) that are specifically designed and built for refrigerated applications. For Trailer on Flat Car (TOFC) applications refer to Precedent installation manuals TK 55745 or TK 55496.

Due to its complexity, you should not attempt this installation unless you:

- Are an experienced mechanic
- Can safely lift 34 kilos (75 lbs.)
- Are certified or trained in the repair and maintenance of diesel powered refrigeration systems
- Have a basic understanding of electricity and electrical wiring
- Have the necessary tools and equipment to complete the installation.

This manual is published for informational purposes only. Thermo King makes no representations warranties express or implied, with respect to the information recommendations and descriptions contained herein. Information provided should not be regarded as all-inclusive or covering all contingencies. If further information is required, Thermo King Corporation Service Department should be consulted.

**Thermo King’s warranty shall not apply to any equipment which has been “so installed, maintained, repaired or altered as, in the manufacturer’s judgment, to affect its integrity.”**

*Manufacturer shall have no liability to any person or entity for any personal injury, property damage or any other direct, indirect, special, or consequential damages whatsoever, arising out of the use of this manual or any information, recommendations or descriptions contained herein.*
Installation Summary for Precedent S-600 RR and S-700 RR Systems

Precedent units install the same as SB-230 RR and SB-330 RR units with the following exceptions:

1. Precedent unit is approximately 6.00 inches wider than a SB which may interfere with DRC or RBC mounted fresh air exchange doors. See “Evaporator Opening Requirements” on page 10.

2. Evaporator opening and mounting bolt locations on front wall of DRC or RBC did not change. However, two particular mounting bolts should be trimmed to 2.25 to 2.50 inches in length from the surface of the trailer wall. All other bolts should be trimmed to 2.25 to 2.75 inches in length from the surface of the trailer wall. See “Mounting Hardware Requirements” on page 12.

3. A new two point lifting bar is required to safely lift unit during installation. See “Lifting Bar Dimensions” on page 22.

4. The supplied heat shield must be installed onto front wall of DRC or rail box car prior to unit installation. See “Installing the Heat Shield” on page 32.

5. DRC applications - Requires an exhaust extension be installed. See “Installing the Exhaust Pipe Extension (DRC Only)” on page 54.

6. IMPORTANT: Using the wrong fuel system fittings may void your engine warranty! All Thermo King supplied fuel line fittings (except fuel line connector) are nickel plated brass for Precedent units. DO NOT use fuel fittings (main body) made of brass, copper, zinc, zinc plated or galvanized steel where it would make direct contact with flowing diesel fuel. Diesel fuel flowing through these types of fittings allows those metals to leach into the fuel forming deposits on the injector tips which fouls them prematurely.

   Fuel fitting nuts, compression sleeves, and fuel line connectors made of brass are acceptable because diesel fuel does not flow across their surfaces.

   • DRC applications - 85, 120 or 156 gallon fuel tanks with the correct fuel fittings designed specifically for DRC applications are available from Thermo King.

   • RBC applications - Installer supplied fuel tank must have nickel plated brass fittings including the drain plug.

   • IMPORTANT: The factory installed fuel tank air vent must be in place and functional for the Thermo King unit’s fuel system to operate correctly and for the fuel tank to remain in compliance with Federal Motor Carrier Safety Administration specifications (title 49, paragraph 393.67). A plugged or restricted fuel tank air vent can result in premature damage to the fuel pump and could also cause severe damage to the fuel tank. NEVER remove or install any other component in place of the fuel tank air vent.

7. Ultrasonic Fuel Level Sensor harness supplied needs to be attached to wires provided inside control box and to sensor at tank using supplied butt splice connectors and heat shrink. Six connections total. See “Installing the UFLS Harness” on page 40.

8. Battery installation requires removal of roadside door and a bracket to access battery tray and cables. See “Installing the Battery” on page 56.

9. Bottom panel and two top covers need to be installed with supplied hardware. Two holes will need to be drilled in to the bottom pan and the supplied grommets installed for the fuel lines. See “Installing the Top Covers and Bottom Pan” on page 50.

10. It may take a few attempts to start a newly installed unit for the first time as the fuel pump primes itself, fills the fuel lines and filter, and automatically bleeds air from the system. The fuel pump can also be primed separately by using the SR-4 controller’s Interface Board Test Mode - Run Relay Function. This function operates only the fuel pump and primes the fuel system without cranking the engine. See “Priming the Fuel Pump and Programming the Controller” on page 60.
Safety Precautions

The ⚠️ symbol appears next to a point that is particularly important:

**DANGER:** Addresses a circumstance that, if encountered, will lead to death or serious injury

**WARNING:** Addresses a circumstance that, if encountered, might lead to death or serious injury.

**CAUTION:** Addresses a circumstance that, if encountered, may cause damage to equipment or minor injury.

**DANGER:** High voltage is present whenever the unit is operating on either diesel or electric standby power. Take precautions when servicing the unit as this high voltage can cause death or serious injury.

**DANGER:** Never operate the unit with the discharge valve closed because it could cause the compressor to explode, causing death or serious injury.

**DANGER:** Never apply heat to a sealed refrigeration system or container because it could explode, causing death or serious injury.

**DANGER:** Fluorocarbon refrigerants, in the presence of an open flame or electrical short, produce toxic gases that are severe respiratory irritants capable of causing death.

**DANGER:** Be careful when working with a refrigerant or refrigeration system in any enclosed or confined area with a limited air supply (i.e., a trailer, container or the hold of a ship). Refrigerant tends to displace air and can cause oxygen depletion which may result in death by suffocation.

**WARNING:** Always wear goggles or safety glasses. Refrigerant liquid, refrigeration oil, and battery acid can permanently damage the eyes (see First Aid under Refrigeration Oil).

**WARNING:** Keep your hands away from fans and belts when the unit is running. This should also be considered when opening and closing the compressor service valves.

**WARNING:** Make sure all mounting bolts are tight and are of correct length for their particular application.

**WARNING:** Never drill holes in the unit unless absolutely necessary. Holes drilled into the unit may weaken structural components. Holes drilled into electrical wiring can cause fire or explosion.

**WARNING:** When using ladders to install or service refrigeration systems, always observe the ladder manufacturer’s safety labels and warnings. A work platform is the recommended method for installations.
Safety Precautions (continued)

Battery Installation and Cable Routing

**WARNING:** Improperly installed battery could result in a fire or explosion. A Thermo King approved battery must be installed and properly secured to the battery tray.

**WARNING:** Improperly installed battery cables could result in fire or explosion. Battery cables must be installed, routed and secured properly to prevent them from rubbing, chaffing or making contact with hot, sharp or rotating components.

**WARNING:** Do not attach fuel lines or any additional wiring harnesses to the battery cables as this could cause an electrical fire.

**CAUTION:** Do not connect other manufacturer's equipment or accessories to the Thermo King unit. This could result in severe damage to equipment and void the warranty.

**CAUTION:** Set all unit electrical controls to the OFF position before connecting battery cables to the battery to prevent unit from starting unexpectedly and causing personal injury.

**CAUTION:** Always wear protective clothing, gloves and eye wear when handling and installing batteries. Battery acid can cause serious burns when exposed to eyes or skin. If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters your eye, immediately flood it with running cold water for at least twenty minutes and get medical attention immediately.

**CAUTION:** Always cover battery terminals to prevent them from making contact with metal components during battery installation. Battery terminals grounding against metal could cause the battery to explode.

Refrigerant

**WARNING:** Although fluorocarbon refrigerants are classified as safe refrigerants, certain precautions must be observed when handling them or servicing a unit in which they are used. When released to the atmosphere in the liquid state, fluorocarbon refrigerants evaporate rapidly, freezing anything they contact.

First Aid

**FROST BITE:** In the event of frost bite, the objectives of First Aid are to protect the frozen area from further injury, to warm the affected area rapidly and to maintain respiration.

**EYES:** For contact with liquid, immediately flush eyes with large amounts of water and get prompt medical attention.

**SKIN:** Flush area with large amounts of lukewarm water. Do not apply heat. Remove contaminated clothing and shoes. Wrap burns with dry, sterile, bulky dressing to protect from infection/injury. Get medical attention. Wash contaminated clothing before reuse.

**INHALATION:** Move victim to fresh air and use CPR or mouth-to-mouth ventilation, if necessary. Stay with victim until arrival of emergency medical personnel.

Refrigeration Oil

**WARNING:** Avoid refrigeration oil contact with the eyes. Avoid prolonged or repeated contact of refrigeration oil with skin or clothing. Wash thoroughly after handling refrigeration oil to prevent irritation.

First Aid

**NOTE:** In case of eye contact, immediately flush with plenty of water for at least 15 minutes. CALL A PHYSICIAN. Wash skin with soap and water.
DRC or RBC Requirements

Approximate Weight of Precedent transport temperature control units:

S-600 and S-700 = 842 kg (1857 lbs.)

Front Wall Requirements

DANGER: The front wall of the DRC or RBC must be structurally strong enough to support the weight of the refrigeration unit!

Evaporator Opening Requirements

IMPORTANT: The location of the evaporator opening in the front wall of the DRC or RBC is critical to the proper installation and operation of the Thermo King unit. See “Evaporator Opening Requirements” on page 10.

Unit Mounting Hardware

DANGER: The use of mounting hardware other than specified for installing the refrigeration unit could result in severe damage to equipment, void the warranty or cause personal injury or death!

IMPORTANT: The location of the unit mounting bolts in the front wall of the DRC or RBC is critical for proper unit installation. See “Mounting Hardware Requirements” on page 12.

Unit Dimensions

IMPORTANT: Adequate clearance must be provided to allow for routine service and maintenance of the Thermo King unit. See “Unit Dimensions” on page 14.

Fuel Tank Mounting

DANGER: An improperly installed fuel tank could lead to serious injury or death! Consult your DRC or RBC manufacturer for specific details on proper fuel tank installation and recommendations.

King Pin Dimensions

CAUTION: VERIFY THIS DIMENSION BEFORE INSTALLING UNIT! See “Swing Radius and King Pin Requirements” on page 9.

Swing Radius Clearance

CAUTION: VERIFY THIS DIMENSION BEFORE INSTALLING UNIT! See “Swing Radius and King Pin Requirements” on page 9.
Swing Radius and King Pin Requirements

- R 1850.4 mm (72.85 in.)
- R 1704.3 mm (67.10 in.)
- R 1555.8 mm (61.25 in.)
- R 1429.3 mm (56.27 in.)
- R 1306.3 mm (51.43 in.)

Swing Radius

King Pin Location

C/L

- A 609.6 mm (24.0 in.)
- B 762.0 mm (30.0 in.)
- C 914.4 mm (36.0 in.)
- D 1066.8 mm (42.0 in.)
- E 1219.2 mm (48.0 in.)
Evaporator Opening Requirements

Evaporator Opening

⚠️ **DANGER:** The front wall of the DRC or RBC must be structurally strong enough to support the weight of the refrigeration unit!

**IMPORTANT:** The location of the unit mounting bolts and evaporator opening in the front wall is critical.

**VERIFY ALL DIMENSIONS BEFORE INSTALLING UNIT!**

**NOTE:** It may be necessary to relocate the DRC or RBC’s front corner clearance lights to the corner radius of the DRC or RBC to prevent damage.

1. The evaporator opening must be square. The diagonal measurements must be ±3.0 mm (0.12 in.)

2. The gasket surface around the opening must be at least 76.2 mm (3.00 in.) wide, be flat ±3.2 mm (0.12 in.) and free of rivets, seams or bolt heads.

**NOTE:** The Precedent unit is 152.4 mm (6.00 in.) wider than the SB. Verify adequate clearance is available for DRC or RBC fresh air exchange doors if applicable. Thermo King fresh air exchange option 070026 is also available
**Evaporator Opening Requirements**

**Evaporator Opening Requirements**
*Front View*

- **203.2 mm (8.00 in.)** Max
- **82.6 mm (3.25 in.)** Min
- **1168.4 mm (46.00 in.)**
- **848.4 mm (33.40 in.)**
- **1696.7 mm (66.50 in.)**

**NOTE:** Corners of Evaporator opening MUST be Square. The diagonal measurement must be within 3.2 mm (0.12 in.).

**NOTE:** Gasket Surface must be free of rivets, seams, & bolt heads.

**Unit Mounting Bolt Locations**
*Front View*

- **3x 889.0 mm (35.0 in.)**
- **848.4 mm (33.40 in.)**
- **36.1 mm (1.50 in.)**
- **1244.5 mm (49.0 in.)**
- **101.6 mm (4.00 in.)**
- **3x 1778.0 mm (70.0 in.)**
- **2x 116.8 mm (4.60 in.)**
- **2x 1010.9 mm (39.80 in.)**
- **2x 1703.0 mm (67.05 in.)**
Mounting Hardware Requirements

Mounting Bolts

⚠️ **DANGER:** Eight mounting bolts must be installed to properly secure the unit to the DRC or RBC front wall! Failure to do so could result in severe damage to equipment, void the warranty or cause personal injury or death!

**NOTE:** The location of the unit mounting bolts in the DRC or RBC front wall is critical to proper unit installation.

All mounting bolts must be square with the front wall and securely fastened to the DRC or RBC wall in such a manner to allow the mounting nuts be torqued to 82 N•m (60 ft. lbs.) from outside the DRC or RBC.

Refer to the illustration on page 13 regarding the following mounting bolt details:

- **Surface of all mounting bolts are to be flat within 2.50 mm (0.10 in.).**
- **Six** unit mounting bolts should be trimmed to extend a **minimum** 57.2 mm (2.25 in.) and a **maximum** of 69.85 mm (2.75 in.) beyond the surface of the front wall.
- **Two** unit mounting bolts should be trimmed to extend a **minimum** 57.2 mm (2.25 in.) and a **maximum** of 63.5 mm (2.50 in.) beyond the surface of the front wall.

Mounting Bolt Specifications

⚠️ **DANGER:** The use of mounting bolts other than those specified could result in severe damage to equipment, void the warranty or cause personal injury or death!

Use 1/2 in.-13 UNC - 28 Rolled thread grade 5, medium carbon steel bolts and locking nuts. All hardware must be zinc plated with dichromate finish.
Mounting Hardware Requirements

These **six** unit mounting bolts should be trimmed to extend a **minimum** 57.2 mm (2.25 in.) and a **maximum** of 69.8 mm (2.75 in.) beyond the surface of the front wall.

These **two** unit mounting bolts should be trimmed to extend a **minimum** 57.2 mm (2.25 in.) and a **maximum** of 63.5 mm (2.50 in.) beyond the surface of the front wall.
Unit Dimensions

FRONT VIEW

2120.6 mm (83.49 in.)

2073.8 mm (81.65 in.)

REAR VIEW

1660.0 mm (65.3 in.)

830.0 mm (32.7 in.)

628.0 mm (24.72 in.)

339.6 mm (13.37 in.)

Access Panel for Multi-Temp Models ONLY

Air Outlet

14.0 mm (0.55 in.)

193.0 mm (7.60 in.)

ABA861
Unit Dimensions

**Top View**
- **Upper Grille Radii**
  - R868.4 mm (34.19 in.)

**Top View**
- **Lower Door & Panel Radii**
  - R671.4 mm (26.43 in.)
  - R566.6 mm (22.31 in.)
  - R544.3 mm (21.43 in.)

**Side View**
- **Top Door Radius**
  - R1288.5 mm (50.73 in.)
Bulkhead Dimensions (Option)

THERMO KING RECOMMENDS USING A BULKHEAD

Contact your Thermo King Dealer for specific part number

Bulkhead Function
A bulkhead is used to keep the return airflow from being restricted if the load shifts. The bulkhead also prevents the load from shifting into the return airflow passageway on the front wall of the DRC or RBC.

Return Airflow
Restrictions of the return airflow adversely affects the performance of the unit. The area directly behind the evaporator return air inlet must not be restricted.

NOTE: Typical Bulkhead Shown (dimensions are approximate).
Bulkhead Dimensions (Option)

1948.2 mm
(76.70 in.)

1790.6 mm
(70.50 in.)

133.4 mm
(5.25 in.)
Battery Selection Guide

Refer to Service Bulletin T&T 446 for more information regarding Battery Selection and Maintenance

⚠️ CAUTION: Do not connect other manufacturer’s equipment or accessories to the Thermo King unit! This could result in severe damage to equipment and void the warranty!

IMPORTANT: The specified battery, electrical wiring and electronic controls were designed to operate and maintain only the Thermo King refrigeration system and factory authorized Thermo King options.

Precedent units are designed for one 12 volt, Group 31 battery supplied by the installer.

The battery must be suitable for deep cycling, heavy duty and rated with a minimum of 95 amp/hr.

NOTE: See following table for Thermo King approved batteries. Refer to Service Bulletin T&T 446 for more information regarding Battery Selection and Maintenance.

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<table>
<thead>
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<th>BATTERY APPLICATION TABLE</th>
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<td><strong>925 CCA Wet Cell</strong></td>
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<tr>
<td>Thermo King ReliaMax 925N</td>
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<tr>
<td>P/N 203-733 Threaded Stud</td>
</tr>
<tr>
<td>P/N 203-732 SAE Post</td>
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- **Wet Cell Technology**
- Better suited for colder climates
- High cranking power at low ambient temperatures
- 18-24 month expected life *see note below

- **Dry Cell (AGM) Technology**
- Better suited for all applications
- High cranking power at lower ambient temperatures
- Suited for extreme temperatures
- Best for high cycling applications (Cycle-Sentry use)
- 5-7 year expected life

* NOTE: Wet cell battery life and maintenance requirements are determined by the operating environment and the charge/discharge rate (cycles) while the battery is in service. Higher ambient temperatures and frequent discharges will shorten a wet cell battery's overall life expectancy and increase maintenance requirement.
Group 31 Battery Dimensions

- Width: 330 mm (13.00 in.)
- Height: 216.6 mm (8.53 in.)
- Top to Top Height: 169.4 mm (6.67 in.)
- Top to Bottom Height: 199.4 mm (7.84 in.)
- Length: 22 mm (.87 in.)
- Width: 330 mm (13.00 in.)
- Height: 216.6 mm (8.53 in.)
- Top to Top Height: 169.4 mm (6.67 in.)
- Top to Bottom Height: 199.4 mm (7.84 in.)

AAA403
Lifting Bar Dimensions

**IMPORTANT:** Use forged clevis and pins, forged chain links and forged locking hooks with strength equal to total lift capacity of hoist mechanism and that meet all safety standards.

1. Forged Clevis Pin
2. Forged Chain Links
3. Forged Locking Hooks

**WARNING:** Thermo King requires a 2 point lifting bar to safely lift and install units. A lifting bar can be made from the drawings provided on pages 20-21 using ASTM A514 Grade B Steel Plate (UNS K11630).

**WARNING:** The lifting bar and lifting device combined must be able to support minimum weight of 1360.8 kilos (1 1/2 tons).
Welded Lifting Bar Assembly

2-3

19.1 mm
(0.75 in.)

100.0 mm
(3.937 in.)

50.8 mm
(2.0 in.)

IMPORTANT:
50.8 mm (2.00 in.) long welds should be made at each end of the bar with additional welds spaced every 76.2 mm (3.00 in.) along the length of the bar. Welding is to be done to both sides of the bar.

NOTE: These instructions are provided for fabricating the lifting bar used to install Precedent units. Thermo King is not the manufacturer of the lifting bar and is not responsible for material used or failure of this lifting device.
Required Tools for Installation

1. Safety Glasses
2. Drill
3. Drill Bits
4. Tape Measure
5. Mechanics Tools
6. Lifting Bar
7. Work Platform (Recommended)
8. Torque Wrench

_NOTE: Equipment such as scales, gauges, refrigerant leak detectors, and torque wrenches should be in good working condition and routinely calibrated to assure accurate readings._
Required Tools for Installation

1. Safety Glasses
2. Drill
3. Drill Bits
4. Tape Measure
5. Screwdriver
6. Chain Hoist
7. Staircase
8. Torque Wrench
9. Eyelet
Installation Components - RBC Only

1. Unit Mounting Kit
2. Drain Tube Kit
3. Fuel Hardware Kit
4. Skin Mounting Kit
5. Battery Mounting Kit
6. Grommets (for Bottom Pan)
7. Heat Shield and Mounting Screws (attached to unit with bandwraps)
Installation Components - RBC Only

1. Unit Mounting Kit
2. Drain Tube Kit
3. Fuel Hardware Kit
4. Skin Mounting Kit
5. Battery Mounting Kit
6. Bottom Pan Grommets
7. Heat Shield & Mounting Screws

NOTE: Components illustrated are for reference only. Actual components or quantities you receive may be different than shown.
Installation Components - DRC Only

1. Unit Mounting Kit
2. Drain Tube Kit
3. Fuel Hardware Kit
4. Skin Mounting Kit
5. Battery Mounting Kit
6. Grommets (for Bottom Pan)
7. Heat Shield and Mounting Screws (attached to unit with bandwraps)
8. Exhaust Tube Extension
9. Exhaust Hanger
10. Exhaust Hanger Clamp
11. Nameplate
12. Exhaust Clamp
Installation Components - DRC Only

NOTE: Components illustrated are for reference only. Actual components or quantities you receive may be different than shown.
Unpacking the Unit

WARNING: Thermo King requires a 2 point lifting bar to safely lift and install the unit. see “Lifting Bar Dimensions” on page 22 and 21.

WARNING: Use only locking hooks to safely lift the unit! Failure to use locking hooks could result in severe damage to the equipment, void the warranty or cause personal injury or death!

Units are shipped attached to disposable wooden pallet and wrapped with protective cardboard and plastic stretch wrap.

NOTE: To avoid unnecessary damage to your unit, place the crated unit near the DRC or RBC prior to its removal.

IMPORTANT: DO NOT use a sharp knife to remove the stretch wrap or cardboard wrap as damage to the exterior of the unit will result!

Unpacking the Unit

• Carefully remove plastic stretch wrap from unit.
• Carefully remove the top cardboard cover.
• Carefully remove the outer cardboard wrap.
• Remove installation kit boxes, bottom panel, and any other loose components from rear of unit.
• Remove the heat shield and screws found loosely attached to the rear of the unit with bandwraps.
• Install two forged eyebolts into the top corners of the unit and attach the 2 point lifting bar with locking hooks to the eyebolts. Raise unit only enough to remove slack from lifting bar chains.
• Remove hardware holding unit to wooden pallet.
• Unit is now ready for installation.
Unpacking the Unit
Installing the Heat Shield

Installation Procedures

NOTE: Heat shield and screws can be found loosely attached to the rear of the unit with bandwraps.

The supplied heat shield must be installed onto the front outside wall of the DRC or RBC prior to unit installation. The shield should be positioned approximately 76.2 mm (3.00 in.) down from the cutout and centered horizontally as shown.

1. Thoroughly clean the area shown with isopropyl alcohol to remove dirt, grease, wax, etc.
2. Starting at the top of the shield, peel approximately 25.4 mm (1.00 in.) of the backing liner from the shield, place shield onto DRC or RBC wall and progressively remove liner downward while applying pressure to the foil.
3. Once shield is installed, apply pressure to the remove wrinkles.

NOTE: Any remaining wrinkles have no effect on performance.

4. Install provided sealing screws at each corner and top and bottom center of the shield.
5. Unit is now ready to be installed.
Installing the Heat Shield

Dimensions shown in inches
Installing the Unit

**WARNING:** Do not use a forklift to install the unit! This could result in severe damage to equipment, void the warranty or cause personal injury or death!

**WARNING:** Thermo King requires a 2 point lifting bar to safely lift and install the unit. See “Lifting Bar Dimensions” on page 22.

**WARNING:** Use only locking hooks to safely lift the unit! Failure to use locking hooks could result in severe damage to the equipment, void the warranty or cause personal injury or death! (Detail I).

**Unit Installation**

**NOTE:** DRC APPLICATIONS ONLY. Unbolt and remove any upper cross bracing or supports from the container that interfere with the installation of the unit using the 3-point lifting bar. Reinstall after unit installation.

1. Raise unit up to the opening and position onto the mounting bolts. To access mounting bolts, see Detail II.

2. Attach thick washer, standard washer and elastic stop nuts provided in the installation kit. Torque to 82 N•m (60 ft. lbs.).

**NOTE:** All nuts that hold the unit to the DRC or RBC should be elastic stop nuts (Nylock Type) provided in the installation kit.

**Access to Mounting Bolts (Detail II)**

- a. Top side mounting hole through the hinged roadside grille.
- b. Center side mounting hole through hinged roadside grille.
- c. Lower side mounting hole through hinged roadside panel, behind hinged control box.
- d. Center side mounting hole through hinged lower curbside door.
- e. Lower side mounting hole through hinged curbside panel.
- f. Center side mounting hole through hinged curbside grille.
- g. Top side mounting hole through hinged curbside grille.
- h. Top center mounting hole from top of the unit.
Installing the Unit

IMPORTANT: The heat shield must be installed onto front wall prior to unit installation.
Installing the Drain Hoses and Coolant Overflow Hose

DRC and RBC Applications:

The drain hoses will need to be routed off to one side, behind the fuel tank, and down the wall.

1. Drain hoses should run down from the unit with no kinks or sharp bends.
2. Secure each hose to wall with clamps and screws as shown.
3. Cut off excess hose and attach check valves with supplied bandwraps.

**IMPORTANT:** Upper clamp location varies by individual application while lower clamps should be installed 127 mm (5.00 in.) up from the bottom of the drain valves and not be so tight as to restrict water drainage.

Coolant Overflow Hose Installation

4. The coolant overflow hose should run straight down the wall with no kinks or bends.
5. Secure the overflow hose to the evaporator drain hose with supplied bandwraps as shown.

**IMPORTANT:** Band warps must not be so tight as to restrict water drainage.
Installing the Drain Hoses and Coolant Overflow Hose
Installing the Float Style Fuel Level Sensor Harness

For fuel tanks without the Ultrasonic Fuel Level Sensor (UFLS)

Wire Routing and Connections

⚠️ DANGER: Do not route electrical wires with fuel lines as this could cause a fire!

NOTE: The fuel level sensor harness 3-pin connector is located outside the control box. It is cable tied to other harnesses at the rear of the unit near the frame mounted ground plate and behind the battery tray.

1. Locate the short factory installed fuel level sensor harness with the 3-pin connector. See note above.
   - Apply a light coating of Superlube (or equivalent) to this connector.
   - Connect the 6 ft. (1.8 m) fuel level sensor harness to the mating 3-pin connector on the factory installed harness.
   - Route the harness to the fuel tank.

IMPORTANT: The use of the supplied crimp and solder style connectors with separate heat shrink tubing is required when connecting the fuel level sensor harness wires.

2. At the tank, cut the harness to length and connect the harness wires to the fuel level sensor wires (wires are not polarity sensitive) by:
   - Sliding supplied heat shrink tubing onto each wire and positioning them away from the joint.
   - Striping the wire ends, inserting them into the wire connectors and crimping securely.
   - Soldering the wires to the wire connectors with a soldering gun.
   - Sliding the heat shrink tubing over the wire connectors and applying heat with a heat gun.

3. Use supplied cable ties, clamps and screws to secure the harness as shown.

IMPORTANT: This is a “Float Style” fuel level sensor and the controller must be programmed accordingly. See “Programming the SR-4 Controller for Fuel Level” on page 60 to enable the fuel level feature.
Installing the Float Style Fuel Level Sensor Harness
Installing the UFLS Harness

For fuel tanks with Ultrasonic Fuel Level Sensor (UFLS)

**IMPORTANT:** All electrical connections of the UFLS harness must be made with the supplied crimp and solder style connectors with separate heat shrink tubing. DO NOT burn the heat shrink. If the heat shrink is burnt, charred, or has bubbles from overheating, the wire connections must be removed and redone correctly.

Interconnect Harness Installation and Routing

**DANGER:** Do not route electrical wires with fuel lines as this could cause a fire!

1. Attach the interconnect harness to the fuel sensor wires located inside the control box.

   - Slide supplied heat shrink tubing onto each wire and position them away from joint:
   - Connect each wire with wire connector and crimp securely.
   - Solder wires to wire connectors with a soldering gun.
   - Slide heat shrink tubing over each wire connector and applying heat with a heat gun.
   - Secure harness inside the control box with bandwraps.

2. Route the harness to the fuel tank.

UFLS Harness Connections

3. Cut the interconnect harness to length and splice wires to the fuel sensor’s leads.

   - Slide supplied heat shrink tubing onto each wire and position them away from joint:
   - Connect each wire with wire connector and crimp securely.
   - Solder wires to wire connectors with a soldering gun.
   - Slide heat shrink tubing over each wire connector and applying heat with a heat gun.

4. Secure any exposed harness with clamps.

**IMPORTANT:** This is a “Solid State” fuel level sensor and the SR-4 Controller must be programmed accordingly to enable the fuel level feature. See “Programming the SR-4 Controller for Fuel Level” on page 60.
Installing the UFLS Harness

“Solid State” Ultrasonic Fuel Level Sensor (UFLS)

Connections inside Control Box
BLACK to FUELN-01
WHITE to FUEL-01
GREEN to 8F-01

Connections at Sensor
BLACK to BLACK
WHITE to YELLOW
GREEN to RED
Installing Remote Door Lock (Option)

**NOTE: Remote Door Lock is Installer Supplied.**

Factory Option - Bulkhead Harness Installation

1. Locate the 6-pin connector (RED1, RED 2, BLK 1, BLK 2) attached to the rear of the unit on the side of the evaporator.

2. Remove sealing plug from connector, apply a light coating of Superlube (or equivalent) to electrical connections and securely attach the bulkhead harness supplied in kit.

3. Route Bulkhead Harness to remote door lock and securely attach connectors.

4. Access the TK TracKing website:
   - Check the Door Lock check box on the Vehicle Maintenance screen.
   - Verify door lock operation.

**IMPORTANT: All harnesses should be installed, routed and properly secured to protect from damage.**

Retro-Fit - Harness Installation

**NOTE: 42-1593 Unit Harness and 42-1594 Bulkhead Harness are each sold separately.**

**NOTE: Unit must have TracKing™ REB only with A035 or higher software installed.**

1. Open control box door and install unit harness 16-pin connector to J2 on the REB board.

2. Secure 5-pin connector to harness with bandwraps inside control box.
   - Route harness and 6-pin connector out the back of control box.

3. Mark and drill a 1.00" (25.5 mm) access hole through front of trailer wall. The access hole should be located inside the unit in an open space behind the battery.

**IMPORTANT: Do not drill holes into the unit’s frame or any part of its structure!**

4. Attach bulkhead harness securely to remote door lock (installer supplied) and route 6-pin connector out through access hole.
   - Remove sealing plug from unit harness connector, apply a light coating of Superlube (or equivalent) to electrical connections and attach the bulkhead harness securely.
   - Bundle excess harness inside unit, provide a drip loop and secure with bandwraps.
   - Seal access hole in trailer wall inside and outside with caulking.
   - All harnesses should be installed, routed and properly secured to protect from damage.

5. Access TK TracKing website:
   - Check the Door Lock check box on the Vehicle Maintenance screen.
   - Verify door lock operation.
Installing Remote Door Lock (Option)

Bulkhead Harness Installation

Unit Harness and Bulkhead Harness Installation

NOTE: Harness connection located outside the trailer will allow a disconnect if unit needs to be removed from trailer.
CargoWatch™ Sensor Locations (Option)

Sensor locations for Domestic Applications as required by customer

1. Sensor #1 is located in the evaporator side return opening near unit return air sensor (factory installed).
2. Sensor #2 location as required by customer.
CargoWatch™ Sensor Locations (Option)

Trailer application shown, DRC and RBC applications similar.
Connecting the CargoWatch™ Sensors (Option)

NOTE: ONLY CargoWatch Sensors Can Be Used

CONNECTING SENSORS

NOTE: The sensor are not polarity sensitive.

1. Locate the CargoWatch Sensor Harness behind the evaporator access panel.
2. Unplug the connector from the harness.
3. Removes orange end from connector.
4. Remove only the plugs from the connector holes for the sensors you are connecting. Unused holes must remain plugged.
5. Insert WHITE pin connector and wire into correct connection until it locks into position (Detail I). The wire side of the connector is shown.

<table>
<thead>
<tr>
<th>SENSOR</th>
<th>PLUGS</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>#1 and #12</td>
</tr>
<tr>
<td>2</td>
<td>#2 and #11</td>
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<tr>
<td>3</td>
<td>#3 and #10</td>
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<tr>
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<td>#4 and #9</td>
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<tr>
<td>5</td>
<td>#5 and #8</td>
</tr>
<tr>
<td>6</td>
<td>#6 and #7</td>
</tr>
</tbody>
</table>

6. Insert BLACK pin connector and wire into correct connection until it locks into position (Detail I). The wire side of the connector is shown.

<table>
<thead>
<tr>
<th>SENSOR</th>
<th>PLUGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Black into #12</td>
</tr>
<tr>
<td>2</td>
<td>Black into #11</td>
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<tr>
<td>3</td>
<td>Black into #10</td>
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<tr>
<td>4</td>
<td>Black into #9</td>
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<tr>
<td>5</td>
<td>Black into #8</td>
</tr>
<tr>
<td>6</td>
<td>Black into #7</td>
</tr>
</tbody>
</table>

Reinstall orange end (3) back onto connector (2), apply a light coating of Superlube to electrical connections and plug sensor back into mating connector on the Sensor Harness (1).

7. Connect the CargoWatch Sensor Harness to the sensor using the splice connectors. Crimp splice connectors securely and apply heat with a heat gun. NOTE: The CargoWatch Sensor wires are not polarity sensitive.

8. Secure sensor with appropriate clamps.
Connecting the CargoWatch™ Sensors (Option)
Installing the Precedent Bulkhead (Option)

THERMO KING RECOMMENDS USING A BULKHEAD

Contact your Thermo King Dealer for specific part numbers of bulkhead and mounting hardware.

Installation

⚠️ CAUTION: Do not drill holes into refrigeration, electrical or mechanical components or severe damage to the equipment will result!

1. Locate and mark the front DRC or RBC wall support posts. The bulkhead side mounting holes should align with the DRC or RBC wall posts.

2. Set the bottom of the bulkhead on the DRC or RBC floor and fit it over the evaporator. DO NOT cut the top of the bulkhead.

3. Secure the sides of bulkhead to the wall support posts using six (3 each side) 1/4” x 3.00” long sheet metal screws and washers (installer supplied).

4. Secure the bottom of the bulkhead using five 1/4” x 1.25” long sheet metal screws and washers (installer supplied).

5. Cut the side flanges to activate the hinge feature.

**NOTE:** For evaporator service, remove the screws on each side securing the top portion of the bulkhead and fold down.
Installing the Precedent Bulkhead (Option)

Three long mounting screws on each side.

Five short mounting screws along bottom.

Cut the side flanges to activate the hinge feature. For evaporator service, remove the screws on each side securing the top portion of the bulkhead and fold down.

Typical DRC or RBC wall support posts.
Installing the Top Covers and Bottom Pan

**Top Covers**

1. Open the top door along with the curbside and roadside grilles.

2. Remove the two screws shown from each condenser fan grilles using a T-30 Torx drive.

3. Place the top covers onto the unit with the upper mounting tabs positioned over the condenser grille mounting holes.
   - Loosely reinstall the two screws removed earlier down through each top cover mounting tab and back into the condenser fan grilles (Detail A).
   - Install the remaining M6 screws supplied in the kit to secure the top covers to the threaded inserts on the frame.
   - Use a T-30 Torx drive and tighten screws to 69 kg-cm (60 in-lbs.)

**Bottom Pan**

4. Before installing the bottom pan, determine where the two fuel lines from the fuel tank need to enter the bottom of the unit.
   - Mark and drill two 25.4 mm (1.00 in.) diameter holes in the bottom pan and install the supplied grommets.

5. Position the bottom pan under the unit and align the mounting holes with the threaded inserts on the frame.
   - From under the unit, loosely install the M6 screws supplied in the installation kit to attach the bottom pan to the frame.
   - Open the roadside door and loosely install a M6 screw down through the frame tab and into the bottom pan insert (Detail B).
   - Use a T-30 Torx drive and tighten screws to 69 kg-cm (60 in-lbs.)

6. Close and secure the curbside and roadside grilles and top door.
Installing the Top Covers and Bottom Pan
Installing the Fuel Lines

Important Installation Requirements

[DANGER] Leaking fuel lines could cause a fire resulting in death or serious injury! All fuel line fittings must be tight and leak free!

[DANGER] Do not route fuel lines with battery cables or electrical wires, as this could cause a fire!

Fuel System Fittings

IMPORTANT: Using the wrong fuel system fittings may void your engine warranty! All Thermo King supplied fuel line fittings (except fuel line connector) are nickel plated brass for Precedent units.

DO NOT use fuel fittings (main body) made of brass, copper, zinc, zinc plated or galvanized steel where it would make direct contact with flowing diesel fuel. Diesel fuel flowing through these types of fittings allows those metals to leach into the fuel forming deposits on the injector tips which fouls them prematurely.

Fuel fitting nuts, compression sleeves, and fuel line connectors made of brass are acceptable because diesel fuel does not flow across their surfaces.

Do not use PTFE (Polytetrafluoroethylene) thread sealing tape on the fuel fittings in a Precedent unit. PTFE tape may allow strands into the fuel system that could plug up the tight clearance fuel injectors causing failures.

Fuel Line Installation

IMPORTANT: Use two wrenches (where applicable) when tightening fuel line fittings to help prevent stripping threads.

1. Route the 3/8” FUEL SUPPLY line from the fuel pump, down through the grommet in the bottom pan (installed earlier), to the fuel tank fitting:
   - Install fuel line connector, cut the end of fuel line at a 45 degree angle and insert into the fuel pickup tube until it is 25.4 mm (1.00 in.) from bottom of tank (Detail III). Tighten fittings securely.

2. Route the 1/4” FUEL RETURN line from the fuel filter, down through the grommet in the bottom pan (installed earlier), to the fuel tank fitting:
   - Cut the fuel return line straight/flush, attach fitting and install into the RETURN fitting on the fuel tank. Tighten fittings securely.

3. Remove the plastic cap from the fuel tank air vent and point the outlet to the rear of the container.
   - IMPORTANT: The factory installed fuel tank air vent must be in place and functional for the Thermo King unit’s fuel system to operate correctly and for the fuel tank to remain in compliance with Federal Motor Carrier Safety Administration specifications (title 49, paragraph 393.67). A plugged or restricted fuel tank air vent can result in premature damage to the fuel pump and could also cause severe damage to the fuel tank. NEVER remove or install any other component in place of the fuel tank air vent.

   NOTE: Add a sufficient amount of fuel (1/4 tank) to allow unit to run for 8 to 12 hours during engine break-in and pre-delivery procedures.
Installing the Fuel Lines

NOTE: Typical fuel tank and fittings shown for illustration purposes only.
Installing the Exhaust Pipe Extension (DRC Only)

Installation (containers with hanger support)

1. Install the exhaust hanger onto the exhaust hanger support located on the container.
2. Install the extension pipe onto the end of the exhaust pipe of the unit.
3. Install exhaust clamps and tighten securely.

Installation (containers without hanger support)

*NOTE: If your container does not have a exhaust hanger support, one will need to be fabricated and installed.*

How to fabricate exhaust hanger support:

- Loosely install the exhaust pipe extension onto the end of the exhaust pipe of the unit.
- Position the exhaust hanger and exhaust clamps as shown.
- Tighten the clamp to secure the extension pipe onto the unit.
- Mark location of the exhaust hanger support on the container.
- Weld the hanger support securely to the container.
- Install the exhaust hanger onto the exhaust hanger support and tighten exhaust clamps securely.

Nameplate Installation

Clean the surface of the container where the exhaust pipe outlet is located and attach the nameplate.
Installing the Exhaust Pipe Extension (DRC Only)

Exhaust pipe extension shown installed

Customer supplied hanger support

Exhaust Outlet

Install nameplate near exhaust outlet
Installing the Battery

Important Battery Information

**IMPORTANT:** See Safety Precautions - “Battery Installation and Cable Routing” on page 7 for additional information.

**WARNING:** Improperly installed battery could result in a fire or explosion! A Thermo King approved battery must be installed and properly secured to the battery tray.

**WARNING:** Improperly installed battery cables could result in fire or explosion! Battery cables must be installed, routed and secured properly to prevent them from rubbing, chaffing or making contact with hot, sharp or rotating components.

**NOTE:** Thermo King units are designed for one 12 volt, group 31 battery. The battery must be suitable for deep cycling, heavy duty and rated with a minimum of 95 amp/hr.

Battery Installation

**IMPORTANT:** Care should be taken to prevent direct metal contact to the battery’s positive post when installing the battery.

1. Open the roadside panel to access the control box.
   - Loosen the two bolts securing the control box in place.
   - Swing the control box away to gain access to the battery tray area.
2. Open the roadside door.
   - Pull the hinge pins and remove the door assembly from unit.
3. Locate the lower bracket directly in front of the battery tray.
   - Remove the two bolts and bracket from the frame.
4. Install the battery into the plastic liner.
5. Attach the negative (-) battery cable onto negative battery post and tighten securely.
6. Install the battery hold down rods and bracket.
   - Tighten the two battery hold down rods to 2.25 N•m (20 in -lbs.)
   - **DO NOT over tighten as this may crack or distort the battery!**
7. Install positive (+) battery cable on the positive battery post and tighten securely.
8. Reinstall the bracket removed in Step 3 and tighten hardware securely.
9. Swing the control box assembly back into place and tighten the two screws securely.
10. Reinstall the roadside door back onto the hinges and close securely.
Installing the Battery
STOP
Only trained and qualified individuals should operate the unit. Refer to your Precedent Operators Manual for specific details.

High Voltage Safety Precautions

⚠️ DANGER: High voltage is present whenever the unit is operating on either diesel or electric standby power. Take precautions when servicing the unit as this high voltage can cause death or serious injury.

High Voltage Components

Various components on the Precedent unit operate using 220/3/60 or 460/3/60 high voltage and are identified by warning nameplates.

![High Voltage Warning Nameplates]

Additionally, all high voltage wiring is identified by ORANGE conduiting. Be aware of the locations of these components and understand that only certified and trained technicians should service them.

See the following page for locations of high voltage components.

Unit Fan Operation Safety Precautions

⚠️ DANGER: The unit’s Condenser fans and Evaporator fans may start automatically anytime the unit switch is “ON” and can cause serious injury. Switch unit to “off” before servicing.

Condenser and Evaporator Fans

Be aware of the warning nameplates near the condenser fans and evaporator fans.

![Fan Warning Nameplates]
STOP
Only trained and qualified individuals should operate the unit. Refer to your Precedent Operators Manual for specific details.
Priming the Fuel Pump and Programming the Controller

Priming the Fuel Pump

The Precedent unit is equipped with an electric fuel pump located inside the unit. This fuel pump needs to be primed and the fuel system bled of air before the diesel engine can be started for the first time.

There are two ways this can be done:

**Recommended Procedure:** The fuel pump can be primed and fuel system bled of air (without starting the engine) by using the SR-4 controller to operate only the fuel pump relay.

1. Access **Maintenance Menu**.
2. Access **Output Test**.
3. Access **Run Relay** and PRESS Lock Key.
4. The fuel pump will begin to operate. Allow the pump to run for 5 minutes.
   - The diesel engine can now be started using the normal SR-4 controller functions.

**Alternative Procedure:** The fuel pump can be primed and fuel system bled of air by using the normal SR-4 controller functions to start and run the unit.

1. Use the SR-4 controller to start the unit.
   - It may take a few attempts to start the diesel engine as the fuel pump primes itself, fills the fuel lines and filter, and automatically bleeds air from the system.
   - Once the unit starts, Alarm Code 20 (Engine Failed to Start) may be present and should be cleared.

Programming the SR-4 Controller for Fuel Level

**NOTE:** These procedures can also be done through OptiSet™

**Programming Procedures**

**NOTE:** The Guarded Access Menu is not available if the engine is running.

1. Turn off the engine.
2. Go to the Guarded Access Menu.
3. Scroll down to and select the Unit Configuration.
4. Scroll down to and select Fuel Level Sensor.
   - The choices are: NONE, SOLID STATE or FLOAT.
     - **USFLS STYLE** - scroll to SOLID STATE by pressing + key then YES key.
     - **FLOAT STYLE** - scroll to FLOAT by pressing + key then YES key.
   - Fuel Level Percent will now be in the gauge menu.
5. The unit is now programed, press the exit key.
UNIT CHECK LIST

Visually inspect the unit for transit and handling damage. File claim with delivery carrier.

Install the unit, fuel tank, fuel pump and lines as outlined in the Thermo King Installation Manual.

Add 15 gallons of fuel to the tank.

BEFORE STARTING THE UNIT

Check battery and battery cable installation.

Inspect fuel line routing checking for rubbing, chaffing or laying on hot surfaces.

Visually inspect the unit for the following: Loose or improperly fitting bolts, brackets, hardware, hose connections and hose routing.

Inspect all wiring connections and routing.

Check defrost drain hoses and kazooos.

Check unit mounting hardware for tightness.

Check compressor and engine mounts.

Install refrigeration gauge manifold. (Multi-Temp units only)

Check engine oil level.

Check condenser and evaporator section for cleanliness and signs of refrigerant leaks.

Check front bulkhead and air chute if equipped.

MULTI-TEMP UNITS (REMOTE EVAPORATORS)

Check evaporator(s) sections for cleanliness.

Leak test interconnecting tubing.

Check for damage, loose or missing bolts and hardware on remote evaporator(s).

Check for proper installation of drain tubes, drain kazooos and drain tube heater wires.

Check for properly routed refrigerant lines wiring harnesses for remote evaporator(s). Check for properly routed harnesses for remote controller.

Check for proper installation of remote evaporator guards if equipped.

Check remote harness wiring plugs in the host evaporator.

Check wiring, connections, and terminals in the remote evaporator(s).

Check compartment bulkhead(s) for proper fit if equipped.
UNIT CHECK LIST

START AND RUN UNIT
(On Multi-temp units start only the host unit)

☐ Check for proper oil pressure, coolant temperature, oil, fuel, or coolant leaks.
☐ Check alternator charge.
☐ Cycle the unit and ensure the unit functions in the correct modes and the mode indicators are working.
☐ Confirm engine speeds at normal engine running temperature. High Speed and Low Speed per maintenance manual. Check @ 70°F (21°C) box temperature and 70°F (21°C) ambient.
☐ Set for continuous run with thermostat set point at 32°F (0°C) and run the unit to 32°F (0°C).
☐ Observe and record refrigerant operating pressures in relation to ambient and box temperatures.
☐ Verify the readings above are correct for the conditions.
☐ When box reaches 32°F (0°C) check calibration of thermostat, thermometer and data logger.
☐ Run unit for 30 minutes at 32°F (0°C). During this period check for correct cycling.
☐ Reset thermostat to 50°F (10°C).
☐ Check throttling valve while in the heat cycle.
☐ Check operation of Modulation system if equipped.
☐ For Single Temp units perform a controlled check of the refrigerant level. For Multi-temps check the charge per multi-temp unit procedures.

MULTI-TEMP UNITS

☐ Install the compartment bulkhead(s) if equipped.
☐ Check for correct rotation of remote evaporator fans.
☐ Check for correct cycling and operation of remote evaporator fans.

ALL UNITS

☐ Initiate and check defrost operation and termination. Check operation and adjustment of damper door and remote fans. Each zone on multi-temps must be checked for proper operation.
☐ Set the unit for Cycle Sentry Operation.
☐ Check for proper operation of all door switches.
☐ Remove the compartment bulkhead(s) if equipped.
☐ Set the unit for continuous run. Continue to run the unit with the back doors open, alternating between high speed cool and heat until at least 6 hours (10 hours preferred) are shown on the engine run time hour meter to ensure complete break in of the engine, and time for the belts and other moving parts to take out the initial tension and adjustment.
☐ Run Pre-trip.
UNIT CHECK LIST

ELECTRIC STANDBY OPERATIONAL CHECKS

☐ Test AC electrical contacts and connections by connecting to AC power and running.
☐ Check for correct electric motor rotation.
☐ Check compressor clutch operation.
☐ Cycle thermostat and check for correct modes of operation.
☐ Power source not available to test AC.

STOP UNIT

☐ On Multi-temp units leak test interconnecting tubing.
☐ Check and readjust all belt tensions using TK belt gauge 204-1903 or equivalent frequency tool.
☐ Check for oil, fuel, coolant, refrigerant and exhaust leaks.
☐ Check engine oil and coolant level.
☐ Check entire unit for loosened hardware and fittings.
☐ Check and adjust all skin, door and panels for correct alignment and operation.
☐ Complete the commissioning registration process.
☐ Release unit.
Ingersoll Rand’s Climate Solutions sector delivers energy-efficient HVACR solutions for customers globally. Its world-class brands include Thermo King, the leader in transport temperature control and Trane, a provider of energy efficient heating, ventilating and air conditioning systems, building and contracting services, parts support and advanced controls for commercial buildings and homes.

TK 55902-2-IM (Rev. 5, 02/15)
and Rail Box Car (RBC) Applications
For Domestic Refrigerated Containers (DRC),
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