



THERMO KING

Installation Manual

Heat King 450 Series

HK450 HO and HK450 MAX Diesel Heating Units

Revision E

February 2025

TK 56118-6-IM-EN

TRANE
TECHNOLOGIES

Introduction

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 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. The procedures described herein should only be undertaken by suitably qualified personnel. Failure to implement these procedures correctly may cause damage to the Thermo King unit or other property or personal injury.

Revision History

Revision A	(Apr 2021) Released new manual format.
Revision B	(Oct 2022) Added TKV5 and Solar Panel Information
Revision C	(Feb 2023) Corrected battery P/N.
Revision D	(Nov 2023) Added missing and solar panel information; Added new fuel return line fitting (133520) information.
Revision E	(Feb 2025) Added Lifting Bar Information.

Assistance/Feedback

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Safety Precautions

Danger, Warning, Caution and Notice

Thermo King recommends that all service be performed by a Thermo King dealer and to be aware of several general safety practices.

Safety advisories appear throughout this manual as required. Your personal safety and the proper installation of this unit depend upon the strict observance of these precautions.

Danger

Hazard!

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

Warning

Hazard!

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

Caution

Hazard!

Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury and unsafe practices.

Notice

Hazard!

Indicates a situation that could result in equipment or property-damage only accidents.

General Practices

Danger

Equipment Damage and Risk of Injury!

To prevent severe equipment damage, serious injury, or death, the front wall of the trailer or container must be structurally strong enough to support the weight of a Heat King 450 series unit, or when using the front wall mounted fuel tank option, the combined weight of a Heat King 450 series unit, plus the weight of the fuel, the fuel tank and brackets.

Danger

Equipment Damage and Risk of Injury!

Failure to secure the Heat King 450 series unit properly to the trailer or container can result in severe equipment damage, serious injury, or death.

Danger

Equipment Damage and Risk of Injury!

Consult your trailer or container manufacturer for specific details on proper fuel tank installation and recommendations. An improperly installed fuel tank could lead to serious injury or death.

Notice**Equipment Damage!**

All unit mounting bolts must be installed, be the correct length for their application, and torqued to specifications. Missing bolts, incorrect bolt lengths and improper torque specifications can damage equipment and void the warranty.

Battery Installation and Cable Routing**Warning****Hazard of Explosion!**

An improperly installed battery could result in a fire, explosion, or injury. A Thermo King approved battery must be installed and properly secured to the battery tray.

Warning**Hazard of Explosion!**

Improperly installed battery cables could result in a fire, explosion, or injury. 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**Fire Hazard!**

Do not attach fuel lines to battery cables or electrical harnesses. This has the potential to cause a fire and could cause serious injury or death.

Warning**Hazard of Explosion!**

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.

Caution**Hazardous Service Procedures!**

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

Notice**Equipment Damage!**

Do not connect other manufacturers' equipment or accessories to the unit or to the Thermo King batteries unless approved by Thermo King. Failure to do so can result in severe damage to equipment and void the warranty.

Important Installation Requirements

Trailer / Container Requirements

⚠ Danger

Equipment Damage and Risk of Injury!

To prevent severe equipment damage, serious injury, or death, the front wall of the trailer or container must be structurally strong enough to support the weight of a Heat King 450 series unit, or when using the front wall mounted fuel tank option, the combined weight of a Heat King 450 series unit, plus the weight of the fuel, the fuel tank and brackets.

⚠ Danger

Equipment Damage and Risk of Injury!

Failure to secure the Heat King 450 series unit properly to the trailer or container can result in severe equipment damage, serious injury, or death.

⚠ Danger

Equipment Damage and Risk of Injury!

Consult your trailer or container manufacturer for specific details on proper fuel tank installation and recommendations. An improperly installed fuel tank could lead to serious injury or death.

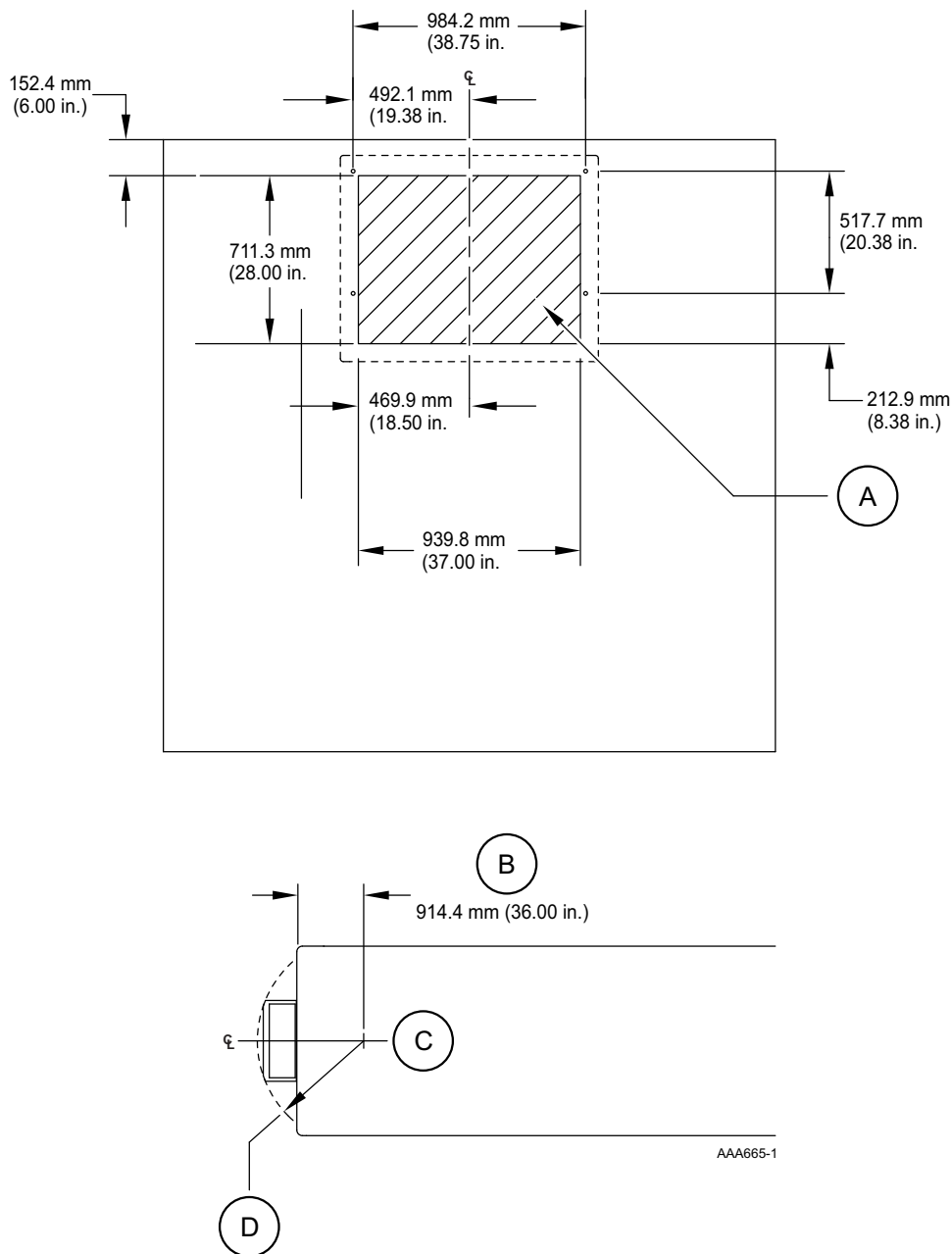
Unit Weight

UNIT WEIGHT*		
Heat King 450 series unit with EON battery installed.	HK450 HO 220 kg (484 lbs.)	HK450 MAX 231 kg (510 lbs)
<i>*Does not include the weight of the fuel, the fuel tank and brackets.</i>		



Front Wall Dimensions and Swing Radius

Figure 1. Front Wall Dimensions and Swing Radius Shown



- A. Trailer opening must be square.
Diagonal dimension must be +/- .12 in.
- B. King Pin Setting
- C. Swing Radius
- D. 407.2 mm (55.40) Radius for Standard HK installation
464.3 mm (57.65) Radius for Zero Cube HK installation

Mounting Bolt Specifications

Notice

Equipment Damage!

All unit mounting bolts must be installed, be the correct length for their application, and torqued to specifications. Missing bolts, incorrect bolt lengths and improper torque specifications can damage equipment and void the warranty.

Danger

Equipment Damage and Risk of Injury!!

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.

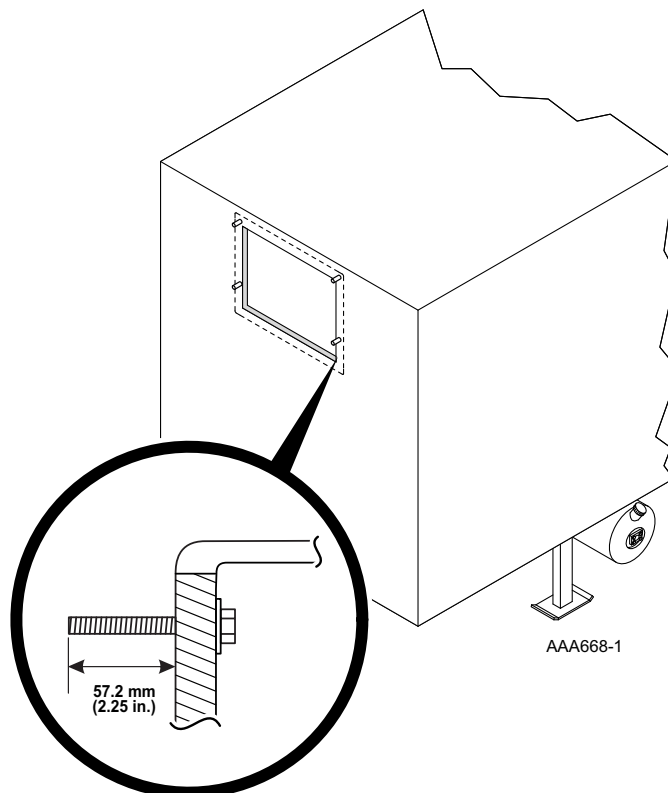
Note: Mounting hardware to be supplied by installer.

- Metric M12 x 1.75 pitch class 8.8 (or 1/2 in.-13 UNC - 2B Rolled thread grade 5), medium carbon steel bolts and locking nuts
- All hardware must be zinc plated with dichromate finish.

Note: The location of the unit mounting bolts in the trailer front wall is critical to proper unit installation.

- A gasket sealing surface of 76.2 mm (3.00 in.) wide all around the trailer/container wall opening must be free from rivets or bolt heads and flat within 6.5 mm (.25 in.)
- All mounting bolts must be square with the front wall and securely fastened to the trailer/container wall in such a manner to allow the mounting nuts be torqued to 82 N•m (60 ft. lbs.) from outside the trailer/container.
- Mounting bolts are to extend 57.2 mm (2.25 in.) beyond the front wall (**See Fig. 2**).
- Surface of all mounting bolts are to be flat within 2.5 mm (0.10 in.).

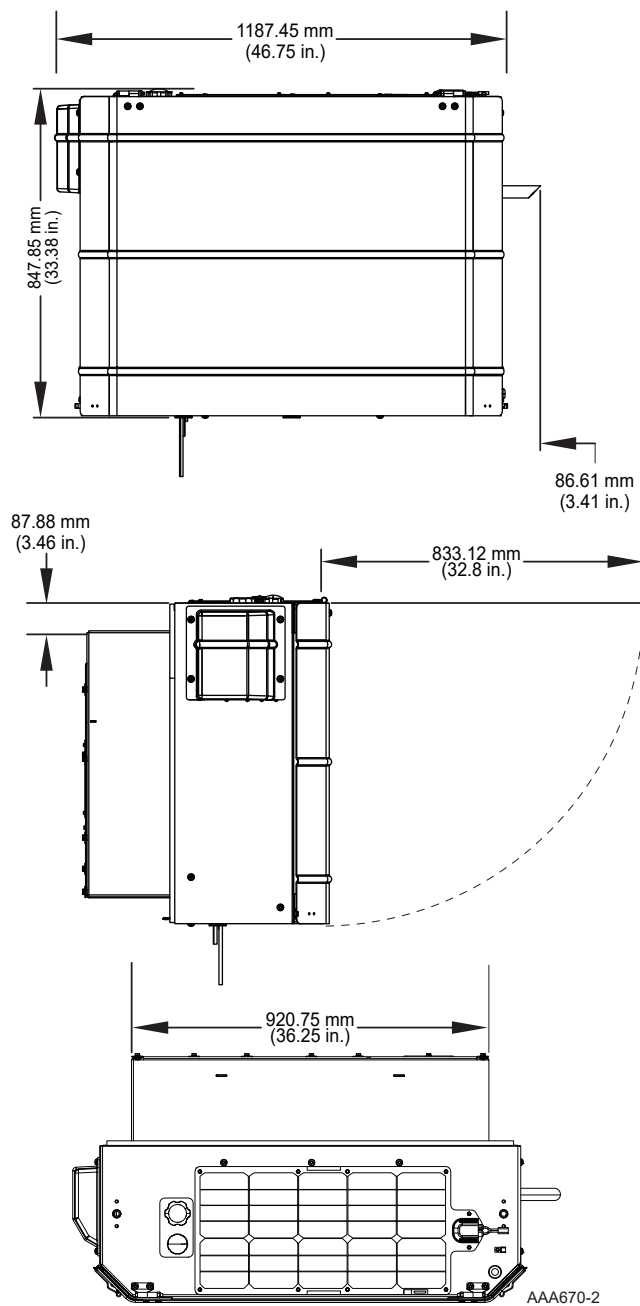
Figure 2. Mounting Bolt Specifications Shown



Component Dimensions

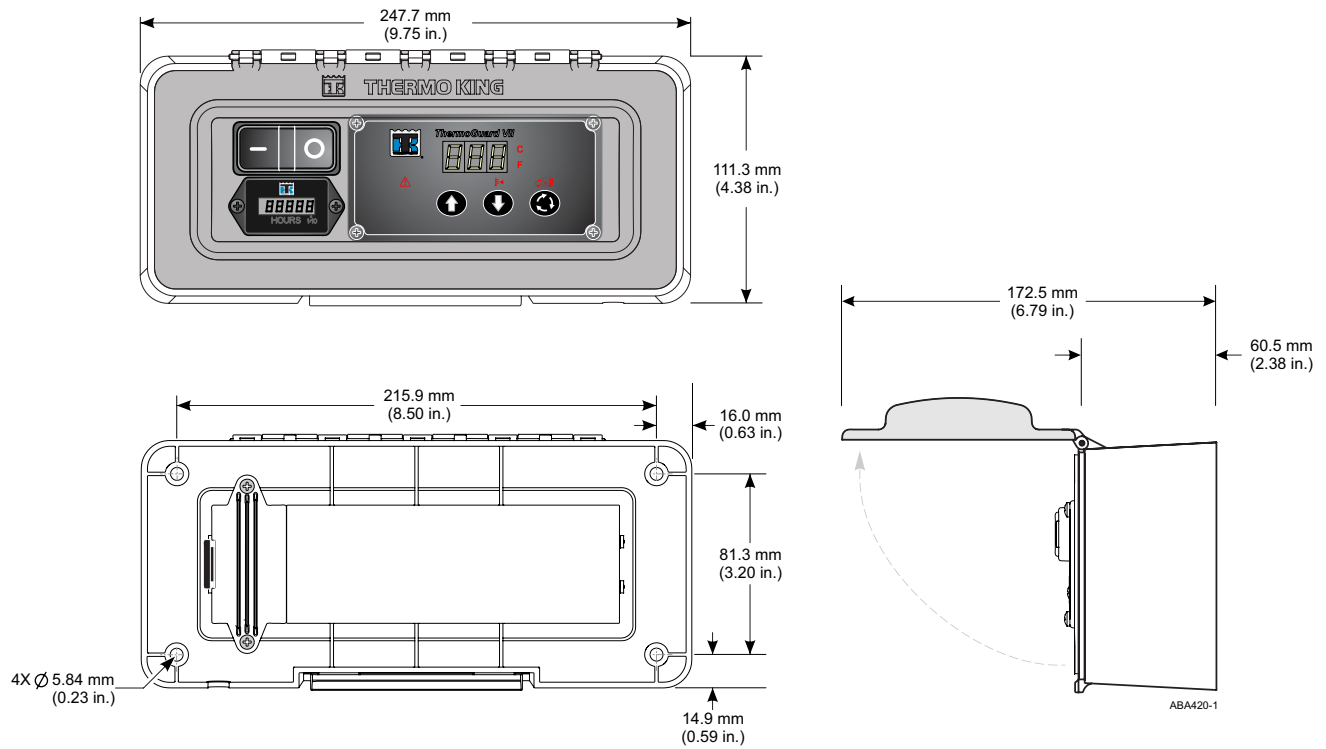
Unit Dimensions

Figure 3. HK Unit Dimensions Shown



Remote HMI Dimensions

Figure 4. Remote HMI Dimensions Shown



Battery Selection Guide

Notice

Equipment Damage!

Do not connect other manufacturers' equipment or accessories to the unit or to the Thermo King batteries unless approved by Thermo King. Failure to do so can 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 Heat King unit and factory authorized Thermo King options. 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!

Heat King units:

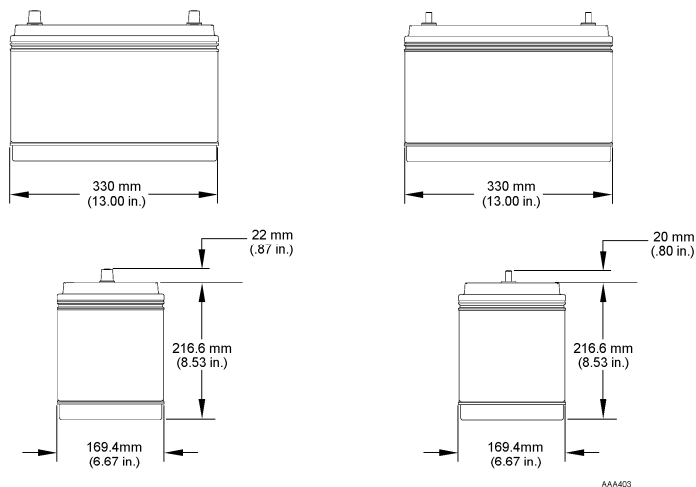
- are designed for one 12 volt, Group 31 battery supplied by the installer.
- must use a battery suitable for deep cycling, heavy duty and rated with a minimum of 95 amp/hr.

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

BATTERY APPLICATION TABLE		
750 CCA Wet Cell Thermo King ReliaMax 750S P/N 2030731 Threaded Stud P/N 2030730 SAE Post	925 CCA Wet Cell Thermo King ReliaMax 925N P/N 2030733 Threaded Stud P/N 2030732 SAE Post	1150 CCA Dry Cell (AGM) Thermo King EON P/N 2030550 Threaded Stud P/N 2030551 SAE Post
<ul style="list-style-type: none"> • Wet Cell Technology • Better suited for warmer climates • Less cranking power at low ambient temperatures • 18-24 month expected life *see note below • Choose for southern climates 	<ul style="list-style-type: none"> • Wet Cell Technology • Better suited for colder climates • High cranking power at low ambient temperatures • 18-24 month expected life *see note below • Choose for northern climates 	<ul style="list-style-type: none"> • Dry Cell Technology • Better suited for all applications • High cranking power at low ambient temperatures • Suited for extreme temperatures • Best for high cycling applications (Cycle-Sentry use) • 5-7 year expected life
<p><i>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 requirements.</i></p>		

Battery Dimensions

Figure 5. Group 31 Battery Dimensions Shown

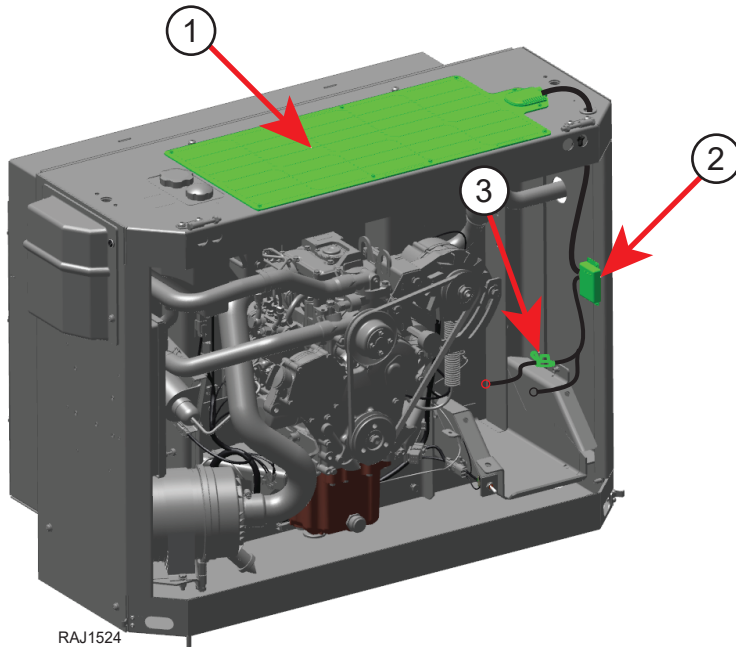


Solar Panel

Beginning June 2023, HK450 HO and HK450 MAX units (904864 and 90865) are equipped with a 40 Watt solar panel and 5 Watt charge controller. The panel is located on top of the unit. The solar charging system is connected directly to the unit's 12 volt battery to help maintain battery voltage when the unit is not in operation. The panel is equipped with a 5 Watt charge controller to prevent overcharging the battery.

Note: For optimum performance, the panel should be routinely cleaned and kept free of dirt, debris or other obstructions.

Figure 6. Solar Components (Front Cover Removed)



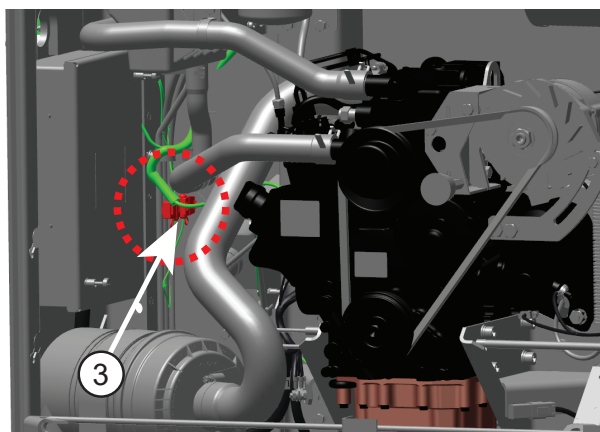
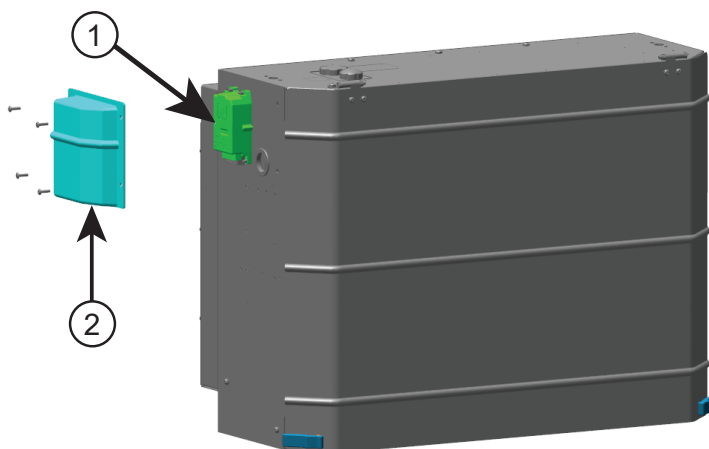
1.	40 Watt Solar Panel
2.	5 Watt Charge Controller
3.	20 Amp Fuse (in single fuse holder)

Telematics

Beginning June 2023, HK450 HO and HK450 MAX units (904864 and 90865) are equipped with the TracKing V5 wireless communication platform that offers fleet owners the ability to monitor their HK450 units. Cellular, GPS, and Bluetooth capabilities communicate with Thermo King's web-based TracKing® application, and Bluetooth with the TK Connect App. A third party interface with TracKing V5 offer a gateway for telematics providers to communicate with the Thermo King unit.

Refer to the appropriate Diagnostic Manual or Operator Manual for more information:

- TracKing® V5 Hardware Diagnostic Manual: 57014
- HK450 Series Diagnostic Manual: TK 55205
- HK450 Series Operator Manual: TK 56117



RAJ1525

1.	TracKing V5 Telematics Module
2.	Cover
3.	Telematics Fuse Location (2)

Required Tools

1. Safety Glasses
2. Drill
3. Drill Bits
4. Tape Measure
5. Mechanics Tools
6. Lifting Device
7. Two Forged Eyebolts (1/2–13 UNC)
8. Work Platform (Recommended)
9. Torque Wrench

Note: *Equipment such as torque wrenches should be in good working condition and routinely calibrated to assure accurate readings.*

Installation Kit Components

HARDWARE KIT	FUEL LINE KIT	FUEL PUMP KIT	Battery Box Kit
Clamps	1/4" OD x 40 ft. Fuel Hose	Fuel Pump	Battery Box Bracket
Band wraps	3/8" OD x 40 ft. Fuel Hose	3/8 Hose Fittings	3/8 Lock Washers
1/4-20 SS Screws	1/4" Eyelet Fitting	Fuel Pump Bracket	3/8 Flat Washers
1/4-20 Lag Bolts	3/8" Eyelet Fittings	Nameplate	3/8-16 Nuts
5/16 Lag Bolts	1/4" Sleeve Fittings	Harness	3/8-16 Screws
1/4-20 SS Nuts	3/8" Sleeve Fittings		
1/2-13 Lock Nuts	1/4" Nut Fittings		
1/2 SAE Washers	3/8" Nut Fittings		
1/4-SS Washers	1/4" Connector		
1/4-20 SS Lock Nuts	Fuel Line Connector		
1.25 OD Washers	4" Long Hose		
#10 Screws			
1/4-20 Screws			

Lifting Bar Dimensions

Note: These instructions are provided for fabricating the lifting bar used to install HK450 units. Thermo King is not the manufacturer of the lifting bar and is not responsible for material used or failure of this lifting device.

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

Note: Refer to the illustrations provided.

Warning

Risk of Injury!

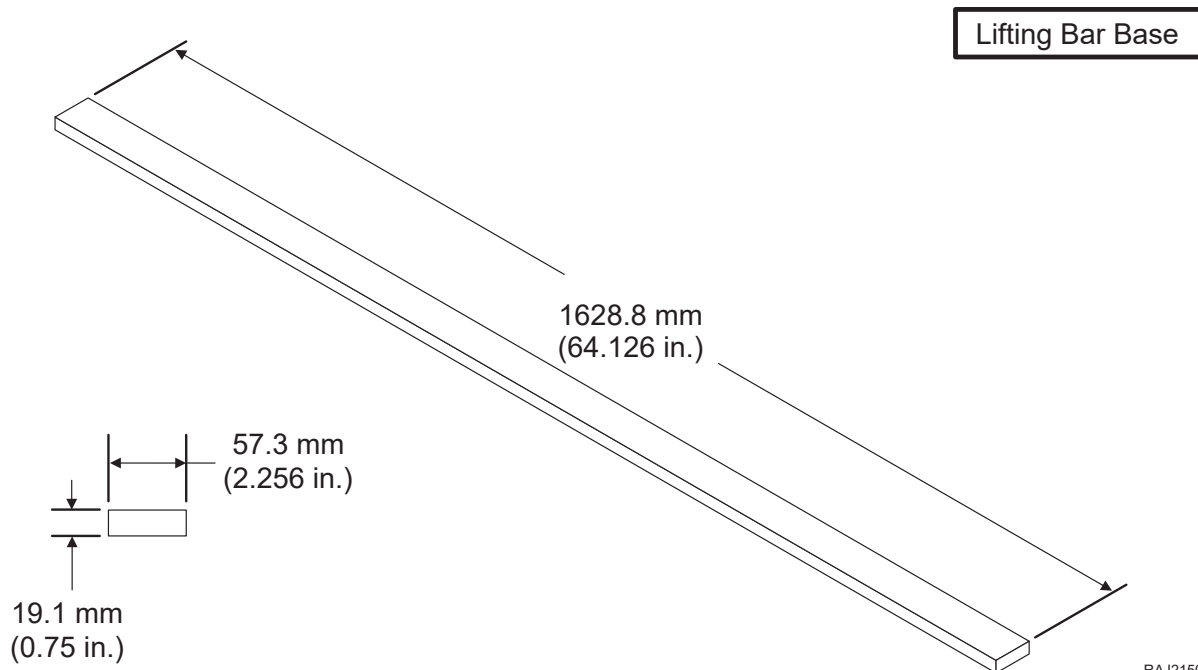
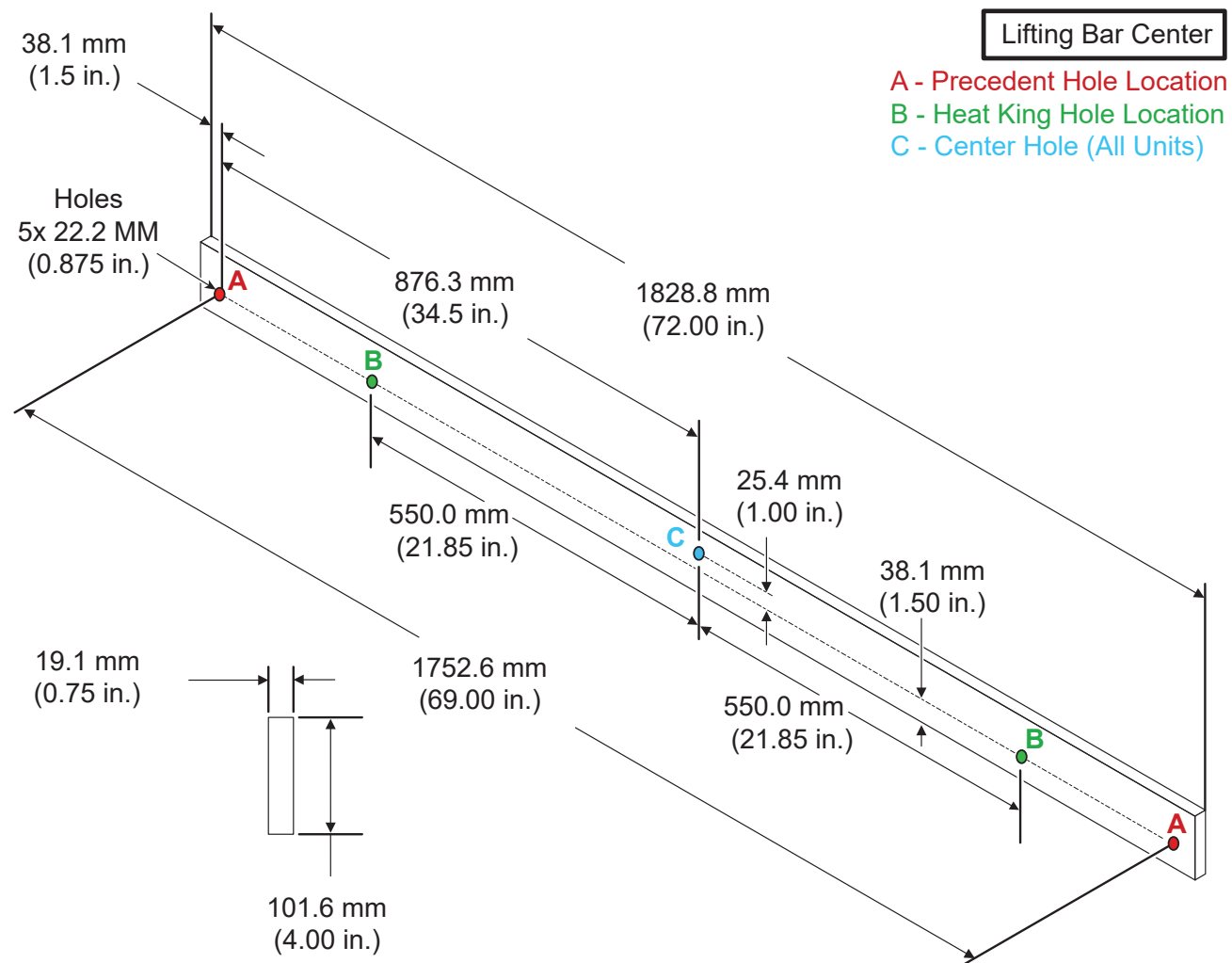
Thermo King requires a 2 point lifting bar to safely lift and install units. A lifting bar can be made from the drawings provided using ASTM A514 Grade B Steel Plate (UNS K11630).

Warning

Risk of Injury!

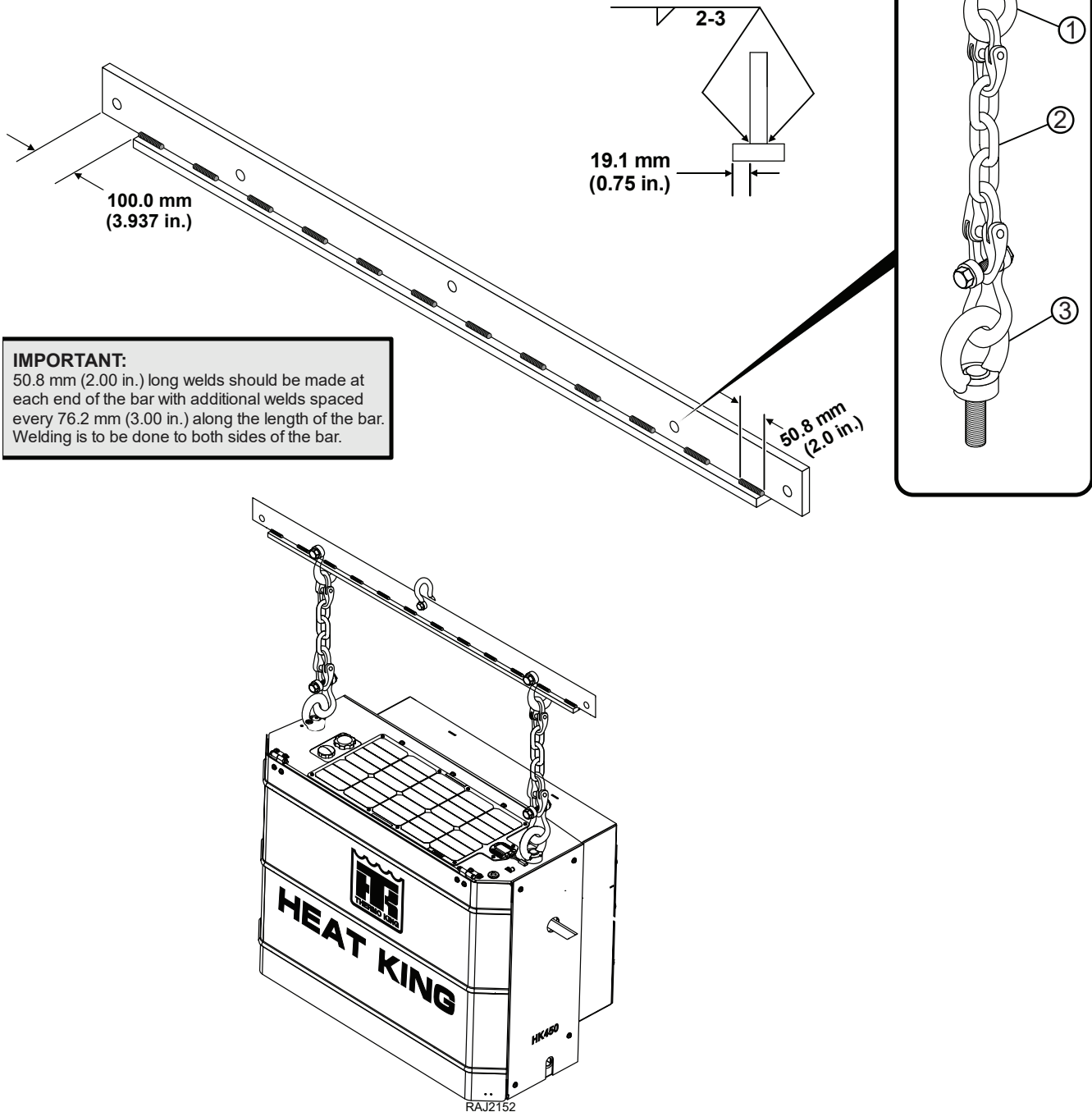
The lifting bar and lifting device combined must be able to support minimum weight of 1360.8 kilos (1 1/2 tons).

Lifting Bar Dimensions



RAJ2150

Welded Lifting Bar Assembly



1.	Forged Clevis Pins 2 3/4" - 3" Wide Shackle Must be Used to Clear Stiffener Plate for HK450 Lifting Holes
2.	Forged Chain Links
3.	Forged Eyebolts

Installing Unit

⚠ Warning

Equipment Damage and Risk of Injury!

Unit mounting nuts should be installed using hand tools or low speed (maximum 150 RPM) power tools and then torqued properly with a calibrated tool. Never use high speed power tools such as impact guns or impact wrenches as they overheat mounting hardware and damage the locking feature of the lock nut.

⚠ Warning

Equipment Damage and Risk of Injury!

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

Risk of Injury!

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.

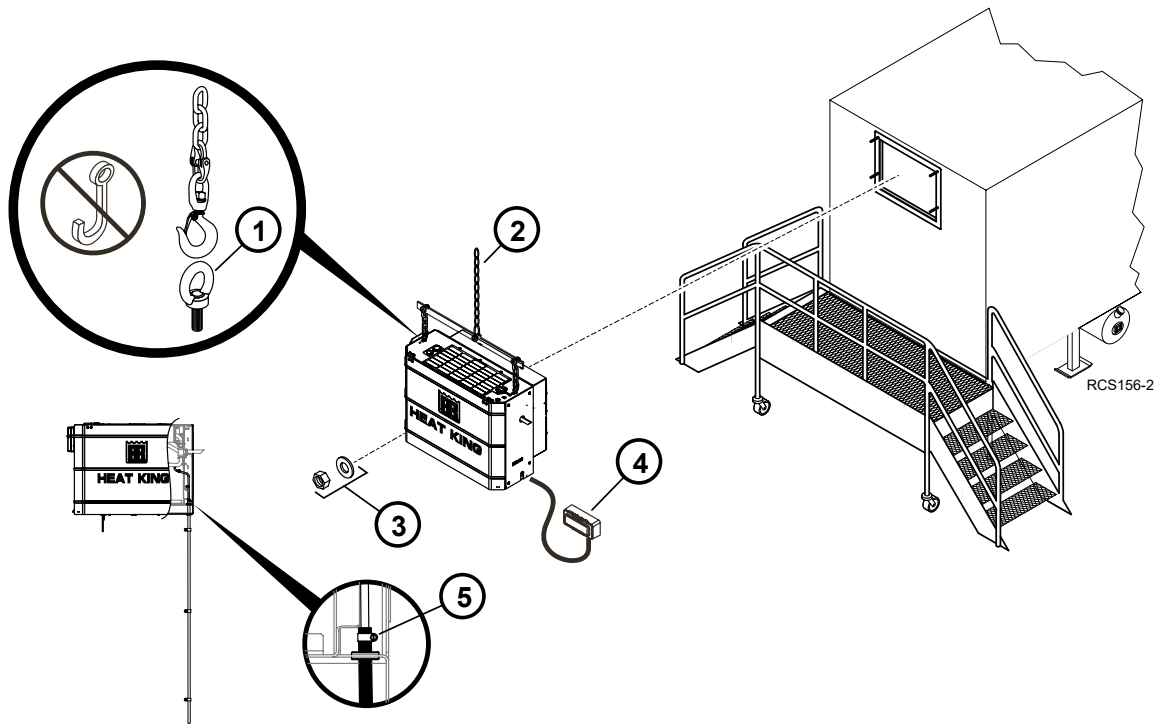
To avoid unnecessary damage to your unit, place the crated unit near the trailer/container prior to its removal. Carefully remove top boards of the crate, the installation kit boxes, and any other loose components from rear of unit.

1. Attach two forged lifting eyebolts (1/2-13 UNC) into the thread holes located on top of unit (Detail I).
 - a. Attach lifting device to eyebolts and slightly raise unit and remove hardware holding unit to crate.
- Note:** For Zero-Cube installations, refer to Zero-Cube installation instructions (TK 56142) available at Thermo King iService or Thermoking.com.
2. Lift the unit and position it in the trailer/container opening.
 - a. With the unit access door open, align the four unit mounting holes with the trailer/container mounting bolts.
3. Attach supplied 1-1/4" washers and locking nuts.
 - a. Torque mounting hardware to 82 N•m (60 ft. lbs.).
4. **See "Installing Remote HMI" on page 18.**
5. **HK450 MAX UNITS ONLY** – From inside the unit, place the supplied hose clamp over the end of the copper exhaust drain tube and slide it up the tube a few inches.

- a. From under the unit, insert the drain hose up through the two grommets located in the frame and over the copper exhaust drain tube. Slide the hose clamp down onto the drain hose and tighten clamp securely.
- b. Route the drain hose straight down past the bottom of the trailer and secure with supplied clamps and screws. Be sure not to pinch the drain hose closed when routing and installing clamps.

Note: When installing an optional exhaust extension kit 701181 or 701182, follow the instructions that are included with the kit.

Figure 7. Standard HK Unit Installation Shown



Installing Remote HMI

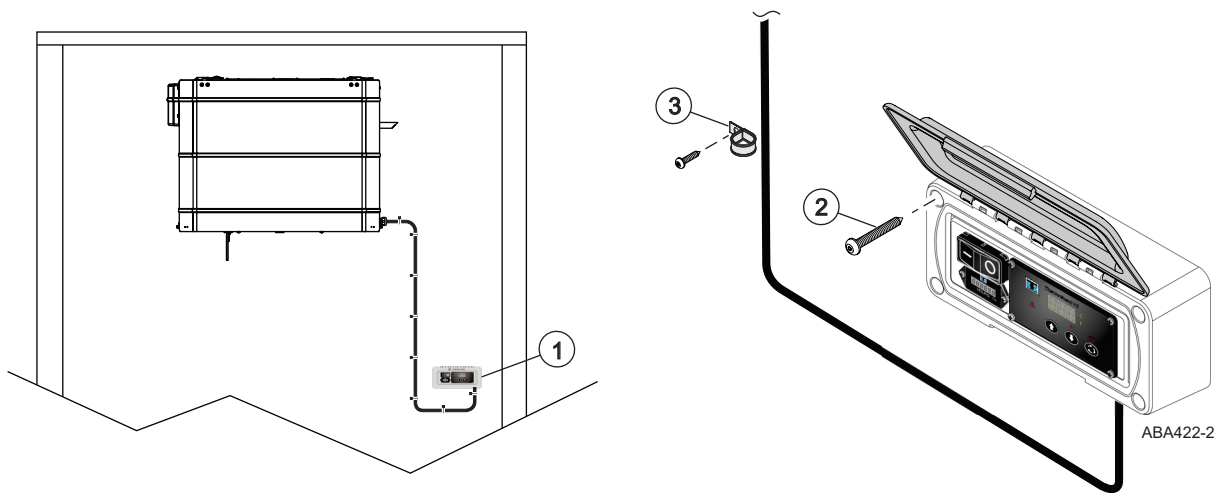
Surface Mount Installation

Note: The installation views shown are for reference only. The actual locations chosen for installing the remote HMI may vary per your specific application and should not interfere with the operation of the trailer or container.

1. Position the HMI onto the surface of the front wall while providing a drip loop as shown.
2. Open the front cover to access the four mounting holes.
 - a. Secure to the trailer wall with the supplied T-25 Torx head self tapping screws.

Important: Do not overtighten the screws or the plastic enclosure will be damaged.

3. Secure the harness to the trailer wall with the supplied clamps and self tapping screws.



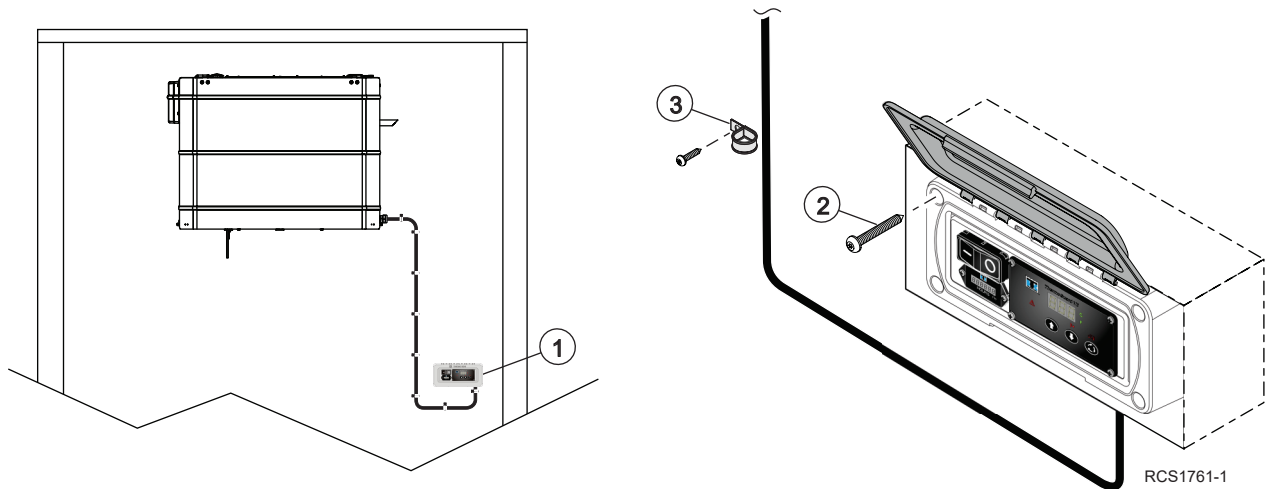
Flush Mount Installation

Note: NOTE: Installer to provide a recessed pocket in the trailer wall to accommodate the remote HMI. This recessed pocket must be deep enough to help protect the HMI from damage and allow for water drainage.

1. Position the HMI into the recessed pocket while providing a drip loop as shown.
2. Open the front cover to access the four mounting holes.
 - a. Secure to the recessed pocket with the supplied T-25 Torx head self tapping screws.
3. Secure the harness to the trailer wall with the supplied clamps and self tapping screws.

Note: Do not overtighten the screws or the plastic enclosure will be damaged.

Figure 8. Flush Mount Installation Shown



Installing Fuel System

Under Chassis Fuel Tank

Installation Best Practices

⚠ Danger

Fire Hazard!

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

⚠ Danger

Fire Hazard!

Do not route fuel lines with battery cables or electrical wires, as this could cause a fire.

- All fuel lines should be routed in a protective housing with no kinks and sharp bends.
- Rubber grommets must be used when routing fuel lines through holes in metal.
- Secure all fuel lines with provided clamps.
- Remove plastic cap from the fuel vent and point the outlet towards the rear of the trailer.

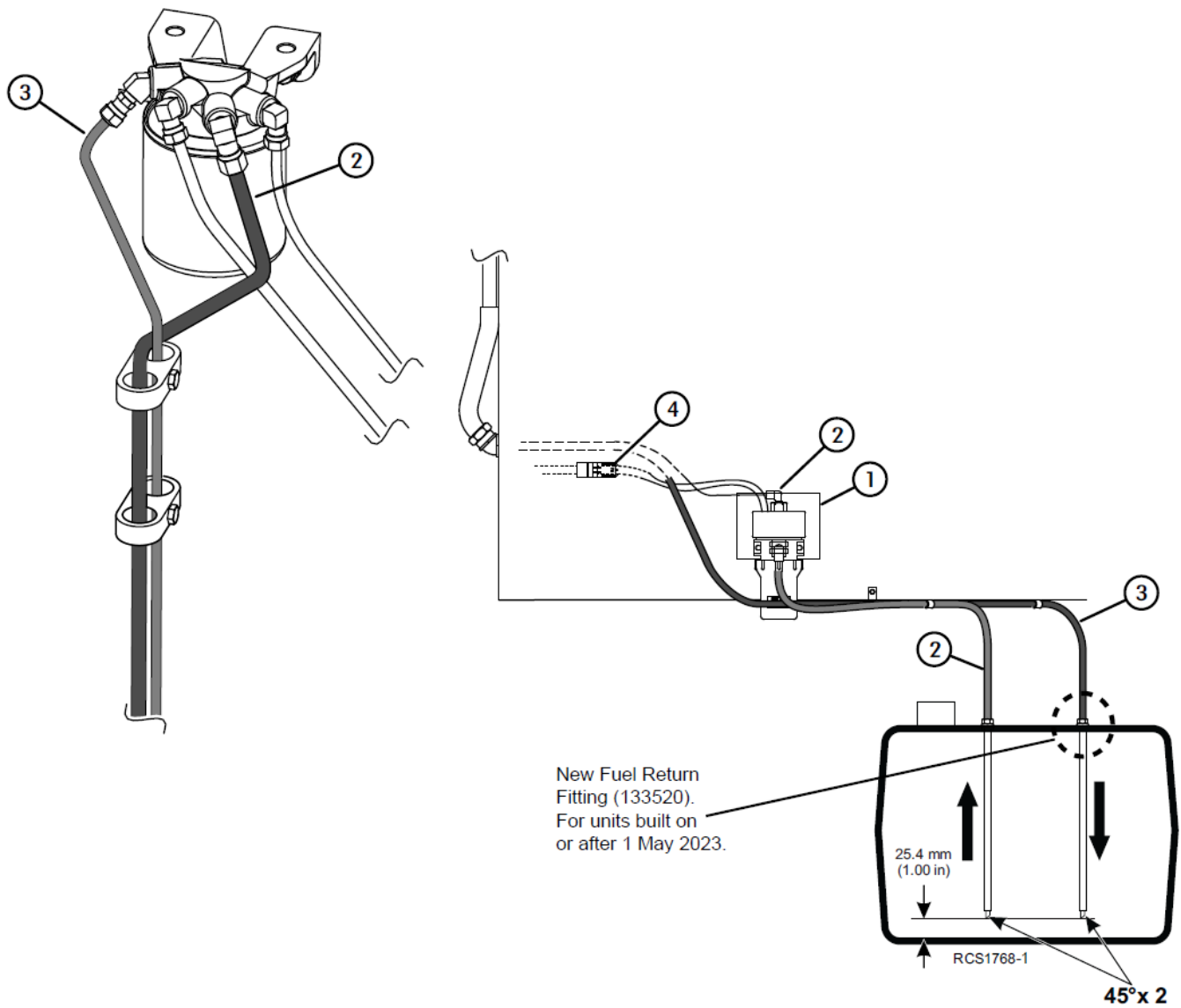
Important: The factory installed fuel tank air vent must be in place and functional for the Thermo King unit's fuel system to operate correctly and for the fuel tank to remain in compliance with Federal Motor Carrier Safety Administration specifications (title 49, paragraph 393.67). A plugged or restricted 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.

Installing Fuel Pump and Fuel Lines

1. Install fuel pump and bracket as low as possible and near fuel tank to provide rapid pump priming.
2. Route a fuel **supply** line from:
 - a. **Inlet** fitting on fuel filter to the **outlet** fitting on top of fuel pump and tighten all fuel lines securely.
 - b. Route another fuel **supply** line from **inlet** fitting on bottom of fuel pump to the **outlet** fitting on fuel tank.
 - c. Cut fuel supply line at 45 degree angle and install sleeve and nut provided in installation kit.
 - d. Insert fuel supply line into fuel tank **outlet** fitting until it bottoms out, then pull line up 25.4 mm (1.00 in.) and tighten nut securely.
3. Route a fuel **return** line from:
 - a. **Return** fitting from the fuel filter to the fuel tank **inlet** fitting.
 - b. Cut fuel line at 45 degree angle and install sleeve and nut provided in installation kit.
 - c. Insert fuel line into fuel tank **inlet** fitting until it bottoms out, then pull line up 25.4 mm (1.00 in.) and tighten nut securely.
4. Route the electrical harness from the unit to the fuel pump and attach to the fuel pump connector. The connector must be installed out of road spray area.

Note: It is important not to allow the unit to run out of fuel during the engine break-in period. Add a sufficient amount of fuel (approximately 20 gallons) to allow the unit to run for 8 to 12 hours during engine break-in and pre-delivery procedures.

Figure 9. Fuel System Components



Optional Nose Mounted 65 Gallon Fuel Tank

Installation Best Practices

⚠ Danger

Fire Hazard!

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

⚠ Danger

Fire Hazard!

Do not route fuel lines with battery cables or electrical wires, as this could cause a fire.

- All fuel lines should be routed in a protective housing with no kinks and sharp bends.
- Rubber grommets must be used when routing fuel lines through holes in metal.
- Secure all fuel lines with provided clamps.
- Remove plastic cap from the fuel vent and point the outlet towards the rear of the trailer.

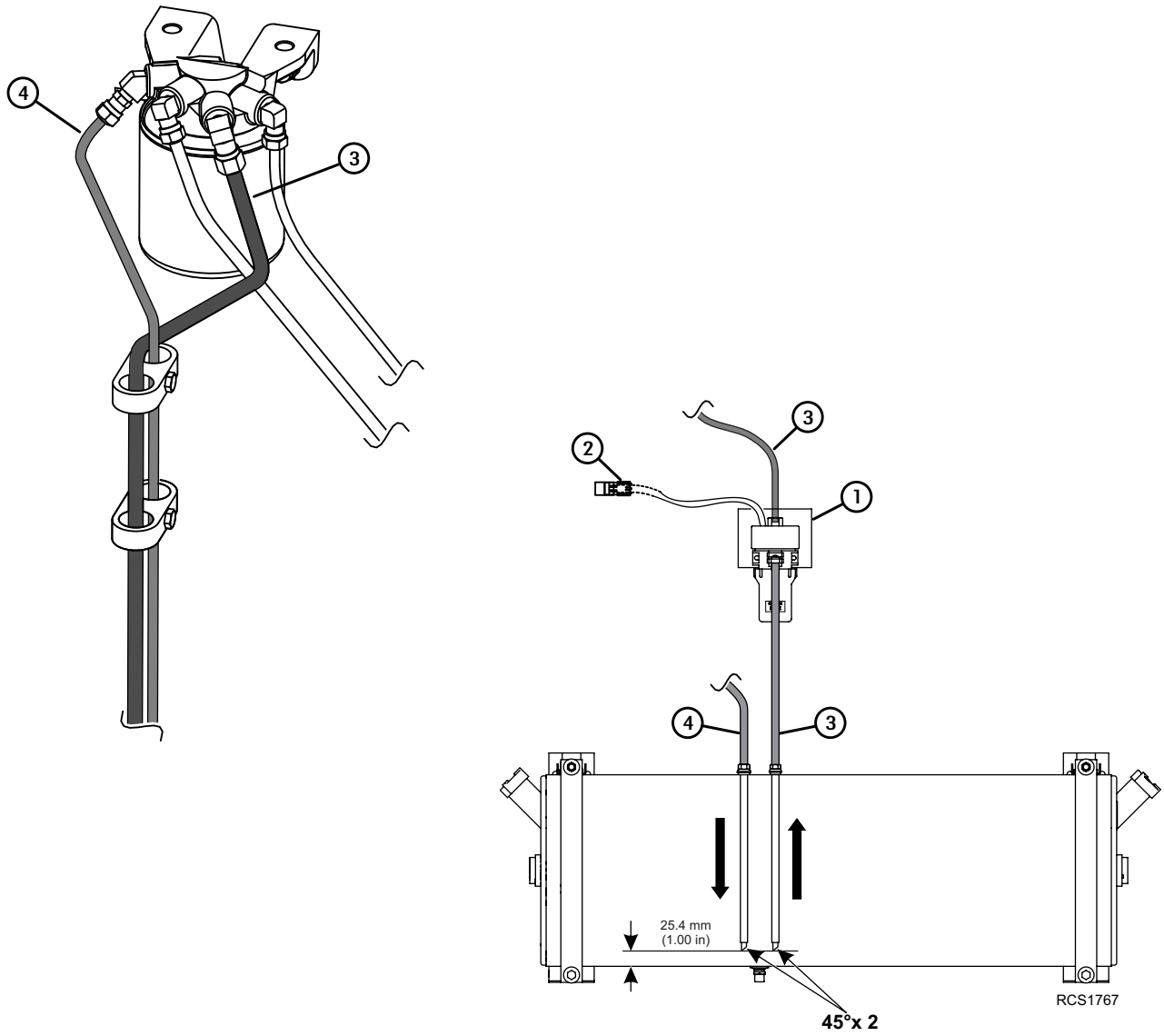
Important: The factory installed fuel tank air vent must be in place and functional for the Thermo King unit's fuel system to operate correctly and for the fuel tank to remain in compliance with Federal Motor Carrier Safety Administration specifications (title 49, paragraph 393.67). A plugged or restricted 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.

Installing Fuel Pump and Fuel Lines

1. The fuel pump is to be mounted inside the unit directly behind the air cleaner with provided hardware.
 - a. Remove the two 1/4-20 screws, flat washers and locking nuts that are provided on the frame directly behind the air cleaner.
 - b. Install the fuel pump using this hardware. Tighten hardware securely.
2. Route and attach the fuel pump harness to the fuel pump.
3. Route a fuel **supply** line from:
 - a. **Inlet** fitting on fuel filter to the **outlet** fitting on top of fuel pump and tighten all fuel lines securely.
 - b. Route another fuel **supply** line from **inlet** fitting on bottom of fuel pump to the **outlet** fitting on fuel tank.
 - c. Cut fuel supply line at 45 degree angle and install sleeve and nut provided in installation kit.
 - d. Insert fuel supply line into fuel tank **outlet** fitting until it bottoms out, then pull line up 25.4 mm (1.00 in.) and tighten nut securely.
4. Route a fuel **return** line from:
 - a. **Return** fitting from the fuel filter to the fuel tank **inlet** fitting.
 - b. Cut fuel line at 45 degree angle and install sleeve and nut provided in installation kit.
 - c. Insert fuel line into fuel tank **inlet** fitting until it bottoms out, then pull line up 25.4 mm (1.00 in.) and tighten nut securely.

Note: It is important not to allow the unit to run out of fuel during the engine break-in period. Add a sufficient amount of fuel (approximately 20 gallons) to allow the unit to run for 8 to 12 hours during engine break-in and pre-delivery procedures.

Figure 10. Fuel System Components



Installing Battery

⚠ Warning

Personal Protective Equipment (PPE) Required!

A battery can be dangerous. A battery contains a flammable gas that can ignite or explode. A battery stores enough electricity to burn you if it discharges quickly. A battery contains battery acid that can burn you. Always wear goggles or safety glasses and personal protective equipment when working with a battery. If you get battery acid on you, immediately flush it with water and get medical attention.

⚠ Warning

Hazard of Explosion!

Improperly installed battery cables could result in a fire, explosion, or injury. 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

Fire Hazard!

Do not attach fuel lines to battery cables or electrical harnesses. This has the potential to cause a fire and could cause serious injury or death.

⚠ Warning

Hazard of Explosion!

An improperly installed battery could result in a fire, explosion, or injury. A Thermo King approved battery must be installed and properly secured to the battery tray.

⚠ Caution

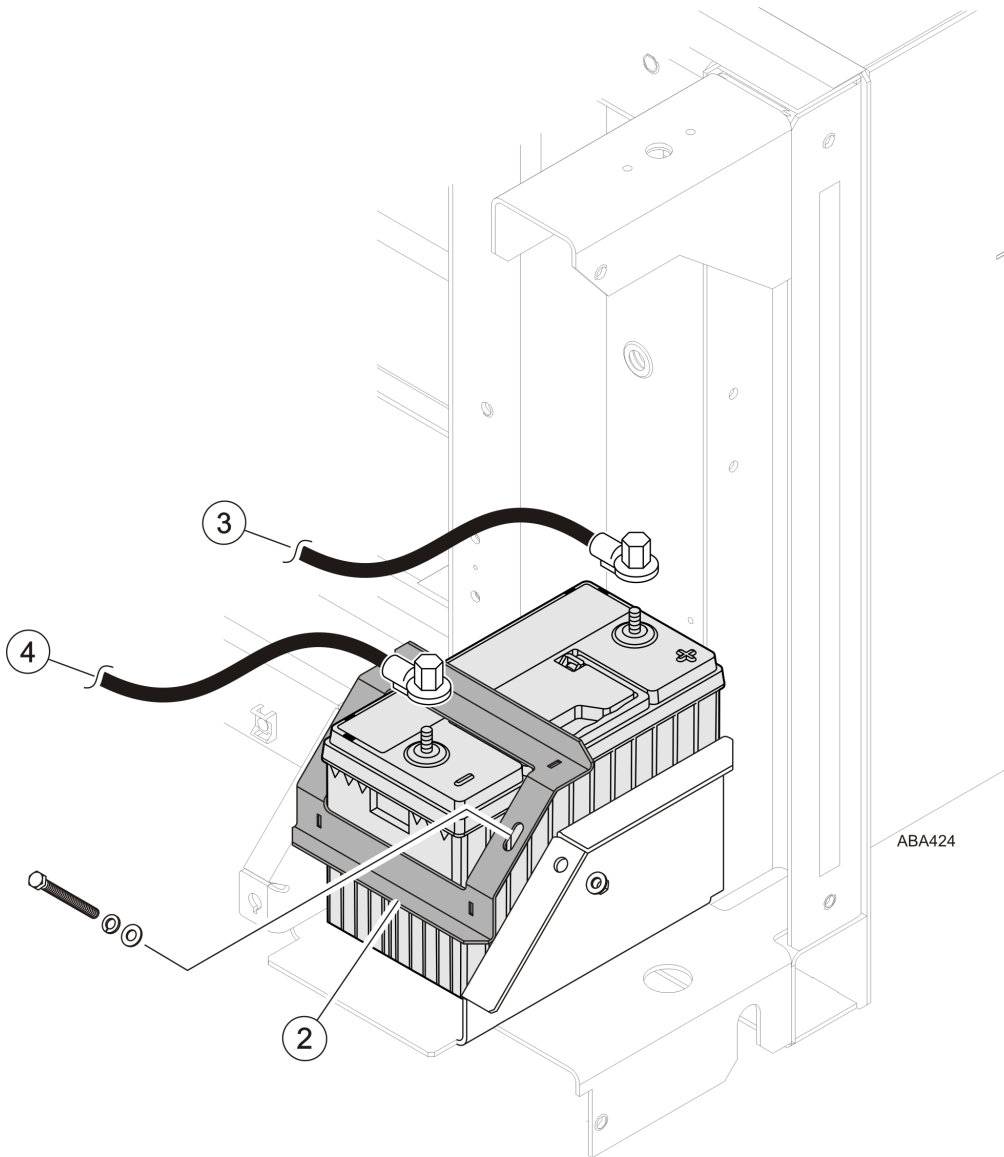
Hazardous Service Procedures!

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

1. Open unit door to access battery tray.
2. Install battery into tray and secure with hold down bracket, bolts, lock washers and flat washers.
 - a. Hand tighten both bolts and then torque to 6.8 N•m (60 in-lb).

Important: DO NOT over tighten hardware as this may crack or distort the battery!
3. Install **positive (+)** battery cable on the positive battery post first to minimize accidental electrical shorting.
4. Install **negative (-)** battery cable on negative battery post second to minimize accidental electrical shorting.
5. Close and secure unit door.

Figure 11. Battery Installation Shown



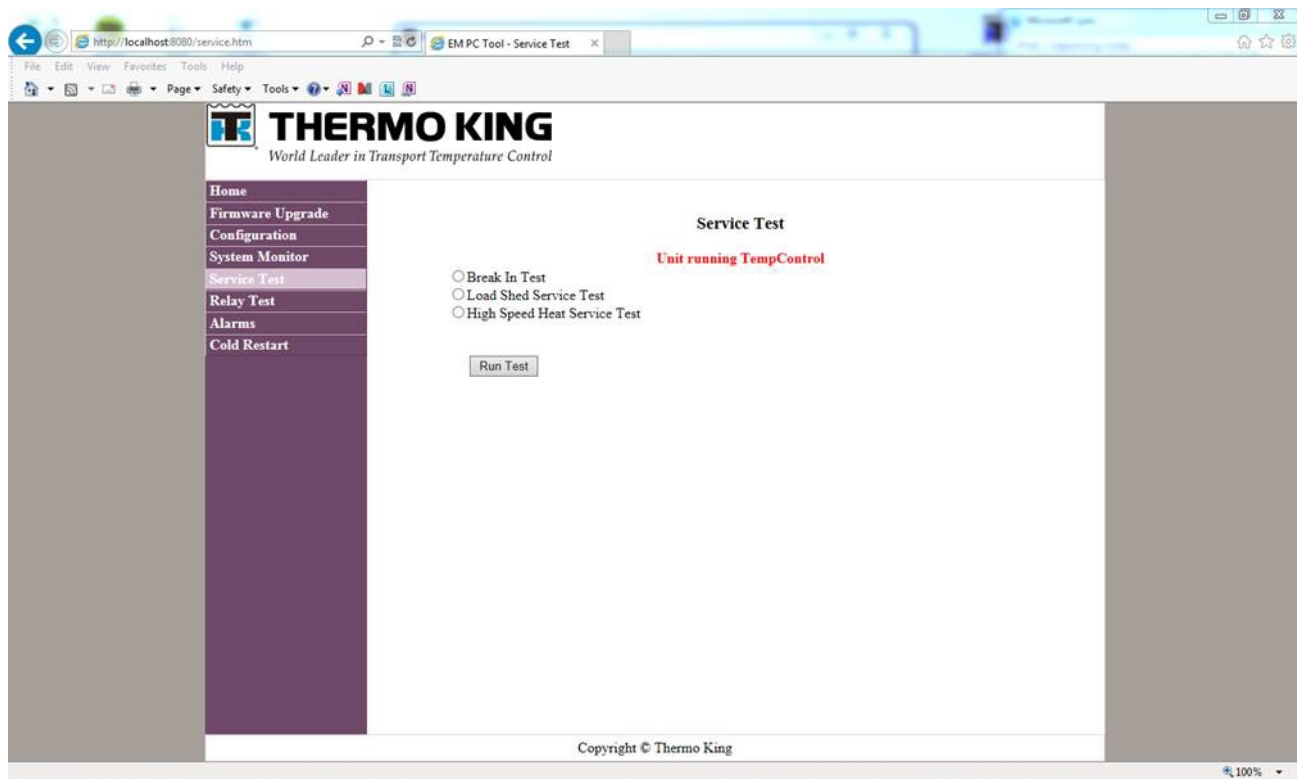
Service Test Procedure

Engine Break-in Test

The following procedure is used to run the unit for 10 hours to break-in the diesel engine.

1. Ensure software revision is **EB04** or higher.
2. Open PC Monitor - In the menu on the left is a page called "Service Test" - this page is new, the only test is the break-in Test.
3. Select - Service Test page.
4. Select - Break-in Test by clicking in the dot in front of it.
5. Select - Run Test by clicking in the radio button.
 - A countdown timer for the 10 hour break-in test will appear and start counting down.
 - The PC may be disconnected and the test will continue until the timer runs out.
 - When the test is completed (timer goes to 0) the unit will go back into temp control mode.
 - The test can be stopped prematurely using PC Monitor. The test can be restarted with PC Monitor, and will run for the remaining amount of time.
 - The test can also be stopped by turning the unit off. Turning the unit off will not affect the hours counter. The counter will stop and restart when the operator goes back in to engine break-in test mode.
 - The software only allows the test to be run once. The test cannot be run with a replacement engine.

Figure 12. Service Test Shown

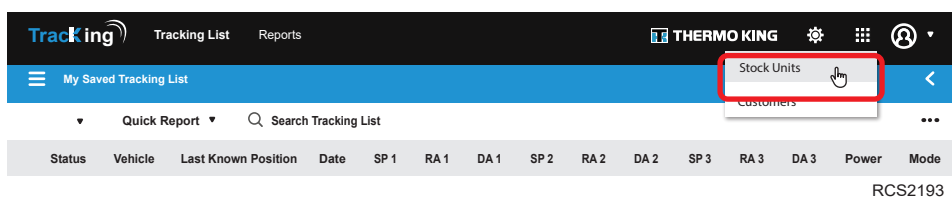
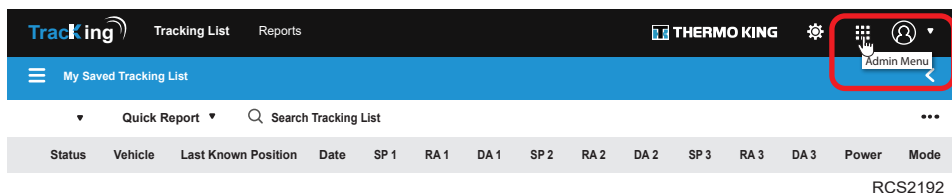


RCS1766

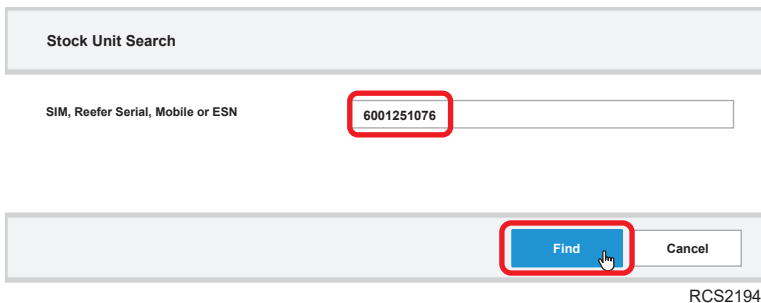
Activating ConnectedSuite

Procedures

1. Log in to the TrackKing website.
2. Select **Admin Menu**.
3. Select **Stock Units**.

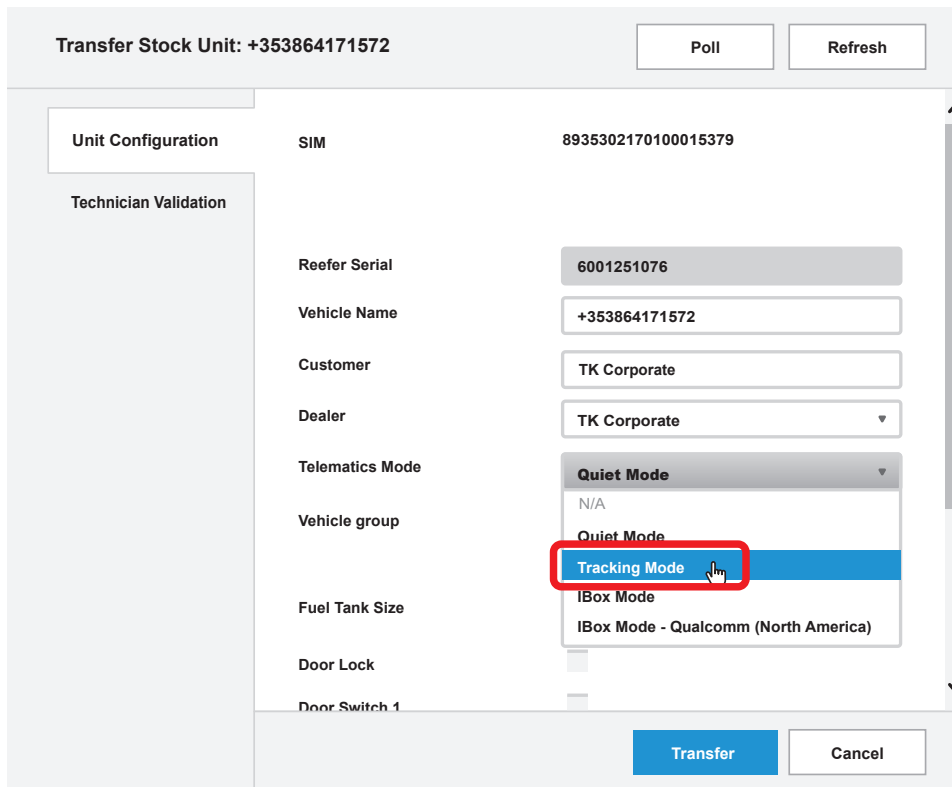


4. Enter the unit **Serial Number** and select **Find**.



The screenshot shows the 'Stock Unit Search' form. The form has a text input field for 'SIM, Reefer Serial, Mobile or ESN' with the value '6001251076' entered. A red box highlights the input field. Below the input field, there is a 'Find' button and a 'Cancel' button. The 'Find' button is highlighted with a red box and a mouse cursor. The form is labeled 'RCS2194'.

5. Select the **Telematics Mode** to be activated. Only the modes that have been enabled will be available. The Unavailable modes will be grayed out. The following example shows the TrackIng Mode being selected.



Transfer Stock Unit: +353864171572

Poll Refresh

Unit Configuration SIM 8935302170100015379

Technician Validation

Reefer Serial 6001251076

Vehicle Name +353864171572

Customer TK Corporate

Dealer TK Corporate

Telematics Mode

Vehicle group

Fuel Tank Size

Door Lock

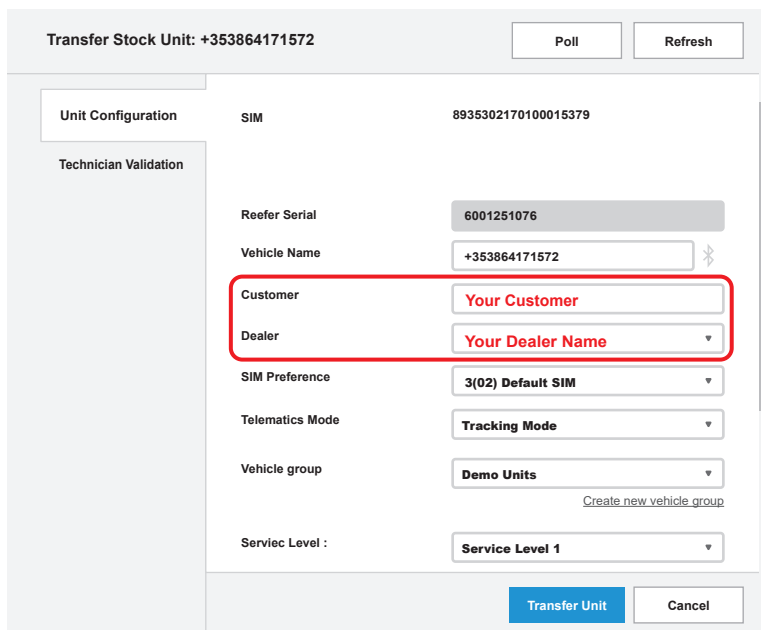
Door Switch 1

Transfer Cancel

The screenshot shows the 'Telematics Mode' dropdown menu open. The 'Tracking Mode' option is highlighted with a red rectangle and a mouse cursor, indicating it is the selected mode. Other options visible include 'Quiet Mode', 'IBox Mode', and 'IBox Mode - Qualcomm (North America)'.

RCS2195

6. If activating a unit in TrackIng mode you will delete the information in the customer menu and enter in your customer name.
7. The dealer should then populate with your dealer name.



Transfer Stock Unit: +353864171572

Poll Refresh

Unit Configuration SIM 8935302170100015379

Technician Validation

Reefer Serial 6001251076

Vehicle Name +353864171572

Customer Your Customer

Dealer Your Dealer Name

SIM Preference 3(02) Default SIM

Telematics Mode Tracking Mode

Vehicle group Demo Units

Service Level : Service Level 1

Transfer Unit Cancel

The screenshot shows the 'Customer' and 'Dealer' fields populated with 'Your Customer' and 'Your Dealer Name' respectively, highlighted by a red rectangle. The 'Telematics Mode' is now set to 'Tracking Mode'. The 'Vehicle Name' field has a small 'x' icon next to it, indicating it might be a required field or has a validation issue.

RCS2201

8. **Do not** change the **SIM Preference** at this time, it can be changed at a later date for poor Cell coverage. Contact TrackKing Support before changing @Tracking@Thermoking.com
9. Choose a **Vehicle Group** or create a new vehicle group per the customer's recommendations.
10. Confirm the **Service Level** per the customer contract.

Vehicle Name: +353864171572

Customer: Your Customer

Dealer: Your Dealer Name

SIM Preference: 3(02) Default SIM

Telematics Mode: Tracking Mode

Vehicle group: Demo Units [Create new vehicle group](#)

Service Level: Service Level 1

[Transfer Unit](#) [Cancel](#)

RCS2197

11. Enter in the **Fuel Tank Size** the fuel capacity, and the number of **Door Switches** if applicable.
12. **Door Lock** is only used if the unit is equipped with the Mi-Jack door lock.
13. Click on **Technician Validation** to confirm the unit is on and operating properly.

Transfer Stock Unit: +353864171572 [Poll](#) [Refresh](#)

Unit Configuration

Technician Validation ☐

Telematics Mode: Tracking Mode

Vehicle group: Demo Units [Create new vehicle group](#)

Service Level: Service Level 1

Fuel Tank Size: 0

Door Lock ☐

Door Switch 1 ☐

Door Switch 2 ☐

Door Switch 3 ☐

RCS2198

14. Click on **Transfer Unit** when everything is entered properly, and the unit is operating properly.
15. The unit will now be on the Customer TrackKing account.

Reefer Power/Ignition status: Off

Port A Device: SR4_TRAILER_MT

Port B Device: SR4_HMI

[Transfer Unit](#) [Cancel](#)

RCS2199

iBox/3rd Party Mode Activation

Units ordered from the factory in iBox/3rd party mode will be activated from the factory in iBox/3rd party mode.

- To confirm the unit is in iBox mode refer to the #1 LED light on the TKV5, it should be **blinking**.
- A solid #1 LED light indicated the units is in Quiet or TrackKing mode and must be changed to iBox mode.

Figure 13. #1 LED shown.



Activating the unit in iBox mode is done on the TrackKing website.

- An order for iBox Mode must be entered in the Order Management System before it can be active.
- If not ordered for iBox mode it will be greyed out.
- Go to the **Stock Units** and enter in the reefer serial number.
- In the Telematics mode menu chose *iBox mode*.
- Then click **Transfer Unit**.

Note: Do not change any other menu items, just change the Mode to “iBox Mode”.

Customer	TK Corporate
Dealer	TK Corporate
Telematics Mode	<div>Quiet Mode</div> <div>N/A</div> <div>Quiet Mode</div> <div>Tracking Mode</div> <div>iBox Mode</div> <div>iBox Mode - Qualcomm (North Americ</div>
Fuel Tank Size	
Door Lock	

RCS2200

System Check List

<input type="checkbox"/>	All unit mounting hardware torqued to specifications.	<input type="checkbox"/>	Battery secured correctly and all connections clean and tight.
<input type="checkbox"/>	No air gaps between unit and trailer wall.	<input type="checkbox"/>	Remote HMI mounted securely.
<input type="checkbox"/>	Drain hose properly routed and secured.	<input type="checkbox"/>	Run Pre-Trip Inspection (refer to Operator's Manual).
<input type="checkbox"/>	Fuel tank properly installed.	<input type="checkbox"/>	Run unit under load for eight hours to properly break-in engine
<input type="checkbox"/>	Fuel lines properly routed and fuel fittings tightened securely.	<input type="checkbox"/>	Release to customer
<input type="checkbox"/>	Bulkhead properly designed and installed.	<input type="checkbox"/>	

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